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Party Placement Knowledge and the Nature of Mass Belief Systems

By

Shad L Turney

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in

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Graduate Division

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University of California, Berkeley

Committee in Charge:

Professor Gabriel Lenz, Chair
Professor Emerita Laura Stoker
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Abstract

Party Placement Knowledge and the Nature of Belief Systems in Mass Publics

by

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Doctor of Philosophy in Political Science

University of California, Berkeley

Professor Gabriel Lenz, Chair

This dissertation examines the consequences, measurement, and evolution over time of citizen knowledge of the Democratic and Republican parties' positions on major policy issues. In the dissertation's first paper (co-authored), we resolve a longstanding and central puzzle in the public opinion literature concerning the over-time instability of citizen issue attitudes—namely, is this instability the result of measurement error in surveys or is it in the opinions themselves? By leveraging for the first time the strong relationship between citizen knowledge of party issue positions and citizen issue opinion stability, the paper reveals that the erratic nature of policy attitudes through time reflects not measurement error but turnover in the opinions themselves. In the project's second paper I experimentally test an alternative survey instrument for measuring citizen knowledge of the party's issue positions. I find that the traditional measurement approach used in the U.S. context likely understates this knowledge among lower education survey respondents, indicating that this cohort's democratic competence is somewhat higher than has heretofore been believed. In the project's third paper I explore the evolution of party position knowledge in the U.S. mass public over time, and present evidence that this knowledge has spread a good deal since the 1970s. My findings indicate that, contrary to one prominent school of thought in the public opinion literature, the American public's political belief systems have on average become better organized over the past fifty years, likely as a result of party elite polarization. Taken together, these papers demonstrate the key conceptual importance of placement knowledge in the study of public opinion, a status that has heretofore been largely unrecognized. The findings show that party placement knowledge should be placed center stage by public opinion scholars, alongside general political knowledge, if the field is to accurately grasp a host of central phenomenon such as the nature of issue attitudes, polarization, and the evolution of belief system organization over time.

To my parents, Margo, Jerry, and Kate, and to Tracy and Marj.

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Chapter 1

The Importance of Knowing "What Goes With What":
Reinterpreting the Evidence on Policy Attitude Stability[1]

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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[1] Coauthored with Gabe Lenz and Sean Freeder

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 chapter, 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

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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 chapter, 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

Figure 1.1: Attitudinal Stability by Selected Characteristics
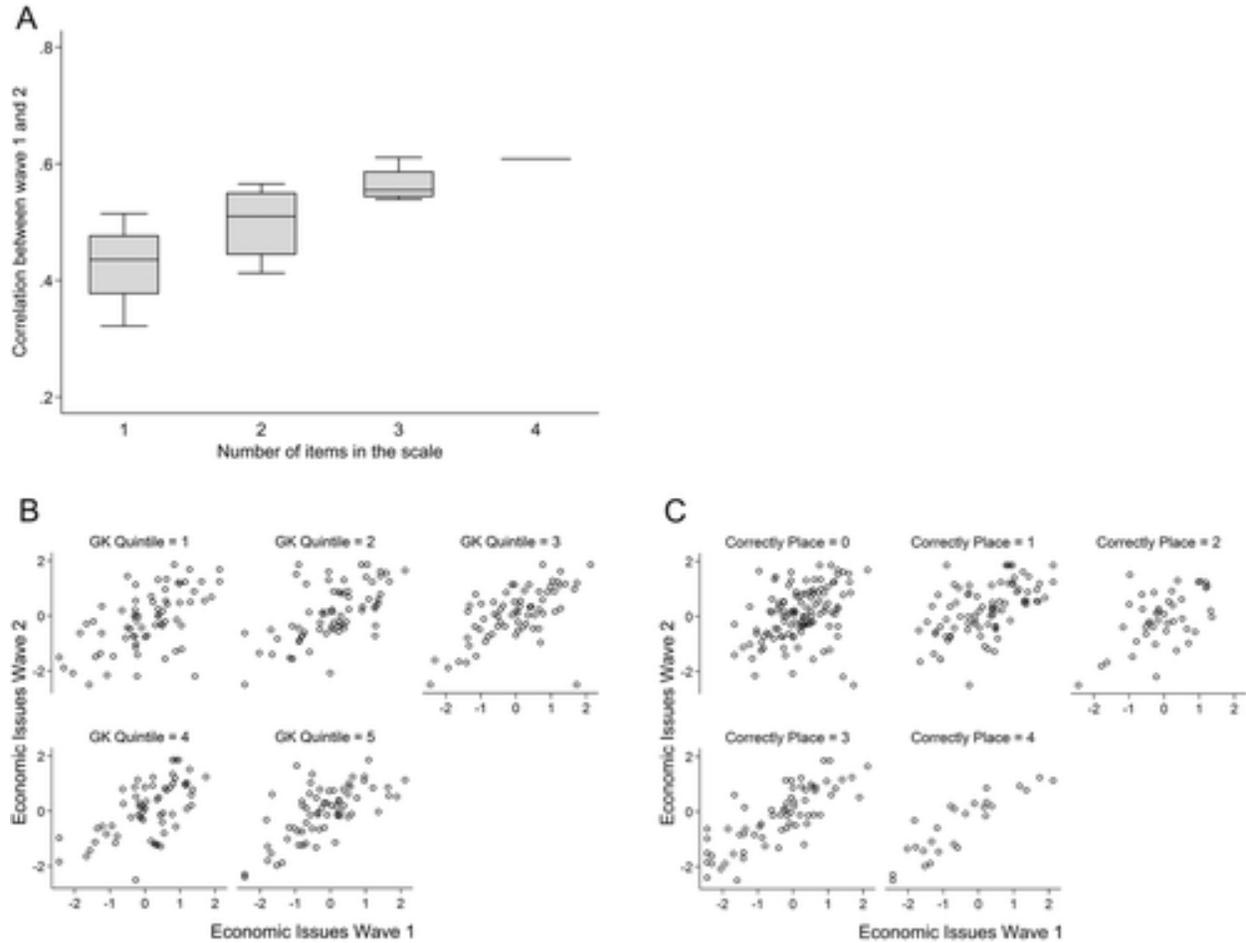
Case study: four-item economic scale in the ANES 1972–76 panel. A, Stability by number of items in the scale; B, stability by general political knowledge quintiles; C, stability by placement knowledge. A shows one line for the scale with four items because we can only make one scale of four items; B 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 α=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 – Correlations for Many Panels

