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## Sean A Freeder

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Committee in charge:

Professor Gabriel Lenz, Co-Chair Professor Emerita Laura Stoker, Co-Chair Professor Emeritus Jacob Citrin Professor Paul Pierson

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#### Abstract

Impacts of Rising American Partisanship: Stability, Accountability, and Hostility

by

#### Sean A Freeder

Doctor of Philosophy in Political Science

University of California, Berkeley

Professor Gabriel Lenz, Co-Chair

Professor Emerita Laura Stoker, Co-Chair

Partisanship has always been one of, if not the most important, characteristics for understanding American political behavior, both at the elites and mass levels. Partisan identity, and the strength of that identity, functions as a key determinant of vote choice, voter turnout, political activism, social affect, and most other outcomes important to Americanists. Since the 1980s, the power of partisanship has only grown stronger – ideological polarization among elites and ideological, demographic and regional sorting among masses has led partisanship to be seen by some as a "mega-identity", functioning as a highly salient proxy for any number of social group conflicts. In turn, national politics has disintegrated into gridlock, hostility, and mistrust.

This dissertation explores three novel roles partisanship plays in the political behavior of American mass publics. In each case, partisanship operates as a challenge to democratic accountability in the American system. In Chapter 1, my coauthors and I present evidence that attitudinal stability in the mass public is dependent largely upon knowledge of where the parties stand on key issues. Not only do a significant portion of Americans lack this information, but our findings imply that, even among those who do have stable preferences, they often do not choose their parties because of their policies, but rather the reverse, highlighting the difficulty of accountability and representativeness in a hyper-partisan system. In Chapter 2, I argue that one of the few longstanding non-partisan determinants of the presidential vote – the state of the economy – is decreasing over time in its influence; as partisanship becomes increasingly important, voters are less likely to vote retrospectively, and more likely to vote in defense of their tribe. Finally, in Chapter 3, I focus on affective polarization, and the role of mass partisan attribution. From a series of novel survey experiments, I present evidence that partisans are increasingly likely to see the other side as primarily motivated by negative desires – bigotry, selfishness, hatred, etc. – and that the attributions we make about the preferences of those with whom we disagree play a key independent role in exacerbating and reinforcing partisan hostility.

Taken together, the studies in this dissertation suggest several ways in which hyper-partisanship will remain a significant challenge in American politics for the foreseeable future. Partisan attitudes, towards both policies and out-partisans, are stable and highly resistant to correction. Performance assessments of elites are increasingly colored by tribal considerations. Though I present some evidence for the possibility of attenuating partisan polarization, the overall findings in this dissertation suggest that doing so will be no easy feat.

To my parents, Steve and Linda, without whose generosity, guidance, support and love, the quest could simply not have been conceived or completed.

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Laura Stoker was instrumental in recruiting me to Berkeley – I clearly remember walking into her office, a cacophony of journal articles and books strewn about, and her reassuring me that the choices of schools before me were great, and that I couldn't go wrong, but that Berkeley was maybe just a *little* more special. When the decision came down to Stanford or Berkeley, my conversation with Laura probably had the single greatest impact on my decision to study here. It is a truth universally acknowledged that taking Laura's advice, academic or otherwise, leads to better life outcomes. She was the first professor for whom I served as a GSI, and her performance as a teacher and lecturer was enormously helpful in my developing pedagogical skills. Through her time as my advisor, Laura has always challenged me intellectually, but also made me feel cared for and welcome.

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## Chapter 1

# The Importance of Knowing "What Goes with What": Reinterpreting the Evidence on Policy Attitude Stability<sup>1</sup>

What share of citizens hold meaningful views about public policy? Despite decades of scholarship, researchers have failed to reach a consensus. Researchers agree that policy opinions in surveys are unstable but disagree about whether that instability is real or just measurement error. In this article, we revisit this debate with a concept neglected in the literature: knowledge of which issue positions "go together" ideologically—or what Philip Converse called knowledge of "what goes with what." Using surveys spanning decades in the United States and the United Kingdom, we find that individuals hold stable views primarily when they possess this knowledge and agree with their party. These results imply that observed opinion instability arises not primarily from measurement error but from instability in the opinions themselves. We find many US citizens lack knowledge of "what goes with what" and that only about 20%—40% hold stable views on many policy issues.

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<sup>&</sup>lt;sup>1</sup> This chapter is a re-print of a published paper of the same name from *Journal of Politics*, *volume 81.1*. My co-authors on this publication are Gabriel S. Lenz and Shad Turney, from whom I have received permission to include this piece in its entirety. The content of this article remains untouched from the previous version, save for referenced figure and appendix numbers, which have changed.

What share of citizens hold meaningful views about public policy? This question seems basic, but answering it has proven difficult. For decades, research has failed to produce a consensus. One side of the scholarly divide maintains that only a limited share of the public holds meaningful opinions on policy issues. As shown by Converse (1964), many people's answers to public policy questions change so much over time that a large share of the public appears to lack meaningful views. Building on Converse's work, Zaller (1992) and Zaller and Feldman (1992) argued that opinion instability results from citizens holding conflicting considerations on policy issues and then sampling from these pools of inconsistent considerations when they answer survey questions.

On the other side of the scholarly divide, researchers argue that most citizens do hold meaningful policy opinions but that these opinions are disguised in surveys by measurement error. For example, Achen (1975) argued that ambiguous survey questions could produce the opinion instability observed by Converse and that statistical corrections of this error reveal widespread attitude stability. Similarly, Ansolabehere, Rodden, and Snyder (2008) argued that reducing measurement error by averaging multiple survey items reveals that stable policy opinions—at least in broad "issue domains"—are pervasive in the mass public. Still, some scholars remain skeptical of this claim, and the debate remains unsettled.

This question has stood at the center of scholarly debate for so long because it concerns a core normative question about democracy: whether voters can hold politicians accountable for their policy decisions. If citizens lack meaningful views about even the most salient political issues, instead having their opinions on these issues easily changed by political elites and the media, "democratic theory loses its starting point" (Achen 1975, 1220). These normative concerns are ameliorated, however, if the opinion instability we observe results from measurement error.

A definitive answer to the source of over-time opinion instability has eluded scholars because of an observational equivalence problem: How does one differentiate randomness in the measurement of policy opinions from randomness in the opinions themselves? To overcome this problem, researchers have focused on a key test: compare the opinion stability of politically sophisticated voters and politically unsophisticated voters, using measures of general political knowledge or participation in politics as a proxy for sophistication. If the observed randomness in opinion stems from measurement, both types of survey respondents should exhibit similar levels of opinion stability. If the randomness is in the opinions, we should observe greater instability among less sophisticated individuals. This test, however, has yielded mixed results. Some studies find little difference in opinion stability between sophisticated and unsophisticated respondents (Achen 1975; Ansolabehere et al. 2008; Erikson 1979). Other studies find differences, although they are often not large (Converse 2000; Converse and Pierce 1986; Dean and Moran 1977; Feldman 1989; Kinder and Kalmoe 2017; Zaller 1990). These mixed results have led some researchers to conclude that observed opinion instability arises primarily from measurement error.

Other researchers have resisted this conclusion. These scholars point to findings that are inconsistent with the measurement error account. For instance, some single survey items, such as party identification, achieve the same stability as 25-item scales, and it seems implausible that measurement error alone could account for this pattern. Additionally, elites exhibit much more opinion stability than does the public on identical questions (Converse and Pierce 1986; Jennings 1992), which seems inconsistent with a simple measurement error explanation. Finally, finite mixture models over four-wave panels yield evidence more consistent with Converse and Zaller and inconsistent with measurement error (Hill and Kriesi 2001a, 2001b).

In this article, we show that this long line of research has yielded mixed results because it has examined opinion stability by general political knowledge, a poor proxy for what we believe drives attitude stability. Central to stable opinion, we argue, is knowledge of what Converse (1964) called "what goes with what," of which bundles of policy positions fall on the left and right sides of the liberal-conservative ideological dimension. When people learn what goes with what, they then tend to bring their policy views and party identification/ideology into alignment. When they do, they have stable attitudes. Using a proxy for "what goes with what" knowledge, we overcome the impasse on policy attitude stability.

We find that a large segment of the public lacks knowledge of "what goes with what," and consequently a large segment lacks stable policy views on salient issues. Relatedly, we find that those who do possess this knowledge tend to have stable views, but only when they agree with the views of their party. Moreover, these findings hold after correcting for measurement error. Much of the observed instability in public opinion, therefore, arises not from measurement error but is in the opinions themselves and, more specifically, in the opinions of the large share of the public that has failed to absorb elite ideology.

## WHAT GOES WITH WHAT

In his seminal 1964 article, Converse argued that elites combine policy issues into liberal and conservative bundles, not because their positions on these disparate issues logically flow from an overarching "crowning [ideological] posture" but for more mundane reasons—such as to gain or hold the allegiance of key groups (e.g., Karol 2009). Subsequently, however, they come to see these issue bundles as "natural" wholes. Many voters, he contended, remain ignorant about these bundles—about which issue position goes with which ideological or partisan camp. Converse called this knowing "what goes with what." Our contention is that knowledge of what goes with what plays an important and underappreciated role in attitude stability. When people learn what goes with what (e.g., which policy positions are Republican and which are Democratic), they will tend to exhibit stable policy views.

They should do so for several reasons. First, when people learn what goes with what, they may engage in "following," adopting the policy positions of their side, whether liberal or conservative, Democratic or Republican (Lenz 2012). This following could take place for several reasons, including the use of party or candidate positions as a heuristic (Bullock 2011; Zaller 1992), attachment to a party based on social group identification (Converse 1964), conformity to the positions of an individual's preferred political "team," or conformity to elite political authority (Asch 1956; Milgram 1974). They could also do so merely as a survey response—when answering survey questions, they must make up an answer on the spot, and the first thing that comes to mind is the positions of the parties or ideological camps. Second, individuals might accept only like-minded messages on policy issues from party leaders and candidates, as in Zaller's (1992) receive-accept-sample model. These individuals would then have stable pools of consistent considerations on policy issues aligned with their party. Finally, individuals who care deeply about a policy issue and have stable opinions about it will learn the political parties' and candidates' positions in order to support the party and candidate who holds the same issue position (Converse 1964; Iyengar 1986; Krosnick 1990; Zaller 1985). These individuals will thus know what goes with what and hold stable policy opinions over time. As a result of some or all of these mechanisms, individuals who possess knowledge of the parties' and

candidates' relative positions on a particular issue or set of issues—those who know what goes with what—should hold stable policy opinions on those same issues.

To measure knowledge of what goes with what, we use questions that asked respondents to place parties and candidates on the same policy scales on which they placed themselves. When respondents place the parties (or candidates, depending on availability) on the correct sides of each other, we code them as knowing "what goes with what" on that issue. Following Sears and Valentino (1997), we call this knowledge "party issue-placement knowledge," or "placement knowledge" for short.

We emphasize that we are agnostic about the direction of causation between placement knowledge and opinion stability. Some segments of the public undoubtedly do have stable opinions because they care deeply about particular issues, while others have stable policy opinions because they "follow the leader." Regardless of the direction of causality, if placement knowledge predicts opinion stability, it allows us to overcome the observational equivalence problem and determine the source of instability in policy opinions observed in surveys, resolving a central puzzle in public opinion research that has persisted for decades.

### DATA SOURCES, MEASUREMENT, AND METHOD

Political surveys rarely ask about candidate or party positions on policy issues. We searched for panel surveys that (1) asked about candidate or party issue positions, (2) did so in the same waves in which they asked respondents their own positions on these policy issues, (3) asked about more than one item in a policy domain (for multi-item scales), and (4) spanned periods when party and candidate stances remained distinct, salient, and relatively constant (see Appendix 1.1-1.4 for details and excluded panels). We focus on the first and last waves of American National Election Study (ANES) panels, including 1972–76 and 1992–96; the British Election Studies' (BES) 1992–97 and 1997–2001 panels; and the Patterson 1976 panel (Patterson 1980). We also present data from a two-wave survey panel we fielded through Survey Sampling International (SSI) in December 2015 and March 2016, which contains more placement questions than previous surveys.

To measure party-issue placement knowledge on an issue, we use the simple rule outlined above. We count respondents as knowing the candidates' or parties' issue positions if they placed the liberal/Democratic candidate or party at a more liberal position on a policy scale than the conservative/Republican candidate or party (Carpini and Keeter 1993; Lenz 2012; Lewis-Beck et al. 2008; Sears and Valentino 1997; Sniderman and Stiglitz 2012). We classify respondents who placed the candidates or parties at the same point on the scale, and those who said "don't know" for either or both candidates, as ignorant of the relative policy positions. The findings in this article, however, are robust to other coding decisions (see Appendix 1.7). Since we focus on stability of views over time, we measure this knowledge in both waves of panel surveys and count people as having correct perceptions only if they pass this test in both waves. This approach substantially reduces error in our measurement of placement knowledge from respondents who correctly guess.

To reduce measurement error in policy opinions, we construct multi-item scales (Ansolabehere et al. 2008; Miller and Shanks 1996). For each panel, we do so using the self-placement policy questions for which the survey also includes candidate or party placement questions. We follow Ansolabehere et al. (2008) by standardizing variables to have mean 0, standard deviation 1, using principal component factor analysis to construct scales, and imputing

missing values for respondents who answered at least 75% of the policy items. We found a single dominant dimension for all the scales (Appendix 1.1 describes the items). When examining the relationship between placement knowledge and stability in these scales, we only use placement knowledge measures of the items in a given scale.

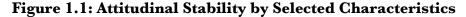
In assessing stability, we present correlations, despite their well-known drawbacks, in part because of "tradition" (Achen 1975) but also because they have some desirable characteristics. In particular, they are equal to the reliability of the measure (variance of the signal over total variance) under certain assumptions (Lord and Novick 1968, chap. 2). Correlations are therefore sensitive to the variance of the true attitude (variance of the signal), which we discuss further below (see also app. sec. 2.1). The results, however, are similar when we use alternative measures of stability, as we show in the next section. We avoid the use of panel measurement error models, such as Wiley and Wiley (1970) models, because they depend on numerous assumptions and attribute noise from any source to measurement error (Converse 1980; Feldman 1995; van der Veld and Saris 2004; Zaller and Feldman 1992), thus failing to differentiate the multiple potential sources of random noise in public opinion surveys (see discussion below). Furthermore, they require data from at least three panel waves, which would limit the data available for analysis. We also remind the reader that correlations of 0.30–0.40 are weak, barely visible in a scatter plot, and indicate "erratic attitude change" over two-year intervals (Achen 1975, 1219). Correlations around 0.50–0.60 represent only slight improvements.

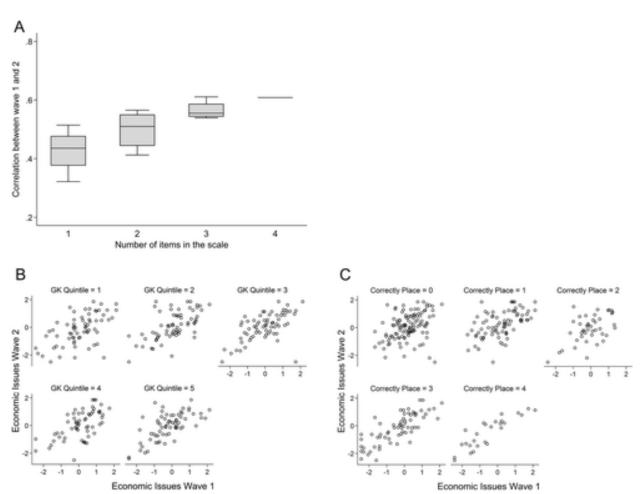
Finally, we follow Zaller (1992) in constructing general political knowledge scales, assigning respondents one point for each correct response to factual questions about politics plus points for interviewer ratings of respondent sophistication. In the United States, the scales have between 19 and 26 items with Cronbach alphas between 0.75 and 0.92. In Britain, they have 12 and 14 items with Cronbach alphas at 0.72 and 0.76, respectively. The 2015–16 SSI panel uses a smaller five-item scale (see Appendix 1.3).

#### OPINION INSTABILITY: MEASUREMENT ERROR OR IN THE OPINIONS?

What is the source of instability in survey measures of the public's policy opinions? If the source is measurement error, the public should generally have stable views after correcting for this error with multi-item scales. In contrast, if the source is ignorance of elite policy positions or a lack of interest in learning these positions, those who do not know elite positions should generally have less stable views, even when we measure their attitudes with multi-item scales. Those who do know elite positions, however, should have stable views—although they may still contain some measurement error that multi-item scales could correct.

Which is it? We begin by illustrating our approach with the 1972–76 ANES panel study. We then replicate the analysis across the other panels. The 1972–76 panel asked respondents to place themselves and the presidential candidates on four economic policy items: higher taxes on the rich, government guaranteed jobs, government provided health insurance, and economic aid to African Americans and other minority groups. Using these items, we present three findings for this panel (and the others). First, we replicate the well-known result that the over-time correlation between the scale scores (stability) rises as the number of items in the scale increases, as shown in figure 1.1A. This figure presents box and whisker plots for all possible scales of each respective length. As the number of scale items increases from one to four, the average correlation between the wave 1 scale score and the wave 2 scale score rises from 0.43 to 0.61. As noted above, some scholars interpret this pattern as supporting the measurement error account, but averaging will





Case study: four-item economic scale in the ANES 1972–76 panel. A, Stability by number of items in the scale; B, stability by general political knowledge quintiles; C, stability by placement knowledge. A shows one line for the scale with four items because we can only make one scale of four items; B and C plot respondents' four-item economic scale scores. N=475.

reduce random noise from any source, not just measurement error, as we discuss below. Although we only have four items, much of the increase in stability reported by Ansolabehere et al. (2008) arises from the first several items, as we would expect from measurement theory, so additional items would likely leave these results unchanged (we expand on this below).

Next, we replicate the finding that general political knowledge appears to only modestly condition attitude stability, the test Erikson (1979, 92) described as "the key issue of the controversy." In figure 1.1B, we plot each respondent's economic issues score in 1976 (y-axis) against that respondent's score in 1972 (x-axis), using all four items to calculate the scores. We do so for each quintile of general political knowledge, relying on a 19-item, factual knowledge scale (Cronbach's  $\alpha$ =0.75). The plots show little increase in opinion stability as general political knowledge increases, with the correlations rising inconsistently across the quintiles from 0.57 to 0.67. This increase is consistent with Ansolabehere et al. (2008, 225), who found an average difference in correlations of 0.15 between respondents with high and low general political

knowledge. It is also consistent with a measurement error account of instability, since even politically knowledgeable individuals exhibit moderate instability.

Finally, we turn to our hypothesis about the source of instability: does the instability arise primarily from respondents' ignorance of elite ideology? In figure 1.1C, we again plot the economic issue scores, but now by the number of issues on which respondents correctly placed the presidential candidates (in both waves). The figure shows a strong relationship between placement knowledge and opinion stability. Respondents who correctly placed the candidates on all four items had highly stable views (e.g., if they were conservative on this scale in 1972, they were conservative in 1976). The correlation between their scores in the two interviews is 0.88. In contrast, respondents who incorrectly placed the candidates on all four items had unstable views—if they were conservative in 1972, they were often moderate or even liberal in 1976. The correlation between their scores is only 0.36. Correcting for measurement error by averaging across the four items fails to stabilize their responses. Respondents who correctly place the candidates on one, two, or three of the issues have attitude stabilities that fall in between, with correlations of 0.55, 0.54, and 0.79, respectively. The more respondents know which issue positions go with which candidates, the more stable their attitudes are. In contrast with much previous work, the 1972–76 panel therefore reveals that the randomness in opinions is not primarily due to measurement error but is in the opinions themselves or, more precisely, in the opinions of those ignorant of elite policy positions.

Politics in the 1970s was unusual, with low polarization in Congress and moderate presidential candidates in 1976. Do these findings replicate in periods where party and candidate differences are stark? Do they replicate in other countries?

In table 1.1, we repeat this exercise in panels that meet the requirements noted above. The statistics shown here are the same as shown in figure 1.1. In each panel, we create a multi-item scale using those policy questions for which the survey asked candidate or party placements. The 1992–96 ANES panel contains five policy items that cut across policy domains, so we create an "all policy" issue scale that consists of these items (abortion, defense spending, ideology, government services and spending, and guaranteed jobs). In the other panels, however, the items are so predominantly economic that we only create economic scales. We have six four-item economic policy scales and one three-item scale. The table shows the average increases in stability from the lowest to highest number of scale items, from the lowest to highest general knowledge quintile (on the full multi-item scales), and from the lowest to highest placement knowledge on the issues in that scale (on the full multi-item scales).

The results show that adding scale items increases attitude stability, but only by a moderate amount. On the four-item economic scales, the correlation rises 0.18 on average from the single to the four-item scales. General knowledge also appears to increase stability by a moderate amount. On the four-item economic scales, the average increase from the bottom to the top general knowledge quintile is 0.31. However, as the final column in table 1.1 illustrates, these associations pale in comparison to placement knowledge, which is strongly associated with opinion stability. They do so even though we are using multi-item scales that should partially correct for measurement error. For the four-item scales, respondents who incorrectly place the parties/candidates on all four items have average correlations of only 0.34. In contrast, respondents who correctly place them on all four items have average correlations of 0.82, an increase of 0.48, nearly three times the effect of moving from the single-item to the four-item scales. The table omits standard errors, but they are small, around 0.03 for the average correlations (using Fisher's transformation).

Table 1.1: Source of Opinion Stability - Correction for Many Panels

	N	umbe	r of I	item	s in S	cale	Gen	eral	Knov	vledg	e Qu	intiles	Νu	ımbe	r of C	orre	ct Pla	cem	ents
Panel	1	2	3	4	5	Diff.	1	2	3	4	5	Diff.	0	1	2	3	4	5	Diff.
Five-item policy scale:																			
All Policy 1992–96	.53	.55	.64	.68	.71	.18	.38	.62	.76	.81	.84	.46	.42	.46	.57	.62	.82	.86	.44
Four-item policy scale:																			
Econ ANES 1972-76	.43	.50	.56	.61		.18	.57	.62	.60	.61	.67	.10	.36	.55	.54	.79	.88		.52
Econ BES 1992-95	.43	.52	.57	.61		.18	.41	.46	.55	.66	.81	.40	.25	.23	.49	.63	.76		.51
Econ BES 1992-96	.45	.54	.60	.64		.19	.43	.45	.62	.74	.81	.38	.21	.48	.33	.61	.80		.59
Econ BES 1992-97	.43	.52	.57	.60		.17	.37	.59	.52	.69	.78	.41	.23	.28	.52	.50	.76		.53
Econ BES 1997–2001	.38	.45	.50	.53		.15	.38	.41	.61	.73	.60	.22	.32	.37	.40	.65	.76		.44
Econ Patterson 1976	.56	.62	.69	.74		.18	.65	.69	.64	.78	.86	.21	.68	.70	.84	.86	.89		.21
Average	.45	.53	.58	.62		.18	.47	.54	.59	.70	.73	.29	.34	.44	.52	.67	.82		.47
Three-item policy scale:																			
Econ ANES 1994-96	.56	.62	.69			.13	.37	.58	.67	.70	.81	.44	.37	.40	.72	.86			.49

Note: Diff = difference; Econ = economy; ANES = American National Election Study; BES = British Election Study. For scatter plots and regression lines for each study by number of correct placements, see Appendix 1.5-1.10. Because of space constraints, this table omits the results from the 10-item Survey Sampling International panel we ran in 2015-16, but figs. 2 and 4 show results from it, and Appendix 1.10 presents the full results.

The results show that adding scale items increases attitude stability, but only by a moderate amount. On the four-item economic scales, the correlation rises 0.18 on average from the single to the four-item scales. General knowledge also appears to increase stability by a moderate amount. On the four-item economic scales, the average increase from the bottom to the top general knowledge quintile is 0.31. However, as the final column in table 1.1 illustrates, these associations pale in comparison to placement knowledge, which is strongly associated with opinion stability. They do so even though we are using multi-item scales that should partially correct for measurement error. For the four-item scales, respondents who incorrectly place the parties/candidates on all four items have average correlations of only 0.34. In contrast, respondents who correctly place them on all four items have average correlations of 0.82, an increase of 0.48, nearly three times the effect of moving from the single-item to the four-item scales. The table omits standard errors, but they are small, around 0.03 for the average correlations (using Fisher's transformation).

We conducted a similar analysis using the 2015–16 SSI study, for which we had 10 scale items, with similar results. Correlations rose by about 0.2 from single-item to 10-item scales, with the last five items contributing only a quarter of this increase. Moving from the lowest to highest quintile of general knowledge increased stability by 0.28, also consistent with the average across other panels. Finally, the difference between the top and bottom groups of placement knowledge was 0.31, somewhat lower than in most of the other panels (Appendix 1.10 presents the results).

We observe a much higher level of opinion stability overall in the SSI study as compared to the other panels. The short time between interviews (less than four months) likely explains this greater stability and the higher stability in the Patterson panel. This higher level of stability likely imposes a ceiling on the size of the placement knowledge effect.

These results appear robust. They hold up when we use non-correlational measures of stability, which we show in the next section. Those results address an ever-present concern with correlations: that the differences in variance drive differences in correlations. Those who know elite positions have higher variances (more extreme views) than those who do not, a pattern evident in figure 1.1C and one that holds up across the panels.<sup>2</sup> One can interpret this as a problem with correlational measures of attitude stability or as capturing an important aspect of the data—that high placement knowledge individuals have higher signal-to-noise ratios in their opinions. These results are also robust to a variety of coding decisions, including alternative codings of placement knowledge and alternative approaches to "don't know" responses in respondents' policy views (see Appendix 1.7).

These results hold up across a wide range of issues. Table 1.1 presented mostly economic policy items because panel surveys rarely contain multiple items with party or candidate placements in other issue domains. Figure 1.2 presents a similar analysis but for individual items in these panels, not multi-item scales. It therefore covers policy issues from busing to desegregate schools, to abortion, to marijuana legalization. Individuals who correctly place the candidates or parties on an item, it shows, always have higher over-time correlations in their opinions than those who incorrectly place them, although the gap varies considerably across items and across panels. Of course, placement knowledge is only one route to opinion stability. Even individuals who lack placement knowledge, figure 1.2 reveals, hold moderately stable views on "easy issues" (Carmines and Stimson 1989), such as abortion, or on issues involving salient social groups, such as busing to desegregate schools.

As far as we know, previous research has missed this strong relationship between knowledge of candidate and party issue positions and attitude stability. When people know which issue positions go with which candidate or party, and so know "what goes with what," their attitudes tend to be stable. Placement knowledge, therefore, allows us to break the observational equivalence problem. It reveals that not all survey respondents report unstable opinions, a pattern that would have been more consistent with question ambiguity or other sources of measurement error. Instead, instability appears to lie in the opinions themselves, particularly the opinions of those lacking placement knowledge.

The implications of these findings for democratic accountability depend on the distribution of placement knowledge in the public. If a large share of the public has high placement knowledge, then opinion stability will be pervasive, while if this share is small, then many citizens will have unstable views. Previous analyses have shown surprising levels of ignorance of party and candidate positions in the United States (Carpini and Keeter 1993; Layman and Carsey 2002; Lewis-Beck et al. 2008).

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<sup>&</sup>lt;sup>2</sup> Interestingly, the variance pattern is complex. Consistent with Broockman (2016), we find that low placement knowledge respondents have higher variance responses on single items (compared to those with high placement knowledge) but lower variance responses across multi-item scales, variances that decline with the number of scale items. As Broockman notes, this pattern results from less knowledgeable individuals taking extreme positions that are ideologically inconsistent (sometimes extremely liberal, sometimes extremely conservative). When averaged into multi-item scales, they therefore appear moderate (lower variance).

Incorrectly place Correctly place Nationalize industry (BES9297) Ideology (ANES9296) Nationalize industry (BES9701) Tax and spend more (BES9701) Gov. services (ANES9296) Employment vs. infl. (BES9701) Employment vs. infl. (BES9297) European integration (BES9297) Guaranteed jobs (ANES9496) Tax and spend more (BES9297) Medicare spending (SSI1516) Guaranteed jobs (ANES7276) Gov. services (ANES/9496) Equalize incomes (BES9297) School spending (SSI1516) Social Security (SSI1516) Taxes on high incomes (ANES7276) Equalize incomes (BES9701) Universal health care (ANES9496) Guaranteed jobs (ANES9296) Tax cut low incomes (PAT76) Gov. services (SSI1516) Housing spending (SS11516) Defense spending (ANES9296) Rights of accused criminals (ANES7276) Busing (ANES7276) Aid to Blacks (ANES7276) Debt ceiling (SSI1516) Parental leave (SSI1516) Raise minimum wage (SSI1516) Women's rights (ANES7276) Childcare spending (SSI1516) Social welfare spending (PAT76) Food stamps (SS11516) Government jobs (PAT76) Price controls (PAT76) Abortion (ANES9296) Marijuana legalization (ANES7276) Average (precision weighted) 0.0 0.2 0.4 0.8 0.6 1.0

Figure 1.2: Stability Correlations by Placement Knowledge for Individual Items

Note: Correlation between respondents' views on the item in wave 1 and wave 2 by whether they correctly placed the parties or candidates on that item. Using Fisher's transformation, the error bars show 68% confidence intervals (1 SE). For comparison, the correlation between respondents' partisan identification in two waves is typically between 0.75 and 0.85 in the ANES panels (Ansolabehere et al. 2008, 221). For readability, we only show the estimates from the 1992–97 waves of the BES panel and so omit the 1992–95 and 1992–96 items—including them leaves the result unchanged. Number of issues = 38. Number of responses = 29,317. Number of unique respondents = 6,116.

Correlation between waves 1 and 2

As far as we know, previous research has missed this strong relationship between knowledge of candidate and party issue positions and attitude stability. When people know which issue positions go with which candidate or party, and so know "what goes with what," their attitudes tend to be stable. Placement knowledge, therefore, allows us to break the observational equivalence problem. It reveals that not all survey respondents report unstable opinions, a pattern that would have been more consistent with question ambiguity or other sources of measurement error. Instead, instability appears to lie in the opinions themselves, particularly the opinions of those lacking placement knowledge.

Table 1.2: Percentages of Panel Respondents by Placement Knowledge

	Num	nber of	Corre	ct Issu	e Place	ments			
Panel	0	1	2	2 3 4		5	N		
Five-item policy scale:									
All Policy 1992-96	18	18	12	16	18	19	567		
Four-item policy scale:									
Econ ANES 1972-76	35	25	13	20	8		336		
Econ BES 1992-95	11	11	16	20	42		907		
Econ BES 1992-96	10	8	15	21	46		815		
Econ BES 1992-97	10	8	19	22	40		838		
Econ BES 1997-2001	17	17	19	23	24		2,27		
Econ Patterson 1976	57	20	12	8	3		661		
Average	25	15	16	19	27				
Three-item policy scale:									
Econ ANES 1994-96	33	18	19	30			1,30		

Note: Econ = economy; ANES = American National Election Study; BES = British Election Study. Percentages of respondents who fall into each level of placement knowledge. Results are similar with alternative measures of placement knowledge (see Appendix 1.7)

The implications of these findings for democratic accountability depend on the distribution of placement knowledge in the public. If a large share of the public has high placement knowledge, then opinion stability will be pervasive, while if this share is small, then many citizens will have unstable views. Previous analyses have shown surprising levels of ignorance of party and candidate positions in the United States (Carpini and Keeter 1993; Layman and Carsey 2002; Lewis-Beck et al. 2008).

Analyzing 1972–2012 ANES surveys, we find that on average somewhat less than half of the public can correctly place both the candidates relative to each other and the parties relative to each other on policy questions. Using both candidate and party placements substantially reduces correct guesses (see Appendix 1.11). For the panels we are analyzing here, table 1.2 presents the percentage of respondents at each level of placement knowledge, showing that many respondents cannot correctly place the candidates on all or most of the items. For example, only 19% correctly place the candidates and parties on all five items in the 1992–96 ANES allpolicy scale, and only 18% correctly place them on four of the five items.

Comparing these percentages with the correlations in table 1.1 reveals that, depending on the panel, roughly 25%–50% of the US public appears to have moderately stable attitudes (0.70 correlation and above). The share of respondents reaches the top of this range only with the three-item, ANES 1994–96 Economy scale, in a period when welfare spending and redistribution were especially salient in US politics. The other US panels fall on the lower end of this range. In Britain, the share of the public with stable attitudes appears much higher—about 60%—in the

mid-1990s but falls to about 40% by the late 1990s, as party differences diminish. In the appendix, we examine whether we are underestimating or overestimating party issue-placement knowledge and conclude that we are probably overestimating it (Appendix 1.12). In sum, these findings peg the share of respondents with stable attitudes in the lower range of 25%– 50% in the United States, and 40%–60% in Britain.

To summarize, the policy attitude instability we observe in surveys appears to arise, not primarily from measurement error but from the opinions themselves—in particular, from the opinions of those who are ignorant of where the parties and candidates stand on any given issue, that is, from those who do not know "what goes with what."

#### INDIVIDUAL LEVEL STABILITY ANALYSIS

The evidence thus far suggests that the over-time noisiness of public opinion on policy stems primarily from randomness in opinion, not primarily from measurement error. The often large mass of the public who lacks the anchor of elite policy positions evinces low opinion stability, even after correcting for measurement error. Those who possess this knowledge tend to have stable views. The correlational analysis above, however, has several limitations. It does not directly pit general political knowledge against placement knowledge. It is also vulnerable to alternative explanations—perhaps placement knowledge correlates with some other variable that accounts for this relationship, such as age, attentiveness to the survey, general policy expertise, policy-specific expertise, and so on. Finally, correlations have strengths but also weaknesses as measures of stability, so assessing whether these findings hold up with other stability measures is essential.

To address these concerns, we conduct analyses of individual-level measures of attitude stability, which allows us to include control variables, conduct the analysis within respondent, and use alternative measures of stability. We present the results with two stability measures: *Crystallized attitudes* (Zaller 1985), which captures whether respondents remain on the same side of the policy scale in both waves (coded 1, otherwise/midpoint/any "don't know" coded 0) and *Absolute change in attitudes*, which measures the absolute value of change in policy views from wave 1 to wave 2 (items are all rescaled to 1–7). As with correlations, these stability measures have strengths and weaknesses (see Appendix 1.5 for a discussion). In analyzing the dependent variables, we pool the analysis across all the panels analyzed above. All models include fixed effects for studies and cluster the standard errors at the respondent level.

To compare the effects of general political knowledge and placement knowledge, we code both as the number of correct items. Because placement knowledge in the analysis above is coded 1 only when respondents correctly place the candidates/parties in both panel waves, we therefore multiply the placement knowledge variable by two.

We first present these analyses with the multi-item scales and then with single items. To construct the multi-item scales, we use the simple average of the underlying items instead of factor scores, rescaling items to seven-point scales before taking the average. This approach makes the midpoint meaningful, which is important for the crystallized attitude measure. It also renders findings for the absolute change measure more interpretable. Across all studies, the mean of the crystallized attitudes measure is .51, implying that 51% of respondents remain on the same side of the multi-item issue scale across panel waves (chance would be 0.14 on a seven-point scale with a "don't know" option). On the average absolute change score, the mean is 0.76, implying that the average respondent changes his or her opinion by this amount.

Table 1.3: Placement Knowledge, Agreement, and Individual Measures of Stability

	(	Crystallized A	ttitudes	*		Abso	olute Change	in Attitu	ıdes <sup>†</sup>	
	General Knowledge					Placement Knowledge	<i>p</i> - Value on Diff.	R <sup>2</sup>	N	
Multi-item scales pooled (nine scales, 5,892 respondents):										
General political knowledge no. of items correct	.02 (.00)			.11	8,116	02 (.00)			.02	7,956
Placement knowledge no. of items correct		.05 (.00)		.14	8,116		04 (.00)		.04	7,956
Both	.01 (.00)	.04 (.00)	5.4 × 10 <sup>-14</sup>	.15	8,116	01 (.00)	04 (.00)	2.8 × 10 <sup>-6</sup>	.04	7,956
Individual items pooled (48 items, 6,256 respondents):										
General political knowledge no. of items correct	.01 (.00)			.05	39,364	03 (.00)			.03	37,027
Placement knowledge no. of items correct		.08 (.00)			39,364		21 (.01)		.04	37,027
Both	.01 (.00)	.07 (.00)	5.7 × 10 <sup>-63</sup>	.07	39,364	02 (.00)	18 (.01)	3.0 × 10 <sup>-42</sup>	.04	37,027
Fixed effects analysis:										
Respondent fixed effects sample	.00 (.00)	.06 (.00)	4.2 × 10 <sup>-32</sup>	.06	23,675	02 (.00)	16 (.01)	7.0 × 10 <sup>-23</sup>	.05	22,669
Respondent fixed effects		.06 (.00)		.27	23,675		13 (.01)		.27	22,669
Plus individual, other party, neutral candidate/party preference coded 0 on treatment		.06 (.00)		.27	23,675		14 (.01)		.27	22,669
Plus initially agree with your party or candidate coded 1 on treatment		.12 (.01)		.29	23,675		25 (.02)		.28	22,669

Note: Diff = difference. Each row presents two separate regressions: one with crystallized attitudes as the dependent variable and one with absolute changes in attitudes as the dependent variable. Standard errors clustered at the individual level are shown in parentheses. We include fixed effects for each panel in all regressions, although these fall out with respondent fixed effects (except for the three panels constructed from the 1992-97 British Election Study where respondents repeat). The Ns are larger for the crystallized attitude measure because it includes all respondents who gave "don't know" responses for their own policy opinions, whereas the change in attitudes measure includes only respondents who answered at least three-quarters of the items (these "don't knows" are imputed, following Ansolabehere et al. 2008). We lose some respondents who gave "don't know" responses to the self-placement questions in surveys that did not then ask them to place the candidates/parties. We also weight the data so that each panel receives equal weight.

<sup>\*</sup> Coded 1 for same side in both waves, 0 otherwise. Higher values are more stable.

<sup>†</sup> Rescaled to seven-point scales before averaging. Lower values are more stable.

We begin by pitting general political knowledge against placement knowledge with the multi-item scales. Table 1.3 presents the findings. Each row shows the results of two regressions, one using the crystallized attitudes measure as the dependent variable and the other using the absolute change in attitudes measure as the dependent variable. The first row of table 3 presents the estimates for general political knowledge. It shows that, for the crystallized attitudes measure of stability, an additional correct item increases the probability of remaining on the same side of the scale by 0.02. Although this might seem small, shifting from the bottom to the top of a 20item knowledge scale would increase a respondent's probability of being stable (and avoiding a "don't know" answer) by 0.4. Row 2 presents the estimates for placement knowledge. On crystallized attitudes, placement knowledge's 0.05 coefficient is two and half times as large as the coefficient for general political knowledge. Since these are on the same scale (number of correct items), placement knowledge's effect is two and half times larger. It implies that a shift from zero correct to four correct placements corresponds to an individual becoming 0.4 (2×4×.05) more stable on the crystallized attitude measure, a sizable increase. Row 3 estimates models that include general political knowledge and placement knowledge. For the crystallized attitudes measure of stability, the estimate for placement knowledge is three times larger than the estimate for general knowledge (0.04 vs. 0.01). The "p-Value Diff." column tests the significance of the difference between the two coefficients, finding it highly significant (p<5.4×10-14), a significance level achieved because of the consistency of the effect and the pooling across multiple panels. The estimates for the absolute change measure of attitude stability are similar, so for brevity we do not discuss them.

The next three rows of table 1.3 (4–6) repeat this analysis, but do so for pooled, individual-level survey items from all the panel studies (48 issue questions, 6,256 unique respondents). For the individual items, the crystallized attitudes variable has an average of 0.61, and the average absolute change variable has a mean of 1.22. As in the multi-item analysis, placement knowledge more strongly corresponds with both measures of attitude stability than does general political knowledge. When we include both in the same model (row 6), placement knowledge is seven times more important than general knowledge in terms of explaining crystallized attitudes, and nine times more important for the absolute change measure of attitude stability, and both differences are highly statistically significant.<sup>3</sup>

Next, table 1.3 examines whether this finding holds within respondent, using respondent fixed effects. That is, we examine whether respondents who correctly place the parties/candidates on item x but not on item y hold stable views on item x but not on item y. By only examining within-respondent variation, we can rule out alternative explanations based on any fixed characteristics of respondents, such as how attentive they are to survey questions, how old they are, how partisan they are, and so on. Of course, we can only conduct this analysis among respondents who know the party/candidate positions on some issues but not others, so we exclude those who correctly place them on none or all of the items. (Note that in these models, we can no longer include general political knowledge because it does not vary within respondent.) Row 7 of table 1.3 presents the estimates in this smaller sample without fixed effects, and row 8 presents them with respondent fixed effects. The effects remain similar in size and highly

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<sup>&</sup>lt;sup>3</sup> Not all measures of general knowledge are equal. Consistent with Sniderman and Stiglitz's (2012) party reputational premium theory, the ability to place the parties on the right side of each other on ideological placement questions strongly predicts policy-specific placement knowledge and therefore attitude stability (see Appendix 1.23).

statistically significant. For crystallized attitudes, the 0.06 fixed effect estimate in row 8 implies that correctly placing the candidates increases the probability of crystallized attitudes by  $0.12 \ (2 \times 1 \times 0.06)$ , a moderate effect given the within-respondent standard deviation on crystallized attitudes of 0.42. Placement knowledge's effect therefore holds within respondent. Attentiveness to the survey or other fixed characteristics cannot account for this finding.

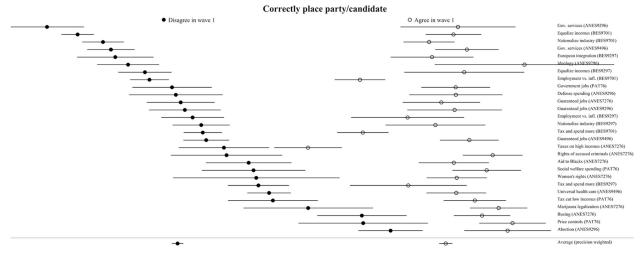
Finally, table 1.3 presents a series of additional tests stemming from our hypotheses about the mechanisms that lead placement knowledge to predict attitude stability. Specifically, we expect placement knowledge to drive attitude stability on a policy item primarily among respondents who hold a party/candidate preference and agree with their party or candidate on that item. These individuals may have a stable view on the issue and have therefore picked their party/candidate because of it, or they may have picked their party/candidate for some other reason and then adopted that party's/candidate's position as their own—causation could flow in either direction. Either way, the key expectation is that respondents will exhibit noticeably more stability on an item when they hold a party/candidate preference and agree with their party/candidate on that item, a pattern that should hold within respondent. The next rows of table 1.3 show that it does. First, in row 9 we code placement knowledge to 0 for respondents who lack a partisan or candidate preference in wave 1, showing that this recoding in itself leaves the results unchanged. In row 10, however, we further code placement knowledge to 0 for the minority of respondents who disagree with their preferred party or candidate in wave 1 or switch their party/candidate allegiance between waves. In this model, which codes respondents as 1 only when they know the party positions and hold a stable partisanship, the effect for crystallized attitudes rises from 0.06 to 0.12, a statistically significant increase. The results are again similar for the absolute change dependent variable.

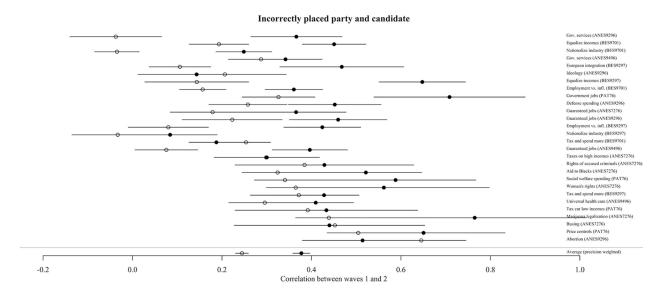
These findings reveal that people tend to hold stable opinions when they know their party's/candidate's positions and agree with them. Figure 1.3 visually displays the item-level correlations for "agreers" and "disagreers." On a few arguably "easy issues" (Carmines and Stimson 1989), such as marijuana legalization, busing to reduce segregation, women's rights, and abortion, respondents who correctly place but disagree with their party/candidate in wave 1 hold stable views. But on most issues, even individuals who appear to know the positions have views that fluctuate wildly if they do not initially agree with their candidate or party.

The "agreers" finding is important in part because it helps us rule out alternative explanations that the within-respondent test above cannot. One such alternative is issue-specific attentiveness: those who do well on tests of placement knowledge on a particular issue may evince less measurement error in placing themselves on that issue, resulting in high apparent attitude stability. Another is about policy-specific expertise: placement knowledge on an issue correlates with policy expertise on that issue, and that expertise may be issue specific and lead to attitude stability. These and other alternatives lead us to expect that placement knowledge should correspond with greater attitude stability regardless of whether people agree with their party or candidate, but that is not what we find.

A very different potential alternative explanation for our findings arises from the format of ANES issue placement questions: the surveys first ask respondents for their own view followed by the positions of the parties/candidates. If respondents randomly choose their policy position on an issue, and project this position onto their preferred party, while also by chance placing themselves on the same side as their party in both waves, we will classify them as having correct placement knowledge and stable opinion, artifactually producing a relationship between these variables. To assess the potential size of this effect (which should be small because of the low probability of the outcome), we replicate our analysis but measure placement knowledge and

Figure 1.3: Attitude Stability by Placement Knowledge and Agreement with Party or Candidate on Single Items Among Partisans



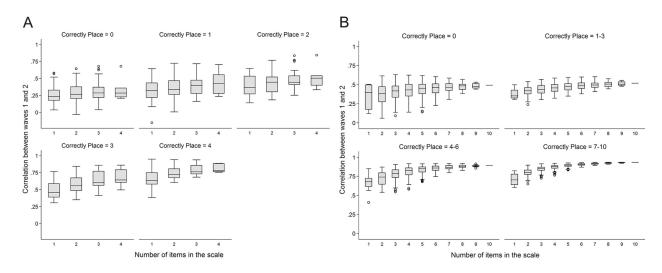


Note: Correlation between respondents' views on the item in wave 1 and wave 2 by whether they correctly placed the parties or candidates on that item. Using Fisher's transformation, the error bars show 68% confidence intervals (1 SE). For readability, we only show the estimates from the 1992–97 waves of the BES panel and so omit the 1992–95 and 1992–96 items—including them leaves the result unchanged.

attitude stability in different panel waves. We do so using the 1992–97 BES—the only panel that asks party placements for several issues in more than two waves. Although placement knowledge is surprisingly unstable itself from wave to wave, we nevertheless replicate the finding (see Appendix 1.21 for details and a general discussion).

In sum, our findings appear robust. Alternative explanations face numerous barriers. They must be within respondent, and they must predict that attitude stability occurs only among respondents who correctly placed the candidates/parties and agreed with their preferred candidate/party (in wave 1).

Figure 1.4: Stability by Placement Knowledge and Number of Scale Items



Note: A, All four-item economic scales pooled; B, SSI 2015–16 10-item panel. Subplots show the results by the number of correct placements. In A, we include six two-wave panels with a total N=5,975N=5,975 (see table 1.2 for the list). We show the plot for each of the six panel waves separately in Appendix 1.18. In B, n=336, n=136, n=92, and n=139, from lowest to highest correct placement categories, respectively.

To recap, we have presented two pieces of evidence on placement knowledge and opinion stability. First, placement knowledge conditions opinion stability, even after correcting for measurement error with multi-item scales, controlling for general political knowledge, and including respondent fixed effects. Second, among those who possess placement knowledge, only "agreers" hold relatively stable opinions, while the views of those who do not agree with their party are unstable. This latter finding further cuts the share of the public that appears to have stable policy opinions. Because only 70%-80% of individuals with placement knowledge also agree with their party on any issue, our estimated share of the public with stable opinions on a given issue in the United States falls from the 25%-50% range mentioned above to a range closer to 20%-40%.

## WOULD MORE SCALE ITEMS CORRECT FOR MEASUREMENT ERROR?

Because of the scarcity of placement questions in panel surveys, we can only include a few items in the scales we analyze. This is unfortunate, given that previous studies have used issue scales with more than 20 items (Ansolabehere et al. 2008). Would these findings change if we had more items? Would we find that even those lacking placement knowledge exhibit high attitude stability?

Additional items do not appear to benefit those lacking placement knowledge. Figure 1.4A presents attitude stability by number of correct placement items and by the number of scale items. It does so for all of the four-item scales shown in table 1.1 and, in each subplot, shows box and whisker plots for all possible scales of lengths 1–4. Figure 1.4B presents plots for the 10-item scale in the 2015–16 SSI panel we conducted, which included 10 economic items.

Table 1.4: General Political Knowledge and Attitude Stability Correlations in the 1992–1996 ANES

											Numl	per of	Items	in th	e Scal	e									
General Political Knowledge Quintiles	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1 (lowest)	.22	.27	.30	.32	.35	.36	.38	.39	.41	.42	.43	.44	.45	.46	.47	.47	.48	.49	.49	.50	.50	.51	.51	.51	.52
2	.31	.38	.43	.47	.49	.52			.58	.60	.61	.62	.63	.64	.65	.66	.66	.67	.67	.68	.68	.69	.69	.70	.70
4	.38	.46	.50 .51	.54	.57 .58	.59 .61	.61	.62 .65	.64 .67	.65 .68	.66 .68	.67 .69	.67 .70	.68 .71	.69 .71	.69 .72	.69 .73	.70 .73	.70 .73	.71 .74	.71 .74	.71 .74	.72 .75	.72	.70
5 (highest)	.49	.58	.65	.70	.73	.74	.77	.78	.79	.80	.81	.81	.82	.82	.83	.83	.84	.84	.84	.85	.85	.85	.85	.85	.86

The effect of adding scale items, the plots show, depends on respondent placement knowledge. Those lacking this knowledge (Correct Place=0Place=0) show minimal signs of stability gains with the number of scale items, and those with low knowledge show only marginal improvement. Only those who correctly place the parties/candidates on most or all of the items show notable stability gains from added items. In figure 1.4A, if we assume that measurement error is the only source of noise in the survey, these correlations imply that the true stability—the correlation without any measurement error—is only 0.36 for those who incorrectly placed the candidates on all four issues but near 0.88 for those who correctly placed the candidates on all four issues (see Appendix 1.17 for calculations and assumptions). Additionally, we know from measurement theory that the returns from additional items decline rapidly—much of the increase in stability comes from the first several items. Therefore, additional items seem unlikely to improve stability for those ignorant of elite positions.

What would happen if we had even more scale items? Although we cannot examine this question using placement knowledge, we can do so with general political knowledge. Although general knowledge is a poor proxy for placement knowledge, the extremes of a sufficiently rich general knowledge scale will correspond with the extremes of placement knowledge, enabling us to uncover instability among those especially low in general knowledge. Examining Ansolabehere et al.'s (2008) 25-item economic scale from the 1992–96 ANES panel, we show the stability correlations for 1–25-item scales by general political knowledge quintiles. Although quintiles do not capture the extremes, they come closer. (Unfortunately, the sample size does not permit us to examine the extremes with any precision.) For the bottom knowledge quintile, the correlation for 25-item scales reaches only 0.52, while correlation for the top quintile reaches 0.86. We present these results in table 1.4 (see also Appendix 1.19, which presents these by political knowledge deciles).

#### WHY MULTI-ITEM SCALES INCREASE STABILITY

Previous research using multi-item policy scales to measure over-time attitude stability has interpreted gains in stability from additional scale items as reflecting reduction in measurement error. But the findings presented here highlight an oversight in these studies: there are multiple sources of noise—by which we mean randomness—in survey items that may decrease as the number of scale items increases, and random measurement error is only one of these sources (Converse 1980; Feldman 1995; Steyer and Schmitt 1990; van der Veld and Saris 2004; Zaller and Feldman 1992). An increase in survey items also (1) reduces noise from the consideration pools respondents access to answer survey questions and (2) reduces noise from those who lack placement knowledge. To formalize this point,  $\hat{y}_i$  equal the true attitude for individual i, and  $y_i$  be the measured attitude for i. The three sources of noise—random measurement error, consideration pool randomness, and lack of placement knowledge—are represented by  $u_i$ ,  $v_i$ , and  $w_i$ , respectively, where  $p_i$  is a dummy variable indicating an incorrect placement. A simple model of the relationship between true attitude and measured attitude is

$$y_i = \hat{y}_i + u_i + v_i + p_i w_i.$$

Increasing the number of items could reduce noise from all three noise components, not just random measurement error. This is a point made by Zaller (2012): "Correcting for

measurement error ... fails to distinguish the random variability that is likely due to measurement error, from the variability that is more appropriately explained as due to weakly developed (ambivalent) attitudes. [It] simply corrects for all of it, regardless of cause" (606). The observed increase in stability from adding scale items, therefore, is consistent with the measurement error account but also with reductions in randomness from other sources of noise.

A central question raised by these findings is how much of the instability in survey questions reflects measurement error, and how much is attributable to these other sources. To answer this question with precision, one would have to eliminate the other sources of noise—not an easy task.

#### CONCLUSION

How do these findings affect our evaluations of the health of democracy? Needless to say, they are inconsistent with the "folk theory" of democracy (Achen and Bartels 2016) in which most citizens hold meaningful views about the major policies on the political agenda and judge politicians on their policy stances. Considered less pessimistically, they could still be consistent with an "issue publics" view of democracy in which citizens pick a party on the basis of one policy issue, then follow the party on most other policy issues. They are also consistent with a "reputational premium" view of partisanship, in which those voters who know and agree with their party's ideological stance reward candidates for hewing closely to it (Sniderman and Stiglitz 2012).

More pessimistically, we believe the finding with the most worrisome implications for democracy is the absence of stable views independent of party. On many issues, individuals who appear to know elite positions on an issue have views that fluctuate wildly on that issue if they do not initially agree with their candidate or party. This pattern seems most consistent with widespread following, or voters adopting views consistent with their preferred political party or leader (Abramowitz 1978; Broockman and Butler 2014; Campbell et al. 1960; Carsey and Layman 2006; Cohen 2003; Jacoby 1988; Layman and Carsey 2002; Lenz 2012). It therefore raises fundamental concerns about who governs in contemporary democracies. If the majority of voters simply adopt their party's views on most issues, party programs and governing choices may reflect the interests of political minorities. Moreover, as followers come to hold their party's issue positions dearly, their partisan attachment may strengthen. Voters may join the Republican Party, for instance, because of their antiabortion policy views, then adopt the Republican's progun position, and then become more attached to the Republican Party because of their newly held gun stance. Such a tendency would reduce party competition for voters' allegiances, an ingredient in policy responsiveness.

Aside from potentially widespread following, we should also worry about the majority that remains ignorant of the parties' stances on any given issue and that therefore does not know whether they agree with their own party. These individuals' views tend to be unstable and so may be unduly influenced by whatever considerations happen to be salient when elections are held. They may be influenced by random events—such as soccer games just before the UK referendum on exiting the European Union or ambiguous communications from the FBI director just before the 2016 US presidential election. They may also be more vulnerable to elite manipulation—such as supporting the 2003 invasion of Iraq (Moore 2008).

The current study is not without limitations. In particular, most of the multi-item scale analysis is on economic issues, although the single-item analysis includes a broader range of

economic and social issues. We lack questions about general policy-related predispositions (Miller and Shanks 1996) that meet our criteria for inclusion, although evidence suggests that these are less stable than policy-specific issues (Ansolabehere et al. 2008, 224). We would have especially liked to analyze additional items on policies that benefit particular groups, such as the poor or ethnic minorities.

In this article, we have broken the observational equivalence problem that has plagued the long-running debate over the apparent instability of the mass public's policy attitudes, revealing that this instability is real, not just measurement error, and mostly in the opinions of individuals ignorant of the parties' issue positions. In so doing, we show that some 20%–40% of the US public holds stable preferences on salient economic public policies. With growing polarization, the US public's knowledge of party and candidate positions appears to be rising, so we would expect levels of attitude stability to rise as well, maybe even to levels we found in Britain in the 1990s.

## Chapter 2

## It's *No Longer* the Economy, Stupid: Selective Perception and Attribution of Economic Outcomes

Scholars of American politics have long touted retrospective economic voting as a means by which citizens capably exercise democratic accountability, despite their overall inattentiveness to politics, and susceptibility to elite manipulation. In an era of runaway polarization, this may no longer be true. Using national survey and experimental data, I present evidence that the relationship between incumbent reelection and economic performance has weakened considerably. I argue that the decline is explained by two psychological mechanisms for motivated reasoning: first, citizens are more likely to misperceive the economy if the alternative would mean acknowledging the seeming successes of the other party, or the apparent failings of their own. Second, even when citizens perceive the economy correctly, they often selectively attribute actual credit or blame for economic outcomes in a manner consistent with their partisanship. I present evidence not only that citizens regularly engage in selective perception and selective attribution, but that they trade off between the two depending on which, in a given election, requires the least cognitive effort for maintaining the perceived superiority of their own party. Both the decline of economic voting and the patterns of motivated reasoning underlying it suggest a serious challenge for democratic accountability in an affectively polarized era.

Do American citizens hold their elected leaders accountable for their performance while in office? Many scholars have argued that citizens lack the sophistication, attention, and interest in politics necessary to do so (Campbell et al 1960; Converse 1964; Delli Carpini and Keeter, 1996; Lupia and McCubbins 1998; Achen and Bartels 2017; also see Chapter 1), but other political scientists have identified ways by which even relatively inattentive voters are nevertheless able to perform their democratic duties. Some scholarship has emphasized the value of heuristics (Lupia 1994; Lau and Redlawsk 1997; Gigerenzer, Czerlinski, and Martignon 1999; Kuklinski and Quirk 2000; Gilens 2011), which voters can use to make decisions similar to those they would make under fully informed conditions. Other work has focused on voters' apparent use of retrospective voting (Key 1966; Fiorina 1981). People often lack the high degree of political knowledge necessary for engaging in prospective voting, but as Fiorina has previously argued, "voters typically have one comparatively hard bit of data: they know what life has been like during the incumbent administration." (Fiorina 1981) By simply evaluating whether their own lives have improved under the incumbent, citizens can punish politicians who have mismanaged the economy, or reward those who appear to have managed it well. Of course, presidents have only a limited amount of control over economic outcomes, which are significantly impacted by business cycles, international developments, and the decisions of private actors. While economic voting is far from perfect as an accountability mechanism, it in theory induces politicians, anticipating that they will later be held responsible by the median voter for the state of the economy, to act as more mindful economic stewards.

Indeed, the literature clearly shows that economic performance plays a great role in determining incumbent vote share (Kramer 1971; Fair 1978; Kiewet 1983; Lewis-Beck 2005) – or, as James Carville's famous quote goes, "it's the economy, stupid." Scholars generally consider the state of the economy to be second only to partisan identity in determining vote choice in presidential elections (especially for non-partisans and weak partisans), and economic indicators (most commonly the year-to-year change in real disposable income) feature prominently in most election prediction models (Hibbs 2000; Fiorina, Abrams and Pope 2003; Lock and Gelman 2010; Blumenthal 2014). Of course, political scientists have highlighted a number of problems with retrospective voting: citizens tend to focus only on the most recent economic developments, ignoring what happens in the first few years of a presidential administration (Mackuen, Erikson, and Stimson 1992; Alesina, Londregan, and Rosenthal 1993; Achen and Bartels 2004); voters often appear to hold politicians accountable for events such as floods, droughts, and shark attacks that are out of their control (Healy and Malhotra 2009; Healy, Malhotra and Mo 2010; Achen and Bartels 2016); they also have a tendency to assume the economy is better when their party is in power, and vice versa (Hetherington and Rudolph 2015).

While these are important problems, scholars have largely missed a greater threat to retrospective voting – mass partisan polarization. Over the past several decades, Americans have become more consistently partisan in their policy attitudes and voting behavior (Abramowitz and Saunders 2008; Nivola and Brady 2008; Bafumi and Shapiro 2009; Abramowitz 2010) and more negative in their attitudes towards the other party (Iyengar, Sood and Lelkes 2012; Iyengar and Westwood 2015; Mason 2015; Lelkes 2016). As polarization rises, one's desire to vote in a manner consistent with one's partisan identity should increasingly take precedence over one's evaluations of the economy, should the two be in conflict. The first part of this paper provides evidence that this is precisely what has occurred, using decades of data on presidential vote share and national economic conditions, supplemented by analysis of data from the American National Election Study. As a result, economic performance may simply no longer have the significant impact on incumbent vote share it once did.

The second part of the paper examines the psychological mechanisms that have allowed voters to behave increasingly partisan despite their real concerns over the state of the economy. As partisan identity becomes increasingly important, citizens should grow less focused on making accurate, fair evaluations of the economy, and more concerned with defending the performance of their team, and/or attacking that of the other. In doing so, I argue that partisans will employ two strategies consistent with motivated reasoning (Abelson 1959; Lord, Ross and Lepper 1979; Kunda 1990; Lodge and Taber 2000; Westen et al 2006; Taber and Lodge 2006; Jerit and Barabas 2012). First, partisans might engage in *selective perception* – assuming the economy under their own party's president is strong, or weak under the other party's president, even if untrue. Second, they might instead practice *selective attribution* (Ross 1977) – in this case, accepting the state of the economy, but blaming poor performance by an incumbent from their own party on bad luck and outside factors, or crediting strong performance by the other party as merely serendipitous.

A combination of observational and experimental evidence demonstrates that partisans engage in both selective perception and selective attribution and that, at least in the case of selective perception, do so increasingly over time. While scholars and journalists have known for some time that partisans engage in selective perception, no studies focus on how this selectiveness changes over time, though some (Enns, Kellstedt and MacAvoy 2012; Weinschenk 2012) show how it differs across context and partisan identity. Research on attribution of responsibility for economic outcomes has largely focused on which institutions (federal vs. state, legislative vs. executive, etc.) are held responsible (Stein 1990; Svoboda 1995; Rudolph 2003), or on non-economic attributions (Healy and Malhotra 2014), though some work (Tilley and Holbolt 2011; Bisgaard 2015; Bisgaard 2019) acknowledges selective attribution of economic performance outside of the United States.

Most importantly, scholars have missed the importance of the relationship between these two psychological tendencies, which are employed in a complementary fashion. The principle of least effort (Zipf 1949) dictates that those engaged in motivated reasoning will choose the easiest means by which they can reduce cognitive dissonance. In this case, that may mean simple denial of economic reality. However, when evidence against an erroneous position grows overwhelming, denial becomes more difficult (Redlawsk, Civettini and Emerson 2010). Accordingly, in a polarized environment, partisans may desire to ignore outparty-associated successes or inparty-associated failures, but find this hard to maintain during clear booms and busts (Parker-Stephen 2013). This paper provides evidence that under particularly strong or weak economies, citizens rely less on selective perception, and more on cognitively effortful selective attribution. This tradeoff ensures a lack of partisan accountability, even when it is most needed. Under partisan polarization, economic retrospective voting may no longer play the significant role in vote choice that scholars have long found, providing elected officials with even fewer incentives for managing the economy to the benefit of all.

## A DECLINING RELATIONSHIP BETWEEN VOTE CHOICE AND ECONOMIC PERFORMANCE

Despite increasing polarization, do citizens still regularly consider the state of the economy when choosing for which presidential candidate to vote? Only recently have scholars of American politics began to present evidence that this relation may be declining (Donovan et al 2019). This paper tests the possibility by observing how the correlation between key economic

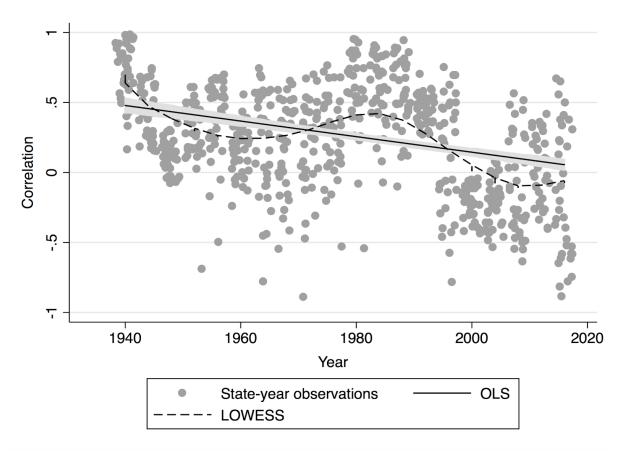
performance variables and the incumbent's share of the two-party vote changes over time. If voters are increasingly unwilling to cross party lines in response to strong or weak economic performance under the incumbent, then we should see a negative relationship between the two variables over time, starting around the 1980s, when scholars agree polarization began rising.

First, I gather data on several key economic indicators. The primary indicator of interest is the year-to-year change in national real disposable income in the election year, keeping in accordance with prior studies that have found voters primarily focus on recent changes to the economy (voters are myopic and discount performance in non-election years) at the national level (local conditions matter, but the effect is smaller and more inconsistent) when voting retrospectively, and that real disposable income is the indicator that most consistently shows a strong relationship (Mackuen, Erikson, and Stimson 1992; Alesina, Londregan, and Rosenthal 1993; Achen and Bartels 2004). Data on RDI come from the U.S. Bureau of Economic Analysis. While prior studies have found that real disposable income is the best predictor of incumbent vote share, it is possible that other indicators have become more predictive over time, especially as this would be in accordance with potential declines in its value as a predictor. To account for this, this study also uses data on the unemployment rate and the S&P 500, both taken from the U.S. Federal Reserve. To best reflect conditions at the time of the election, all data comes from October of the election year. The dependent variable is two-party presidential vote-share at the county level, as the paucity of observations at the national or even state levels makes over-time analysis difficult. The data on this come from Healy and Lenz (2014), which provides vote share at the county-level, from 1928-present for all counties. These files also contain the total counts of votes within each county for each year, which are used as population weights.

As RDI is measured at the national level for a given year, RDI does not vary within a given year, and therefore one cannot simply produce the within-year correlation between vote share and RDI for all election years, and then see whether the correlation declines over time. To get around this, this study uses the above data to compute a series of rolling correlations between RDI and vote share across time. For a given state-year, I take the correlation between RDI and vote share from each county in that state for that year and the previous two election years (for all election years for which there was also data on the two preceding election) and account for county population differences by weighting by county vote total. For instance, the correlation for Alabama in 2016 is computed on the weighted average of correlations between vote share and RDI change in all Alabama counties across 2008, 2012, and 2016. I drop from analysis any states with less than 25 counties, as correlations obtained from such states were highly variant and therefore unreliable (dropping these states from the analysis does not change the final outcome). This procedure generates correlations for 36 states in each election year between 1940 and 2016. I then plot the change in magnitude of these correlations over time, weighing by state population.

Figure 2.1 on the next page shows this relationship plotted using the line of best fit for both OLS and LOWESS specifications. Each observation in the plot represents a single state-year correlation between incumbent vote-share and RDI. The once-strong relationship, above 0.3 on average prior to 1980, declines to nearly zero by 2016. The mean correlation for all observations prior to the 1990s is 0.35, whereas from the 1990s on, it averages just -0.01, a highly significant difference (95% confidence intervals on the latter statistic range from -0.06 to 0.04). This decline is remarkably consistent regardless of whether this analysis is repeated using the unemployment rate or the S&P 500 (see Appendix 2.2). The LOWESS, which detects non-linear local changes, shows two periods of decline, one between 1940-1960, and another roughly

Figure 2.1: Decreasing Correlation Between Real Disposable Income and Two-Party Vote Share



Note: N=792. The OLS line of best fit uses 95% confidence intervals, as does the LOWESS, but they are too small to be seen above. Each observation represents the average correlation (weighted by vote total) between incumbent vote share and year-to-year change in real disposable income for all counties within a state, across that and the previous two elections. For readability, observations have been jittered (each observation is in an election year).

between 1984-2004. The former of these two declines is consistent with the end of the Great Depression (economic voting, unsurprisingly, would be particularly common in a period of such great economic need, and as the United States became the economic leader of the world over this period, producing consistent domestic prosperity for decades, the primacy of economic voting declined accordingly), while the latter occurs during the period primarily associated with rising polarization. In particular, beginning around 1996, a large number of states actually show significantly *negative* correlations, suggesting their citizens increasingly support the incumbent as economic performance *worsens*. To confirm these results are not spurious, I report several robustness checks in the SI, such as using regression coefficients instead of Pearson correlation coefficients (Appendix 2.3), using two or four-year election windows instead of the three used above (Append 2.4), or grouping by counties rather than aggregating to states (Appendix 2.5). In none of these alternative specifications do the results change.

Table 2.1: Alternative Model Specifications for the Decline of Economic Voting

Row	Model description	b (SE)	T-stat	R2	N
1	RDI*year interaction effect on incumbent vote	-0.034 (0.008)	-4.65	0.07	58177
	Controls				
2	with control for lagged incumbent vote	-0.038 (0.007)	-5.39	0.08	57476
3	and control for county income	-0.038 (0.007)	-5.42	0.08	57476
4	and control for year squared	-0.035 (0.007)	-4.91	0.08	57476
5	and control for district partisanship	-0.032 (0.004)	-7.32	0.34	57476
	Fixed Effects				
6	Row 1, with state fixed effects	-0.038 (0.012)	-3.33	0.11	57476
7	Row 1, with county fixed effects	-0.011 (0.004)	-2.34	0.15	57561
	Alternative Independent Variable Measures				
8	Row 1, using CPI instead of RDI	-0.014 (0.005)	-2.84	0.03	61238
9	Row 1, using S&P 500 instead of RDI	-0.003 (0.001)	-3.95	0.02	58177
	Subgroups by County Partisanship				
10	Row 1, lowest margin of victory quartile	-0.0302 (0.005)	-5.60	0.20	14323
11	Row 1, second lowest margin of victory quartile	-0.0140 (0.014)	-0.98	0.09	14487
12	Row 1, second highest margin of victory quartile	-0.0565 (0.005)	-3.28	0.06	14421
13	Row 1, highest margin of victory quartile	-0.0977 (0.029)	-3.32	0.05	14245
	Individual Level Analysis, ANES				
14	RDI*year interaction effect on incumbent vote	-0.201 (0.013)	-14.59	0.12	20712

Note: Standard errors clustered by election year in parentheses. Observations are weighted, in rows 1-13 by population using each county-year's vote total, and in row 14 using respondent sample weights. All reported coefficients are significant at p < 0.05, excepting Row 11.

Other potential challenges exist. Perhaps the apparent decline in economic voting is an artifact of the aggregation strategy I use, or of the decision to drop fourteen smaller states with few counties. Alternatively, perhaps it can be explained by some kind of omitted variable bias. To address these and other possibilities, Table 2.1 above reports results from a series of OLS regression models using county-level data from all fifty states over the period from 1940 to 2016. In each model, the dependent variable is the incumbent party's share of the two-party presidential vote, while the right side of the equation contains a measure of economic performance (typically, as above, year-to-year change in real disposable income), year, and an interaction between the two. If economic voting is on the decline, then the interaction term should be significant and negative. The third column reports the beta coefficient and standard

error for the interaction term in each of these models, while the fourth, fifth and sixth columns report T-statistic, R-squared, and the number of observations, respectively.

Row 1, the simplest version of this model, shows the hypothesized highly significant, negative interaction between RDI and year. Rows 2 and 3 report the same model, but with controls for incumbent vote share in the last election, and county-level average real disposable income, which slightly increase the strength of the finding. To account for potential non-linear effects, Row 4 uses year squared instead of year, but this makes no difference. To reduce noise within the model by removing any impact of partisan voting patterns within counties, Row 5 includes an interaction between lagged incumbent vote share and an indicator for a change in the party of the incumbent president, which also makes no difference. Rows 6 and 7 include fixed effects at both the state and county levels. While the inclusion of fixed effects either strengthens or weakens the finding, depending on the unit of analysis, the results either way remain highly significant, suggesting that it is within-unit, not between-unit, variation that accounts for the decline in the relationship over time. To test the possibility that voters are becoming more sensitive to some alternative measure of economic performance, rows 8 and 9 report the model using changes in the Consumer Price Index and the S&P 500, respectively, instead of RDI. Regardless of specification, all results remain significant (p<0.05).

To get a sense of the extent of this problematic decline in economic voting, we might want to see whether it has occurred generally, or only in highly partisan counties. After all, if retrospective voting has only declined in places where the incumbent regularly wins in a landslide, but has remained intact elsewhere, the damage to democratic accountability might be less severe. Furthermore, this may provide some clue as to the mechanism for the decline; if it is driven by polarization, then we would expect to see the greatest decline in counties that lean heavily towards one party or the other. To test this, I create a measure of over-time county partisanship by taking the absolute average margin of victory of the incumbent for all elections in that county across all years in the dataset, then dividing all observations into quartiles. Rows 10-13 report the results of the Row 1 regression model for each of these groups separately, and confirm the hypothesis that the magnitude of decline generally grows with average margin of victory. While this is true, the decline is still significant even in counties with the lowest average margin of incumbent victory — in other words, in swing counties in which careful monitoring of economic performance by voters could actually flip the results of an election.