Panel	Number of Items in Scale						General Knowledge Quintiles						Number of Correct Placements						
	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.[2] 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

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[2] 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).

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).

Figure 1.2: Stability Correlations by Placement Knowledge for Individual Items
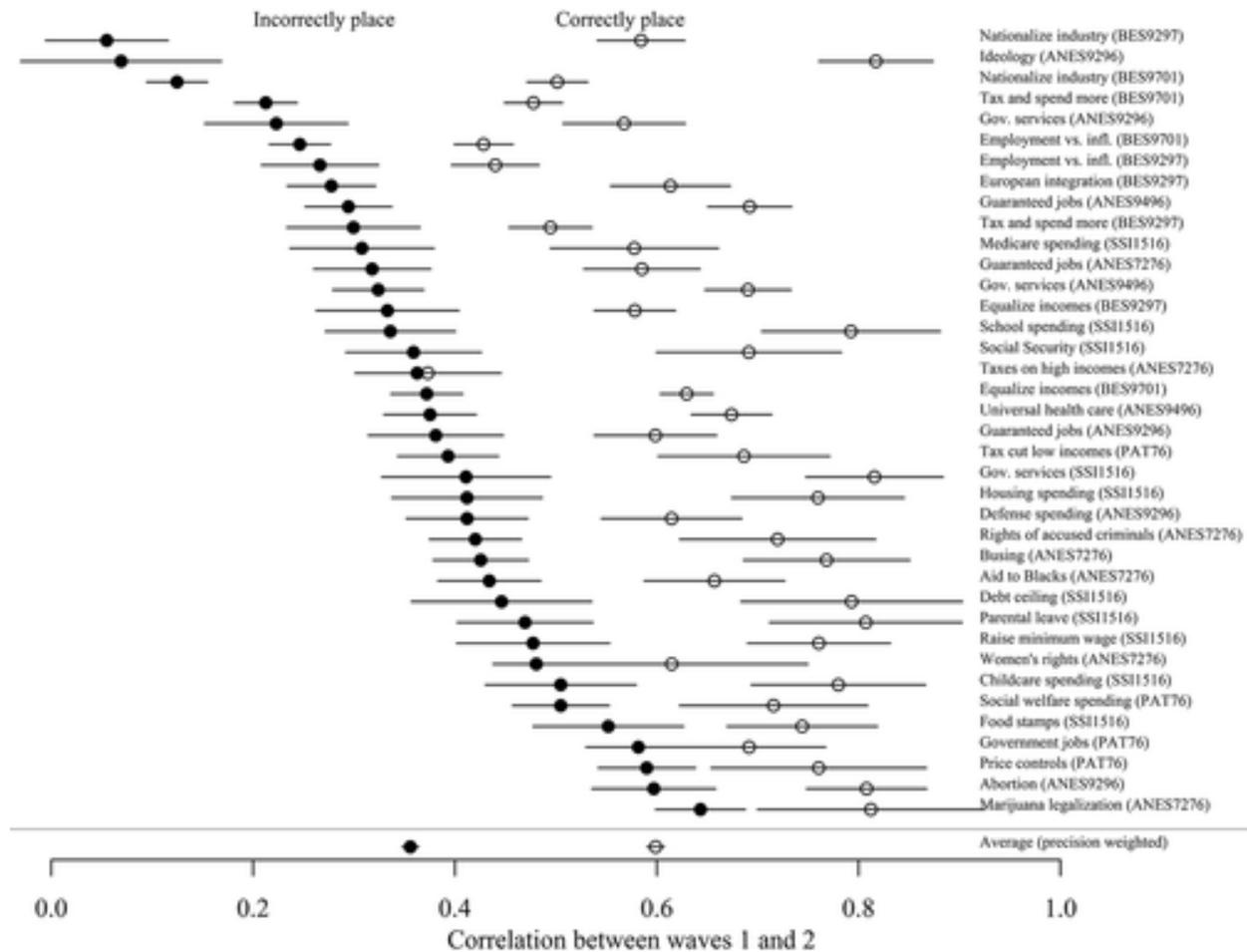
Note: Correlation between respondents' views on the item in wave 1 and wave 2 by whether they correctly placed the parties or candidates on that item. Using Fisher's transformation, the error bars show 68% confidence intervals (1 SE). For comparison, the correlation between respondents' partisan identification 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.