Finally, it is still possible that these findings would not replicate if one were to conduct an individual-level analysis using survey data. Row 14 shows the results of just such an analysis. The same data on change in real disposable income is used as the independent variable, and the new dependent variable is no longer incumbent's share of the two party vote at the county level, but rather at the level of the individual respondent, going from 1964 to the present. The results, a highly significant negative interaction term between RDI and year, are strikingly similar to those obtained using the aggregate data. While during an earlier period of American politics it could fairly be claimed that voters are quite responsive to economic conditions, given the preceding evidence, it is no longer clearly so.

#### EXPLAINING THE DECLINE OF ECONOMIC VOTING

Economic performance appears to be deteriorating as a means by which voters hold political leaders democratically accountable. What accounts for this decline? The remainder of this paper provides an explanation that relies upon polarization — as partisan attachment grows,

economic performance becomes increasingly crowded out as a primary matter of public concern. From there, this account rests upon psychological pressure among citizens to engage in motivated reasoning to protect their deeply-felt partisan identity (Green, Palmquist and Schickler 2004), either by denying the reality of economic outcomes, or attributing outcomes differentially.

Partisans should engage in some combination of at least two forms of motivated reasoning. First, voters may engage in *selective perception* of the economy. That is, partisans will assume that political representatives from their team, given that they ostensibly possess the right values and the right policies, will capably manage national economic performance, while those from the other side will not, regardless of actual economic outcomes. A citizen engaging in selective perception might receive ambiguous or contradictory economic signals, and choose to interpret them in a partisan-consistent manner. Alternatively, they might dispute whether clear economic signals effectively measure real economic performance (for instance, whether the U6 measure of unemployment fairly accounts for part-time and disaffected workers).

Second, voters may engage in *selective attribution* – that is, they attribute credit for a good economy to the government primarily when it is controlled by co-partisans, and blame for a bad economy primarily when the other side has control. Alternatively, when the inparty presides over bad economies, or the outparty over good, citizens explain away these inconvenient truths by attributing the state of the economy to non-political factors (e.g. business cycles), outside actors (e.g. international markets), or simply chance. As discerning responsibility for economic outcomes requires a higher cognitive load than simple denial of the economy in its current state, I expect selective attribution becomes increasingly preferred over selective perception during clearly strong or weak economic periods, in which the state of the economy becomes undeniable.

This is not to say that alternative explanations do not exist. For instance, it may be that rising elite ideological polarization has made the public more ideologically polarized (Abramowitz and Saunders 2008), in which case newly-ideological voters may be more concerned with the positions of the parties themselves, or rhetoric surrounding those positions, rather than their consequences for the economy, although some may question whether the public has indeed polarized ideologically enough to have had this effect (Fiorina, Abrams and Pope 2008). Another possibility is that voters are not choosing to reject economic reality themselves, but instead are increasingly dependent upon a media landscape that, once relatively unified in message, now may provide differential signals about the economy to satisfy and/or mobilize their partisan audience. This is certainly consistent with what we know about partisan adoption of ingroup media messages (Zaller 1992; Lenz 2013). While these possibilities are not tested directly in this study, they should be considered complementary to the arguments made herein, and researchers should be encouraged to explore their empirical validity in the future.

#### MECHANISM 1: THE RISE OF SELECTIVE PERCEPTION

Over time, are citizens more likely to misperceive (or at least report misperceptions about) the state of the economy when economic reality does not comport with their partisanship? While we know that citizens engage in selective perception about the economy, previous studies have not tracked how this phenomenon changes over time.

As a simple test of this, we first look to see how the relationship between economic evaluations and partisanship has changed in the last several decades. If partisan affiliation increasingly leads citizens to perceive the economy incorrectly, then partisanship should be an

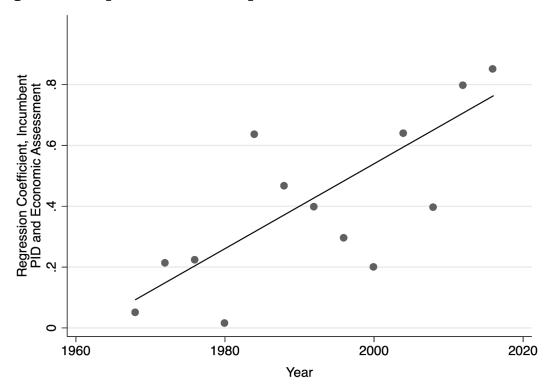


Figure 2.2: Impact of Partisanship on Economic Evaluations Over Time

Note: N=18,191 across 13 election years. Each data point above represents the bivariate regression coefficient of partisanship on evaluations of the economy over the past year.

increasingly strong predictor of economic evaluations. From 1962 to the present, the American National Election Study asked respondents whether, over the past year, the economy has gotten better, worse, or stayed the same. Their answers serve as the dependent variable in a simple bivariate OLS regression model, where the independent variable represents strength of partisan identity relative to the party of the incumbent president. The variable is constructed from 0 to 1 such that 1 represents a strong partisan from the incumbent's party and 0 a strong partisan from the opposite party, with five other scale points in between (all independents are scored at 0.5). Figure 2.2 above tracks the OLS regression coefficient of partisanship on economic evaluations for each election year, 1968-2016, estimated separately. An increasingly positive correlation means that as one's strength of identification with the incumbent party increases, their economic ratings become more positive. In the period prior to 1980, the coefficient averages about 0.15, while post-2000, it now averages around 0.6, a fourfold increase in magnitude. It should be noted that this trend is not purely secular, and appears complicated in the mid-period (1980-2000) by a sudden spike and gradual decline in the impact of partisanship, though these levels still constitute an increase in the relationship relative to earlier periods. These results are robust regardless of whether sample weights are used, or whether the data in later years are restricted to face-to-face respondents only (see Appendix 2.6).

While this test demonstrates that the impact of partisanship on economic assessments increases over time, it does not establish the degree to which this actually leads citizens to

perceive the state of the economy incorrectly. To better demonstrate this, this paper next uses time-series data from the American National Election Study's pre-election interviews, in conjunction with economic data, to see whether citizens are more likely over time to evaluate the economy inaccurately when doing so benefits their party, versus when it does not.

To objectively evaluate the state of the economy in a given year, I use an economic index provided by FiveThirtyEight, which averages changes in seven different economic indicators (nonfarm payrolls, personal income, industrial production, personal consumption expenditures, inflation, forecasted GDP, and the S&P 500 index) in the month prior to the election (see Appendix 2.7). According to this model, the economy is average or above when the index reaches at least 3%, and below average otherwise. For the time period I examine (1962-2016), there are three election years in which the index is below 3%: 1980, 1992, and 2008. In the case of 1980 (-2.5%) and 2008 (-2.1%), the economy a month before the election was clearly in bad shape, while this is more ambiguous in 1992 (1.6%). Still, coverage of the election at the time was uniformly negative regarding the economy, and Bush is widely perceived to have lost his election bid due to economic weakness. Then, using the same ANES question from the previous test, for each election year, I code survey respondents as "misperceivers" if they answer the economy is "getting better" in 1980, 1992, and 2008, or "getting worse" in other years. This scheme understates misperceptions, as those who say things "stayed the same" even during, for instance, a booming 1984 economy are counted as correct.

I then look to see how misperception differs depending on partisanship. Henceforth, I refer to "conflicted" versus "consistent" partisans. The "consistent" label refers to respondents for whom economic reality is consistent with their desired beliefs about economic stewardship — citizens are labeled as consistent when their own party occupies the White House during a good economy, or when the other party presides over a bad economy. "Conflicted" citizens, on the other hand, should feel some pressure to misperceive or misrepresent the economy, as their own party presides over a bad economy, or the other party over a good one. For instance, in 2008, at the beginning of the great recession, Democrats would be labeled as consistent partisans, given the poor economic reality was consistent with their expectations about outparty stewardship of the economy. Republicans, expecting their party to have done a better job handling the economy, are labeled as conflicted.

Using these classifications, Figure 2.3 on the next page shows how the accuracy of these two groups in evaluating the economy changes differentially over time. Consistent partisans tend to be fairly accurate in their evaluations over the whole period, with only an average of about 20% at any time differing from objective evaluations, and with only a single election higher than 25%. More importantly, this trend changes little over time, with consistent voters even getting slightly more accurate over time. On the other hand, conflicted partisans exhibit much greater inaccuracy, averaging about 36% and, crucially, getting much worse over time; since 2000, conflicted partisans have never held inaccuracy rates lower than 40%. While at the beginning of this period, the gap between conflicted and consistent partisans was less than 10 points, by the end, the gap is nearly 30 points, a highly significant difference (p<0.001). These findings hold regardless of whether face-to-face samples are included, or if sample weights are used (see Appendix 2.8).

Given that the ANES is an explicitly political survey in nature, respondents who are asked economic questions are particularly likely to frame their evaluations in a partisan manner. For surveys such as the GSS that are not primarily political, but in which respondents are nevertheless asked to evaluate the economy, we might not expect to find similar levels of selective perception. This is consistent with previous work showing that these surveys differ in terms of

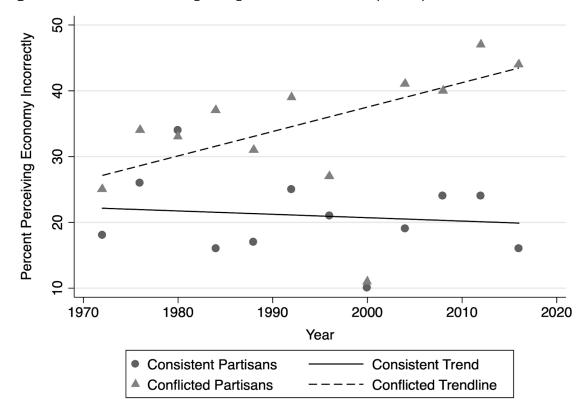


Figure 2.3: Economic Misperceptions Over Time (ANES)

Note: N=27,875. ANES = American National Election Study. 95% confidence intervals (not shown above) for each group do not overlap.

their ability to politicize respondents (Sears and Lau 1983; Wilcox and Wlezien 1993). In fact, I find that the GSS shows no change over time in the relationship between economic perceptions and partisanship. Rather than cast doubt on rising selective perception, however, I argue that this disconnect reinforces the partisan nature of this phenomenon; when political identities are activated, citizens engage in effortful defense of them, and when they are not, they are more likely to see the world for what it is (Vavreck 2009). Given that an actual election clearly mirrors the partisan context of the ANES much more closely than the non-partisan GSS, we should consider the results from the ANES better reflective of the thought processes that will influence actual voting behavior, especially in light of evidence of declining economic voting. For a detailed discussion of these findings, refer to Appendix 2.9.

#### **MECHANISM 2: SELECTIVE ATTRIBUTION**

Selective attribution is defined here as the tendency of partisans to offer or withhold attribution to the government for economic outcomes depending on which party controls the government during that period. We would expect consistent partisans (those whose party oversees a good economy, or whose opposition oversees a bad one) to attribute economic

outcomes to government policies, and conflicted partisans (vice versa) to attribute those same outcomes to chance or outside factors. Scholars have largely missed the important role that selective attribution may play in the electorate's ability to hold political leaders accountable for economic stewardship (with some exceptions outside of the case of the U.S. – see Tilley and Hobolt 2011; Bisgaard 2015, 2019). Ideally, as with selective perception, we would track the increased usage of selective attribution over time, but unfortunately, survey questions about attribution are rare and inconsistently used. Still, it is possible to determine whether respondents appear to engage in selective attribution in recent U.S. elections. This section first presents findings from two original survey experiments about presidential economic performance. The first of these shows that individuals engage in selective attribution with historical information about overall past partisan economic performance, while the second experiment assesses selective attribution regarding contemporary presidential administrations. Finally, this section examines ANES data that confirms the phenomenon of selective attribution, at least during the brief period in which attribution questions were asked.

#### EXPERIMENT 1: HISTORICAL PARTISAN ECONOMIC PERFORMANCE

The first experiment provides respondents with varying information about the performance of the economy under Democratic and Republican administrations, aggregated across the last several decades. In the second experiment, the president in question (Obama or Trump) is varied, and then respondents are asked to evaluate both the state of the economy and the president's responsibility for it.

Respondents in Experiment 1 (n=254, users on Mechanical Turk) were randomly assigned to receive one of two messages about how well the parties had done in managing the post-WW2 economy. The content of these messages reflects the fact that from 1948-2005, Democratic presidents oversaw greater overall income growth than Republicans, but that Republicans had the better record when analysis is restricted to election years only (Bartels 2016). Taking advantage of this ambiguity, one message claimed that Republicans had the better record over the period, while the other said that Democrats did.<sup>4</sup> Respondents were shown one of these two messages, and then were asked what explained why one party did better than the other. I asked them to rate the quality of two explanations ("poor" to "strong", 5 point scale), that a) the policies of that party are better at producing income growth (henceforth referred to as the "skill" explanation), and b) that party was simply lucky to have been in power during times when the economy was better, for reasons beyond their control (the "luck" explanation).

Table 2.2 on the next page shows the differences between how respondents answered these questions depending on their assignment to their own party or the outparty. Column 1 shows that ingroup respondents thought the skill explanation was strong (3.98 out of a possible 5), while outgroup respondents (2.48) found it considerably weaker. These respondents instead preferred the luck explanations. Column 2 shows this relationship is reversed when evaluating the luck explanations, and column 3 shows the difference between columns 1 and 2. Overall, as

<sup>4</sup> The pro-Republican message mentioned this was for election years only, though this was de-emphasized in the question wording. All respondents were debriefed at the end of the survey, learning the facts as presented in Bartels' book. For specifics on question wording, see Appendix 2.12.

Table 2.2: Economic Misperceptions Over Time (ANES)

		Average "Luck" Motive Rating	, 0	% with "Skill" Motive Higher
Party Ingroup	3.98 (0.083)	2.36 (0.107)	1.62	72 (0.039)
Party Outgroup	2.48 (0.100)	3.41 (0.100)	-0.93	19 (0.036)
Difference	1.5	-1.05	2.55	53

Note: N=132 for all ingroup statistics above, N=122 for all outgroup statistics. Standard errors in parentheses. All differences are significant at the p>0.001 level.

shown in column 4, 72% of ingroup respondents thought their party's performance was better explained by skill than luck, while only 19% felt the same in the outgroup. The results of this experiment demonstrate that citizens do not have a fixed understanding of the effect government officials have on the economy; when confronted with evidence that the other side better handles the economy, respondents explain this away by denying politicians responsibility for outcomes.

#### EXPERIMENT 2: RECENT ECONOMIC PERFORMANCE

In a second experiment, mTurk respondents (n=1093) answer two questions about politics and the recent state of the economy. In one question, respondents are asked to indicate the degree to which the state of the economy is determined by presidential actions versus outside forces beyond presidential control, using a seven-point Likert scale. In the other, respondents rate the quality of the economy under a recent president on a seven-point Likert scale. For both questions, the identity of the president in question (either) Obama or Trump) is randomized, as is the order in which the two questions are asked, to control for potential order effects. In the case of Obama, respondents were asked to think about the state of the economy in 2016, while respondents in the Trump condition were asked to think about 2017. Given the close proximity of these two periods, and the similarity of economic performance between them, all respondents are given a case in which the performance of the economy is undeniably strong.

This experiment allows us to see whether and the degree to which respondents engage in both selective perception and selective attribution. First, if respondents perceive the economy selectively, those in the inparty president condition should have more positive economic views than those in the outparty condition. Second, if respondents engage in selective attribution, inparty raters should attribute greater economic control to the president as evaluations of the president's handling of it improve; for outparty raters, this relationship should be reversed. First, looking at selective perception, the findings from the ANES are reconfirmed. Only 11% of inparty subjects claimed the state of the economy was "mediocre" (the scale midpoint) or worse, compared to 54% of outparty subjects, a highly significant difference (p<0.001). This 43-point gap is even larger than the 30-point gap observed among ANES respondents.

Less Control

Attribution of Economy to President

— Inparty Evaluations

Outparty Evaluations

Figure 2.4: Selective Attribution by Partisan Attachment

*Note:*  $\mathcal{N}=1093$ . Confidence intervals are 95%.

Next, we look at selective attribution. Subjects' economic attributions change, as expected, depending on the president referenced and their beliefs about the economy. Of subjects who saw the president from the other party and perceived the economy as strong, only 29% said the president, not other forces, primarily determined economic outcomes; for those who instead perceived the economy was weak, this number rises to 46%. For those who saw a president from their own party, this relationship is exactly reversed. Figure 2.4 above visualizes these results. The relationship between economic perception and economic attribution is shown as a solid line for ingroup subjects, and dashed for outgroup subjects. For the former, as expected, their economic satisfaction is higher at all levels, but improves as attributed responsibility for economic conditions increases. For outgroup subjects, we see the opposite pattern; as their satisfaction with the economy declines, they increasingly attribute said outcome to the incumbent president. The order in which the questions were asked does not seem to matter, as effects are significant regardless of order for both ingroup and outgroup respondents (see Appendix 2.13).

Table 2.3: Selective Attribution of Economic Performance, 1985-1996, ANES

		Percent Attributing Outcome to Government, by Election Year				
		1984 1988 1992 1996 Avg				
Economy	Inparty	78	59	33*	54	56
perceived as	Outparty	55	46*	24*	34	40
getting better	Difference	23	13	9	20	16
Economy	Inparty	48	39	46	34	42
perceived as	Outparty	63	63	58	54	60
getting worse	Difference	-15	-24	-12	-20	-18

Note: N=3,365. An asterisk indicates less than 10% of sample held this belief.

#### OBSERVATIONAL DATA FROM THE ANES

Beginning in 1984, the ANES asked respondents to rate the effect of the policies of the federal government on the national economy as making it "better", "worse", or "no difference" (see Appendix 2.10 for question wording). As this question was unfortunately retired in 1996, it was not used for a long enough period of time to convincingly demonstrate any over-time shifts in the usage of selective attribution. However, for four presidential elections, the data shows how respondents' answers change depending on their partisanship and that of the incumbent president. When the economy is good, citizens who share the partisan identity of the president should be more likely to say it was the government's policies that made it better, while citizens of the other party should be more likely to claim government policy had no effect or weakened a good economy; when the economy is bad, the reverse should be true.

Each cell in Table 2.3 above shows the percentage of respondents in that category who attributed economic performance to the government in that year; for instance, in 1984, 78% of Republicans who saw the economy as improving attributed the booming economy to Reagan's policies, while only 55% of Democrats did. The attribution difference between partisans who saw the economy the same is shown in each "difference" row. The "Avg" column shows the

average difference for each group across these four elections. For those who perceive the economy as getting better, citizens who share their party with the president are 16 points more likely to attribute economic performance to the government than those who do not. When the economy is seen as getting worse, citizens from the opposite party of the president are 18 points more likely than those on the other side to do the same. While this is too short a period to show any changes in attribution over time, these findings do demonstrate that voters engage in selective attribution based on their partisan identities and their perceptions about the economy.

#### TRADEOFFS BETWEEN SELECTIVE PERCEPTION AND ATTRIBUTION

In the previous sections, I provided evidence that citizens act in defense of their parties by engaging in selective perception and attribution when evaluating economic performance. In this section, I show that these two mechanisms complement one another. When people attempt to maintain their priors, they do so by the principle of least effort – that is, they will use the simplest psychological trick available to them, and eschew rationalizations that are more cognitively effortful (Kunda 1990; Zipf 1949). When the state of the economy is at all ambiguous, selective perception is arguably the easier of the two; simply stating the "bad" party delivered the "bad" outcome is easier than thinking through whether their policy efforts actually resulted in such a situation. However, when the economy is particularly strong or weak, it becomes difficult to convince oneself of what is clearly not the case (Redlawsk, Civettini and Emerson 2010). In such situations, selective attribution should be the preferred way of maintaining one's priors.

Two case studies using ANES data suggest that this is true. In 1988, the economy a month before the election was better than average, but only barely so. Democrats who wanted to believe that the Reagan economy was weak could probably do so with some ease. According to ANES data, in fact, many of them did: 41% of Democratic respondents said the growing economy was actually shrinking. Comparatively few Democrats (6%) answered that the economy was growing, but that Reagan was either not responsible for it or actively working against it. However, in 1992, the economy was well below average and the media consistently covered the Clinton-Bush election as one in which the incumbent presided over a weak economy. Given this, very few Republicans (8%) were willing to suggest the economy was actually getting better. Instead, a much larger share of Republicans (32%) claimed that the weakened economy was not the fault of Bush's policies, or even that in fact his administration's policies had staved off the worst case economic scenarios. If citizens were not engaging in selective attribution as well as selective perceptions, conflicted partisans among them in years like 1992 or 2008 would be forced to begrudgingly admit that their team performed less than admirably on the economy, and some of these respondents would likely have changed their vote accordingly.

Experiment 2 also provides evidence consistent with this account. In 2016 and 2017, the economy was unambiguously strong, suggesting that selective attribution would be used as a motivated reasoning strategy by outparty subjects at least as commonly as selective perception. Using the same data as before, I divide outgroup subjects into four groups using a 2x2 grid: those who perceive the economy as good (versus mediocre or worse), and those who perceive the president as primarily responsible for economic outcomes (versus equally or more attributable to other factors). Only 13% of outgroup subjects actually give the president credit for a strong economy (compared to 35% in the ingroup). On the other hand, 25% of outgroup subjects saw the president as responsible for a bad economy, while 32% saw the outparty president as getting lucky with a good economy. While 54% of outgroup subjects in total saw the economy as weak, selective attribution allowed an additional 32% of subjects to avoid giving credit to a president from the other party. It is worth noting that although selective attribution is used more commonly than selective perception, compared to the ANES respondents from decades earlier, many more respondents are still willing to engage in the latter, despite a clearly strong economy. This may be due to increased reliance upon partisan media for economic data. Alternatively, it could reflect growing economic inequality, as stagnant wages and a growing reliance on parttime work could make citizens more likely to see the economy as weak.

#### DISCUSSION AND CONCLUSION

The evidence presented here suggests that retrospective economic voting is on the decline, and plays a significantly diminished role in presidential vote choice compared to past periods. This decline is consistent with the timing of the ramp up in political polarization in the 1980s, and continuing to the present. Polarization leads mass partisans to think of the other party in tribalistic, competitive terms, and in order to maintain prior beliefs about the outgroup's inability to successfully manage the national economy, they engage in selective perception of the state of the economy, and attribution of credit and blame for its highs and lows. Both of these tendencies matter, as selective perception allows them to dismiss outparty successes through the relatively cognitively effortless process of simple denial, while selective attribution provides an alternative rationalization when the economy is too strong or weak to perceive otherwise. This study highlights the importance of well-known psychology biases of attribution which political scientists have paid too little attention. Depending on the economic context, selective attribution appears to play just as much of a role as selective perception in weakening democratic accountability, but only the latter has been studied to any meaningful degree. Some newer research argues that negative attributions about the other party do as well or better in explaining low outgroup affect than more common explanations, such as growing ideological extremity, and that voters tend to selectively credit or blame politicians for non-economic behavior as well (see Chapter 3). The lack of attention to attribution, despite its importance to outcomes in American politics, makes studying it more difficult. Scholars, for instance, cannot easily track shifts in usage of selective attribution over time because attribution questions were only rarely asked in the American National Election Study, and often not at all elsewhere. Future scholars are therefore highly encouraged to include attribution questions in future rounds of major time-series surveys, as well as in their own work.

A common response to findings of selective perception and/or selective attribution may be that the evaluations respondents make in surveys are reflective of partisan cheerleading, rather than sincere beliefs. However, given the diminishing linkage between economic conditions and actual votes, as demonstrated in the first section of this paper, it is increasingly difficult to think of economic misperception in surveys as mere partisan cheap talk. If conflicted partisans do privately perceive the economy as it truly is, but choose to hold their nose and vote with their party regardless, then retrospective voting is in just as much peril as if they sincerely believed their stated misperceptions. Rather than fooling themselves, they have simply decided to privilege party above performance, departing from a key aspect of retrospective accountability.

These findings underscore the challenges that affective polarization poses for governance. In a polarized America, citizens may be willing to tolerate poor economic performance from their own party, or fail to reward the other side for apparently good economic stewardship, winnowing further already weak hopes that the public will be responsive to government action. This argument should not be construed as meaning that voters can only provide responsible signals to their representatives by voting for the incumbent during good economic times, and the challenger during troubling ones. Indeed, there are plenty of political considerations of great import besides the state of the economy, and citizens can certainly be justified in voting against an apparently capable manager of the economy who does not share their values, represent their non-economic policy views, and so on. This is especially so given that the president has modest control over economic outcomes, and can often do little without the assent of other actors within and outside of the country.

Instead, the decline of retrospective voting matters to the extent that it provides elected officials with an incentive to deliver positive economic outcomes for the median voter. If politicians get the sense that economic well-being is no longer as strong a priority for the median voter as partisan identity, then elites may feel freer to pursue their own goals, or those of the wealthy or organized, whose preferred policies may be orthogonal or even detrimental to the public interest. Similarly, if politicians no longer feel they can win much support from voters in the other party via economic achievement, they may instead prefer to enact policies that narrowly benefit members from their own base.

At the moment of this writing, the United States seems likely to slide into a severe recession, given the global pandemic and the challenges it has created for the economy. While Trump is clearly not responsible for the virus, the public may yet blame Trump for his response to it, and its resulting effects for the economy and public health. Even prior to this, though, the Trump administration pursued tariff-based trade policies that economists have condemned, predicting they could result in the loss of tens to hundreds of thousands of jobs in the short-run. Will the combination of a weak economy and the plausibility of Trump's responsibility for said weakness lead to his defeat? The magnitude of the economic downturn and its ubiquitous coverage in the media suggests that selective attribution, and not selective perception, will play a major role this year in mitigating the role of economic voting. While it will be difficult to claim the economy is good, it will be much easier for co-partisans to claim that the downturn is simply not Trump's fault. Given that unique circumstance of the pandemic itself, 2020 perhaps no longer makes a clean test case for the theory that economic voting is declining. In general, it has always been difficult to study economic voting at the presidential level given the relative paucity of data points, and the wide array of determinants that impact vote outcomes. A more final confirmation of the decline of economic voting may have to be made after decades, not years, of further observation and analysis.

## Chapter 3

# Malice and Stupidity: Outgroup Motive Attribution and Affective Polarization

Affective polarization weakens voters' willingness to cross party lines, support bipartisan compromise, and trust outgroup messages. Existing scholarship on causes of rising partisan hostility has focused on mass ideological polarization, elite incivility, and partisan demographic sorting. This paper offers evidence from multiple survey experiments suggesting negative motive attribution — partisans' tendency to assume ill-intent guides outparty interests — as another key dynamic underlying affective polarization. When asked why outparty members prefer certain policy outcomes, roughly half of partisan respondents offer an explanation involving selfishness, ignorance, hatred, and other negative motives. Then, subjects are exposed to a series of motive statements for supporting a given party or policy varying in thoughtfulness and pro-sociality, provided by other study participants. Subjects exposed to more admirable outgroup motives demonstrate decreased outparty hostility, and increased willingness to interact with and vote for the outparty. The magnitude of these effects surpasses even that of perceived attitudinal similarity, suggesting affective judgments depend not just on perceptions of what the outgroup wants, but also why they want it. These findings suggest a new approach towards attenuating affective polarization, but also highlight the difficulty of changing citizens' partisan attributions.

Over the past several decades, political polarization in the United States has become a focal point of academic and societal concern. While scholars agree that ideological and/or partisan polarization occur among elites (Poole and Rosenthal 1984; Hetherington 2001; McCarty Poole and Rosenthal 2016), they disagree over the extent to which masses have polarized; some claim that they have (Abramowitz and Saunders 2008; Nivola and Brady 2008; Bafumi and Shapiro 2009; Abramowitz 2010), while others find lacking or contradictory evidence (Fiorina and Abrams 2008; Baldassarri and Gelman 2008), arguing that people have not become extreme or constrained in their views, but rather better sorted ideologically into the correct parties. Whether or not citizens are growing apart ideologically, they are certainly polarizing in terms of affect. Partisans increasingly think of each other negatively, shun close ties to one another, and occupy separate social and political realities (Iyengar, Sood and Lelkes 2012; Iyengar and Westwood 2015; Mason 2015; Lelkes 2016).

The causes of affective polarization are complex and multifaceted, and political scientists have suggested a number of factors that have contributed to the dynamic. First, as the median ideological preferences of the parties diverge from one another over time, mass partisans increasingly see the other side as a threat to their interests, and increase their dislike for them accordingly (Rogowski and Sutherland 2016; Webster and Abramowitz 2017). Given that scholars still disagree whether the public has ideologically polarized, such an argument may seem to have limited application, especially given that a large share of the public lacks attitudinal stability and basic knowledge of party positions on even high-salience issues (see Chapter 1). Some researchers have even found that media coverage of polarization attenuates policy extremity while nevertheless increasing partisan outgroup hostility (Levendusky and Malhotra 2016), suggesting at least that the latter is not a simple, exclusive function of the former. Still, citizens nevertheless perceive mass polarization as having occurred, especially the other party (Chambers et al. 2015), and it may be the perception driving affective polarization.

Second, affective polarization may result from exposure to a hostile, partisan media — when citizens witness elite political communication, they adopt the apparent norms of incivility that operate between bickering pundits (Berry and Sobieraj 2011; Levendusky 2013; Mutz 2015). Still, some studies have found that partisan media exposure does not increase polarization (Prior 2013), may sometimes instead expose partisans to the more reasonable views of the other side (Mutz 2007). The relatively small fraction of Americans who actually consume partisan media on a regular basis may also limit the scope of media effects.

Third, affective polarization may arise from beliefs that the outgroup differs in terms of salient non-political behaviors and characteristics, such as race, sexual orientation, and occupation. As a result of some combination of growing social alienation and demographic makeup between Democrats and Republicans (Abramowitz and Webster 2009; Mason 2016) and the tendency of citizens to perceive political conflict primarily as group-based (Converse 1964; Grossman and Hopkins 2016), partisans increasingly assume that the other side looks, acts, and lives very differently from them and their co-partisans, often to an extent that significantly exaggerates such differences (Ahler and Sood 2018).

This paper advances an under-examined, complementary account for affective polarization — negative motive attribution. Scholarship tends to focus on inter-partisan

<sup>&</sup>quot;Never attribute to malice that which is adequately explained by stupidity" - Hanlon's Razor

<sup>&</sup>quot;People are evil. We also live in a stupid society." - Anonymous survey respondent

perceptions of who the other party's members are, and what they want; less explored is the impact of perceptions of why partisans want what they want. Consider two citizens, the first of whom strongly disagrees with you on a matter of policy, and the second of whom holds your exact position on that same policy. However, the first citizen frames their position as arising from the same fundamental, value-laden concerns – harm reduction, justice, fairness, etc. – as yours, even if they disagree with you as to how to achieve these outcomes. Meanwhile, the second citizen admits that they hold your position only because they happen to materially benefit from that outcome, or because the policy harms a demographic group towards which they are prejudiced. If asked which individual we feel more warmly towards, we might have a difficult time deciding, or even clearly prefer the value-driven citizen. Affect, therefore, should not be thought of purely as a function of policy congruence, but also the quality of one's intentions. When we encounter disagreement, we may in good faith believe that outgroup members nevertheless possess good intentions. Alternatively, we may believe they are motivated by the repugnant and indefensible — stupidity, madness, ignorance, greed, bigotry, cruelty, hunger for power, and so on. If Americans increasingly believe the latter, then our democracy increasingly constitutes a tense and untenable arrangement between tribes that share little to bind them, morally and socially.

To what extent do partisans tend to make negative attributions about the outparty? Does negative motive attribution have an independent causal impact on outparty affect? If so, can affective polarization be reduced by exposing partisans to evidence of positive motivations on the other side? The studies shown in this paper provide evidence that begins to answer these questions. In the first, respondents are asked to explain why they think out-partisans hold the preferences they do on a wide range of contemporary policy issues. Coding and analysis of these responses reveals that about half of out-partisan attributions are negative. In the second study, subjects are exposed to a random series of motive statements, provided by out-partisan respondents in advance. These statements vary in terms of admirability, which were rated by participants in a separate survey. As the average quality of these motives improve, so does respondent affect towards the outparty, to a degree surpassing even the effect of perceived attitudinal similarity between the parties. In the third study, subjects are shown a series of motive statements as before, but the consistency of positive motive statements is varied more systematically to simulate a number of ways in which partisan attribution may occur in the real world. Exposure to positive outgroup matters does appear to lead respondents to update outgroup attributions, which in turn can lead to increased outgroup affect. However, motivated reasoning makes such updating likely only when the outparty motives shown are of uniformly high quality – even one bad apple appears to spoil the whole bunch. Taken together, these studies demonstrate the importance of understanding the role of attribution in exacerbating outgroup hostilities, and highlight another means by which scholars, journalists and public policy advocates may seek to reduce affective polarization.

#### THEORY AND DESIGN

The existing literature in psychology and political science suggests that people are likely to negatively assess outgroup traits, and negative attributions about outgroup behavior. This is true for how people evaluate one another even generally, as people tend to assume themselves rational and devoid of the cognitive biases they imagine others suffer from, as described in work on naive realism (Ward et al. 1997; Pronin, Lin and Ross 2002; Pronin, Gilovich and Ross 2004). The fundamental attribution error causes people to overly rely on internal factors like personality

or self-interest (Ross 1977; Miller and Ratner 1998) as explanations for others' behavior (Heider 1944; Aronson 2003). The ultimate attribution error describes this practice at the group level (Pettigrew 1979), especially when social status is at stake (Tajfel and Turner 2004; Brewer and Brown 1998). Because people have a vested interest in maintaining the superiority of the ingroup, they also engage in motivated reasoning to reject any evidence of status threats (Lord, Ross and Lepper 1979; Kunda 1990; Westen et al. 2006). Scholars have found evidence of negative motive attribution in group conflict generally (Reeder et al. 2002; Kenworthy and Miller 2002; Reeder et al. 2004; Waytz Young and Ginges 2014) and for specific political issues such as war (Reeder et al. 2005), affirmative action (Sherman, Nelson and Ross 2003), abortion (Robinson et al. 1995), and racial inequality (Knight 1998).

In a model for understanding how affective polarization is generated, motive attribution should be conceived of as a feedback mechanism, likely serving as both its cause and effect. That is, people might first negatively assess someone, then form negative attributions about them as a result (e.g. we think poorly of someone and then assume they want to harm others). Alternatively, one may first assume the worst about someone's intentions, then evaluate them accordingly (e.g. someone wants to harm others — therefore, we think poorly of them). Negative motive attribution therefore is both a cause and consequence of outgroup hostility: motivated reasoning about out-partisans encourages out-partisan stereotyping, which in turn leads to increased hostility, which incentivizes further stereotyping, and so on. The literature on ethnocentrism makes clear that as ingroup-outgroup dynamics strengthen, group members stereotype outgroups more frequently, both as a means by which to enlarge the social distance between the two groups, as well as an excuse for dismissing potential challenges to their place in social and moral hierarchies. Once partisan polarization begins, negative motive attribution may provide partisans with an easy way to "other" the outgroup, which in turn increases the internal desire to further negatively attribute. Such a feedback loop leads citizens to perceive themselves as increasingly surrounded by monsters. Negative motive attribution is not necessarily the "first mover" of affective polarization, but rather a major part of the iterative dynamics that propel the growth in outgroup hostility. Combined with other explanations for affective polarization, negative motive attribution serves as a force multiplier for existing outgroup hostilities.