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

Panel	Number of Correct Issue Placements						
	0	1	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		2,272
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			1,307

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 all-policy 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 Attitudes*					Absolute Change in Attitudes[†]				
	General Knowledge	Placement Knowledge	p-Value on Diff.	R^2	N	General Knowledge	Placement Knowledge	p-Value on Diff.	R^2	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^{-14}	.15	8,116	−.01 (.00)	−.04 (.00)	2.8×10^{-6}	.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^{-63}	.07	39,364	−.02 (.00)	−.18 (.01)	3.0×10^{-42}	.04	37,027
Fixed effects analysis:										
Respondent fixed effects sample	.00 (.00)	.06 (.00)	4.2×10^{-32}	.06	23,675	−.02 (.00)	−.16 (.01)	7.0×10^{-23}	.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.

* Coded 1 for same side in both waves, 0 otherwise. Higher values are more stable.

† 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 1.3 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 20-item 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.[3]

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

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[3] 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).

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 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 (2×1×0.06), 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
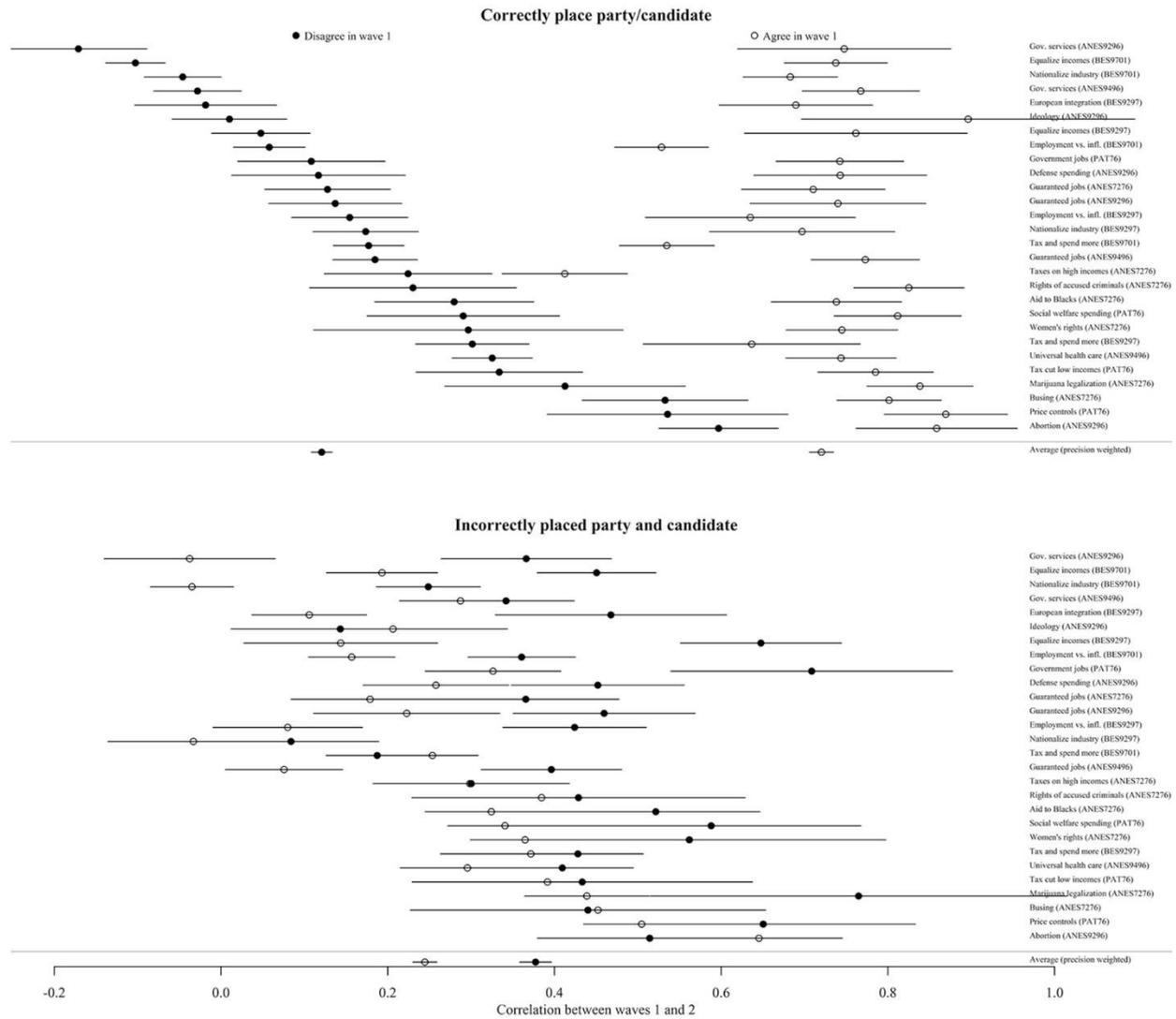
Note: Correlation between respondents' views on the item in wave 1 and wave 2 by whether they correctly placed the parties or candidates on that item. Using Fisher's transformation, the error bars show 68% confidence intervals (1 SE). For readability, we only show the estimates from the 1992–97 waves 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
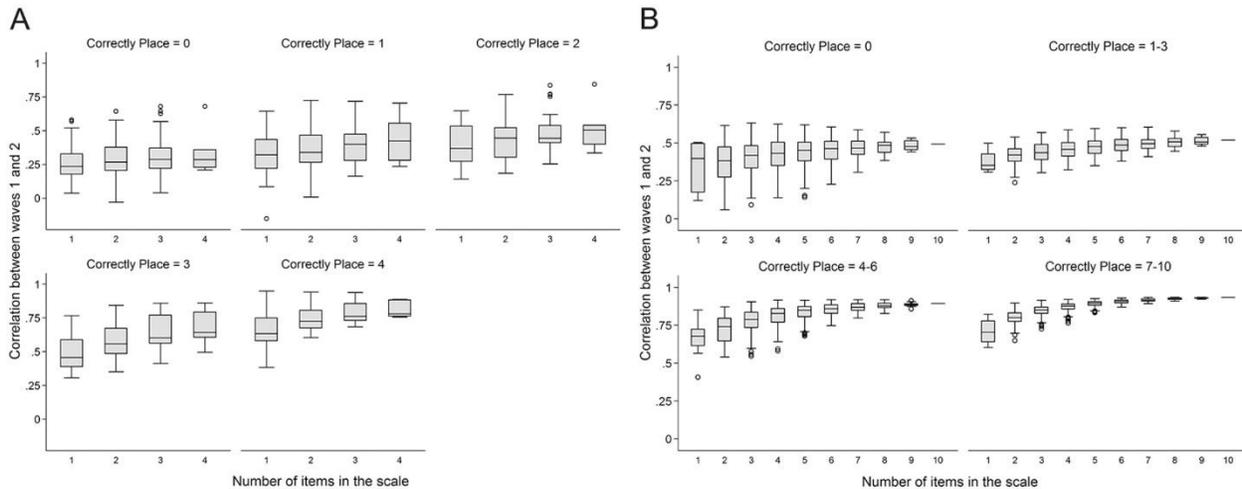
Note: A, All four-item economic scales pooled; B, SSI 2015–16 10-item panel. Subplots show the results by the number of correct placements. In A, we include six two-wave panels with a total N=5,975N=5,975 (see table 1.2 for the list). We show the plot for each of the six panel waves separately in Appendix 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 1.4*A* 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 1.4*B* 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