If motive attribution is a key component of affective polarization, what would explain the increase in negative attributions over time? One possible explanation is the changing process by which people are exposed to people with whom they politically disagree. Just decades ago, political discussions between differing partisans were rarer, and more likely to take place amongst friends or family, if at all, given societal perceptions of political conversation as taboo or dangerous. In deliberations with close company, norms of civility and good-faith assumption operate; such individuals ostensibly already like one another, and expect repeated interaction in the future. However, in the present day, social media has significantly increased the likelihood of observing the political communications from strangers, those for whom the same norms of civility likely do not hold. Under the cloak of anonymity, people lack the incentive to treat each other respectfully and to suppress open hostility. Worse still, those who act with hostility are also more likely to speak their mind, leading to their overrepresentation. Therefore, compared to past environments for associative, behavioral and social learning about outgroups, the modern partisan is much more likely to encounter examples of anti-social and cruel behavior. Most research on affective polarization focuses exclusively on *partisan* affect, but in these experiments, I also study attributions and affective evaluations of issue outgroups, or those whom we disagree with on specific political issues. Affect between those who disagree over policy has been largely ignored by political scientists. This is perhaps justified given that partisan

identification is common, stable, and strongly linked to key political behaviors like voting and cuetaking (Green, Palmquist and Schickler 2004). On the other hand, issue attitudes tend to be less common, relatively more unstable over time, and play a limited role in vote choice when controlling for other key variables. Still, there are good reasons for studying issue-based affect. Partisan hostility does not occur in a vacuum, but in the context of whatever partisan conflict is most salient at any given moment. Issue disagreements are nexus points at which political differences most clearly manifest themselves. In recent times, a number of policy disputes have generated intense public interest and anger — healthcare, illegal immigration, transgender rights, gun control, responses to police brutality, and so on. For partisans, if they know where the parties stand on the issues, then attributions about issue preferences should impact outparty evaluations. On the other hand, true independents, or those who *do not* know where the parties stand, may evince little partisan hostility, but still possess animosity for those on the other side of that issue. As such, issue-based affective polarization should not be ignored.

If negative attributions help to explain affective polarization, then it must first be demonstrated that citizens today do in fact commonly tend to make negative attributions about the behaviors and attitudes of political outgroups. The first study presented in this paper relies upon a combination of closed and open-ended questions to get a better sense of the landscape of attributions people tend to make about the other side. Undergraduate researchers later code these responses for valence and content.

The second two studies use survey experiments to require the necessary exogenous variation to determine whether any relationship between negative motive attribution outgroup hostility is actually causal. A research design reliant up on observational data — for instance, asking respondents about their outgroup attributions and affect, then looking at the relationship between the two — would be flawed for at least two reasons. First, any apparent relationship between attribution and affect might actually result from an omitted variable. For instance, it may be that people with more extreme views hold more negative motive beliefs, and that some form of attitudinal or ideological extremity is really what drives the relationship with affect. Even if one were to control for these factors, some unobserved characteristic could still bias the effect estimate. Second, even if a causal relationship exists between affect and motive attribution, much of what would be picked up might be in the wrong causal direction; indeed, it is quite likely that increased outgroup hostility leads to more negative attributions. The solution to both of these problems is exogenous manipulation of attributions via experimental treatment. In these experiments, subjects are shown a series of statements based on those provided by other, real citizens, in which they explain their political preferences. If citizens learn about the motives of the other side by observing mass outgroup communications, then exposure to these profiles should prompt them to update their attributions, at least temporarily. In turn, improving outgroup attributions will decrease outgroup hostility.

#### HOW COMMON ARE NEGATIVE OUTPARTY ATTRIBUTIONS?

Do citizens often make negative attributions about political outgroups? If such beliefs are rare, then motive attribution likely does not contribute significantly to affective polarization. The following study uses a combination of closed and open-ended survey questions to reveal what motives citizens attribute to others' political attitudes and behaviors.

For the open-ended response item, respondents were asked to think about what motivates someone to take a particular position, and then write down anything that comes to mind. Two

undergraduate research assistants and I then coded the open-ended responses into three general motive categories: bad, good, or ambiguous. Responses that were either off-topic or unintelligible, constituting less than 10% of the sample, were removed from analysis. We counted responses as containing bad motive if what someone said was *unambiguously* negative. Most other motive mentions were counted as good. A small subset of responses were too ambiguous to ascertain their valence. A response could contain multiple motives (potentially both good and bad), though such responses constituted a small portion (3-9% of respondents who offered a motive) of the sample. In cases in which all three coders disagreed over a coding, I drop the response from analysis. Disagreements in which two of the three coders were in agreement were coded in favor of the majority.

For the closed response items, respondents were presented with a list of potential motives for taking a given political position and asked to assess what percentage of people who hold that position do so primarily for each reason (all percentages sum to 100). The motives presented were a combination of bad (e.g. ignorance, bigotry, selfishness) and good (e.g. values, morals, empirical evidence). I then summed percentages across all bad motives to get the percentage of individuals to whom any bad motive was attributed.

Each method has its advantages and drawbacks. The open-response question allows respondents to answer as they wish without outside prompting, and the measure itself reflects what a respondent sees as the typical outgroup member. Open-ended responses allow for coding into further subcategories, making it much easier to capture the variety of motives attributed. However, people might tend to focus on particularly bad examples of outgroup members, while still believing most to be positively motivated. If true, this measure might not reveal that. The closed responses do allow us to assess the total percentage of outgroup members believed to be negatively motivated. Unfortunately, the motive options provided on the list were limited to a small set, so some respondents may have found the motive list to not be exhaustive.

Given the variety of potential sites for group conflict in politics, I assessed motive attribution in three broad domains: policy issues, partisan identity, and vote intent. In the case of policy issues, to capture variation across a large number of political conflicts, I used a set of nine issues (taxes, healthcare, gun control, gay marriage, immigration, affirmative action, global warming, Israel/Palestine, and flag burning) that vary in terms of public salience, media coverage, and issue type. The groups used in the other domains are Democrats/Republicans and Clinton/Trump voters.

This study was fielded across three separate surveys between December 2015 and June 2017, each of which focused on a different type of political outgroup (disagreements over policies, candidates, or parties). In the first survey (December 2015), 1811 respondents in a sample provided by Survey Sampling International answered a series of questions on three randomly selected political issues from the full set of nine. For each issue, respondents saw a brief description of the issue conflict, then indicated their issue attitude on a seven point scale (plus "don't know"). They then were shown the open-response question. For one of the three issues, respondents were asked to speculate on the motives of others who agree with them, or their own. For the other two issues, they attributed motives to those who disagree with them. Individuals who took no position or the middle option were asked about their views of those on both sides of the issue, separately. The respondents in this study did not see the closed response question. The second survey was fielded in November 2016 using 879 respondents recruited from Mechanical Turk. In this survey, respondents indicated if they planned to vote in the upcoming election and, if so, for which candidate they planned to vote. Then, each person saw both openended and closed response questions about the motives of Trump and Clinton voters. The third

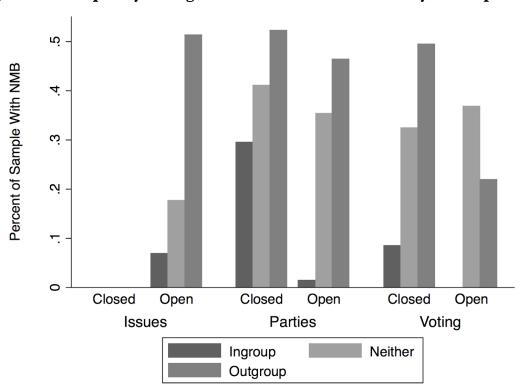


Figure 3.1: Frequency of Negative Attribution Across Survey Participants

Note: NMB = Negative Motive Belief. The number of observations for each survey (Issues, Parties, Voting) above is n=1811, n=879, and n=711, respectively. 95% confidence intervals are not shown, but differences are highly significant (p<0.001). The "Closed, Issues" panel is blank as subjects in this study were not asked closed questions.

survey took place in February 2017 with 711 Mechanical Turk respondents. Here, respondents placed themselves on a 7-point partisan scale at the beginning, then completed both the open and closed questions for both their partisan ingroup and outgroup. To avoid coloring responses, open-ended questions always precede closed questions.

Figure 3.1 above shows the frequency of negative attributions pooled across all three surveys. The Y-axis displays the percent of responses in a given category that cite at least one negative motive for the other side. Results are separated by whether respondents were evaluating people who disagreed with them on policy, candidate, and party preferences. Respondents in each survey are then grouped by whether they were evaluating their side, the other side, or were unattached and evaluating either side.

Several findings stand out. First, across all domains, respondents almost universally perceive their ingroup positively, though less so in the case of fellow partisans, as negative attributions rarely rise above 10%. Second, as predicted, people commonly attribute negative motives to the outgroup. Generally, about half of all outgroup assessments run negative (open responses), and half of the outgroup is thought of as primarily negatively motivated (closed responses). Open assessments of voter outgroups constitute the sole exception. In fact, in this case, the unaffiliated open responses were more negative than the outgroup assessments — unsurprising, perhaps, as "unaffiliated" here refers to those third party voters. Their lack of affiliation likely results from dislike rather than disinterest.

While the respondents in these studies tended to be somewhat unrepresentative of the public at large, this does not invalidate these findings. Women, people under the age of 35, Democrats and the college-educated were all quite a bit overrepresented in these subject pools. These groups, however, were also either equally or less likely to hold negative motive beliefs relative to their counterparts — men, Republicans, and the lower educated were all more likely to have negative beliefs. Therefore, to the extent that this study is unrepresentative, it is likely underestimating the degree to which people make negative outgroup attributions in politics.

#### EXPERIMENT 1A: DOES ATTRIBUTION IMPACT AFFECTIVE EVALUATION?

The previous study demonstrates that negative attributions are common, but do negative attributions about outparty preferences and identities significantly impact people's outparty affect? This experiment tests this possibility by exposing respondents to a series of statements made by other people, each containing a description of a policy attitude or partisan preference, and a brief explanation for why they hold that view. If attribution is a determinant of affect, respondents who are exposed to higher quality motives should indicate less hostility to the associated groups in follow-up questions. If this effect is not just statistically significant but also meaningful, the magnitude of its impact should be comparable to that of attitudinal similarity, which has long been demonstrated to impact partisan affect, and is considered one of its key determinants.

In June 2017, 594 subjects were recruited from Mechanical Turk to take a short opinion survey. Subjects began by indicating their partisan affiliation and their attitudes on four issues (gun control, immigration, healthcare, environmental protection) on a seven-point Likert scale. Then, subjects were shown a series of profiles of other individuals who, they were told, had previously been asked a similar set of attitudinal questions. Each profile contains only a short quote from a fictional participant indicating their position on an issue (their placement on the seven-point scale, plus a brief explanation of what they interpret that scale placement to mean in terms of substantive policy), and their self-stated reason for that preference. Each subject saw ten profiles: eight profiles about issue attitudes (one from each side of each of the four issues), and two profiles indicating partisan preference (i.e. strength of partisan identity and stated reason for preferring that party). The order of these topics was randomized. Some subjects (n=85) participated in a control condition where they also saw ten profiles, but without any information on motive. Subjects then expressed their feelings towards this individual on a 9-point scale.

The strength of the attitude and the quality of the motive displayed in each profile was randomized. An attitude could take on one of three levels of extremity (e.g. slightly, somewhat, or strongly oppose/support). To ensure a given scale point was interpreted similarly across subjects, each attitude reveal included a brief explanation of what the person in the profile believes that scale point to substantively mean for that issue. Attitudinal distance between the subject and the profile is measured as the absolute value of the subject and profile scale positions (such that the measure runs 0-6, with 0 representing full agreement between respondent and the profiled individual, and 6 indicating that they are on opposite ends of the policy scale).

As for motive, subjects see one of six explanations on each profile, half positive, half negative. Each statement, while not originating from other actual subjects, draws heavily on open-ended responses from real people fielded during previous studies. Statements were designed to reflect a range of motive types both negative (greed, ignorance, bigotry, laziness, etc.) and positive (fairness, concern for others, desire for liberty, etc.). To confirm that respondents viewed

motive statements as positively/negatively as intended, I fielded a separate study using 450 Mechanical Turk respondents, who were asked to rate the motives for reasonability on a 9-point scale, where 1 is perfectly reasonable and 9 completely unreasonable. Motive quality in this study is therefore measured as the average of these ratings. Because ingroup and outgroups judge motive quality differently, the scores on each profile reflect averages from one's ingroup only.

#### **Table 3.1: Sample Positions and Motivations**

Panel A: Positions

		<u></u>		
Issue Type	Position Type	Position Wording		
Gun Control	Strong Oppose	"I fully support the 2nd amendment. I don't want any new rules on gun ownership, and would like to rollback many existing regulations."		
Gun Control	Oppose	"I want to roll back several existing regulations, but there is a need for some very basic laws on gun ownership."		
Gun Control	Weak Oppose	"I support most current gun laws, but don't want any additional regulations."		
Gun Control	Strong Favor	"I'm completely in favor of making private gun ownership difficult, even the banning of private gun ownership altogether."		
Gun Control	Favor	"I support much stricter regulations than currently exist, but I do believe in the basic right to own firearms."		
Gun Control	Weak Favor	"I support a few additional regulations, but I do believe in the basic right to own firearms."		

Panel B: Motivations

Position Type	Motivation Quality	Motivation Wording
Oppose	4.25	"I live in a rural area without much police presence. Regulations against gun ownership would render me unable to defend myself and family against possible intruders."
Oppose	4.45	"I believe in the original meaning of the 2nd amendment - I'm even open to some strict firearm regulations, but the constitution first needs to be amended."
Oppose	5.05	"I want to save innocent lives - more people would be harmed, as unarmed citizens, than would be saved by the passage of anti-gun laws."
Oppose	5.6	"I like guns and own many different kinds - gun violence alone doesn't justify making laws that would deprive me of my guns."
Oppose	6.58	"I live in a mixed race neighborhood - gotta be able to defend myself if my home gets vandalized or targeted by minorities."
Oppose	6.83	"Eventually, the government is gonna try to enslave the people of the United States, and citizens will need to stockpile guns and ammunition in order to resist them."
Favor	4.39	"I want to save innocent lives - stricter laws would reduce accidental deaths, and prevent criminals and unstable people from using guns to commit violent crimes."
Favor	5.33	"I live near a school where several kids were killed by a gunman. Stronger gun laws will reduce the odds of these kinds of things happening again."
Favor	5.55	"Guns, especially those with high-capacity magazines, make it too easy for mass murders to occur. Other countries with stricter laws have fewer mass murders."
Favor	6.09	"I live in a mixed race neighborhood - the last thing we need is more of those people armed."
Favor	7	"I don't like guns and I don't like gun owners - there's rarely a justifiable reason for owning, using, or collecting guns."
Favor	7.69	"Gun owners are rednecks - I couldn't care less whether gun laws impact their lives negatively or not."
	Type Oppose Oppose Oppose Oppose Oppose	Type         Quality           Oppose         4.25           Oppose         5.05           Oppose         5.6           Oppose         6.58           Oppose         6.83           Favor         5.33           Favor         5.55           Favor         6.09           Favor         7

Note: Only "gun control" motives and positions are listed above. For a full set of motives/positions across all issues, see Appendix 3.2 and 3.3. In Panel B, "Motivational Quality" refers to the average ratings of each motive by a separate subject pool. The scores range from 1-9, where 9 is the least reasonable.

Table 3.1 on the previous page a sample of positions and motives that might be shown in each profile. In this case, these are the positions and motives used for the gun control profiles. Panel A shows the wording that accompanies each position, while Panel B does the same for motives. Panel B also shows the average motive quality rating for each example (lower averages correspond to better preferred motives). Panel C shows examples of the profiles respondents actually see. For the full set of positions and motives across topics, see Appendix 3.2 and 3.3. For examples of the full profiles shown to respondents, see Appendix 3.8.

Affect does indeed appear strongly influenced by motive beliefs. Figure 3.2a on the next page shows the mean profile rating of those in the control group compared to those who saw the highest and lowest rated motivations for a given item, at each possible level of issue position distance. For example, when subjects saw someone whose position differed from theirs by a distance of 4 on a 7-point scale (e.g. subjects who moderately agree rating someone who moderately disagrees), their outgroup affect relative to a control subject increases or decreases on average by about 15% of the scale length, depending on if the motive they see is positive or negative. The difference between the highest and lowest rated motives, on average, is about a third the range of the entire scale, or the difference between clear like and clear dislike. It should be noted that subjects narrowly prefer individuals they strongly disagreed with but had good motives to those who they agreed with but had bad motives, further suggesting the importance of attribution for affect. The plot also indicates there are some floor and ceiling effects; highly-rated motives do not appear to improve affect towards those with whom we strongly agree, and poorly-rated do not further lower it for those with whom we strongly disagree. This is consistent with people assuming those with whom they agree to be thoughtful, and boorish otherwise

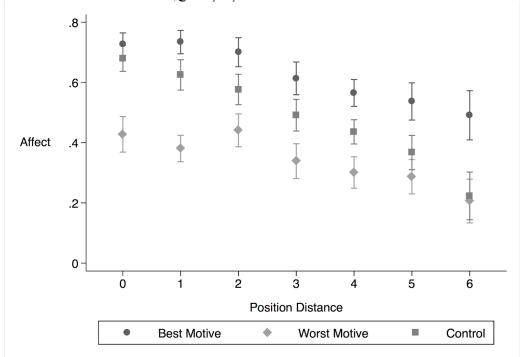
Not only does motive quality matter for outgroup judgments at all levels of disagreement, but also for ingroup and neutral judgments. Figure 3.2b plots motive quality against residual affect ratings (after controlling for position distance) by type of group judgment. The bottom-right panel shows all data combined. The dashed line represents a kernel-weighted local polynomial regression, and each point represents a single evaluation. In all cases, affect declines as motive quality worsens, though somewhat less for those who take positions at the midpoint.

The affective impact of motivation equals or surpasses that of position. Figure 3.3 shows the results of a standard OLS regression of affect on both issue position distance and motive quality treatments, separately for those who judge someone on their side, the other side, and neutral people judging either side. The bottom-most panel shows the results for all subjects taken together in a within-subjects, fixed-effects regression. Higher absolute magnitudes indicate stronger effects. The coefficient on motivation is several times that of position, regardless of whether one is judging one's own side or the other side. Of course, given the variety of substantive choices (i.e. types of issues, chosen positions on those issues) that could be made differently in constructing both of these measures, results should be taken with a grain of salt. Still, these scales were created to capture the whole range of positions (e.g. the healthcare scale goes from full government takeover to eliminating Medicare) and motivations (e.g. thoughtful claims versus open racism), so the results should still be instructive.

One additional finding bears mentioning — the relative importance of position and motivation depends on one's interest in the issue at hand (see Appendix 3.5 and 3.6 for details and plots). As interest decreases, so does the importance of position distance, and for those with low interest, position distance has no effect. However, the magnitude and significance of motive quality hold, regardless of extremity or even political interest. This demonstrates both the robustness of motive attribution as a determinant of affect, and that improving motive beliefs would help even those who may not otherwise pay a great deal of attention or interest to politics.

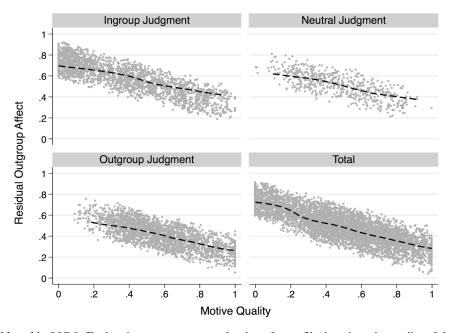
Figure 3.2: Relative Affective Impact of Motive Beliefs

Panel A: Effect of Motive Quality by Issue Distance



Note: N=5276. Confidence intervals are 95%. Standard errors are clustered by individual respondents. Each point corresponds to the average rating across profiles at that level of attitudinal distance.

Panel B: Effect of Motive Quality by Object of Judgment



Note: N=5276. Each point represents an evaluation of a profile, based on the quality of the motive assigned in that profile. The rating on the y-axis represents residual affect after controlling for position distance. Ingroup judgments reflect evaluations of those on the same side, and Outgroup of the other. Neutral judgments reflect evaluations by subjects who were uncommitted. The Total panel shows the pooled results.

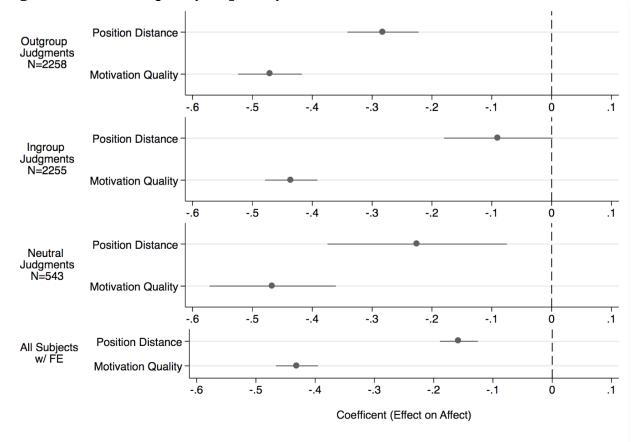


Figure 3.3: Motive Quality Impact by Position Distance

Note: Confidence intervals are 95%. Standard errors are clustered at the level of the individual respondent. Ingroup judgments reflect subject evaluations of those on the same side, and Outgroup of the other. Neutral judgments reflect evaluations by subjects who placed themselves at the midpoint of a scale.

# EXPERIMENT 1B: DO ATTRIBUTIONS IMPACT AFFECT TOWARDS PARTISAN GROUPS?

While the above results suggest that attributions play a significant role in political evaluations, these were evaluations of *individuals*, not *groups*, and thus do not directly deal with outgroup affect. This experiment uses the same data as before, but with independent and dependent variables that measure group-level motive beliefs and affect, respectively.

In the previous experiment, the key independent variable was the randomly assigned motive quality for each individual profile. The information learned in these ten profiles should, taken together, contribute to group-level motive beliefs — Democrats and Republicans have staked out clear positions on each issue used in these profiles, so politically attentive individuals should be able to attribute motives for a given issue position to the associated party. As each profile's motive quality was randomly assigned, by chance alone, some individuals saw more high-quality motives associated with the partisan outgroup than did others. This variation is leveraged here to create a "motive quality index" representing the average of ratings from each of the motives seen by an individual. If individuals apply what they have collectively learned from

these individuals to the parties with which their preferences are associated, as the index score improves, so should outparty affect.

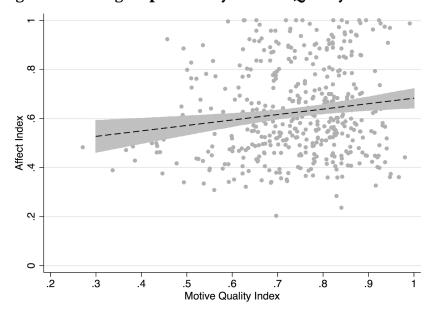
After seeing the profiles, and answering a series of distraction questions (a political general knowledge battery), respondents indicated partisan affect in several ways. First, they provided partisan feeling ratings on a nine-point scale. Second, they speculated on how they would react to their child marrying a member of the opposite party, a question now frequently used to measure outgroup hostility. Third, to perhaps better capture the sentiments of those who do not have (or plan to have) children, and to further gauge willingness to socially interact with the other side, subjects were also asked a question about dating preferences. The questions asks them to suppose they see a profile on a dating service for someone who initially interests them, but affiliates with the outparty. Subjects then indicate how they would react to this information on a 5-point scale, where 1 equals increased interest, and 5 a total unwillingness to contact them (a "dealbreaker"). I also use a dummy that equals 1 for the dealbreaker, and 0 otherwise.

Table 3.2: Effect of Motive Quality Index on Outgroup Affect

	DV TYPE: Outgroup			Ingroup - Outgroup			
		В	SE	Ν	В	SE	N
1	Feeling Thermometer	0.215***	0.07	436	0.229***	0.08	436
2	Marriage Acceptability	0.231***	0.06	438	0.241***	0.07	438
3	Dating Willingness (Scale)	0.261**	0.11	451	0.149**	0.07	451
4	Dating Willingness (Dealbreaker)	0.333**	0.15	451		1	

Note: \*\*\* p < 0.01, \*\* p < 0.05. All variables recoded 0-1. Rows 1-3 reflect standard OLS regression; Row 4 uses logistic regression. Outgroup columns use only outgroup ratings, while the Ingroup-Outgroup columns use ingroup ratings minus outgroup ratings.

Figure 3.4: Outgroup Affect by Motive Quality Index



Note: Confidence interval is 95%. Each point represents a single subject's evaluation of the outparty. The y-axis shows an index that combines the three aforementioned measures of affect (partisan feeling, marriage indicator, and willingness to date).

Table 3.2 on the previous page reports the results of a series of simple bivariate OLS regressions of these dependent variables on the motive quality index. Each row corresponds to a different dependent variable chosen from the four aforementioned affect measures. The "outgroup" column uses only ratings of outgroups, while the "ingroup-outgroup" column takes the difference between ingroup and outgroup ratings. Each row shows that the effect of motive quality is significant regardless of specification. For instance, in row 1, moving from the lowest to highest assigned motive quality increases affect by a little more than a fifth of the scale. For the dealbreaker results (row 4), moving from the bottom to the top of the motive quality index corresponds to about a 33% decrease in the likelihood of selecting the dealbreaker option. Overall, subjects appear to have learned from the profiles and updated their beliefs about outgroup motives. Figure 3.4 summarizes the results by showing the relationship between the motive quality index and an index of the three affective measures (a simple average across all three). Those who saw a better motive set indicated greater warmth towards the outparty, and increased willingness to interact with its members. The strength of this effect is remarkable given that respondents were left to draw conclusions about parties from a set of profiles that focused primarily on issue positions.

# EXPERIMENT 2: WHAT DOES IT TAKE FOR PEOPLE TO UPDATE PARTISAN ATTRIBUTIONS?

Although Experiment 1b tests whether outgroup motive attribution causally impacts outgroup affect, it does so using only a handful of examples across several issues. One motive per issue seems like an inadequate draw, especially given that issue motives won't contribute to partisan feeling unless respondents know where the party stands on that issue, which is often not the case. Choosing a single topic (issue preference or party affiliation) and providing respondents with motive examples from a large number of individuals may better approximate real-life situations – outparty behaviors and attitudes are most likely to be encountered in the discussion of a single topic or event, such as on social media.

Another experiment also provides the opportunity to better understand how people interpret direct evidence of outgroup motives. For instance, what we know about ingroup-outgroup dynamics suggests motive beliefs will be difficult to correct. People are likely to accept positive information about ingroups, or negative information about outgroups, as these revelations easily accord with preexisting beliefs. However, when given evidence out of alignment with one's priors (i.e. evidence of good motives for outgroups, and vice versa), rejection of this new information becomes much likelier. An individual may overlook bad ingroup behavior as that of "a few bad apples", but seize upon any ill intent from the outgroup as typical. If true, to successfully change outgroup attributions, we may need to stack the deck in favor of the outgroup—that is, show subjects uniform positivity in the examples they see.

This second experiment is therefore designed to improve experimental realism and to better test the factors that influence whether people apply what they learn about group members to the group as a whole. While the independent and dependent variables remain the same as in the first experiment, the treatment protocol is changed. Subjects are exposed to a series of motive profiles, as before, but now these profiles all address a single topic, and the percentage of profiles containing good or bad motive information is systematically varied across participants.

This study was conducted in June 2017, using 3,266 participants on Mechanical Turk. To reduce potential demand effects, recruitment materials stated that subjects would participate

in a rating task that would later be used to create a training set for machine learning — not until the debriefing at the end were respondents told they were taking part in an academic survey. As before, subjects saw multiple profiles containing both a position (only "for" or "against," — to maintain experimental power, strength of position is not varied in this experiment) and a motive for that position. For each profile, subjects were asked to categorize the motive statement using a preset list of motives (six options — three negative, three positive — plus "other"). Statements were again based on real communications by respondents in previous studies, and designed to give an impression of what share of outgroup members have negative (e.g. bigotry, selfishness, stupidity, cruelty) or positive (e.g. seeking justice, seeking freedom, care for others) motives. To restrict the study's focus to partisan ingroup/outgroup dynamics, only those who indicated a preference for the Democratic or Republican party (i.e. those who did not identify themselves as true independents) participated.

The key experimental variation is the percentage of motive statements that are negatively-valenced. Some subjects were randomly assigned to see mostly negative statements, some mostly positive ones, and another group saw exclusively positive statements. As valence improves, we should expect outgroup affect to improve. However, if motivated reasoning or some other cognitive bias is at work, subjects should update their priors, if at all, only when unable to draw on any examples of outgroup misconduct.

As mentioned above, while each profile in Experiment 2 pertained to a different topic, here respondents see a series of profiles on the *same* topic, also randomly assigned. The goal was to provide subjects a larger pool of evidence from which to make attributions about a single outgroup. As before, I use both issue and partisan outgroups. Subjects saw one of two versions of the above task — about "issues" (affirmative action or healthcare), or "party identification" (Democrat or Republican) — or took part in a control condition, in which respondents completed a neutral rating task on an unrelated topic. All respondents in the "issues" condition saw eight statements from disagreers on their assigned issue. I assigned respondents to one of three valence conditions — bad (six bad motives), good (two bad motives), or perfect (no bad motives). Half of those chosen to see "party" profiles were shown eight outgroup profiles, as above, but with motives about their *partisan identification* rather than issue position.

The other half of "party" subjects were assigned to profiles from both inparty and outparty members (twelve in all, six from each party). It may be that affective polarization can be diminished not just by revealing that many outgroup members are positively motivated, but that many ingroup members are negatively so. To test the potential effects of ingroup-outgroup comparison, subjects in this condition were assigned to valences using a 2x2 factorial (ingroup "good" or "bad," outgroup "good" or "bad"). Of the six statements used for each party, four are negative in the "bad" valence condition, and two in the "good" valence condition. Therefore, subjects were randomly assigned to see one of four sets of profiles (both parties good; both parties bad; inparty good, outparty bad; and vice versa). Appendix 3.10 contains a list of all possible motives. Figure 3.5 on the next page shows two examples of the profiles respondents might see.

Upon completing their assigned rating task, subjects answered a knowledge battery, then placed themselves on 9-point scales for partisan affect and issue group affect. Finally, to test whether manipulating attributions might have *behavioral* consequences, I ask a question to gauge willingness to vote across party lines. Subjects saw a vignette in which a candidate from their party was under investigation before an election, and asked whether they would vote for that person, someone else (the outparty challenger or an independent) or not vote at all.

### Figure 3.5: Sample Profiles Used in Experiment 3

m a Republican becauseI think they do a better job for small business owners, many regulations are driving people out of business.					
Based on the quote, what would you say explains this individual's identification with the Republican party? (check all that apply)					
Selfishness or Indifference Prejudice/dislike towards other people/groups Stupidity, irrationality, misinformation or lack of information Support for conservative ideology and values Support for specific issue positions associated with the party Support for politicians within the Republican party Other					
n a Republican becauseI cant stand the filthy degeneracy of homos and blacks I hispanics.					
sed on the quote, what would you say explains this individual's identification with the publican party? (check all that apply)					
Selfishness or Indifference Prejudice/dislike towards other people/groups Stupidity, irrationality, misinformation or lack of information Support for conservative ideology and values Support for specific issue positions associated with the party Support for politicians within the Republican party Other					

Note: Sample profiles and corresponding questions shown to respondents. Samples constitute one of the highest rated motive statements (above), and the lowest rated motive statement (below) for Republicans.

Upon completing their assigned rating task, subjects answered a knowledge battery, then placed themselves on 9-point scales for partisan affect and issue group affect. Finally, to test whether manipulating attributions might have *behavioral* consequences, I ask a question to gauge willingness to vote across party lines. Subjects saw a vignette in which a candidate from their party was under investigation before an election, and asked whether they would vote for that person, someone else (the outparty challenger or an independent) or not vote at all. In order to confirm that the treatments did successfully manipulate the intended belief (attributions for outgroup attitudes/behaviors), immediately following the exercise, I showed respondents a list of possible attributions, good and bad, about outgroup members, and asked them to write in the percentage they thought were primarily motivated by each attribution

(forced summing to 100%). I then summed the percentages across bad motives to get a measure of overall outgroup attributions. The manipulations were successful; as valence improved, the percentage of outgroup members given negative attributions decreased (see Appendix 3.11).

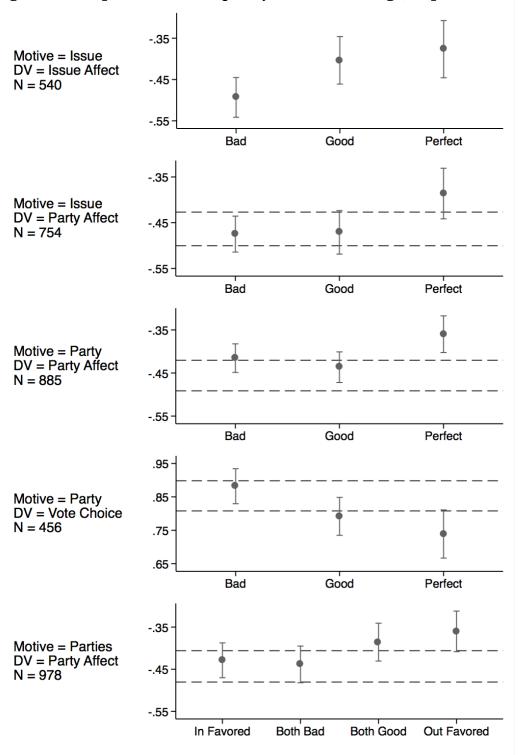
Figure 3.6 on the next page shows the experimental results. In each panel, the Y-axis shows the difference between ingroup and outgroup affect (scaled from -1 to 1, where -1 corresponds to low outgroup affect) in each condition. The one exception is the fourth panel, where the Y-axis shows the percentage of people who preferred their own party's (possibly corrupt) candidate if they were forced to vote for their own or the other party's candidate. The top two panels show effects for those who saw *issue* outgroup motives, the next two panels for those who saw *party* outgroup motives, and the final panel for subjects who saw party motives for both the *ingroup* and *outgroup*. The dashed lines in each panel correspond to 95% confidence intervals on control group affect ratings (not shown in the top panel, as the control group was not asked about issues).

These analyses use only the subset of subjects who appear to have complied with the instructions of the exercise — some subjects merely clicked through the exercise without reading the vignettes, thus not receiving the treatment. To deal with the inattentive or otherwise noncompliant, I count the total number of motives correctly identified (good or bad) by the subjects, and drop those roughly in the bottom quintile of this measure (generally corresponding to those who did worse than chance would predict). Because extremity and political sophistication correlate with compliance, all treatment effects shown above arise from a multivariate regression including party extremity and general knowledge. Still, the above results hold when using a two stage least squares regression in which treatment is instrumented on compliance (see Appendix 3.12-3.14 for detailed analyses).

Each panel in Figure 3.6 shows that the difference between ingroup and outgroup affect decreases as outgroup motive valence increases. In the top panel, for instance, when people saw mostly negative motives from those who disagreed with them on affirmative action or healthcare, their affect towards that outgroup was significantly lower than those who saw mostly or entirely positive motives. However, in most cases, the treatment effect is only significant in the *perfect* condition. In other words, people who saw mostly good motives did not evaluate the outgroup significantly differently from those who saw mostly bad ones — only those who saw nothing but good motives showed clear improvement. In other words, affect improved only when subjects *completely* lacked recent evidence of negative outgroup conduct. This suggests one of two possibilities about how people interpret group motives from example. First, ingroup members may think bad motives are more common than good ones in the outgroup, so when they see one, they figure it is better representative of the typical outgroup member. Second, negative motives may be particularly salient, so even if someone doesn't assume deficiency on the party of most outgroup members, they might overly focus on the few who are. Either way, these results demonstrate the high difficulty of changing perceptions of the outgroup.

Learning negative motives about one's own party does not appear to improve the outparty-inparty affect differential unless it is also paired with positive evidence about the other party. The bottom panel shows results from the ingroup-outgroup partisan comparison condition. When the ingroup appears to have better motives than the outgroup, the control condition is replicated. Showing both groups as containing several negatively motivated individuals has no impact on affect. Here, as subjects might dismiss positive outgroup examples as unrepresentative of the group as a whole, they may simply do the same with negative ingroup examples. As in the other manipulations, however, providing good information about outparty

Figure 3.6: Impact of Motive Quality on Affect Ratings, Experiment 2



Note: Error bars are 95% confidence intervals. Dashed lines reflect the upper and lower of 95% confidence intervals on the estimate of affect in the control group. All DVs above are measured as the difference between ingroup and outgroup affect, scaled from -1 to 1, where -1 corresponds to maximum outgroup hostility. Plots show marginal averages. All differences in effect between the Perfect and Control group affect ratings are significant at 95% confidence in multivariate regression.

motives improves outparty affect, though again only significantly so when the evidentiary deck is stacked in the outgroup's favor as much as possible.

As demonstrated in the fourth panel, manipulating motive beliefs may impact not just attitudes but also behavior, or at least behavioral intent. While about 85% of those in the control group said they'd vote for their own party's (likely corrupt) candidate, only 74% of those who saw nothing but positive outgroup motives indicate the same. This small but significant decrease suggests that some people are willing to cross party lines when faced with an inadequate inparty candidate, but only if they believe that people in the outparty possess good intentions. Such a finding seems relevant to the 2016 presidential election, which featured the two least popular major party candidates in history, each with an arguably questionable legal past. Nevertheless, people still largely voted along party lines. In a less polarized partisan environment, voters may have felt freer to reject their party's candidate based on undesirable qualities. Of course, as these results reflect behavioral intent in a hypothetical, and not real-life behaviors themselves, they should be taken with a grain of salt.

Experiment 2 demonstrates, as did experiment 1, that motive attribution is a key causal contributor to outgroup hostility, and that giving citizens reason to believe the outgroup has good intentions can reduce outgroup hostility. These results suggest it may be possible to fight affective polarization by directly providing evidence of positive outgroup motives; however, this may only work when the evidence of well-intentioned outgroup members appears overwhelming. Even a single bad apple spoils the whole bunch.

#### DISCUSSION AND CONCLUSION

While affective polarization is well-documented, it is still not well understood. What explains the persistent rise in animosity between partisan groups? This paper adds to the existing set of explanations an additional answer, that citizens often attribute nefarious motives to outgroup members, rather than assume that their preferences result from legitimate values and concerns. Roughly half of the public appear to hold negative beliefs about outgroup motives, and those who do evaluate outgroup members more negatively. The impact of motive attribution on outgroup affect appears to be equal to or larger than that of attitudinal similarity, a key finding for a literature that, to this point, has focused on affective polarization's relationship with what people want rather than why they want it. The impact of motive beliefs on affect is strong regardless of who is being judged (ingroup members, outgroup members, and judgments of either side by the uncommitted) or one's level of interest in the issue, something untrue of attitudinal similarity. Most importantly, people appear willing to change their outgroup motive beliefs, but perhaps only under the best conditions; when they do, their outgroup hostility lessens, their willingness to interact with outgroup members increases, and they appear somewhat more willing to vote across party lines to block problematic ingroup candidates.

These experiments are not without limitation — surveys were not conducted using a random, nationally representative sample, though in all cases, underrepresented respondent groups were equally or more likely to engage in negative motive attribution and show significant effects; the reliance upon survey research raises some concern about external validity; the studies do not track multiple waves, and therefore cannot speak to long-term effect decay; dependent variables are non-behavioral and self-reported. Manipulating beliefs and/or affect on a more permanent basis, in a more realistic environment, may be much more difficult.

The results of this study should inform future steps lawmakers or private organizations might take to combat affective polarization. People acquire information about each other's motives from their media environment; if this content is either largely negative or infrequently provided, citizens will learn, or at least assume, that political disagreements stem from nefarious outgroup motives. Journalists, therefore, should do a better job of explaining why people support the policies they do, and avoid suggestions that said support is underlaid primarily by ill intent. Social media organizations can also work to restructure their platforms to minimize the likelihood of shallow, hostile outgroup interactions. This may include interventions such as the minimization of the role of comments sections on news articles, preventing anonymous commenting, and incentivizing thoughtful deliberation.

Affective polarization is a significant problem in the United States. Hostility towards the other side makes political compromise more difficult, encourages the formation of informational echo chambers, makes voting for the out-party difficult even when sensible, incentivizes elected officials to approach political decision-making in an increasingly partisan fashion, and increases the likelihood of partisan violence. The high amount of congressional gridlock, increasing partisan disagreement on even basic facts of reality, the choice by most partisans to stick with their party's candidate in the 2016 election despite high unfavorables, a growing tendency towards partisan hardball, the recent public shootings of Reps. Gabby Giffords and Steve Scalise, and the violence at protests in Charlottesville, VA and Berkeley, CA are just a few recent manifestations of these problems. If affective polarization continues over the coming years, we will undoubtedly witness the further erosion of political norms of civility and good faith deliberation; a functioning democracy would seem to require, at the very least, its citizens to not assume their neighbors to be monsters.

### Conclusion

As I write this, the most recent survey of California voters from the Institute of Governmental Studies has just been released. As we shelter-in-place during the global COVID-19 pandemic, it is unsurprising that the survey focuses specifically on policy and performance attitudes related to government handling of and messaging on the crisis. If there were any world event in the past twenty years that could potentially shock society so much as to disrupt the power of partisanship, surely it would be an invisible enemy that cares nothing about our politics?

Unfortunately, the data from this survey and many others over the past two months has made it clear that COVID-19 is just another attitudinal object to be slotted into our partisan schemas for interpretation. According to the survey, levels of concern about the disease are highly related to attitudes towards Trump – 86% of those who strongly disapprove are at least somewhat concerned about spreading the virus to others, while just 51% of those who strongly of approve of his job as President agree. Similarly, 91% of strong Trump opposers are primarily concerned about opening the economy too soon, while 76% of strong Trump supporters are concerned about it opening too late. Among those strongly opposed, 75% say they completely trust the scientific community, while just 18% of strong supporters say the same.

It is not difficult to see the application of this dissertation to this matter. Members of the public often don't know what positions they should take on key issues, and look to co-partisan thought leaders for help. Once people figure out where the parties stand, their attitudes become solidified and in-line with their own party. As Trump praises stay-at-home protestors and Democratic governors extend their sheltering orders, partisans pay attention and, in this two-message environment, separate from one another in their outlooks.

As partisans grow aware of this divergence in public opinion on such a key issue, and see footage of armed, angry protestors and others wearing full protective gear, they will begin to wonder what drives the other side to act and think as they do. Given the evidence I have presented on partisan attribution, it is likely that Democrats will assume the average Republican's desire to re-open the economy early is driven by selfishness and ignorance, and Republicans will assume the average Democrat's desire to remain cautious is driven by cowardice and a pathological need to control others.

And when it comes time to go to the polls in November to determine the next president, we would perhaps hope that retrospective voting will serve as punishment for whichever party and politicians do a poor job of handling the crisis. Many Democrats will need little more than the high death toll to convince them of the administration's failure, even if high numbers were, to some degree, inevitable and out of politicians' hands. Accordingly, many Republicans will no doubt ignore accounts of failed policymaking by the Trump White House, and will be all too happy to accept the positive account provided for them by their favored pundits and politicians. If partisanship is the key determinant of performance evaluations in this crisis, then it is difficult to see how the signal of accountability can break through the din of partisan noise.

Given the threat runaway partisanship poses for the health and functioning of our democratic system, future scholars of political science should be encouraged to do more research into what can be done to attenuate polarization, and to restore key mechanisms of accountability to a system that badly needs it.

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## 1.1: QUESTION WORDING

#### ANES 1972-1976

## Four item economic policy scale:

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.

- 1. Government sees to job and good standard of living
- 2-6
- 7. Government lets each person get ahead on his own

GOVERNMENT HEALTH INSURANCE: 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 by individuals, and through private insurance like Blue Cross.

- 1. Government insurance plan
- 2-6.
- 7. Private insurance plan

AID TO BLACKS: Some people feel that the 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 minorities because they should help themselves.

- 1. Government should help minority groups
- 2-6.
- 7. Minority groups should help themselves

TAX CUTS: As you know, in our tax system people who earn a lot of money already have to pay higher rates of income tax than those who earn less. Some people think that those with high income should pay even more of their incomes into taxes than they do now. Others think that the rates shouldn't be different at all—that everyone should pay the same portion of their income, no matter how much they make.

- 1. Increase the tax rate for high incomes 2-6.
- 7. Have the same tax rate for everyone

## Single items include those above and the following:

WOMEN'S RIGHTS: Recently there has been a lot of talk about women's rights. Some people feel that women should have an equal role with men in running business, industry and government. Others feel that a woman's place is in the home. And of course, some people have opinions somewhere in between.

- 1. Women and men should have an equal role
- 2-6.
- 7. Women's place is in the home

BUSING: There is much discussion about the best way to deal with racial problems. Some people think achieving racial integration of schools is so important that it justifies busing children to schools out of their own neighborhoods. Others think letting children go to their neighborhood schools is so important that they oppose busing.

- 1. Busing to achieve integration
- 2-6.
- 7. Keep children in neighborhood schools

MARIJUANA: Some people think that the use of marijuana should be made legal. Others think that the penalties for using marijuana should be set higher than they are now.

- 1. Make use of marijuana legal
- 2-6.
- 7. Set penalties higher than they are now

RIGHTS OF THE 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.

- 1. Protect rights of accused
- 2-6
- 7. Stop crime regardless of rights of the accused

## ANES 1992-1996 Five item all policy scale:

ABORTION: There has been some discussion about abortion during recent years. Which one of the opinions on this page best agrees with your view? You can just tell me the number of the opinion you choose.

- 1. BY LAW, ABORTION SHOULD NEVER BE PERMITTED
- 2. THE LAW SHOULD PERMIT ABORTION ONLY IN CASE OF RAPE, INCEST OR WHEN THE WOMAN'S LIFE IS IN DANGER
- 3. THE LAW SHOULD PERMIT ABORTION FOR REASONS OTHER THAN RAPE, INCEST, OR DANGER TO THE WOMAN'S LIFE, BUT ONLY AFTER THE NEED FOR THE ABORTION HAS BEEN CLEARLY ESTABLISHED
- 4. BY LAW, A WOMAN SHOULD ALWAYS BE ABLE TO OBTAIN AN ABORTION AS A MATTER OF PERSONAL CHOICE

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 yourself on this scale, or haven't you thought much about this?

- 1. GREATLY DECREASE DEFENSE SPENDING 2-6.
- 7. GREATLY INCREASE DEFENSE SPENDING

IDEOLOGY: We hear a lot of talk these days about liberals and conservatives. Here is a 7-point scale on which the political views that people might hold are arranged from extremely liberal to extremely conservative. Where would you place yourself on this scale, or haven't you thought much about this?

- 1. EXTREMELY LIBERAL
- 2. LIBERAL
- 3. SLIGHTLY LIBERAL
- 4. MODERATE; MIDDLE OF ROAD
- 5. SLIGHTLY CONSERVATIVE
- 6. CONSERVATIVE
- 7. EXTREMELY CONSERVATIVE

GOVERNMENT SERVICES AND SPENDING: Some people think the government should provide fewer services, even in areas such as health and education in order to reduce spending. Suppose these people are at one end of the scale at point 1. Other people feel it is important for the government to provide many more services even if it means an increase in spending. Suppose these people are at the other end, at point 7. And of course, some other people have opinions somewhere in between at points 2, 3, 4, 5, or 6. Where would you place yourself on this scale, or haven't you thought much about this?

- 1. GOV'T PROVIDE MANY FEWER SERVICES, REDUCE SPENDING A LOT 2-6.
- 7. GOV'T PROVIDE MANY MORE SERVICES INCREASE SPENDING A LOT

GOVERNMENT GUARANTEED JOBS: Some people feel 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 their own. Where would you place yourself on this scale, or haven't you thought much about this?

- 1. GOVERNMENT SEE TO JOB AND GOOD STANDARD OF LIVING 2-6.
- 7. GOVERNMENT LET EACH PERSON GET AHEAD

#### ANES 1994-1996 Three item economic scale

GOVERNMENT SERVICES AND SPENDING: Some people think the government should provide fewer services, even in areas such as health and education in order to reduce spending. Suppose these people are at one end of the scale at point 1. Other people feel it is important for the government to provide many more services even if it means an increase in spending. Suppose these people are at the other end, at point 7. And of course, some other people have opinions somewhere in between at points 2, 3, 4, 5, or 6. Where would you place yourself on this scale, or haven't you thought much about this?

- 1. GOV'T PROVIDE MANY FEWER SERVICES, REDUCE SPENDING A LOT 2-6.
- 7. GOV'T PROVIDE MANY MORE SERVICES INCREASE SPENDING A LOT

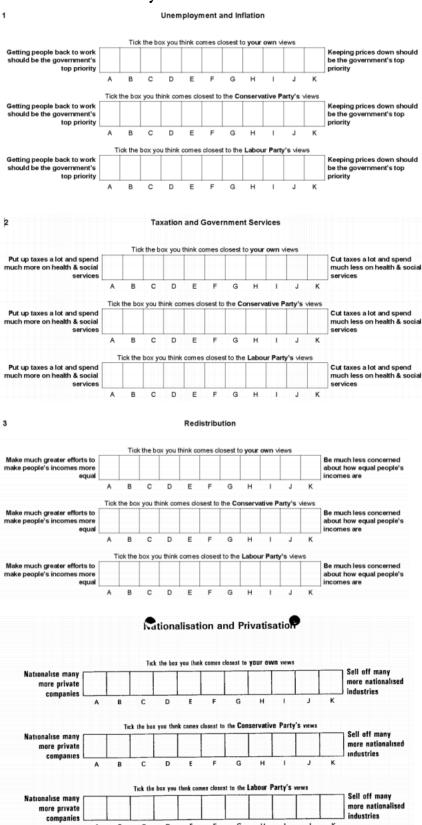
GOVERNMENT GUARANTEED JOBS: Some people feel the government in Washington should see to it that every person has a job and a good standard of living. Others think the government should just let each person get ahead on their own. Where would you place yourself on this scale, or haven't you thought much about this?

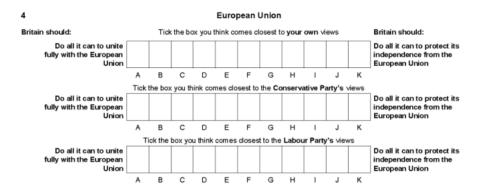
- 1. GOVERNMENT SEE TO JOB AND GOOD STANDARD OF LIVING 2-6.
- 7. GOVERNMENT LET EACH PERSON GET AHEAD

FEDERAL HEALTH INSURANCE: There is much concern about the rapid rise in medical and hospital costs. Some people feel there should be a government insurance plan which would cover all medical expenses for everyone. Others feel that all medical expenses should be paid by individuals, and through private insurance plans like Blue Cross or other company paid plans. Where would you place yourself on this scale, or haven't you thought much about this?

- 1. GOVERNMENT INSURANCE PLAN 2-6.
- 7. PRIVATE INSURANCE PLAN

## British Election Study 1992-1997 AND 1997-2001 Panels Four item economic scale:





## Patterson 1976 Panel: Interviews in June and October

Four-item economic scale Social welfare spending

sary because almost	everyon	e rece	eiving	this g	overnm	ent he		needs it.	
Others feel a great lot of people recei								because a	L
Which number on the or haven't you thou							gs on this	issue	
Where would you pla	ce (CAND	IDATE)	on th	is sca				bout his	
Curr	ent Leve elfare S Is Nece	endin			Curr	ent S	pending	Haven Thoug About	ht
Yourself	1	2	3	4	5	6	7	8	2
ASK FOR EACH CA	NDIDATE	THE RE	SPONDE	NT "KNO	OWS SOM	ETHIN	G ABOUT."	Don' Know	-
George Wallace	1	2	3	4	5	6	7	8	2
Morris Udal?	1	2	3	4	5	6	7	8	2
Hubert Humphrey	1	2	3	.4	5	6	7	8	2
Edward Kennedy	1	2	3	4	5	6	7	8	3
Jimmy Carter	,	2	3	4	5	6	7	8	3
Jerry Brown	,	2	3	٨	5	6	7	8	3
Frank Church	1	2	3	4	5	6	7	8	3
Gerald Ford	,	2	3	4	5	6	7	8	3
		2	3			6	7	. 8	3

#### Tax Cuts

73. Please look at Card 12 (YELLOW). Most everyone favors a cut in personal income taxes, but there is a disagreement about the nature of a tax cut.

Some people want a tax cut that is intended to benefit all income groups about the same. Other people want a tax cut that is intended to benefit modest and low income groups much more than it benefits the high income groups.

4

Which number on the scale would best describe your feelings on this issue or haven't you thought much about it? (RECORD BELOW)

Where would you place (CANDIDATE) on this scale or don't you know about his

Yourself

Tax Cut to Benefit All Income Groups the Same 3 Tax Cut to Benefit Modest & Low Income Groups the Most

Haven't Thought About It 8 62

19

Price and Wage Controls

Please look at Card 15 (YELLOW). Some people feel that the government should take direct action to control wages and prices so that inflation can be kept in check.

Col. #

Others think that government control of wages and prices is not the way to deal with inflation.

Which number on the scale would best describe your feelings on this issue or haven't you thought much about it? (RECORD BELOW)

Where would you place (CANDIDATE) on this scale or don't you know about his position?

3

2

Wage & Price Control Yourself

No Wage & Price Control 4

Haven't Thought About It 8 35

Government Jobs

78. Please look at Card 17 (BLUE). As a way to reduce unemployment, most people feel the government should help business to prosper so that more jobs are created. But people have different opinions about the government directly providing jobs. Col. #

Some people want a federal job program, where the government  $\underline{\text{directly}}$  provides jobs to those who cannot otherwise find  $\underline{\text{employment}}$ .

Others do not want the government directly to provide jobs to those out of work.

Which number on the scale would best describe your feelings on this issue or haven't you though much about it? (RECORD BELOW)

Where would you place (CANDIDATE) on this scale or don't you know about his position?

> Government Should Directly Provide Jobs

Government Should Not Directly Provide Jobs

Thought About It

Yourself

8 59.

## SSI 2016 Panel

On the following questions, we just want to know your opinion and the Democratic and Republican parties' positions on various issues.

Should federal spending on [food stamps / public schools / Social Security / medicare / public housing] be ...

- 1: Increased
- 2: Decreased
- 3: Kept about the same
- 4: Don't know

Should the federal minimum wage be ...

- 1: Increased
- 2: Decreased
- 3: Kept about the same
- 4: Don't know

Some people think government should provide child care assistance to low and middle income working parents, while others think this is not the government's responsibility. On this issue, where you would place [yourself/Democratic Party/Republican Party]?

- 1. Government should provide child care assistance
- 2. Not government responsibility
- 3. Don't know

Some people think the government should raise the debt ceiling to prevent default on our debt, while others oppose raising it. On this issue, where you would place [yourself/Democratic Party/Republican Party]?

- 1. Government should raise debt ceiling
- 2. Government should not raise debt ceiling
- 3. Don't know

Some people think the government should make parental leave after childbirth a guaranteed benefit for all workers, while others think this is not the government's responsibility. On this issue, where you would place [yourself/Democratic Party/Republican Party]?

- 1. Government should guarantee parental leave
- 2. Not government responsibility
- 3. Don't know

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 it is important for the government to provide many more services even if it means an increase in spending. On this scale, where would you place [yourself/Democratic Party/Republican Party]?

- 1. More services
- 2-6.
- 7. Less services
- 8. Don't know

Fifteen percent of our sample was prompted with the following question immediately after indicating "don't know" for any of the previous questions: You just indicated that you don't know the position of either the Republicans or Democrats (or both) on [ISSUE]. If you had to take a guess though, where would you place them?

[Question options restated without "don't know" provided as an option]

Fifteen percent of our sample was given placement questions that did not require scale placement. Instead, they were asked the following type of question immediately after placing themselves on a scale: Which party would you generally say is more in favor of [increasing/decreasing] federal spending on [ISSUE]?

- 1. Democrats
- 2. Republicans
- 3. No Difference
- 4. Don't Know

#### 1.2: EXCLUDED PANELS

The 1956-1960 ANES panel because it lacked questions about candidate or party positions (the ANES began asking these questions in 1972).

The BES 1963-1970 panel contains several placement questions but the parties' positions were changing during this period and the salience of issues changed dramatically, so we exclude it.

The 1980 ANES panel has self-placement and candidate/party placement about defense spending, cooperation with Russia, government services, inflation versus unemployment, and aid to minorities. Given the short time between waves (just several months), we have not analyzed this panel.

The 1990-1992 panel because it contained few questions with candidate or party placements in more than one wave.

The 2000-2002-2004 ANES panel has very few questions about policy.

The 2008-2009 ANES Internet panel asked respondents about policy items and asked them to place the candidates on those items. Unfortunately, the survey only asks self-placement and candidate-placement in the same wave on one occasion (October wave). Although it does ask for placements in 3 to 4 other waves, it only asked for opinions in the first wave (January), before Obama and McCain were the clear party nominees.

#### 1.3: GENERAL POLITICAL KNOWLEDGE SCALES

Patterson 1976 panel: 26 items, Cronbach's alpha = 0.90

ANES 1972-1976: 19 items, Cronbach's alpha = 0.82

ANES 1992-1996: 20 items, Cronbach's alpha = 0.92

ANES 1994-1996: 20 items, Cronbach's alpha = 0.92

BES 1992-1997: 14 items, Cronbach's alpha = 0.76

BES 1997-2001: 12 items, Cronbach's alpha = 0.72

SSI 2015-2016: 5 items, Cronbach's alpha = 0.77

# 1.4: SELECTED HISTORY OF PANELS ANALYZED BY OTHER RESEARCHERS

Obviously, this table is selective.

## **Table A1.4.1:**

Panel	Studies
ANES 92-94-96	(Ansolabehere, Rodden, and Snyder 2008;
	Kinder and Kalmoe 2017)
ANES 72-76	(Ansolabehere, Rodden, and Snyder 2008;
	Kinder and Kalmoe 2017)
Patterson 76	(Feldman 1989)

# Panels we exclude due to lack of placement questions

ANES 56-58-60	(Achen 1975; Ansolabehere, Rodden, and Snyder 2008; Converse 1964; Dean and Moran 1977; Erikson 1979; Kinder and Kalmoe 2017)
ANES 90-92	(Ansolabehere, Rodden, and Snyder 2008)
ANES 08-09	(Leeper 2014)
Swiss environmental panel 93-95	(Hill and Kriesi 2001a; Hill and Kriesi 2001b)
Russian Socio-Economic Transition Panel 93-99	(van der Veld and Saris 2004)
Mass Survey of French Electorate 67-68	(Converse and Pierce 1986)

# 1.5: MEASURES OF STABILITY: ADVANTAGES AND DISADVANTAGES

All measures of stability flawed. Here, we show that the main results replicate with alternative measures, each of which has its own problems.

#### **CORRELATION**

#### Advantages

- In classical test theory, measures reliability (see next section)
- Less sensitive to mean shifts in opinion overtime

#### Disadvantages

- Sensitive to variance, which makes comparisons across groups potentially problematic, changing the interpretation of the findings, though could be seen as a feature rather than a bug
- Scale hard to interpret

#### CRYSTALLIZED ATTITUDES

Crystallized attitudes measures whether people maintain a similar attitude and follows Zaller. We code respondents as having crystallized attitudes if they place themselves on the same side of the issue scale in both waves. We classify respondents as not crystallized on an issue when they change sides, place themselves at the midpoint in either wave, or say don't know in either wave.

#### Advantages

- Straightforward to interpret
- Intuitive measure captures what people mean by stability
- "Don't know" responses incorporated

#### Disadvantages

- People who place themselves near the midpoint on the scale coded as much less stable
- Treats individuals as unstable even when public opinion shifts, even when they remain stable relative to other individuals

### ABSOLUTE CHANGE IN ATTITUDE

#### Advantages

• Captures the degree of change more than other measures

#### Disadvantages

• Midpoint responses appear stable. On this measure, people can appear stable by giving consistent midpoint responses. Abundant evidence indicates that midpoint responses often reflect nonattitudes or don't knows in a different form. For example, studies have found that the same variables that predict don't know responses also predict midpoint responses. As a result,

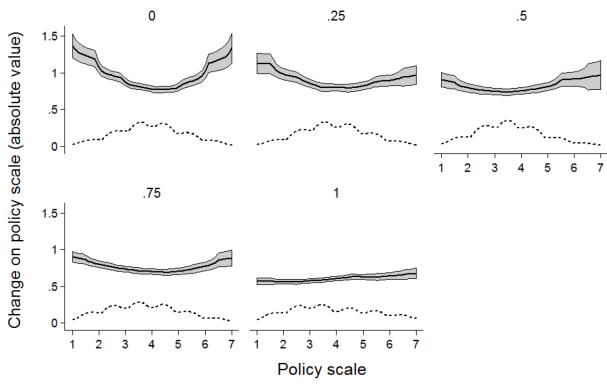
respondents who consistently place themselves at the midpoint, many of whom probably have no opinion on the issue, are coded as stable (no change in absolute value). With the correlation measure of stability, in contrast, midpoint responses contribute little to correlations, so they receive little weight.

- Nonideological respondents appear stable on multi-item scales. Respondents who are not consistently liberal or conservative/Democrat or Republican in their policy preferences end up appearing as moderates on multi-item scales (Broockman). Even if their underlying opinions change, their ideologically inconsistent nature of their responses makes them consistent moderates, making it appear as if they are stable over time on multi-item scales.
- Don't know responses are ignored. This leads absolute change in attitudes measure to underestimate the lack of real opinions, especially since respondents must have opinion in both waves to contribute to the estimates. On the correlation measure, some percent of these are imputed (following Ansolabehere et al.) and will tend to be towards the midpoint and contribute little to the estimates. Attitude crystallization measure best captures don't know responses.
- People at the extremes can change their attitude more. Further analysis suggests that low placement knowledge individuals are least stable when they take extreme positions, while high placement knowledge individuals are consistently stable across the scale. (See the figure on the next page).

#### WHY THE ABSOLUTE VALUE MEASURE APPEARS STABLE

The figure below shows the degree to which the absolute value measure of attitude stability is affected by low knowledge people ending up at or near the midpoint on multi-item scales. It does so by pooling the multi-item scales we use in the paper (ANES panels, BES panels, Patterson, our own SSI panel), putting them all on a seven-point scale for comparability. It arrays the plots by the share of respondents placing the candidates/parties correctly on the policy items (getting them on the right side of each other). The solid line shows the average amount of change in absolute value on the multi-item policy scales. The dotted line shows the distribution of responses on that scale in wave 1. Respondents who failed to correctly place any of the parties/candidates (0s), tend to have responses near the middle of the scale, and tend to be quite stable if they put themselves at the middle. If they don't, they tend to exhibit considerable change. As placement knowledge increases, the variance of people's responses to the policy scale increases (more extremist, a point David Broockman often makes), instability decreases, and the tendency of extremists to be unstable disappears.

# FIGURE A1.5.1

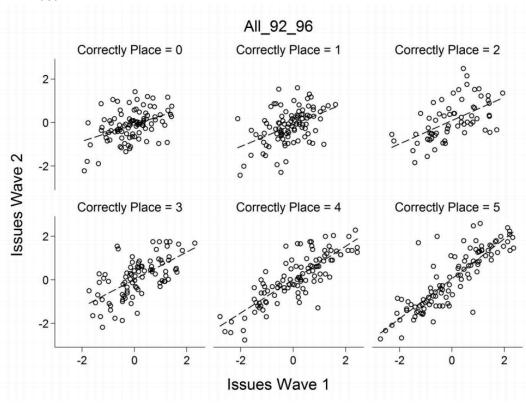


Graphs by Correctly placed issue % in scale

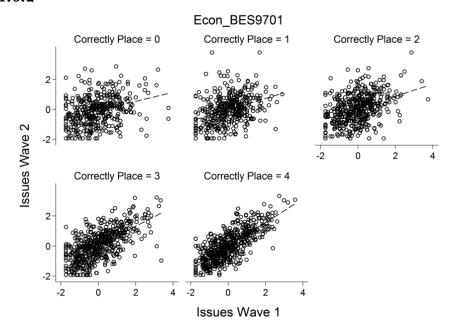
Note: Solid line shows the average change on multi-item scales (absolute value). Dashed line shows the distribution of policy responses on the multi-item scales in wave 1. Figure pools across all multi-item scales.

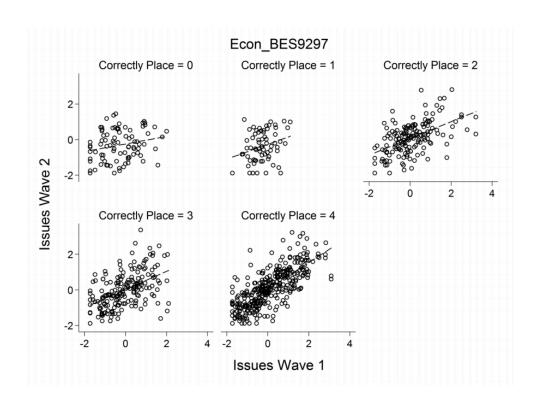
# 1.6: SCATTER PLOTS FOR EACH MULTI-ITEM POLICY SCALE

## FIGURE A1.6.1

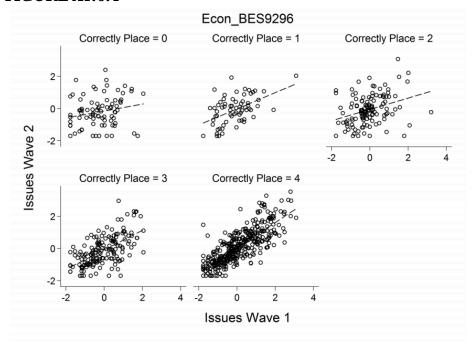


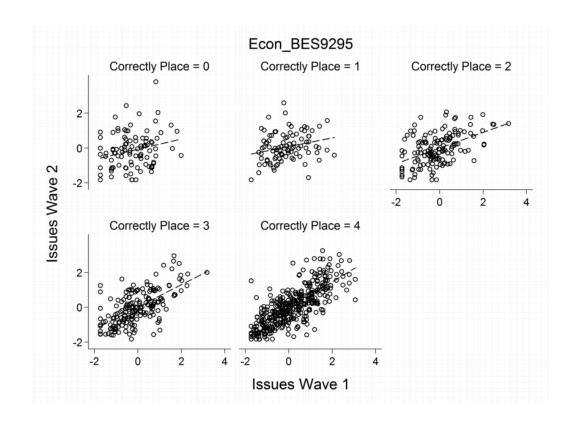
### **FIGURE A1.6.2**

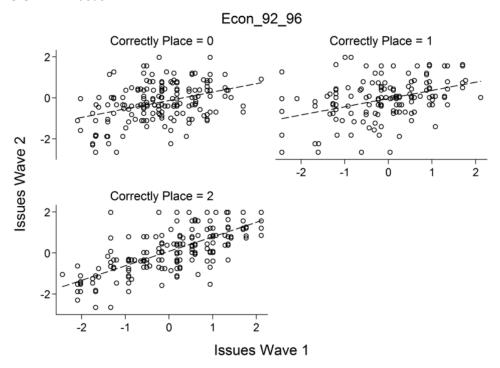




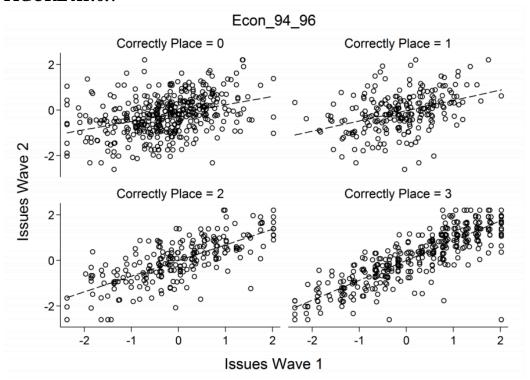
## **FIGURE A1.6.4**

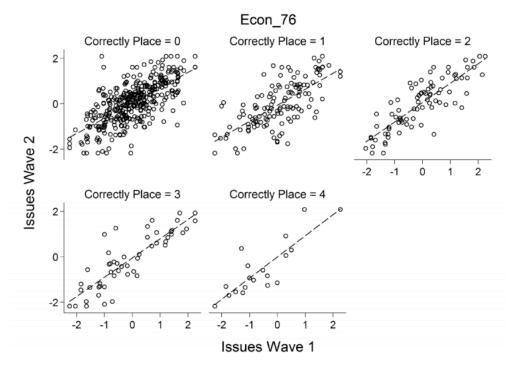




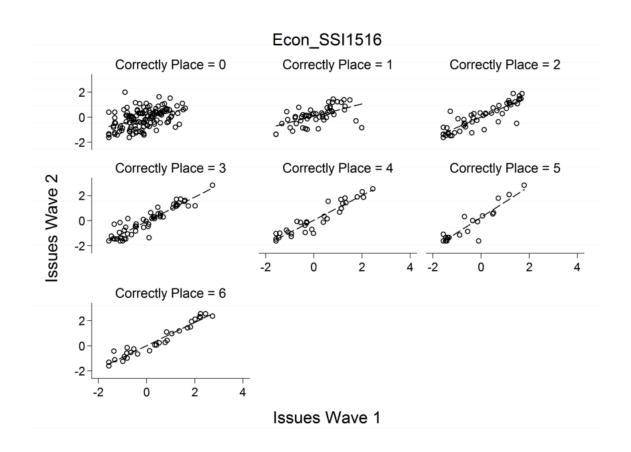


## **FIGURE A1.6.7**





**FIGURE A1.6.9** 



Note: The above table shows only 6 bins for the SSI study, while we had 10 placement questions. Because our respondents tended to be clustered on the lower end of the knowledge scale, and because this scale was much larger than in other studies, we were forced to combine results from some of the higher knowledge bins into a single bin, such that "Correct Place = 5" corresponds to getting 5-7 placements correct, and "Correct Place = 6" to getting 8-10 correct. We tried several bin arrangements and they do not change the substantive results of the figure

# 1.7: ROBUSTNESS TO PLACEMENT KNOWLEDGE CODING AND "DON'T KNOW" CODING

In the paper, we classify respondents as correctly placing the candidates or parties if they merely put them on the correct side of the scale (candidates on the correct sides of each other, or parties on the correct sides of each other). We have tried several modifications of our placement knowledge coding, including:

- Only coding individuals as correct if they placed the parties/candidates on the correct side of the midpoint (results shown on the next page),
- Coding individuals as correct if they placed their own party/candidate on the right side of the scale, even if they incorrectly placed the other party/candidate,
- Coding individuals as incorrect if they placed either party/candidate at the midpoint,
- Coding individuals who reversed the positions of the parties/candidates to -1, so such individuals receive especially low scores on placement knowledge in the multi-item scale analysis. Across the different panels, we have varying degrees of "don't know" responses on individuals' own policy opinions. We follow Ansolabehere et al. (2008) in imputing those responses for individuals who answered at least 75% of the items in scale. We also tried coding don't know responses to scale midpoint and the results were similar.

In the table below, we show that the results are similar if we instead code respondents as correct only if they place candidates on the right side of the midpoint of any scale.

**TABLE A1.7.1** 

Number of correct placements								
	0	1	2	3	4	5	6	Difference
Econ SSI 15-16	0.54	0.79	0.93	0.95	0.96	0.96	1.00	0.46
All Policy 92-96	0.51	0.66	0.77	0.85	0.82	0.93		0.42
Econ ANES 72-76	0.42	0.67	0.87	0.7	0.88			0.46
Econ BES 92-95	0.29	0.56	0.71	0.83	0.68			0.39
Econ BES 92-96	0.31	0.62	0.61	0.8	0.79			0.48
Econ BES 92-97	0.42	0.54	0.62	0.79	0.72			0.30
Econ BES 97-01	0.40	0.54	0.73	0.76	0.80			0.40
Econ Patterson 76	0.69	0.86	0.87	0.96	1.00			0.31
Econ ANES 94-96	0.49	0.69	0.81	0.84				0.35
Average								0.40
Average of four-item s	scales							0.39

**TABLE A1.7.2** 

	Number of correct placements						
	0	1	2	3	4	5	6
Econ SSI 15-16	47%	20%	17%	11%	3%	1%	1%
All Policy 92-96	36	24	20	11	7		
Econ ANES 72-76	78	15	5	2	0		
Econ BES 92-95	27	22	19	17	15		
Econ BES 92-96	24	20	22	18	16		
Econ BES 92-97	28	23	25	15	9		
Econ BES 97-01	51	24	15	8	2		
Econ Patterson 76	82	11	5	2	0		
Econ ANES 94-96	55	18	14	13			

Note: The above table shows only 6 bins for the SSI study, while we had 10 placement questions. Because our respondents tended to be clustered on the lower end of the knowledge scale, and because this scale was much larger than in other studies, we were forced to combine results from some of the higher knowledge bins into a single bin, such that "Correct Place = 5" corresponds to getting 5-7 placements correct, and "Correct Place = 6" to getting 8-10 correct. We tried several bin arrangements and they do not change the substantive results of the figure

#### 1.8: INDIVIDUAL STABILITY MEASURES

#### **CRYSTALLIZED ATTITUDES**

Following Zaller, we use a measure called attitude crystallization as one of our two individual-level measures of attitude stability, presenting the results in Table 1.3 of the paper. Here, we provide more information about the measures and more descriptive statistics. We code respondents as having crystallized attitudes if they place themselves on the same side of the issue scale in both waves. We classify respondents as not crystallized on an issue when they change sides, place themselves at the midpoint in either wave, or say don't know in either wave. When we classify people who consistently place themselves at the midpoint as having crystallized attitudes, the associations in the tables below remain similar, but the mean shifts up about 10 percentage points.

In the tables on the next page, we show that respondents who correctly place the candidates on an issue have higher attitude crystallization rates than those who incorrectly placed the candidates. The first table on the next page shows the average crystallization rates for all single-item scales in each study. When they can correctly place the candidates on an issue, 59% have crystallized attitudes. When they can't, only 42% do. 59% may seem low, but this rises to 82% when we calculate it for respondents who know the positions and agree with their party/candidate. See Appendix 1.13.

The second table on the next page shows that general political knowledge scales also predict attitude crystallization, but not as well as the single item placement knowledge scales.

## Table A1.8.1: Crystallized Attitudes and Placement Knowledge

The table shows the average proportion of respondents with crystallized attitudes by whether they correctly or incorrectly placed candidates on that issue. The averages are of single items.

study	   	Plac cori No	ce rectly Yes
	-+-		
All_92_96 Econ_7276 Econ_92_96 Econ_94_96 Econ_BES9295 Econ_BES9296 Econ_BES9297 Econ_BES9701 Econ_SSI1516		0.35 0.30 0.62 0.31 0.30 0.53 0.56 0.53 0.50	0.58 0.54 0.72 0.48 0.56 0.61 0.63 0.60 0.65
Total	ı	0.42	0.59

Note: We weight the total averages so that each study counts equally, with the three BES studies from the mid-1990s counting as one third of a study, since respondents repeat in those panels.

## Table A1.8.2: Crystallized Attitudes and General Political Knowledge

The table shows the average proportion of respondents with crystallized attitudes by general political knowledge. The averages are of single items.

	1	Gener	ral	_	owle	_	qu		
study		1		2		3		4	5
	+-								
All_92_96		0.36	0.	. 43	0.	51	0.	51	0.57
Econ_7276		0.26	0.	.35	0.	34	0.	42	0.46
Econ_76		0.55	0.	63	0.	62	0.	67	0.71
Econ_92_96		0.33	0.	.37	0.	44	0.	38	0.49
Econ_94_96		0.32	0.	.38	0.	42	0.	49	0.55
Econ_BES9295		0.59	0.	.59	0.	57	0.	56	0.61
Econ_BES9296		0.59	0.	63	0.	60	0.	59	0.67
Econ_BES9297		0.58	0.	61	0.	56	0.	55	0.64
Econ_BES9701		0.57	0.	.56	0.	57	0.	62	0.62
Econ SSI1516		0.48	0.	49	0.	52	0.	54	0.58
_									
Total		0.43	0.	48	0.	50	0.	53	0.57

Note: We weight the total averages so that each study counts equally, with the three BES studies from the mid-1990s counting as one third of a study, since respondents repeat in those panels.

## ABSOLUTE CHANGE IN ATTITUDE (AND PROBLEMS WITH THIS MEASURE)

A second stability measure we examine is absolute change in attitudes. Accordingly, we rescale all attitudes to seven-point scales and use simple averages to create multi-item scales (no mean zero, no standard deviation one, no factor analysis).

The two tables on the next page simply show the average absolute value of change on seven-point scales by correct placement percent on the multi-item scales and by general knowledge quintiles. For example, on average, people with 0% placement correct change their views by about 0.90 points on a seven-point scale, but 0.63 points when they place all correctly. The results show that percent of placements correct slightly outperforms general knowledge quintiles.

One pattern not shown in the table below is that the estimates for individuals with high placement knowledge are biased upwards (less stable). The bias comes from people who can place the parties but disagree with their own party in wave 1. They are among the least stable individuals in the sample and, since they tend to be at the extremes, can move a large distance on the absolute value measure.

The absolute change in attitude measure is arguably the most problematic of all the attitude change measures. See our discussion above in the appendix about the advantages and disadvantages of various stability measures.

## Table A1.8.3: Absolute Change in Attitudes and Placement Knowledge

The table shows the average absolute value of change on the multi-item scale made up from a simple average of the items available. We rescaled the items to seven-point scales before taking the average.

		Perce	ent pla	acement	corre	ect
study		0	25	50	75	100
	+-					
All 92 96		0.64	0.59	0.68	0.54	0.51
Econ 7276		1.00	0.90	0.91	0.80	0.60
Econ 76		0.74	0.76		0.69	0.63
Econ 92 96		1.05		1.05		0.78
Econ 94 96		0.96	0.91		0.78	0.59
Econ BES9295	Ì	1.06	0.87	0.84	0.75	0.69
Econ BES9296		1.07	0.82	0.86	0.76	0.63
Econ BES9297		1.03	0.79	0.81	0.84	0.67
Econ BES9701		0.97	0.88	0.89	0.73	0.59
Econ SSI1516		0.87	0.63	0.45	0.46	0.37
_	ĺ					
Avg.	Ī	0.90	0.78	0.82	0.69	0.63

Note: We weight the total averages so that each study counts equally, with the three BES studies from the mid-1990s counting as one third of a study, since respondents repeat in those panels.

## Table A1.8.4: Absolute Change in Attitudes and Placement Knowledge

The table shows the average absolute value of change on the multi-item scale made up from a simple average of the items available. We rescaled the items to seven-point scales before taking the average.

a+d			al kno 2	wledge 3	quint	
study	!	1	Z	3	4	5
711 00 06	-+-					
All_92_96		0.75	0.60	0.56	0.55	0.48
Econ_7276		0.97	0.89	1.00	0.89	0.87
Econ 76		0.78	0.73	0.77	0.77	0.62
Econ_92_96		1.26	0.98	0.86	0.79	0.73
Econ 94 96		0.98	0.86	0.80	0.73	0.62
Econ_BES9295		0.79	0.82	0.86	0.76	0.68
Econ_BES9296		0.79	0.82	0.78	0.68	0.64
Econ BES9297		0.80	0.77	0.88	0.72	0.67
Econ_BES9701		0.85	0.90	0.76	0.63	0.77
Econ SSI1516		0.75	0.72	0.65	0.51	0.54
_						
Total		0.89	0.81	0.78	0.69	0.66

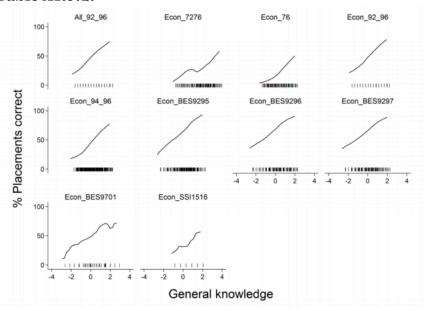
Note: We weight the total averages so that each study counts equally, with the three BES studies from the mid-1990s counting as one third of a study, since respondents repeat in those panels.

# 1.9: RELATIONSHIP BETWEEN GENERAL KNOWLEDGE AND PLACEMENT KNOWLEDGE

**Table A1.9.1:** 

Study	Correlation between general political knowledge and total
	correct placements
Econ_SSI1516	0.41
All_92_96	0.61
Econ_7276	0.37
Econ_BES9295	0.51
Econ_BES9296	0.50
Econ_BES9297	0.48
Econ_BES9701	0.34
Econ_76	0.53
Econ_94_96	0.51
Econ_92_96	0.47

**Table A1.9.2:** 



**Table A1.9.3:** 

	Ι			General	poli	tical }	knowled	dge de	ciles		
study	Ī	1	2	3	4	5	6	7	8	9	10
All_92_96		19%	32%	37%	47%	54%	61%		63%	81%	81%
Econ 7276		5	13	18	24	23	36	19	28	33	52
Econ 76		2	4	6	11	17	17	21	27	47	54
Econ 92 96		21	35	41	44	58	66	60		84	84
Econ 94 96	1	18	23	30	37	39	60	58	73	67	89
Econ BES9295		38	51	57	62	68	75	74	83	89	96
Econ BES9296	ĺ	41	52	59	66	73	80	81	90		95
Econ BES9297	İ	40	52	58	63	69	76	81	86		93
Econ BES9701	İ	34	46	44	53		59		73		63
Econ_SSI1516		17		33		30		34	52	58	

The BES studies stand out in this table. This partly reflects the high rate at which all respondents correctly place the Labour Party and the Conservative Party between 1992 and 1997. It also reflects the weakness of the political knowledge scales in the BES, which are a dozen items or less.

### 1.10: ATTITUDE STABILITY IN THE 2015-16 SSI PANEL

The below table shows a replication of the analysis featured in Table 1.1 of the paper, but using the data from the 2015-16 two wave SSI survey we fielded. Results from ANES 72-76 are provided here for context. We see that the results are largely the same, despite the passage of several decades and the much smaller time in between waves in our survey – reducing measurement error through added scale items improves stability, though only modestly, while correlations from placement knowledge increase more from lowest to highest knowledge. We also find that the addition of extra scale items, as expected, hardly changes the results. If any differences between the two sets of results stand out, it is that general knowledge now does a somewhat better job of predicting attitude stability.

**Table A1.10.1:** 

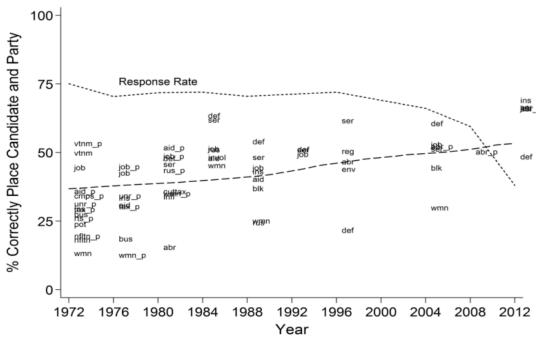
	Number of Items in scale										
	1	2	3	4	5	6	7	8	9	10	
ANES 72-76	0.49	0.52	0.59	0.63	0.66	0.68	0.7				
SSI 15-16	0.50	0.56	0.60	0.63	0.65	0.67	0.68	0.69	0.70	0.71	
	General Knowledge										
	1	2	3	4	5						
ANES 72-76	0.57	0.57	0.72	0.68	0.69						
SSI 15-16	0.57	0.61	0.67	0.75	0.85						
	Party Placement Knowledge										
	1	2	3	4	5	6	7	8	9	10	
ANES 72-76	0.53	0.49	0.63	0.67	0.74	0.75	0.79				
SSI 15-16	0.56 0.56				0.87			0.85			

Note: Table shows the correlations between waves 1 and 2. We bin several knowledge values together in the SSI study in order to provide more clear, consistent results, as many values contained a very low number of respondents, especially at higher points on the scale. Changing bin width does not significantly affect the results.

### 1.11: PLACEMENT KNOWLEDGE IN THE 1972-2012 ANES

The figure below presents the percent correctly placing the candidates and parties for all issues across ANES presidential election surveys, not just the panel studies (see also, Layman and Carsey 2002). As in the paper, we code respondents as correct if they place the Democratic candidate to the ideological left of the Republican anywhere on the scale. We code respondents who placed the candidates at the same point, say don't know to one or both candidates or reverse the positions as incorrect. In order to reduce the possibility of correctly placing by chance, we count an individual as correct only if they correctly place the parties and the candidates (the ANES often asks about both). The average percent correct across all the years and the issues never exceeds 50% (chance is about 11%) until 2012, when the ANES response rate plummeted. Knowledge may be increasing somewhat over time, as the figure reveals. Rising partisan polarization may partly explain this increase, but so may falling response rates to ANES surveys, which declined from 75% in 1972 to just 38% in 2012. The low level of placement knowledge holds for economic issues and non-economic issues alike — even abortion, a high salience, "easy" (Carmines and Stimson 1980) issue falls below 50%.

### **Figure A1.11.1:**



Note: This figure shows the percent correctly placing the presidential candidates relative to each other (the Democrat as more liberal than the Republican) and the parties for all the issues on which the ANES asked for presidential candidate placements and party placements. We categorize respondents as incorrectly placing the candidates if they say "don't know" for either candidate or party, place the candidates on the same scale position, or place the Democrat as more conservative than the Republican. We do not show the percentages for 2000 because of the split phone/face-to-face design. We weight the estimates in years when the ANES calculates

weights. Issue definitions: tax (High-income tax-rate), unr (Urban unrest), cmps (College campus unrest), job (Government guaranteed jobs), pot (Legalization of marijuana), bus (School bussing), ins (Government provided health insurance), wmn (Women's role in society), rts (Rights of the accused), aid ("Aid to minorities"), blk ("Aid to blacks"), def (Defense spending), ser (Government services and spending), infl (Inflation-unemployment tradeoff), abr (Abortion), invol (US involvement in Central America), rus (Cooperation with Russia), crm (Crime reduction), env (Environment-Jobs tradeoff), reg (Environmental Regulation). "\_p" indicates that a question is from the postelection survey wave.

### 1.12: ARE WE OVERESTIMATING OR UNDERESTIMATING PLACEMENT KNOWLEDGE?

There are several reasons to think we may be overestimating placement knowledge.

- First, in most ANES surveys, we must drop respondents who fail to report their own opinion on an issue (about 4% of the sample) because the survey did not then ask them to place the candidates afterwards. Consequently, we are dropping respondents who likely cannot place the candidates.
- Second, we are using a fairly low standard for placement knowledge, coding respondents as correct if they merely place the Democrat to the left of the Republican. We thus code many respondents as correct when they place both parties on the same side of the scale, or one of the parties at the midpoint, though both types of placement may indicate error or uncertainty. Of those whom we count as correct, about 40% make one of these errors, and therefore may lack a basic understanding of the issues.
- Third, some respondents correctly place candidates simply by chance, with the probability that they do so varying from about one in three to about one in eleven when we require them to place both the candidates and the parties (Wright and Niemi 1983).
- Fourth, declining response rates and panel attrition likely lead the samples to be more politically knowledgeable than the population.

On the other hand, we find little evidence of Type II errors—that is, incorrectly counting those who possess placement knowledge as lacking it. For instance, some respondents may hold opinions so extreme that they view both parties as being equally liberal or equally conservative, leading us to erroneously count these respondents as lacking placement knowledge. If so, we should see extreme respondents stacking both parties at the same point on the opposite end of the scale. However, we find such behavior to be rare, occurring in far less than 1% of incorrect placements. In fact, extremists are two to three times more likely to stack both parties at their own position, indicating they believe both parties agree with their viewpoint. The table on the next page presents the percent of extreme respondents who place both candidates at the opposite end of the scale from them.

Figure A1.12.1: Are We Wrongly Classifying Extreme Respondents As Placing Candidates Incorrectly?

		cing both copposite ext		Percent placing both candidates on the other side of the scale from respondent			
	Self at 1 Self at 7 Self at 1 or 7			Self at 1	Self at 1 Self at 7		
Guaranteed jobs	0.09%	0.12%	0.21%	0.17%	0.3%	0.47%	
Spending and services	0.03	0.05	0.08	0.09	0.1	0.19	
Government health insurance	0.09	0.07	0.16	0.22	0.17	0.39	
Aid to Blacks and minorities	0.04	0.23	0.27	0.12	0.52	0.64	
Women's rights	0.04	0.12	0.16	0.24	0.26	0.50	
Ideology	0	0.02	0.02	0.02	0.04	0.06	
Defense spending	0.04	0.01	0.05	0.12	0.05	0.17	
AVERAGE	0.05	0.09	0.14	0.14	0.21	0.35	

Note: Data from ANES 1972-1976. The first two columns show the percent of individuals in the sample who self rate at 1 or 7 and place the parties both at the opposite extreme. Column 3 is a composite of the first two. Columns 4 and 5 show self-raters at 1 or 7 who place both parties on other side of scale (1-3 or 5-7). Column 6 is a composite of 4 and 5. Results show that this type of person is extremely rare — even by the most generous count (Column 6), these people make up only about a third of one percent of all respondents.

Another possibility is that those who indicate "don't know" really do know the positions of the parties, but are hesitant to make a placement attempt. However, the literature (Luskin and Bullock 2011; Sturgis, Allum, and Smith 2008) and experiments we have conducted provide little support for this view – we tested this in our 2016 SSI survey by prompting those who indicated they did not know to take a guess, and found that they did no better than chance.

Based on the above evidence, we believe we are, if anything, overestimating the public's level of placement knowledge. Lack of understanding of elite preferences appears widespread in the public, at least in the United States. As our measure of placement knowledge is imperfect, biasing its effect size towards zero, the magnitude of placement knowledge's impact on attitude stability may be larger than we show here.

#### 1.13: PERCENT AGREEING WITH THEIR PARTY IN THE ANES

The ANES began asking questions about party and candidate placement in 1972, so our estimates are for 1972-2012. In the article, we calculate the percent who agree with their party among individuals who vote for the candidate of their party, which is 90% of ANES respondents with a major-party voter intent (75% of all respondents). We do so because research has found that people who break with their party's candidate appear to adopt the positions of the other candidate. Using panel data to help sort out causation, Lenz (2012, 196) finds that people appear to follow their preferred presidential candidate on policy as much or more than they follow parties. As the top part of the table below shows, we find that people voting for their own party's presidential nominee agree with their party about 80% of the time when they know the positions, and only about 38% of the time when they don't.

Another way to examine these statistics is to calculate the percent of respondents agreeing with their party or their candidate, so respondents who are voting for the out-party have two chances of being counted as correct. Since these respondents are rare (8% of the total sample), the expectation by chance is similar: 41%. The table below shows that about 80% of respondents agree with their party or candidate when they know the positions. On the next page, we show how consistent these patterns are over time and across issues.

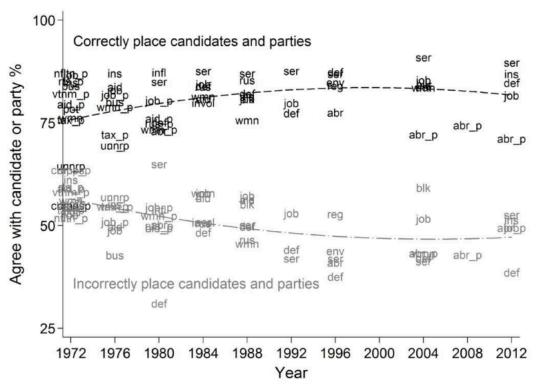
Table A1.13.1: Percent Agreeing with Their Party in the ANES 1972-2012 among Partisans

			% agreeing with their party			
Agreeing with your party	% of partisans	% of partisans with a vote intention	Correctly place parties and candidates	Incorrectly place parties and candidates		
Expectation based on chance			38%	38%		
Respondents voting for their party	75%	90%	80	40		
Respondents voting against their party	8	10	57	43		
Respondents with no or other vote intent	19		66	50		
Agreeing with your party or candidate						
Expectation based on chance			41	41		
All partisan respondents	100	NA	80	51		

Note: Analyses are only for presidential election years and only for partisans (includes independents who lean), and are weighted in years with weights. N=14,672. We classify respondents as voting for their party if they vote for their party's presidential nominee. We define agreeing with party as being on the same side as your party. We classify respondents placing themselves at the midpoint of the scale, saying DK, or placing themselves on the other side of the scale as not agreeing with their party. The calculation of the expectation based on chance is simple in the case of agreeing with their party (respondents can agree with their party by choosing three of seven scale points plus don't know, so 3/8\*100 = 38%). In the case of agreeing with their party or candidate, chance varies by whether you are voting with your party, so the calculation is slightly more complicated ( $.75\times3/8+0.08\times6/8+.19\times3/8*100 = 41\%$ ).

The figure below shows the rate at which respondents agree with their party or candidate for all issues in the ANES where the survey asked about candidate and party placements. These are exactly the same issues as shown in the table on the previous page.

Figure A1.13.1: Agreeing on the Issues and Placement Knowledge, ANES 1972-2012



Note: The figure shows the percent agreeing with their party or with their candidate (measured with vote decision) among people who correctly and incorrectly placed the parties and the candidates. It does so for all policy issues where the ANES asked for both party and candidate positions. We measure agreement by whether respondents place themselves on the same side of the scale as their party or candidate. The figure excludes respondents who did not place themselves. N= 14,672. Excludes pure independents and those without a major-party vote intent. Weighted.

# 1.14: STANDARD DEVIATION OF RESPONSES BY PLACEMENT KNOWLEDGE, AND AGREEING WITH YOUR PARTY/CANDIDATE

In table 1.3 and figure 1.3, we show a striking difference in attitude stability. Respondents who can correctly place the candidate/parties on an issue and agree with their party in wave 1 on that issue are much more stable than similar respondents who disagree with their party in wave 1. As we noted in the paper, one explanation for the higher correlations in these analysis is higher variance. Under assumptions discussed above, the correlation equals the reliability, which is the ratio of the variance of the signal over the total variance. Consequently, the correlation could be going up because variance of attitudes is going up or because random noise from any source is decreasing. Which is it? The table below shows a higher standard deviation among respondents who correctly place the candidates/parties on the issue and agree with their party (standard deviation equals 2.2). In part, this is because people only get counted as agreeing with their party if they are on the same side of the scale and avoid the midpoint. By excluding the midpoint, we are mechanically increasing the variance of attitudes. Although this is undoubtedly part of the story, the results remain strong when we use the crystallized attitude measure (see the next section). So increased variance is part of the story, but it's far from the whole story.

Table A1.14.1: Standard deviations for the results in the left section of Table 1.3

Agree with party	Place positions correctly on single item					
in wave 1	No	Yes				
Wave 1						
No	1.95	1.37				
Yes	2.07	1.63				
Wave 2						
No	2.31	2.22				
Yes	2.19	1.99				

### 1.15: CRYSTALLIZED ATTITUDES AND ABSOLUTE VALUE CHANGE

In this section, we show the means for the crystallized attitudes measure and the absolute change in attitudes measure by whether people agree with their party and whether they know positions.

The definitions of these variables are the same but we repeat the definitions here.

- Attitude crystallization is an indicator variable coded one if respondents place themselves on the same side of the issue scale in both waves. We code respondents as zero (not crystallized) on an issue when they change sides, place themselves at the midpoint in either wave, or say don't know in either wave. (When we classify people who consistently place themselves at the midpoint as having crystallized attitudes, the associations in the tables below remain similar, but the mean shifts up about 10 percentage points.)
- Absolute value of change is simply the absolute value of change on the policy opinion variable, which are all coded to seven point scales for comparability.

Since it focuses on whether respondents agree with their party/candidate, the analysis below only examines respondents who reported a major party identification (Democrat or Republican in the US, Conservative or Labor in the UK).

Table A1.15.1: Crystallized Attitudes

	Place positions correctly on single item				
Agree with party in wave 1	No	Yes			
Treating midpoint responses	as not cr	ystallized 27%			
Yes	71	82			
Treating midpoint responses	as crysta	llized			
No	58	47			
Yes	71	82			

Total number of responses: 27,284. Number of unique respondents: 4,671. Number of unique policy questions: 38. Higher values are more stable.

**Table A1.15.2: Absolute Value of Change** 

Agree with party	Place positions correctly on single item				
in wave 1	No	Yes			
No	1.3	1.2			
Yes	1.2	0.8			

Lower values are more stable.

#### 1.16: WHAT PREDICTS DISAGREEING WITH YOUR PARTY?

What predicts disagreeing with your party among those who know the positions? The sample size of individuals who know the placements but disagree with their party/candidate is not large in any given survey, somewhat limiting the analysis we can do. So, we conducted additional analyses of ANES 1972-2012 time-series surveys, since they provide a larger N (and because we do not need panel surveys, since this question is not about stability). People who know the positions of the parties/candidates but disagree do not stand out on many of their standard demographic variables, including general political knowledge. To examine the effects of cross pressures, we coded variables such as high-income Democrats and low-income Republicans, conservative Democrats and liberal Republicans (using self-reported ideology), religious Democrats and nonreligious Republicans (using church attendance). All these measures have potential flaws.

On church attendance, we do see some sign that cross pressure matters. Individuals whose Party ID is inconsistent with their church-attendance level are about 15 percentage points less likely to agree with their party on abortion, which is notable. On other cross pressures, however, it is hard to find much. We find about a 10-percentage point effect of income-party ID inconsistency on attitudes about government regulation, but none of the other economic items exhibited similar patterns. Ideology-party ID inconsistency yields nothing notable. We also found some sign that Democratic Catholics are less likely to agree with their party on abortion, even when they know the parties' positions, but that is not too surprising.

### 1.17: WOULD MORE ITEMS MATTER?

Ansolabehere, Rodden, and Snyder (2008) derive an estimator for the true correlation (without measurement error) implied by the correlations between multi-item scales. See their Equation 9 (page 219). The assumptions necessary for this correlation are standard: "The measurement error in each item is assumed to be uncorrelated with the true value of the item itself, uncorrelated with the true value of the other item, and uncorrelated with the measurement error in the other items." They also assume no autocorrelation in the errors. In the table below, we show the implied correlations based on their equation 9 for the six 4-item panel studies we are examining in figure 1.4a.

Table A1.17.1: Average correlations and implied true correlation for the six studies with four items (see figure 1.4a in the paper)

· · · · · · · · · · · · · · · · · · ·									
Number of					Implied true				
correct placements	1	2	3	4	correlation				
0	0.26	0.28	0.31	0.33	0.36				
1	0.33	0.37	0.42	0.45	0.51				
2	0.39	0.44	0.49	0.52	0.59				
3	0.49	0.58	0.64	0.67	0.76				
4	0.65	0.74	0.78	0.81	0.88				

### 1.18: VERSIONS OF FIGURE 1.4 SEPARATELY FOR EACH PANEL

Figure A1.18.1: Patterson 1976 panel

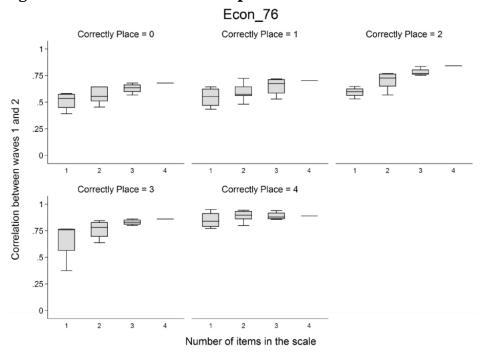


Figure A1.18.2: BES 1997-2001 panel

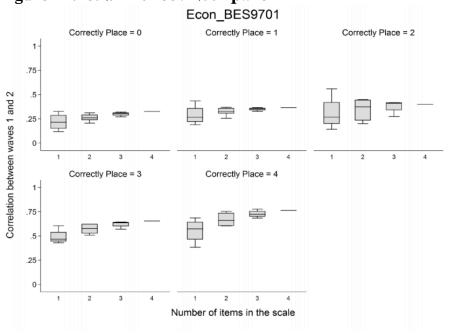


Figure A1.18.3: BES 1992-97 panel

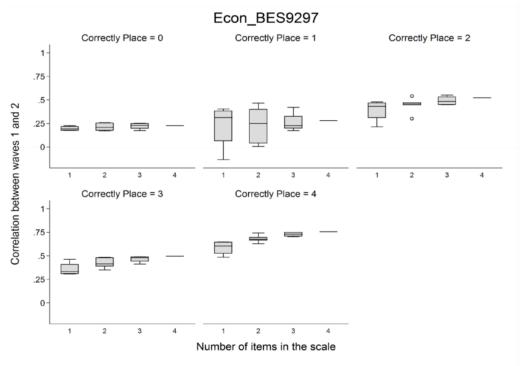


Figure A1.18.4: BES 1992-96 panel

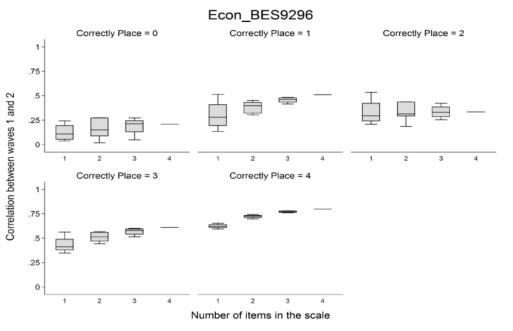


Figure A1.18.5: BES 1992-95 panel

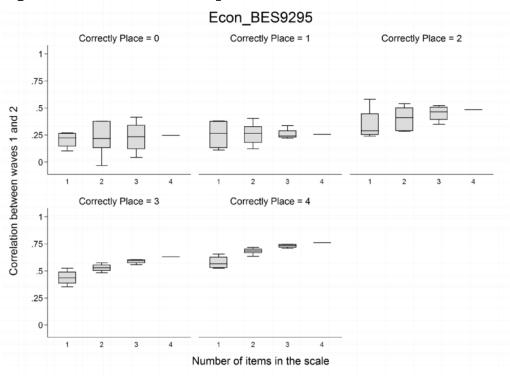
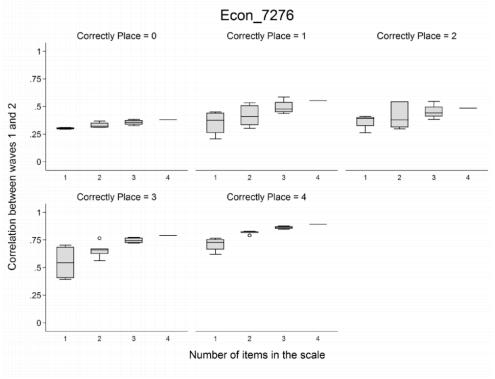


Figure A1.18.6: ANES 1972-76 panel



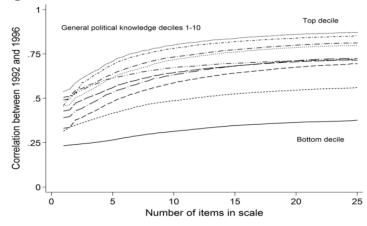
### 1.19: STABILITY AT THE EXTREMES OF POLITICAL KNOWLEDGE

While general political knowledge quintiles and placement knowledge correlate only moderately, at the extremes of general knowledge, we find greater similarities. In studies with rich general political knowledge scales, individuals who know a great deal about politics correctly place the candidates or parties at high rates during periods of high party polarization (80-90%), while individuals who know very little about politics do so at very low rates (10-20%). The British Election Studies are an exception to this pattern for reasons we discuss on the previous page. Although few respondents lie at these knowledge extremes, we can use them to test the following prediction. If placement knowledge drives opinion stability, then we should find that individuals very high in general political knowledge have stable attitudes (because they likely know elite positions), while the attitudes of individuals with very low general political knowledge are unstable (because they almost certainly do not). Moreover, we should find these differences even after correcting for measurement error with multi-item scales.

Most studies examining the relationship between general political knowledge and opinion stability lack rich enough general political knowledge measures to assess this prediction, though Norpoth and Lodge (1985) do for constraint. Here, we do so using the 1992-1996 ANES panel. To measure policy attitudes, we use the 25-item economic policy scale developed by Ansolabehere et al. (2008). We measure general political knowledge with 47 items (Cronbach's alpha = 0.96) and, to examine the extremes, we show the results by knowledge deciles. Following Ansolabehere et al. (2008), we randomly sample from scales of length 1-25 (oversampling the tails), construct each scale for 1992 and 1996, calculate the correlation between them, and plot the average correlations below.

Table 1.4 in the paper bears out this expectation. In the figure on the next page, we plot noisier deciles. The least politically knowledgeable individuals (bottom decile) exhibit little stability for single items with correlations around 0.25, and their stability only modestly increases as the number of items in the scale rises from 1 to 25. In contrast, the most politically knowledgeable individuals have stabilities that start above 0.50 and rapidly rise to over 0.80. Other deciles fall in between, as we would expect given that placement knowledge should rise with general knowledge, but given the small sample sizes do not always fall in the correct order.

### **Figure A1.19.1:**



### 1.20: REPLICATION WITH ACHEN (1975) MEASURE

We adopted the Ansolabehere et al. approach of using multi-item scales, as opposed to the Achen (1975) approach, mainly because of its simplicity, but there are advantages to other approaches. In particular, Achen (and Wiley and Wiley more generally) attempt to separate persistent attitude change from randomness. To do so, however, they require three or more waves. The only panel where we have placements for many items in more than two waves is the 1992-1997 British Election Study (BES). We strongly prefer having placements in every wave because placement knowledge is itself quite unstable. So, we also in part avoided this approach for practical reasons.

Nonetheless, it would be interesting to know if our results hold up with Achen's approach. So, we replicated a version of Achen's (1975) table 3, where he famously finds that measures of education and political sophistication fail to predict the amount of measurement error (or randomness) in public opinion. We followed his approach as closely as possible, conducting analysis at the individual-item level for all four BES economic items. We regressed the amount of measurement error (calculated from his equation 17) on general political knowledge and on placement knowledge, pooling the four items and including fixed effects for items and clustering the standard errors at the respondent level. Reassuringly, we conceptually replicate his basic finding: the BES general political knowledge scale fails to predict Achen's measure of error (that is, fails to reach p<0.05). It fails to do so even when it is the only regressor in the model. In contrast, however, placement knowledge is a strong predictor of reduced measurement error (p<0.00001).

### 1.21: MEASURING STABILITY AND PLACEMENT KNOWLEDGE IN DIFFERENT WAVES

One potential concern with our results is that the relationship between placement knowledge and attitude stability could be inflated by an artifact (we thank an anonymous reviewer for pointing this out). If respondents randomly generated their own opinions and then projected those onto the candidates/parties, it could end up inflating the relationship between attitude and party/candidate placement. It could do so because some people will, by chance, place themselves on the same side as their party, project their own position onto their party, and so be counted as stable and having placement knowledge. The order of the questions in election studies, which first asks about respondents' positions, then the candidates or parties or both, make this a real possibility.

Several analyses have convinced us that, while this may inflate the relationship, it does so to a small degree.

First, the bias is bounded by the randomness of the process that would give rise to it. If someone randomly picks a position on a seven-point scale with a do not know option, they will end up on the same side of the scale by chance in two interviews only (3/8\*3/8\*100=) 14% of the time. On the British Election Study 11-point scales, it is just 6% of the time. By chance, only half of these people would end up on the right side of the issue, that is, the same side as their party or candidate, further reducing the size of this upward bias. Presumably, not all these random responders project their opinion on to their party and project the opposite opinion on to the other party, so the upward bias could only be occurring in a small percent of respondents.

Second, as an anonymous reviewer suggested, we can assess this concern by measuring placement knowledge in other waves. One problem with doing so is that the candidate and party placement questions are scarce. In fact, the only panel where these questions are repeated in other waves is the British Election Study 1992-1997 (BES). They repeat the economic placements in the 1992, 1995, 1996, and 1997 waves. Another problem with doing so is that placement knowledge is itself not terribly stable. For example, placing the parties correctly on one of these four BES economic issues in 1992 only increases the chances that a respondent will correctly place them on the same item in 1997 by 0.20. If we look at this relationship between 1996 and 1997—only one year apart—the increase is only 0.30 (on average across the four issues). Some of the low stability of placement knowledge is likely because of guessing and some of it is because people forget, learn, etc. So, using placement knowledge from other waves will undoubtedly suppress the relationship between placement knowledge and attitude stability.

Despite the relatively weak relationship between placement knowledge across panel waves, our key finding holds up when we measure stability and placement knowledge in different waves.

In the table on the next page, we look at attitude stability on the four-item economic index in the BES. To maximize variation, we look at stability from 1992 to 1997. To increase the chances that knowledge persists, we measure placement knowledge between the 1995 and 1996 waves. By calculating placement knowledge across these two waves, we also reduce noise from guessing.

In the table below, column 1 shows the stability correlations (1992 to 1997) when we measure placement knowledge in the same waves, as we do in the paper. Those who incorrectly place the parties on all four issues in 1992 and 1997 (0 correct) have unstable attitudes, with a correlation of only .22. Among those who correctly placed them on all four items, the correlation rises to 0.76. Column 2 shows the relationship when we measure placement knowledge in the waves in between: 1995 and 1996. Among those who got all four items incorrect in 1995 in 1996, the correlation between their positions is 0.38. Among those who got all four correct, the correlation is 0.74. Obviously the correlation increase between the 1992 and 1997 waves is somewhat smaller, but still strong. The somewhat weaker relationship could come about because we have eliminated the upward bias from random position taking with projection, or simply because of the instability of placement knowledge.

Table A1.21.1: Measuring Placement Knowledge in the Same Versus a Different Wave: Four Item Economic Scale in the British Election Study 1992-1997

	1992 ar	1992 and 1997					
	(1)	_					
	Placement knowledge	Placement knowledge					
Placement	1992 and 1997	1995 and 1996					
knowledge	(Same wave)	N col 1	N col 2				
0 correct	0.22	0.38	88	178			
1 correct	0.27	0.41	67	54			
2 correct	0.52	0.52	161	89			
3 correct	0.50	0.55	185	154			
4 correct	0.76	0.74	338	364			
Diff.	0.54	0.36	839	839			

Instrumental variable analysis allows us to potentially estimate the relationship between attitude stability and placement knowledge while avoiding both of these problems (the artifact and the low stability of placement knowledge). We can instrument same-wave placement knowledge with prior-wave placement knowledge and conduct the analysis at the individual level, using the crystallized and absolute value of change variables. So that we measure the instrument before the treatment, we examine stability between 1996 and 1997, and instrument placement knowledge in 1996 and 1997 with placement knowledge in 1992 and 1995. This analysis, which we are happy to make available, finds a much stronger relationship between placement knowledge and attitude stability than do other analyses. This finding is consistent with low stability and measurement error exerting downward bias on placement knowledge, and doing so to a greater extent than the upward bias from random responding and projection in the same wave (the artifact). Of course, instrumental variable analysis has its own problems and exclusion restriction violations could be giving rise to this pattern.

### 1.22: IDEOLOGICAL PLACEMENT KNOWLEDGE AND POLICY PLACEMENT KNOWLEDGE

We examined the relationship between our findings, and the reputational premium theory of partisanship and vote choice (Sniderman and Stiglitz 2011). Knowing the parties ideological reputations is strongly related to policy specific placement knowledge, which makes a great deal of sense. On average across the studies, placing the parties on the right side of each other on an ideology scale increases the chance that a respondent will place the parties on the right side of each other on a particular issue by about 0.34 (95% CI 0.32-0.37). This estimate falls only to 0.23 when we control for general political knowledge, which itself gets a small coefficient of only 0.05. These estimates imply that ideological reputations are about four times more important than a single item of general political knowledge.

We also found that party reputation knowledge does predict attitude stability reasonably well, though not as well as placement knowledge. We think this makes sense: people who know the parties' general reputations are likely to know the parties positions on specific issues and so be stable on those issues, but when they don't, they are less stable. When they don't know how to relate the overall reputation to a specific issue, however, they are much less stable on that issue. Unfortunately, we are only able to investigate this question in the American panels, as the British election study did not ask a general ideological party placement question. To examine the relationship between party reputation knowledge and attitude stability, we coded a variable that equals one only when people correctly place the parties relative to each other on an ideology scale in both waves. We then examined the relationship between this variable and attitude stability across all the single items in American panels. On its own, scoring one on this variable increases stability by about 0.10 on the crystallized attitude measure. By contrast, placing the parties correctly on the specific issue increases crystallized attitudes by 0.18. When we include both in a model, the respective effects are 0.16 and 0.05, and both remain highly statistically significant.

#### 1.23: INACCURATE PERCEPTIONS?

A small number of respondents reverse the positions of the parties on policy issues. Do these misperceptions, especially if they are stable over time, also lead respondents to hold stable views themselves? In any given wave, about 10% of respondents placed the parties/candidates on the wrong sides of each other (well below chance, which is about 33%). Only 2.6% of respondents consistently do so across two waves. So, the sample is quite small. These 2.6% exhibit somewhat lower stability than average, and noticeably lower stability than individuals who correctly placed candidates, a result that is statistically significant, even with respondent fixed effects and clustered standard errors. So, it appears that consistently inaccurate views, in this case reversed perceptions, do not increase attitude stability, which is interesting. This finding may help us address concerns about the finding potentially being an artifact of random responding and projection.

### 1.24: THE ROLE OF POLARIZATION

What is the relationship between placement knowledge and polarization in the US electorate? Given the strong relationship we find between placement knowledge, agreeing with one's party/candidate, and attitude stability, we would expect polarization to occur primarily (maybe even solely) among individuals who know the major party or major candidate positions. In the figures on the next page, we examine this prediction. We analyze all policy questions in the ANES between 1972 and 2012 where the survey also asked about either the positions of the candidates or the positions of the parties. We recode all the ANES items to seven-point scales with one indicating the most liberal and seven indicating the most conservative.

In panel A on the next page, we show the basic pattern of polarization among all respondents. The figure shows the average position on the policy items over time by respondent party identification, using the seven-point scale (strong Republican to strong Democrat). As expected, it reveals that Republicans are becoming more conservative and Democrats are becoming more liberal over time, though the effects are modest. The more the lines in this figure spread apart, the greater the polarization.

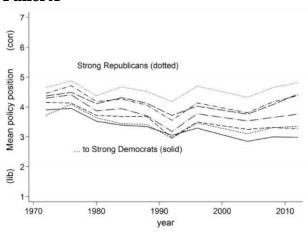
In panel B, we show the pattern of issue polarization among respondents who correctly placed the candidates or the parties (or both if they are asked about both). Here, we take the average at the item level, so only include respondents' issue positions on issues when they placed correctly on those issues. As expected, this figure reveals much more sorting among partisans. Strong Republicans are substantially more conservative on average (compared to figure A), strong Democrats are substantially more liberal. However, the figure reveals no sign of polarization. Partisans are just as sorted in 1972 as they are in 2012.

In panel C, we show the pattern of polarization among respondents who failed to correctly place the parties or candidates (or both if they were asked about both). In contrast with those who correctly placed, we see no clear sorting. In fact, strong partisans are reversed, with strong Democrats being the most conservative and strong Republicans being the most liberal, though the differences between them are very small. This reversal probably results from random position taking and projection, a pattern that seems unlikely to be unrelated to stability (see Appendix 1.22, which is the previous section). Given that neither panel B nor C reveal any sign of polarization, polarization must therefore arise from learning, from people moving from panel C to panel B. Appendix 1.11 presents evidence for that learning.

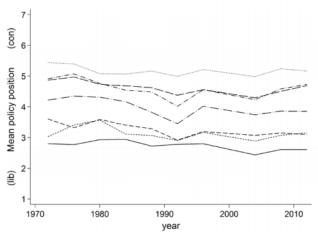
(The source of this data is ANES 1972-2012, presidential election years only)

Figure A1.19.1:

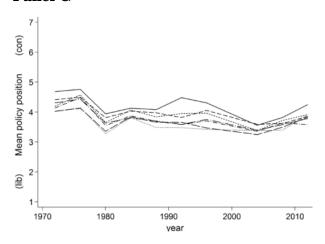
### Panel A



### Panel B



### Panel C



# 2.1: DESCRIPTIONS AND DEMOGRAPHICS OF REFERENCED STUDIES

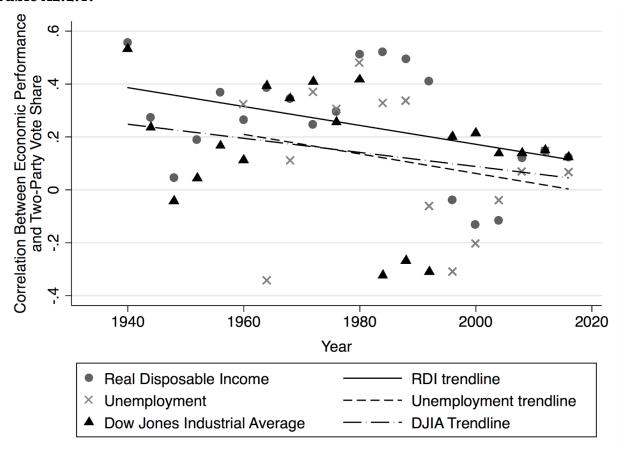
**Table A2.1.1** 

	County Vote	ANES Perception	GSS Perception	ANES Attribution	Exp. 1 (mTurk)	Exp. 2 mTurk
Years	1932- 2016	1972-2016	1972-2016	1984-1996	2018	2018
Unit	County- Year	Ind.	Ind.	Ind.	Ind.	Ind.
# Obs	71,784	27,875	57,706	3,365	254	853
% Under 35	-1	33.21%	33.94%	36.37%	62.59%	60.44%
% College		39.94%	47%	45.32%	59.6%	59.89%
% Female		55.16%	55.88%	55.43%	46.37%	46.18%
% Democrat		52.69%	70%	49.13%	49.81%	50.78%
% Republican		35.45%	30%	39.06%	36.61%	36.23%

 $Note: ANES = American \ National \ Election \ Study. \ GSS = General \ Social \ Survey. \ Ind. = Individual. \ Exp = Experiment.$ 

# 2.2: DECLINE OF ECONOMIC VOTING ROBUSTNESS CHECKS – ALTERNATIVE ECONOMIC MARKERS

**Table A2.2.1:** 



To examine the possibility that it is only the relationship between RDI and incumbent vote share that has changed, and not that of economic performance and vote share generally, the above figure shows the same analysis from Figure 2.1 on two other economic variables – the unemployment rate and the Dow Jones Industrial Average. Data comes from the Federal Reserve and Bureau of Labor Statistics. For these measures, as with RDI, I take the year to year difference from October of each year, using only national-level data. As the figure above shows, regardless of the measure used, the relationship over time is significantly negative.

# 2.3: DECLINE OF ECONOMIC VOTING ROBUSTNESS CHECKS – CORRELATION COEFFICIENTS

Figure A2.3.1:

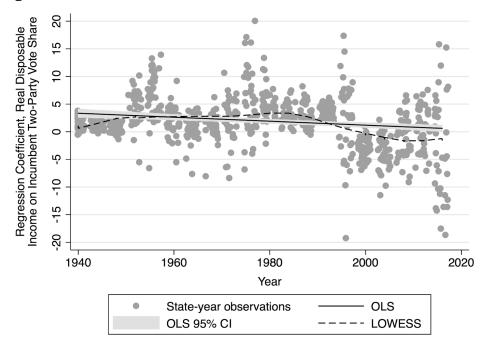
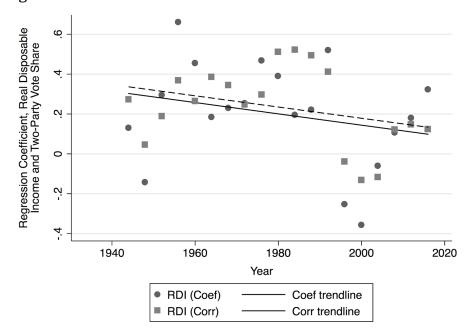


Figure A2.3.2:



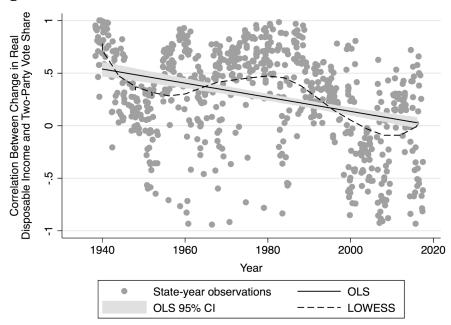
One problem with using correlations as the primary measure is that correlation measures are sensitive to variance, which could lead to a misinterpretation of the apparent over-time relationship. For instance, rather than a decline in the impact of economic performance on incumbent vote share, the negative relationship over time could instead be due to decreased variance in incumbent vote share across elections. To account for this, I rerun the analysis described in the paper, but using correlation coefficients from simple bivariate OLS regressions. Using this new method, I still find similar negative over-time results for data taken by grouping county observations at the state level (figure A2.3.1), as well as those from taking simple averages of all observations in each year (figure A2.3.2). For clarity, the bottom panel shows the results using both correlation coefficients (solid) and correlations (dashed). The difference between the two is small and insignificant.

One observable difference between the results reported in the paper and those reported above is in the lowess curve in the top panel. The former version shows a declining relationship from 1940-1960, while in this version the relationship is flat to increasing. Despite this difference, both versions show the result key to the argument in this paper, that from 1990-present, the relationship has significantly declined.

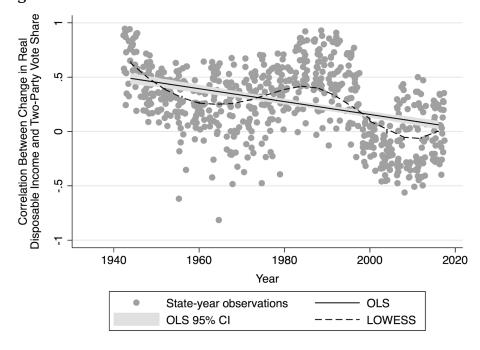
In addition to what is shown above, I also obtain correlation coefficients from a model that includes a term for lagged incumbent vote share, to allow for the possibility that the estimated effect of real disposable income on incumbent vote share is not picking up some other proincumbent bias that is growing over time. Specifically, this model includes the percentage incumbent vote share from the most recent presidential election prior to the one held in a given year. While this variable is often significant in the model, its substantive impact on the correlation coefficients of interest are small and insignificant, and these estimates are not shown separately for this reason.

# 2.4: DECLINE OF ECONOMIC VOTING ROBUSTNESS CHECKS – ALTERNATIVE TIME WINDOWS

**Figure A2.4.1:** 



**Figure A2.4.2:** 

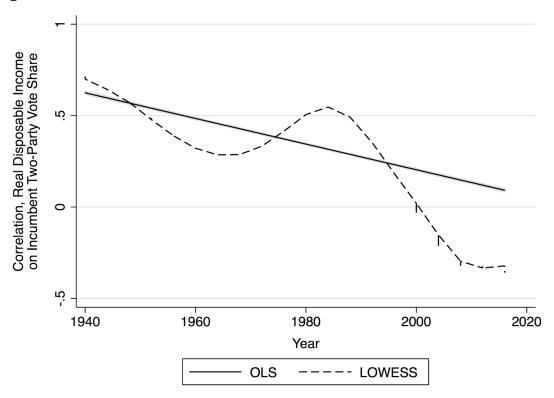


In the main analysis, the correlations I used represent windows of three elections for each grouping of county level observations. For instance, in the paper, the dots in the figure above each represent the correlation between RDI and incumbent vote share for all counties within a state, over a period of three consecutive elections.

To demonstrate that my findings are not an artifact of the particular window of elections I chose to select, the above figures show the analysis from Figure 1 in the paper recreated using alternative specifications. Figure A2.4.1 uses two-election windows, while figure A2.4.2 shows the results from the use of four-election windows. It is easily seen that my findings are insensitive to changes in the window; both the line of best fit and LOWESS curve are similar regardless of specification. This is true as well for alternative measures of economic performance, but for the sake of brevity these results are not reproduced here.

## 2.5: DECLINE OF ECONOMIC VOTING ROBUSTNESS CHECKS – NO STATE GROUPING

Figure A2.5.1



Some may be concerned that the strategy used to group observations by state in Figure 2.1 compromised the results. While I grouped by state only to produce a more easily readable plot, and the regression series shown in Table 1 should address these concerns, I produce above a plot similar to Figure 1, but that does not group counties by state. The above plot uses 58,200 county-level observations, each representing a rolling correlation (over three election years) of incumbent vote share and year-to-year change in real disposable income in the election year. To ensure results are not driven by counties dropping in or out of the analysis, I drop any county that lacks observations in one or more of the twenty two election years analyzed. The above figure shows both OLS and LOWESS results, but does not include a scatter plot, which would contain too many observations to be readable. The above results are effectively the same as those shown in Figure 2.1, as well as the other robustness checks.

# 2.6: INCREASED ROLE OF PARTISANSHIP IN ECONOMIC EVALUATIONS – SURVEY WEIGHTS AND SAMPLING

Figure A2.6.1

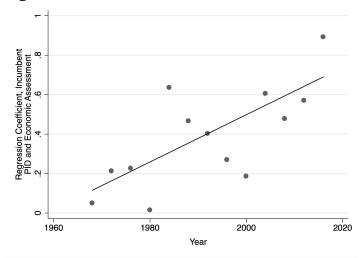
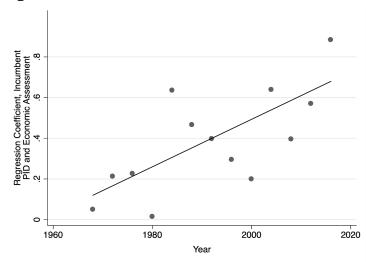


Figure A2.6.2



In the main analysis, Figure 2.2 uses non-weighted ANES data, and includes face-to-face respondents in 2008 and after. To ensure that my findings are not the result of a weighting problem or the shift in sample makeup, I produce the above figures using weights (figure A2.6.1) and dropping FTF respondents (figure A2.6.2), respectively.

### 2.7: FIVE THIRTY EIGHT ECONOMIC INDEX

Table A2.7.1
FiveThirtyEight Economic Composite Index, 1968-2008

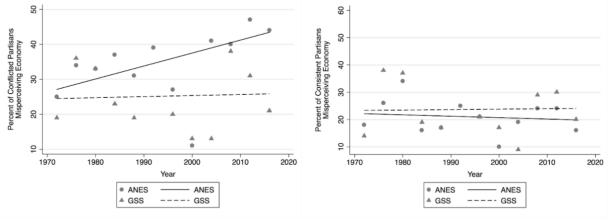
Days Until Election	1968	1972	1976	1980	1984	1988	1992	1996	2000	2004	2008
250	3.0%	3.1%	1.9%	-0.6%	5.4%	3.0%	1.0%	3.2%	4.2%	3.3%	2.0%
225	3.1%	3.4%	2.5%	-2.5%	5.5%	2.8%	1.3%	3.1%	5.0%	3.3%	1.3%
200	4.2%	3.9%	2.6%	-2.9%	5.6%	2.8%	1.8%	3.0%	4.3%	3.6%	1.2%
175	4.3%	3.8%	3.5%	-3.6%	5.7%	2.7%	1.8%	2.9%	4.5%	3.4%	1.1%
150	4.5%	4.0%	3.6%	-4.0%	5.6%	3.1%	1.8%	3.0%	4.2%	3.6%	0.4%
125	3.7%	4.0%	3.9%	-4.7%	5.5%	3.5%	1.9%	2.8%	4.1%	3.6%	-0.3%
100	3.4%	4.2%	4.2%	-5.1%	5.1%	3.8%	1.8%	2.5%	3.8%	3.1%	-0.3%
80	3.3%	4.5%	4.1%	-5.3%	5.8%	3.7%	2.0%	2.9%	3.8%	2.6%	-0.9%
60	3.4%	4.4%	4.2%	-4.5%	5.5%	3.5%	2.0%	2.6%	3.5%	3.0%	-1.6%
45	3.3%	4.4%	4.2%	-2.5%	5.2%	3.6%	2.0%	3.0%	3.4%	3.1%	-1.5%
30	3.4%	4.5%	4.0%	-2.5%	4.9%	3.7%	1.6%	3.1%	3.2%	3.0%	-2.1%
20	3.3%	4.4%	3.9%	-2.3%	4.8%	3.7%	1.5%	3.1%	2.9%	2.9%	-2.7%
10	3.4%	4.6%	3.5%	-2.2%	4.9%	3.4%	1.6%	3.0%	3.0%	2.7%	-3.2%
0	3.3%	4.8%	3.7%	-2.2%	5.1%	3.3%	1.8%	3.0%	3.1%	2.8%	-2.6%

Reprinted above is FiveThirtyEight's economic index, which I use in this paper as an objective measure of the state of the economy at a given point in time prior to the election. The index uses seven major economic indicators to produce a sense of the overall growth in the economy. A number lower than 3% with less than a month until the election is considered to be unusually bad by the developers of the index, and in the paper, I treat any such cases as a "bad economy". This occurs in 1980, 1992, and 2008. For more information about how the index is computed, please visit https://fivethirtyeight.com/features/measuring-the-effect-of-the-economy-on-elections/

### **ECONOMIC MISPERCEPTION – SURVEY WEIGHTS AND SAMPLING**

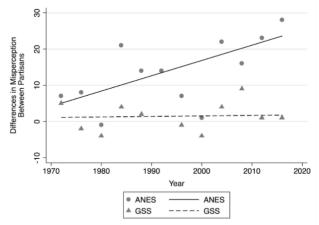
Figure A2.8.1 a) % among conflicted partisans

### 50 9



b) % among consistent partisans

### c) difference between conflicted and consistent

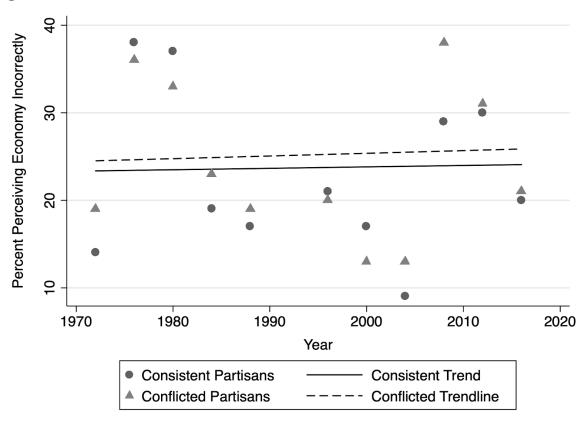


Note: N=27,875 for ANES respondents and N=57,706 for GSS respondents. Panel A shows results only for conflicted partisans, Panel B only for consistent partisans, and Panel C plots the difference between the observations in Panels A and B.

The above plots replicate elements of Figure 2.3 from the paper, but the underlying analysis uses sample weights from ANES, and drops face-to-face respondents from 2008, 2012, and 2016. The results are essentially the same.

### 2.9: COMPARING THE ANES AND GSS OVER TIME

Figure A2.9.1



Note:  $\mathcal{N}=57,706$ . 95% confidence intervals (not shown above) for each group always overlap.

Figure A2.9.1 above replicates figure 2.3 from the paper, but using only data from the General Social Survey. The pattern of selective perception discussed in the paper does not replicate when looking at data from the GSS, which asks a nearly identical economic evaluation question as the ANES, reproduced below:

### ANES Question [VCF0880]

1962-1998,2004: We are interested in how people are getting along financially these days. Would you say that (1962,1966-1974: you [and your family]; 1976 and later : you [and your family living here]) are better off or worse off financially than you were a year ago?

2000-2002: Would you say that you (and your family) (2000 FACE-TO-FACE ONLY: living here) are better off, worse off, or just about the same financially as you were a year ago?

RESPONSE OPTIONS: Better Now; Same; Worse Now; DK/Uncertain/Depends

### GSS Question ['finalter']

During the last few years, has your financial situation gotten better, worse, or stayed the same?

RESPONSE OPTIONS: Better; Stayed the Same; Worse; DK/No answer/NA

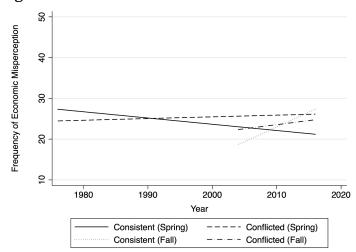
The figure above shows the results for the same test that produced Figure 2.3 in the paper, but using GSS data instead of ANES data. For the GSS, in which the vast majority of respondents are contacted in the spring, I use economic data taken from the FiveThirtyEight Index corresponding to five months prior to the election, rather than a month prior, as is contextually appropriate for the ANES. This, however, makes little difference, as in all but one election year, the state of the economy in the spring is more or less identical to the fall. See Appendix 2.7 for more details on timing and the economic index.

Despite the similarities between the two questions, the GSS shows no evidence of changes in how partisans perceive the economy. Across the entire period, neither conflicted nor consistent partisans exhibit high degrees of inaccuracy (the average is stable, though noisy, around 25% for both groups), and the trend is flat and identical for each.

What explains why these two surveys produce very different results? One possibility is timing — the GSS is fielded largely in the spring (80% of respondents contacted in the first half of the year), while the ANES pre-election interviews are fielded September through November, during the campaign season. Therefore, the difference may be due to the wide proliferation of general election campaign material that ANES subjects (but not GSS subjects) are exposed to, which pushes conflicted partisans towards inaccuracy. A second possibility is the context of the survey itself — the ANES is an explicitly political survey, while the GSS asks questions on a variety of social topics. As such, it may be that ANES respondents are inherently primed to think of themselves in a partisan manner in a way that GSS respondents are not.

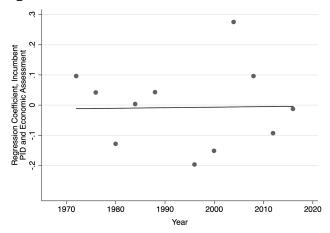
These possibilities are testable. If the first account is true, then the minority of GSS respondents who are surveyed June-November should exhibit greater inaccuracy than their earlier counterparts. If the second account is true, then for GSS respondents, the relationship between partisanship and economic evaluation should remain weak and flat over the entire period. Testing the first of these accounts, I first find that GSS respondents do not appear to behave differently depending on when they are interviewed. Figure A2.9.2 on the next page plots both conflicted and consistent partisans on inaccurate perceptions over time, just as I did in paper Figure 2.3 and the figure above. Respondents in this figure, however, are further separated by their date of interview, with those being interviewed in May or earlier showing up as Spring respondents, and all others as Fall interviewees (the GSS did not interview any respondents in the fall prior to 2004). If the difference between the GSS and ANES were attributable to differences in timing, then we would expect to see conflicted partisans in the fall to be noticeably more inaccurate than both consistent fall partisans (who have no incentive to get it wrong) and conflicted spring partisans (who have not yet been exposed to campaign advertising). This does not appear to be the case – conflicted fall partisans appear to be no less accurate than the others. On the other hand, testing the second account, I find partisanship is a weak predictor of economic evaluations for GSS respondents across the period. Figure A2.9.3 shows Figure 2.2 from the paper, but replicated for the GSS. Instead of a fourfold increase in coefficient strength, the trend is flat over time.

### Figure A2.9.2



*Note:* N=22,931.

Figure A2.9.3



Note:  $\mathcal{N}=22,931$ . Dots represent the coefficient across all respondents in each year.

The differences between the ANES and GSS samples cannot be explained by differences in timing; instead, it appears that respondents in the GSS do not feel increasing pressure to link their evaluations of the economy to their strength of partisanship. Given this, it seems likely that the findings differ across the two surveys because of the inherently political context of the ANES. Rather than calling into question the evidence for rise of selective perception, this arguably reinforces the finding – when partisan identities are activated, especially under increasingly high polarization contexts over time, citizens rush to defend their own team. Once removed from the explicit influence of partisanship, people evaluate the economy more fairly and accurately. Given that presidential voting occurs under an explicitly partisan context, and the evidence already presented shows actual economic conditions to have increasingly weak impact on voting decisions over time, scholars should consider the findings from the ANES, not the GSS, as representative of the actual calculus voters face when thinking about the economy.

# 2.10: QUESTION WORDING, "GOVERNMENT HANDLING OF THE ECONOMY", ANES

### **ANES Question [VCF9044a]**

1984 AND LATER: 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?

Response options: Better; Same ("haven't made much difference"); Worse

### 2.11: QUESTION WORDING, EXPERIMENT 1

### Prompt (in-text choice is randomized):

According to economic data, between 1948-2005, on average, **real income growth** in [**ELECTION YEARS** if condition=democrat; **NON-ELECTION YEARS** if condition=republican] for lower, middle and upper-class Americans **was significantly higher under [DEMOCRATIC/REPUBLICAN] presidents than** [**REPUBLICANS/DEMOCRATS**]. (source: United States Census Bureau)

### What do you think explains why [DEMOCRATIC/REPUBLICAN] presidents outperform [REPUBLICANS/DEMOCRATS] on this measure?

#### Response Options

For each reason listed below, please indicate how well it explains this finding:

- 1. [DEMOCRATIC/REPUBLICAN] policies are better at producing income growth.
- 2. [DEMOCRATS/REPUBLICANS] were lucky to serve more often when the economy was doing well for other reasons.

For each of the above, respondents answered using a 5 point scale, ranging from "Poor Explanation" to "Strong Explanation"

### Disclosure at End of Survey

"DISCLOSURE: Earlier, you were shown a statement about economic performance under Democratic and Republican presidents. This finding comes from work by Larry Bartels in "Unequal Democracy: The Political Economy of the New Gilded Age" (2008).

#### He found that:

- 1) Republican presidents presided over a stronger economy in **election years** relative to Democratic presidents, for all levels of income.
- 2) Democratic presidents presided over a stronger economy in **non-election years** relative to Republican presidents, for all levels of income.

Please click to the next page to finish the survey."

### 2.12: QUESTION WORDING, EXPERIMENT 2

### **Attribution Question**

"Some people think politicians, such as President **[OBAMA/TRUMP]**, have great control over the economy. Others think that the quality of the economy is largely determined by forces outside his control.

### What do you think? How much ability to affect the American economy [DID OBAMA / DOES TRUMP] actually have?

The scale below ranges from high presidential control to low presidential control. Please use it to indicate your belief."

Respondents are shown a 7 point scale, with the left pole labeled "Economy mostly determined by president" and the right pole "Economy mostly determined by outside forces and chance". The midpoint was labeled "Even mixture of both".

### **Economic Performance Question**

"Think about the **performance of the economy** during [**OBAMA'S LAST YEAR / TRUMP'S FIRST YEAR**] in office (2016).

Regardless of your attitudes towards him personally, how would you rate the economy under [PRESIDENT OBAMA IN 2016 / PRESIDENT TRUMP IN 2017]?"

Respondents are then shown a 7 point scale with each point labeled, top to bottom, as follows: "excellent", "very good", "good", "mediocre", "bad", "very bad", "terrible"

## 2.13: ORDER EFFECTS, EXPERIMENT 2

**Table A2.13.1** 

		b	S.E.	N
Economic	Inparty	0.259***	0.094	214
Evaluation First	Outparty	-0.147**	0.069	225
	Inparty	0.216**	0.1	200
Economic Evaluation Last	Outparty	-0.196***	0.072	214

The above table shows the effects reported in Experiment 2 broken down by the order in which the two questions (quality of the economy under the randomized president, and the level of responsible attributed to the president for economic outcomes). Respondents were shown these questions in randomized order. Regardless of order, the relationship between responses to these questions are significant and in the correct direction: for outgroup respondents, an increased rating of the economy is associated with a lessened belief in the president's impact on the economy, while the opposite is true for ingroup respondents. Significance is reported above as \*\* when p<0.05, and \*\*\* when p<0.01.

# 3.1: ATTITUDINAL SELF-RATINGS, EXPERIMENT 1

Turning to the topic of **gun control**, some people want **more/stricter regulations** on firearm ownership and use, while others would like to **eliminate or loosen existing regulations**.

Place your feelings about gun control on the following scale.

Strongly favor	Somewhat favor	Slightly favor	Neither favor nor oppose	Slightly oppose	Somewhat oppose	Strongly oppose	× Don't Know
			О	Оррозе	Оррозе	Оррозе	O
Turning to the topic of <b>illegal immigration</b> , some people favor relatively <b>punitive policies</b> for those who are already here illegally, such as mass deportation, while others prefer a more <b>lenient approach</b> that would allow amnesty for many of these individuals, provided they meet certain criteria.							
Place your fe	elings towa	rds <b>punitive</b> i	llegal immigr	ation polici	<b>es</b> on the follo	owing scale	Э.
Strongly favor	Somewhat favor	Slightly favor	Neither favor nor oppose	Slightly oppose	Somewhat oppose	Strongly oppose	× Don't Know
					or full govern government i		
Place your fe	elings towa	ırds <b>governm</b>	ent involvem	ent in healt	<b>hcare</b> on the f	following s	cale.
Strongly favor	Somewhat favor	Slightly favor	Neither favor nor oppose	Slightly oppose	Somewhat oppose	Strongly oppose	× Don't Know
Turning to the topic of <b>the environment</b> , some people feel that we need to pursue <b>stricter environmental regulations</b> , while others would like to <b>eliminate or weaken existing regulations</b> .							
Place your fe	elings abou	ut <b>environme</b>	ntal regulatio	<b>ns</b> on the f	ollowing scale		
Strongly favor	Somewhat favor	Slightly favor	Neither favor nor oppose	Slightly oppose	Somewhat oppose	Strongly oppose	× Don't Know

# 3.2: POSITIONS SHOWN IN PROFILES, EXPERIMENT 1

Issue Type	Position Type	Position Wording
Gun Control	Strong Oppose	"I fully support the 2nd amendment. I don't want any new rules on gun ownership, and would like to rollback many existing regulations."
Gun Control	Oppose	"I want to roll back several existing regulations, but there is a need for some very basic laws on gun ownership."
Gun Control	Weak Oppose	"I support most current gun laws, but don't want any additional regulations."
Gun Control	Strong Favor	"I'm completely in favor of making private gun ownership difficult, even the banning of private gun ownership altogether."
Gun Control	Favor	"I support much stricter regulations than currently exist, but I do believe in the basic right to own firearms."
Gun Control	Weak Favor	"I support a few additional regulations, but I do believe in the basic right to own firearms."
Healthcare	Strong Oppose	"Private companies should be completely responsible for insurance. The free market should set prices and access."
Healthcare	Oppose	"Healthcare should primarily be handled by private companies, but the gov't should set some basic rules, and maintain Medicare."
Healthcare	Weak Oppose	"Healthcare should mostly be handled by private companies, but the gov't should keep them in check, and of course continue Medicare and Medicaid."
Healthcare	Strong Favor	"The government should be the sole provider of insurance and treatment, and guarantee it for everyone in the country."
Healthcare	Favor	"The gov't should guarantee everyone's access to insurance in a regulated market, and a publicly funded option should be available to all."
Healthcare	Weak Favor	"The gov't should guarantee that everyone, including people with pre-existing conditions, has access to insurance in a regulated market."
Immigration	Strong Oppose	"I think all illegal immigrants should be deported however and whenever possible, and we need to build a border wall."
Immigration	Oppose	"I want a border wall and the deportation of most illegal immigrants that are already here, though maybe with exceptions for certain minors."
Immigration	Weak Oppose	"I want to improve border security. I favor the deportation of illegal immigrants already here, with exceptions for minors and the elderly."
Immigration	Strong Favor	"I stand in solidarity with undocumented immigrants currently in the US, and against any efforts to deport or harass them."
Immigration	Favor	"I approve of deporting illegal immigrants who have committed criminal acts, but otherwise we should leave illegal immigrants already living here alone."
Immigration	Weak Favor	"I want to deport illegal immigrants who have committed criminal acts, but the rest should have a chance to be citizens, provided they pay penalties."
Environment	Strong Oppose	"I'm against new regulations, and would like to see a lot of the ones on the books weakened or eliminated entirely."
Environment	Oppose	"I don't want any new regulations, and I'd like to get rid of many of the existing ones. Still, I see the need for some basic rules."
Environment	Weak Oppose	"In general, I'm a little wary of the rules that exist and those we might make in the future."
Environment	Strong Favor	"Our current environmental protection standards are completely inadequate. I want a major expansion of existing regulations."
Environment	Favor	"I'd like to see the government keep most existing rules, and add new ones where needed."
Environment	Weak Favor	"I generally support efforts by the government to protect the environment."

# 3.3: MOTIVES USED IN PROFILES, EXPERIMENT 1

Issue Type	Position Type	Motivation Quality	Motivation Wording
Gun Control	Oppose	4.25	"I live in a rural area without much police presence. Regulations against gun ownership would render me unable to defend myself and family against possible intruders."
Gun Control	Oppose	4.45	"I believe in the original meaning of the 2nd amendment - I'm even open to some strict firearm regulations, but the constitution first needs to be amended."
Gun Control	Oppose	5.05	"I want to save innocent lives - more people would be harmed, as unarmed citizens, than would be saved by the passage of anti-gun laws."
Gun Control	Oppose	5.6	"I like guns and own many different kinds - gun violence alone doesn't justify making laws that would deprive me of my guns."
Gun Control	Oppose	6.58	"I live in a mixed race neighborhood - gotta be able to defend myself if my home gets vandalized or targeted by minorities."
Gun Control	Oppose	6.83	"Eventually, the government is gonna try to enslave the people of the United States, and citizens will need to stockpile guns and ammunition in order to resist them."
Gun Control	Favor	4.39	"I want to save innocent lives - stricter laws would reduce accidental deaths, and prevent criminals and unstable people from using guns to commit violent crimes."
Gun Control	Favor	5.33	"I live near a school where several kids were killed by a gunman. Stronger gun laws will reduce the odds of these kinds of things happening again."
Gun Control	Favor	5.55	"Guns, especially those with high-capacity magazines, make it too easy for mass murders to occur. Other countries with stricter laws have fewer mass murders."
Gun Control	Favor	6.09	"I live in a mixed race neighborhood - the last thing we need is more of those people armed."
Gun Control	Favor	7	"I don't like guns and I don't like gun owners - there's rarely a justifiable reason for owning, using, or collecting guns."
Gun Control	Favor	7.69	"Gun owners are rednecks - I couldn't care less whether gun laws impact their lives negatively or not."
Healthcare	Oppose	3.78	"Healthcare decisions should be made by individuals - people should be free to forgo insurance if they feel it's in their own interest, and to choose among options in the free market."
Healthcare	Oppose	4.33	"I'm generally opposed to expanding the government. They never end up working for the people, but rather rich interest groups like pharmaceutical companies."
Healthcare	Oppose	4.33	"I don't want my taxes going up - paying for other people who aren't willing to pay for themselves just means less money for me."
Healthcare	Oppose	4.8	"The government would run the healthcare system inefficiently - the lack of competition would give the govt no incentive to handle things cost-effectively. The free market is the best option."
Healthcare	Oppose	6.02	"I am firmly opposed to handouts. People should work for what they want, and not rely upon getting free stuff from the government."
Healthcare	Oppose	6.07	"I've already got good insurance. Don't see a need to fix the system, it's working fine for me."
Healthcare	Favor	3.76	"I just don't want to people to be hurt, suffer, or die - in the 21st century, no one should have to worry about themselves or their family suffering from treatable illnesses and conditions."
Healthcare	Favor	4.15	"I'm on welfare and can't afford insurance. I need the government to step in and pay for me."
Healthcare	Favor	5.04	"Government control of healthcare simply works elsewhere - the US is one of few developed nations without government-run healthcare, but has the highest costs and poorest health."
Healthcare	Favor	5.19	"The government is best able to run the system efficiently. The free market is good but fails in markets where people need the goods to survive. The gov't is needed to negotiate on their behalf."
Healthcare	Favor	5.5	"Simple, I need free benefits - I'm not working right now, can't pay into the system, but I still want good healthcare."
Healthcare	Favor	6.48	"Government control means we can start fixing people's lifestyles - people need to eat healthily and sustainably, exercise regularly, and the gov't can enforce that."

Issue Type	Position	Motivation	Metivation Wording
	<u>Type</u>	Quality	Motivation Wording
Immigration	Oppose	3.23	"The current system is unfair to legal immigrants; many immigrants played by the rules and earned their right to be here. It's unfair for illegals to skip ahead of them in line."
Immigration	Oppose	4.63	"I want to protect American jobs - where I live, the loss of factory jobs has led to high unemployment, and many businesses hire illegal immigrants to do what work remains."
Immigration	Oppose	5.67	"I want to save innocent lives - many illegal immigrants have raped or murdered Americans in the past. A stricter immigration policy would protect US citizens."
Immigration	Oppose	6.21	"I want to protect the culture of the US - illegal immigrants don't assimilate and bring unwanted beliefs and traditions into the American mainstream."
Immigration	Oppose	7.3	"Americans are more important to me than Mexicans - I'd be fine allowing 1000 mexicans to remain in poverty if it meant protecting 1 American family."
Immigration	Oppose	7.69	"I don't like mexicans - a lot of them in my area are lazy, won't work, and are involved with crime and drugs."
Immigration	Favor	4.15	"I want to save innocent lives. Many illegal immigrants flee their country to escape violence and oppression. Deporting them would be cruel and immoral."
Immigration	Favor	4.24	"We are a nation of immigrants, and given that history, we should be particularly welcoming to those that come to this country for an opportunity for a better life."
Immigration	Favor	4.79	"I know a family of undocumented immigrants - they are good people who are respected in the community, and I'd never want to do anything to harm their family, or others like them."
Immigration	Favor	5.27	"I believe in a borderless world! We shouldn't be focused on borders at all, we need to learn to live as a single human race."
Immigration	Favor	5.45	"Illegal immigration doesn't affect me. Combatting it is a waste of time, who cares. Let's spend money elsewhere."
Immigration	Favor	6.84	"Hey, it's good for the Democrats - illegal immigrants will find a way to vote, and it'll keep Republicans out of office."
Environment	Oppose	4.03	"In my area, we've lost a lot of jobs due to environmental overregulation - small businesses can't meet expensive requirements, while big corporations can easily pay for them. It's not fair."
Environment	Oppose	4.81	"I don't want to really hurt our economy just to only slightly improve the environment. I've seen small business owners have to close shop just to protect certain reptile species!"
Environment	Oppose	5.53	"Private entities can take better care of the environment than the gov't - public land should be managed by private citizens, who'll have self-interest in preventing pollution/damage."
Environment	Oppose	5.92	"Well, honestly, I own stock in a couple big coal companies. Environmental regulations would likely cut into the profit I can expect from my stock portfolio."
Environment	Oppose	7.38	"Honestly, I just don't care much about the environment - I live in a big city, and I don't go outdoors much. Aren't there bigger priorities?"
Environment	Oppose	7.81	"I'm just sick of whiny hippies and liberals who don't understand how the real world works."
Environment	Favor	3.31	"My community has been completely devastated by frakking - it made the water undrinkable and there were birth defects. We need regulations to prevent this from happening to others."
Environment	Favor	4	"Without regulations, over time, private companies will destroy the environment. Corporations only focus on short-term profits. They'll always choose that over safety and health."
Environment	Favor	4.58	"Bottom line, I want to leave our children better off - it's unfair for our generation to live however we want with no thought to the global crises we are creating for the next generation."
Environment	Favor	5.58	"It's REALLY simple. We'll be dead soon if we don't act now - I've seen research on the internet that says humans will be wiped out in less than five years by global warming!"
Environment	Favor	5.85	"I've invested pretty heavily in renewable energy companies - environmental regulations should put the old competitors out of business, and result in some pretty nice profits."
Environment	Favor	6.88	"It's one more way to hurt big businesses - evil corporations need to be punished and run out of business using regulations, even if it weakens the whole economy for a while."

Issue Type	Position Type	Motivation Quality	Position Wording
Party	Democrat	3	"I believe in taking care of the poor, sick, and vulnerable in society."
Party	Democrat	3.43	"I want to fight discrimination against on the basis of race, religion, class, gender, or sexual orientation."
Party	Democrat	4.24	"I support the rights of workers. I want to level the playing field between the rich and the poor."
Party	Democrat	5.74	"It's great when the government provides me with free things, the more the better."
Party	Democrat	6.09	"I support Communism. I want the US to be a Communist nation. Close as it gets."
Party	Democrat	6.74	"Republicans are the party of old white men. I don't trust them, don't like them."
Party	Republican	4.31	"I believe in individual responsibility, freedom of choice, and freedom of speech."
Party	Republican	4.52	"Private individuals make the best decisions about the economy and job creation, not the government."
Party	Republican	4.54	"I don't believe that the government is capable of running most programs without corruption and waste."
Party	Republican	5.46	"I don't want lazy people trying to take free stuff out of my pockets."
Party	Republican	6.25	"Honestly, I just want things to go back to how they were 50 years ago."
Party	Republican	6.59	"Democrats are the party of minorities. White people are losing control of this country!"

Motivation quality is scored from 1-9, where 1 represents a rating of "highly reasonable" and 9 "highly unreasonable". All motivation quality scores above are taken from the average of outgroup judgments only.

# 3.4: EXERCISE INSTRUCTIONS FOR RESPONDENTS, EXPERIMENT 1

#### ALL RESPONDENTS:

"For the following exercise, you will see a series of profiles. The comments in these profiles come from real people who previously participated in a similar, earlier study. While hundreds of people participated, we are showing you the responses of only a small sample of people."

#### THEN, IF CONTROL GROUP:

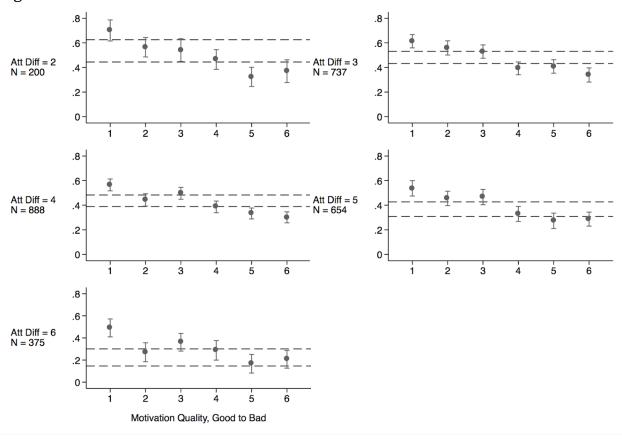
"Just as you did, these individuals were first asked to indicate their position on a number of issues. On each of the following pages, you'll see a different individual and their position on a certain issue. Given this information, please indicate how you feel towards them, positive or negative, using the scale provided."

#### THEN, IF EXPERIMENTAL GROUP:

"Just as you did, these individuals were first asked to indicate their position on a number of issues. Then, for each one, they were asked to talk about why they take that position. On each of the following pages, you'll see a different individual, and both their <u>position</u> and <u>motivation</u> on a certain issue. Given this information, please indicate how you feel towards them, positive or negative, using the scale provided."

## 3.5: EFFECT OF MOTIVE QUALITY BY POSITION, EXPERIMENT 1

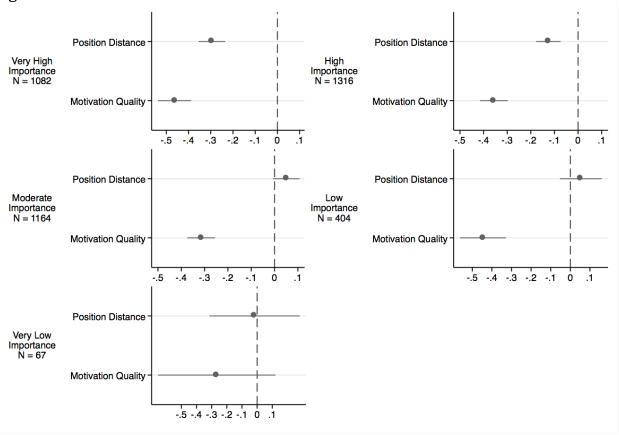
**Figure A3.5.1:** 



Note: The above figure shows the mean affect ratings for each type of motivation, with each panel representing a different level of position distance from the individual in the profile. Each observation reflects a single rating (each respondent ranked multiple profiles). Only outgroup judgments are used, so the minimum position distance is 2 (e.g. 3 and 5 on a 7-point scale). The x-axis shows the motivations each profile might contain, arranged in order from the highest to lowest rated motivation for each issue. The y-axis represents the mean affect rating for a given individual profile. The dashed lines are the edges of the 95% confidence interval of the mean affect of the control group. Each panel shows that the presence of the highest rated motivation has a significant positive effect relative to the control group and, in most cases, the lowest rated motivations have a significant negative effect. Even for those evaluating someone on the opposite end of the scale (Att Diff = 6), the affective impact of seeing the best motive is such that their outgroup affect equals that of the control group in the minimal difference panel (Att Diff = 2), a movement across about a third of the entire scale.

# 3.6: EFFECT OF MOTIVE QUALITY BY ISSUE SALIENCE, EXPERIMENT 1

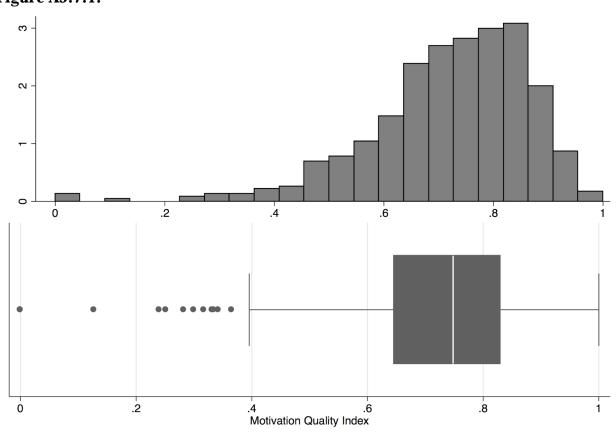
Figure A3.6.1:



Note: The above figure shows the effect sizes of motivation quality and position distance on profile rating, by the respondent's level of interest in a given issue. Each observation reflects a single rating (each respondent ranked multiple profiles). The dashed line represents a null effect. For each issue, respondents were asked to indicate their level of interest in the issue on a 5-point scale, and each panel above represents all ratings by those with the given interest level. These panels show that motivation quality always has a significant effect (except for the Very Low panel, which has very few observations). Position distance, however, only matters to those with a high amount of interest in an issue.

# 3.7: MOTIVE QUALITY INDEX DISTRIBUTION

**Figure A3.7.1:** 



Note: The top panel shows a histogram density plot of the Motivation Quality Index as described in the main paper. This index represents the average motivation quality each respondent sees across all five outgroup profiles. The index value consists of five randomly assigned values, and therefore varies across subjects by chance alone. Motivation quality ranges from 0-1, where 0 is a motivation rated by a separate pilot group as "highly unreasonable", and 1 as "highly reasonable". The bottom shows the same distribution as a box-and-whiskers plot.

# 3.8: EXAMPLES OF FULL PROFILES, EXPERIMENT 1

Position: Somewhat favors leniency - "I approve of deporting illegal immigrants who have committed criminal acts, but otherwise we should leave illegal immigrants already iving here alone."									
are respecte	Motivation: "I know a family of undocumented immigrants - they are good people who are respected in the community, and I'd never want to do anything to harm their family, or others like them."								
Please indic	cate belov	w your initia	al feelings	s towards t	his perso	on, positive	or negat	ive.	
Extremely negative	Very negative	Somewhat negative	Slightly negative	Neither positive nor negative	Slightly positive	Somewhat positive	Very positive	Extremely positive	
0	0	0	0	0	0	0	0	0	
Position: SI believe in the Motivation:	ne basic ı	right to owr	firearms	."					
Motivation: "I don't like guns and I don't like gun owners - there's rarely a justifiable reason for owning, using, or collecting guns."									
Please indic	cate belo	w your initia	al feelings	s towards t	his perso	on, positive	or negat	ive.	
Extremely negative	Very negative		Slightly negative	Neither positive nor negative	Slightly positive	Somewhat positive	Very positive	Extremely positive	
0	0	0	0	0	0	0	0	0	

# 3.9: EXERCISE INSTRUCTIONS FOR RESPONDENTS, EXPERIMENT 2

#### **ISSUE CONDITION:**

"For the following task, we are going to present you with several short quotes from a number of citizens. These regular people told us their attitude (for or against) on <<u>AFFIRMATIVE</u> <u>ACTION / GOVERNMENT INVOLVEMENT IN HEALTHCARE></u>, then provided a brief explanation for why they take the position that they do.

For each statement, we want you to do the following:

- 1) indicate what you think their motive is from a preset list of motives (check all that apply)
- 2) evaluate the emotional content of their response (check all that apply)
- 3) evaluate how reasonable/justifiable you think their answer to the question is

We will be using your responses to develop an algorithm to code a much larger of a set of these statements automatically. Thoughtful responses are crucial to our research, so please do not answer randomly without reading the prompts! There will be an attention check to ensure this."

#### **PARTY / PARTIES CONDITIONS:**

"For the following task, we are going to present you with several short quotes from a number of citizens. These regular people told us which <u>political party</u> they identify with, then provided a brief explanation for why they take the position that they do.

For each statement, we want you to do the following:

- 1) indicate what you think their motive is from a preset list of motives (check all that apply)
- 2) evaluate the emotional content of their response (check all that apply)
- 3) evaluate how reasonable/justifiable you think their answer to the question is

We will be using your responses to develop an algorithm to code a much larger of a set of these statements automatically. Thoughtful responses are crucial to our research, so please do not answer randomly without reading the prompts! There will be an attention check to ensure this."

# 3.10: PROFILES MOTIVES, EXPERIMENT 2

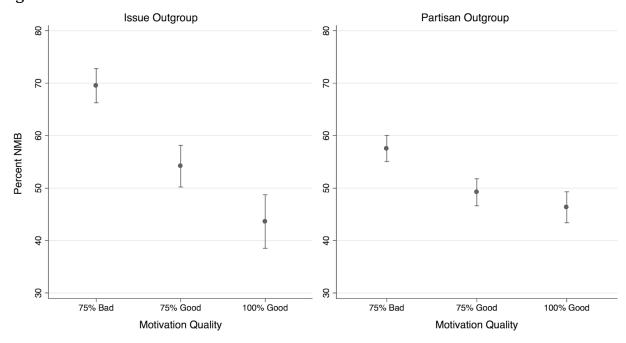
Position Type	Valence Type	Position Wording
Oppose	Good	"I believe everyone in this country deserves an equal chance of getting hired, no matter their color or background."
Oppose	Good	"I want to make sure people are hired based on having the highest merit of all the candidates."
Oppose	Good	"I think race should only play a role in job hiring if all the top candidates are equally qualified in all other ways."
Oppose	Good	"I think its unfair to minorities to treat them like they need the help - the soft bigotry of low expectations."
Oppose	Good	"I personally lost an opportunity to advance in my career recently because the position had hit a quota for white candidates. Affirmative action creates fairness for one group by creating unfairness for another."
Oppose	Good	"Race or ethnic background are always unfair criteria for evaluating folks for a job."
Oppose	Good	"It just seems unfair to potentially disadvantage the most qualified applicant for a position just because they might not be a minority."
Oppose	Good	"I think it might just hurt minorities in the long run. Affirmative action will just give racist whites a way to convince themselves that minorities didn't deserve the position they were given."
Oppose	Bad	"Its 2017, racism isnt a problem anymore, minorities will be fine."
Oppose	Bad	"I dont need to make it any harder for me to get a job than it already is."
Oppose	Bad	"Im white."
Oppose	Bad	"Its just for lazy people who want everything to be handed to them."
Oppose	Bad	"Everyone needs to quit making such a big deal about race."
Oppose	Bad	"theyres no reason for doing that in USA today"
Favor	Good	"Although minorities have equal rights now, their families were oppressed for many generations. The effects of this, as well as the discrimination which still occurs, warrants affirmative action."
Favor	Good	"It's good to help people who are disadvantaged. Equality in our nation is key, and that motivates me to want to help."
Favor	Good	"It is clear to me that minorities do not receive the same socioeconomic considerations that caucasians do in this country."
Favor	Good	"I want to balance a playing field that has been unequal for centuries."
Favor	Good	"I believe in fairness and justice."
Favor	Good	"I have seen first hand how minority job applicants are treated poorly and want to help fight discrimination."
Favor	Good	"I've seen research that people of color and women do more poorly on the job market than equally qualified white or male applicants."
Favor	Good	"I want to help minorities get a leg up in an inherently unequal society."
Favor	Bad	"Its time for white people to get a taste of their own medicine."
Favor	Bad	"dont know much about it but if it helps me get hired than great."
Favor	Bad	"Im a white ally that thinks white people need to check their privilege!"
Favor	Bad	"my sister needs a job"
Favor	Bad	"thats what Democrats position on that issue is.
Favor	Bad	"Whites should feel guilty about what whites have done to blacks, they deserve stuff in return."
	Type Oppose Favor	Type         Type           Oppose         Good           Oppose         Bad           Oppose         Bad           Oppose         Bad           Oppose         Bad           Oppose         Bad           Pavor         Good           Favor         Bad           Favor         Bad

Issue Type	Position Type	Valence Type	Position Wording
Healthcare	Oppose	Good	"The free market is the best way to ensure that a product is produced with the highest possible quality and sold at the lowest possible price."
Healthcare	Oppose	Good	"I'm concerned that the government would provide poor health coverage. We know how badly they've screwed up other things in the past."
Healthcare	Oppose	Good	"It's not in the constitution. The government does not have any business getting involved in the private medical decisions of its citizens."
Healthcare	Oppose	Good	"The government is not good at managing big programs. Just look at what they've done with social security - it's bankrupt."
Healthcare	Oppose	Good	"I think it's a nice idea in theory, and people should have good healthcare options, but I don't think government-run healthcare would work in a country this controlled by the pharmaceutical industry."
Healthcare	Oppose	Good	"In countries where the government runs the healthcare system, there are terrible waiting times for surgeries and other important medical procedures. I don't want that here."
Healthcare	Oppose	Good	"People are going to lose their current insurance plans if we make big changes to the system, and thats not fair to those who are already happy with what they have."
Healthcare	Oppose	Good	"Government is already too intrusive in our daily lives, do we really need to give them our medical records too?"
Healthcare	Oppose	Bad	"There are to many people just looking for a handout these days."
Healthcare	Oppose	Bad	"Ive already got good private insurance, dont see a reason to do things differently."
Healthcare	Oppose	Bad	"I don't want to pay higher taxes just to support lazy people."
Healthcare	Oppose	Bad	"The govt would try to save money through death panels and population control."
Healthcare	Oppose	Bad	"If you want healthcare get a job."
Healthcare	Oppose	Bad	"Don't need to help a bunch of immigrants fill up our waiting rooms."
Healthcare	Favor	Good	"Every human being should have access to adequate healthcare."
Healthcare	Favor	Good	"Other countries that use government-run healthcare systems have higher quality care for lower spending."
Healthcare	Favor	Good	"The private system is not working and can't be fixed. We could negotiate better prices for healthcare if the government were the only buyer."
Healthcare	Favor	Good	"Low income families are one illness or accident away from bankruptcy. We need to protect the most vulnerable people in our society."
Healthcare	Favor	Good	"My brother wouldn't be alive now if it weren't for the ACA, everyone needs to have insurance access."
Healthcare	Favor	Good	"Insurance companies make life or death decisions based on profits, health care should only be about making people healthy."
Healthcare	Favor	Good	"The government is far from perfect, but I trust them more than private corporations when it comes to my family's health."
Healthcare	Favor	Good	"I see people in need and I want to help them."
Healthcare	Favor	Bad	"i dont see why i should have to pay for my own healthcare"
Healthcare	Favor	Bad	"Thats what the democrats say is right and I usually go along with them"
Healthcare	Favor	Bad	"just because i do not work does not mean i shouldnt have health insurance."
Healthcare	Favor	Bad	"the more government, the better."
Healthcare	Favor	Bad	"I got a lot of issues. I need healthcare."
Healthcare	Favor	Bad	"the government shod just take care off it."

<u>Issue</u> Type	Position Type	<u>Valence</u> <u>Type</u>	Position Wording
Party	Democrat	Good	"I care about the less fortunate and want to help them out."
Party	Democrat	Good	"I support equal treatment of people regardless of race, gender, sexual orientation or religion.
Party	Democrat	Good	"I support civil rights, a clean environment, better conditions for workers, and quality healthcare and education for all."
Party	Democrat	Good	"I don't like how the rich get richer and the poor gets poorer, and I think the Democrats are most likely to do something about that."
Party	Democrat	Good	"I'm liberal on more issues than I am conservative. The Democrats have their problems but they're closest to what I believe in."
Party	Democrat	Good	"I am very progressive on social issues."
Party	Democrat	Good	"I'm a scientist. It shouldn't be political, but nowadays, Democrats seem like the least likely political party to reject an established scientific finding."
Party	Democrat	Good	"I think as a community it is our duty to take care of one another, no man is an island."
Party	Democrat	Bad	"dont know really, parents brought me up to be a Democrat."
Party	Democrat	Bad	"They want to give us free benefits."
Party	Democrat	Bad	"their better than evil Republicans."
Party	Democrat	Bad	"We need a big government to keep everything under control.
Party	Democrat	Bad	"White people are awful and democrats have our back."
Party	Democrat	Bad	"Im on welfare and disability"
Party	Republican	Good	"I believe in hard work, individual responsibility and freedom to live my life without interference.
Party	Republican	Good	"Im fiscally conservative, I want to keep the debt down, and support tax code simplification.
Party	Republican	Good	"I care about job creation. We are losing far too many jobs with the policies of the past, and many decent hard working people are suffering because of it."
Party	Republican	Good	"I think government should be handled as locally as possible, and the democrats want to expand the federal government."
Party	Republican	Good	"The government has demonstrated it cant be trusted with our money and our private information. They are far from perfect, but I expect private industry to do a better job overall."
Party	Republican	Good	"I served in the military for 22 years, and know how important a strong national defense is, and how easily we can find ourselves in danger without proper funding and leadership."
Party	Republican	Good	"I think they do a better job for small business owners, too many regulations are driving people out of business."
Party	Republican	Good	"I want a balanced budget. Neither party has been good for that, but Republicans seem to care about it more."
Party	Republican	Bad	"I cant stand the filthy degeneracy of homos and blacks and hispanics."
Party	Republican	Bad	"I want to keep my money, if you arent living the life you want, you need to work harder."
Party	Republican	Bad	"dont know really, parents brought me up as a republican"
Party	Republican	Bad	"its time to get rid of all the foreigners and take our country back"
Party	Republican	Bad	"im sick of liberals, no one messs with my guns, my flag, or my famely"
Party	Republican	Bad	"i dont want my hard earned money going to a bunch of losers and drug addicts"

## 3.11: MANIPULATION CHECK, EXPERIMENT 2

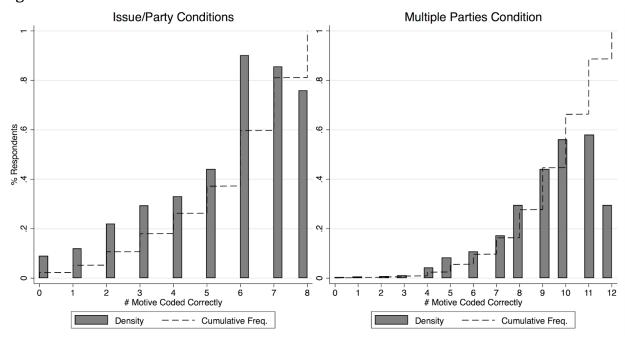
Figure A3.11.1



Note: The left and right panels show the effect of random assignment of motivation content on respondent estimates of outgroup motives. After the rating exercise and a distraction exercise, respondents were given a version of the closed response motive exercise that corresponded to the particular issue/party profiles they were shown (see sections 3.1 and 4.1 for examples). As the percentage of positive motives shown in these profiles increased, the percentage of outgroup members estimated to be negatively motivated sharply decreases, by 30 points in the case of issue outgroups, and 10 points in the case of partisan outgroups. The difference in effect size between these two groups might reflect partisan views that are much more entrenched than those for issue outgroups. Overall, this plot demonstrates that the experimental manipulations are impacting the desired concept - motive judgments.

#### 3.12: TREATMENT COMPLIANCE, EXPERIMENT 2

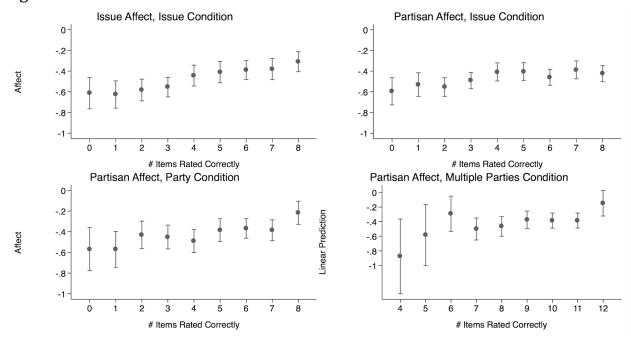
Figure A3.12.1



Note: The above plots show the distribution of performance on the rating exercise. Respondents were asked to evaluate a number of profiles (8 for issue and party outgroups, 12 for partisan ingroup/outgroup), and indicate which motive(s) (from a list) they saw in the profile (the list is shown in Appendix 3.2). The motives (shown in Appendix 3.3) presented tended to be easily categorizable as good or bad. For each profile they are shown, I count their judgment as either "correct" (if they selected at least one motive of the correct valence, or "other") or "incorrect" (otherwise). I then create a variable equal to the number of correct identifications made by each subject, which is displayed above on the x-axis. The bars represent the percentage of respondents in each bin, while the line represents the cumulative percentage of people who scored that amount or lower. In the analyses presented in Figure 7 of the paper, I drop all observations from roughly the bottom quintile of this measure (less than 4 correct in the left panel, and less than 8 correct in the right panel). Given the ease of the exercise, it is highly likely that respondents in this bottom quintile were simply not paying attention, and therefore not receiving the treatment.

## 3.13: OUTGROUP AFFECT BY COMPLIANCE, EXPERIMENT 2

Figure A3.13.1:



Note: The four panels above show the relationship between outgroup affect and compliance with treatment. All observations included above reflect respondents who were in the strongest treatment category (i.e. "100% good" motives in the Issue or Party conditions, or "Ingroup bad, Outgroup good" in the Multiple Parties condition), so as to best demonstrate the relationship between treatment compliance and treatment effectiveness. Each panel represents one of the three different conditions; the Issue condition shows up twice as I analyze two different outgroups (issue and partisan) for respondents in this condition. All DVs are constructed as the difference between ingroup and outgroup affect, and scaled from -1 to 1, where -1 represents strong dislike of the outgroup and strong support for the ingroup. In the bottom-right panel, 0-3 are dropped due to low N (n=11 across all values 0-3).

#### 3.14: INSTRUMENTAL VARIABLE ANALYSIS

**Table A3.14.1:** 

	Full Po	Full Pop		iers	IV Model		Comply	/>4
	В	N	В	N	В	N	В	Z
Issue / Issue	0.02	715	0.14***	540		715	0.15***	337
Issue / Party	0.02	482	0.11***	373	0.02	482	0.08**	366
Party / Party	0.07**	564	0.11***	474	0.11**	564		
Parties / Party	0.08**	476	0.10***	439	0.11**	476		
Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1								

The above table shows the results from multiple regressions of outgroup affect on treatment. Each row represents a different combination of condition (issue/party/parties) and outgroup used as the DV (issue/party). All DVs are measured as ingroup minus outgroup affect. Each group of columns shows a different model, with the beta coefficient and observations listed below. In all models above, treatment is a variable equal to 1 when subjects were exposed to the most positive outgroup condition ("100% good" motives in the issue and party conditions, "Ingroup bad - Outgroup good" in the multiple parties condition). It is equal to 0 for those in the control condition or for, in the case of the issue condition, which had no corresponding control group affect ratings, those receiving the "75% bad" treatment.

The first model shows a simple bivariate regression of affect on treatment for all subjects. The results are null in the issue condition, and significant in the party/parties conditions. In model 2, I drop roughly the bottom quintile of compliers (see section 6.2). With this modification, treatment is always significant and much larger in magnitude.

The cutoff point for treatment compliance, however, is arbitrary. To demonstrate that the treatment effect increases in magnitude alongside compliance, I perform a 2SLS regression by instrumenting treatment on compliance, shown here as the third model. Unfortunately, this cannot be done in row 1, as the control group was never asked about issue groups. For the other cases, treatment remains significant, except in row 2.

The reason for the failure of the test in row 2 is that one of the mid-level compliance groups (# correct = 4), perhaps by chance, shows a stronger treatment effect than the more compliant. To help demonstrate that the treatment effect is still significant without this potential artifact, the final model shows the results of analysis in which those get less than 5 of 8 correct are dropped. The effects are smaller than in model 2, but still significant.

# 3.15: RATINGS EXERCISE, EXPERIMENT 2

Profiles of those in support of affirmative action

	sed on the quote, what would you say explains this individual's position on this issue? (check all that ply)
	Selfishness or indifference towards others
	Prejudice/dislike towards other people/groups
	Stupidity, irrationality, misinformation or lack of information
	Allegiance to their party/ideology
	A desire to provide opportunities to vulnerable people
	A belief that racism is still a major problem in hiring
	Concern with overall racial inequality in the United States
	Personal experience with discrimination in the past
	Other
Pro	files of those in opposition to affirmative action
	sed on the quote, what would you say explains this individual's position on this issue? (check all that ply)
	Selfishness or indifference towards others
	Prejudice/dislike towards other people/groups
	Stupidity, irrationality, misinformation or lack of information
	Allegiance to their party/ideology
	A belief that hiring based on race is fundamentally unfair
	A belief that affirmative action would actually hurt minorities
	Concern it would lead to the hiring of unqualified candidates
	Fear it would prevent them personally from being hired
	Other

Based on the quote, what would you say explains this individual's position on this issue? (check all that apply) Selfishness or Indifference Prejudice/dislike towards other people/groups Stupidity, irrationality, misinformation or lack of information Allegiance to their party/ideology Wanting to improve the lives of vulnerable people A belief that government involvement will lower costs or improve quality A belief that access to healthcare is a human right Concern about the well-being of their own family Other Profiles of those in opposition to government involvement in healthcare Based on the quote, what would you say explains this individual's position on this issue? (check all that apply) Selfishness or Indifference Prejudice/dislike towards other people/groups ☐ Stupidity, irrationality, misinformation or lack of information Allegiance to their party/ideology Believing in freedom to make their own healthcare decisions Concern about government involvement leading to lower quality care Concern about government involvement leading to higher cost care Worry about negative impact of plan on own family Other

Profiles of those in favor of government involvement in healthcare

Profiles of Democrats
Based on the quote, what would you say explains this individual's identification with the Democratic party? (check all that apply)
☐ Selfishness or Indifference
Prejudice/dislike towards other people/groups

Stupidity, irrationality, misinformation or lack of information
 Support for liberal ideology and values
 Support for specific issue positions associated with the party
 Support for politicians within the Democratic party
 Other

## Profiles of Republicans

Based on the quote, what would you say explains this individual's identification with the Republican party? (check all that apply)

Selfishness or Indifference
Prejudice/dislike towards other people/groups
Stupidity, irrationality, misinformation or lack of information
Support for conservative ideology and values
Support for specific issue positions associated with the party
Support for politicians within the Republican party
Other

## 3.16: STUDY INFORMATION

**Table A3.16.1:** 

	Experiment 1/2	Experiment 3	National Average	
Date Fielded	June 2017	June 2017		
Subject Recruitment	Mechanical Turk	Mechanical Turk	1	
Number of Subjects	594	3266	1	
% Under 35	52.53%	52.33%	26.70%	
% Male	48.65%	38.73%	49.20%	
% White	76.09%	76.91%	72.40%	
% Bachelors or higher	51.68%	51.29%	30.30%	
% Democrat	55.05%	62.52%	45%	
% Republican	35.02%	37.48%	44%	

Note: The survey populations used across these studies differ from that of a random sample of American adults in a number of significant ways - the survey groups tend to be younger and better educated, and have greater numbers of women and Democrats.

# 3.17: DESCRIPTIONS OF KEY DEPENDENT VARIABLES

Marriage In	dicator:							
	on or daughter of yours was getting married. How would you feel if he or she married a f the Republican Party? Would you be pleased, would you be displeased, or would it make no							
O Very displ	eased							
<ul><li>Displease</li></ul>	d							
Somewha	Somewhat Displeased  Would Make No Difference							
O Would Ma								
Somewha	t Pleased							
Pleased								
○ Very Pleased								
	se your child married a supporter of the Democratic Party. Would you be pleased, would you ed, or would it make no difference?							
O Very displ	eased							
Displease	d							
Somewha	t Displeased							
O Would Ma	ke No Difference							
Somewha	t Pleased							
Pleased								
Very Pleas	sed							
Willingness	to Cross Party Lines (example for Democrat identifying respondents)							
Suppose that Democrat, a F	there is an election for Governor this year in your state. Three candidates are running: a Republican, and an Independent. Also, suppose that the Democratic candidate has spent lection year under <i>investigation</i> for ethics violations.							
You could eith	ner vote for your <i>preferred party's</i> candidate and risk electing someone who is corrupt							
or instead v are harmful.	rote for another party's candidate, who may pursue policies you do not want and/or think							
Given this situ	uation, how would you vote?							
O I would vote	for the Democrat.							
I would vote	for the Republican.							
O I would vote	for the Independent.							
○ I would not	vote.							

# Individual Profile Rating (Experiment 1a)

Please indicate below your initial feelings towards this person, positive or negative.

=		0		Neither		0			
Extremely negative	Very negative	Somewhat negative	Slightly negative	positive nor negative	Slightly positive	Somewhat positive	Very positive	Extremel positive	
0	0	0	0	0	0	$\circ$	0	$\circ$	
Party Feelir	ng								
How do you	feel about <b>D</b>	emocrats?							
				Neither					
Strongly				approve nor				Strongly	
approve		Approve		disapprove	Dis	approve	disap	prove	
		0	0	0	0	0		)	
					Pag	je Break			
How do you	feel about <b>R</b>	epublicans?							
				Neither					
Strongly		A		pprove nor	D:-		Stro		
approve		Approve		disapprove	Dis	approve	disap	prove	
Willingness	to Date (	order rande	omized)						
	ou were usin		ting site, an	nd you find som	neone to wh	om you are a	ttracted and v	vho	
				wever, before y					
O I would c	hoose to not d	contact this pers	son.						
O I would s	till consider co	ontacting this pe	erson, though	with strong rese	rvations.				
O I'd still co	ontact this per	rson, but less en	thusiastically						
O It would i	make no diffe	rence to me.							
O I would a	ctually be eve	n more intereste	ed in contacti	ng this person th	an before.				
					Page	Break			

What if that same person were a Republican?

#### 4.1: BIBLIOGRAPHY FOR APPENDIX

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