| General Political Knowledge Quintiles | Number of Items in the Scale | | | | | | | | | | | | | | | | | | | | | | | | |
	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	.54	.56	.58	.60	.61	.62	.63	.64	.65	.66	.66	.67	.67	.68	.68	.69	.69	.70	.70
3	.38	.46	.50	.54	.57	.59	.61	.62	.64	.65	.66	.67	.67	.68	.69	.69	.69	.70	.70	.71	.71	.71	.72	.72	.70
4	.37	.48	.51	.55	.58	.61	.63	.65	.67	.68	.68	.69	.70	.71	.71	.72	.73	.73	.73	.74	.74	.74	.75	.75	.75
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 pro-gun 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 chapter, 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

Measuring Party Placement Knowledge in the Mass Public

Students of politics have long expressed concerns about the democratic competence of mass publics, and contemporary survey researchers have shown that large shares of the public in the United States lack basic facts about government, including where the two major political parties stand relative to each other on even highly salient public policy issues. In this paper I investigate whether this latter finding could be the result of poor measurement of citizen knowledge of where the parties stand on issues. I test an alternative survey item tapping party placement knowledge against the standard measure used by most researchers since the 1950s. I find that among low education respondents, the alternative measure yields a moderately higher level of party placement knowledge than the traditional survey item. The results support two conclusions. First, the alternative measure should be used by researchers to gain the most accurate measurement of party placement knowledge in the mass public. Second, however, the generally low level of this knowledge in surveys is unfortunately not the result of measurement error, a finding that reinforces concerns about citizen competence in American democracy.

INTRODUCTION

What share of the American public knows where the two major American political parties stand on high salience policy issues? One recent study of the mass public's policy attitudes found that only 20-40% of the public knows that the Democratic Party stands to the left of the Republican Party on major national economic policy issues such as whether the federal government should provide more services, what if anything it should do to provide health care for the public, and how much financial assistance it should provide for the poor (Freeder, Lenz, and Turney 2019, hereafter FLT). This finding is consistent with other studies that have reported surprisingly low levels of party position knowledge in the American mass public (e.g. Campbell et. al. 1960; Delli Carpini and Keeter 1993, 1996; Lewis-Beck et al. 2008). This generally low level of party position knowledge raises important normative concerns about the public's capacity to hold its elected representatives accountable—if citizens don't know where the parties stand on major issues, how can they make "correct" vote choices that reflect their own preferences on these same policies? However, the apparently low share of the American public that knows the parties' issue positions also raises an important methodological question: could the seemingly widespread ignorance of where the parties stand on issues be an artifact of how this knowledge is gauged in public opinion surveys? Perhaps this knowledge is more widely held among the public than previous studies report, but is disguised to some degree by the survey questions and measurement approach scholars have used to estimate who holds accurate beliefs about the parties' positions.

This paper reports the findings of an original study aimed at answering this question. Specifically, I test an alternative survey item to tap respondents' knowledge of the parties' relative positions on multiple economic policy issues. I find that among the lowest education respondents, this alternative measure shows higher knowledge than the traditional measure used by FLT and a long line of prior researchers. Thus, this study suggests that estimates of the share of the public with knowledge of the parties' issue positions could be improved by using this alternative survey item. At the same time, this finding among lower education citizens changes the picture of *aggregate* public knowledge only modestly. In this way, the results strongly cut against an alternative explanation that would account for prior studies' findings of widespread public ignorance of the parties' issue positions—namely, that they are an artifact of poor measurement. The findings reported here thus sharpen the normative concerns raised by these studies about political accountability and the health of American democracy.

MEASURING THE PUBLIC'S KNOWLEDGE OF THE PARTIES' ISSUE POSITIONS

How have scholars measured who amongst the American public knows which of the two major political parties is more conservative on any given policy issue? In their 2019 study, FLT follow a long line of prior scholars in using survey respondents' placements of parties and candidates on seven point policy scales to derive this information. (e.g. Campbell et. al. 1960; Zaller 1992; Delli Carpini and Keeter 1993, 1996; Lewis-Beck et al. 2008; Sears and Valentino 1997; Sniderman and Stiglitz 2012) To briefly recap this approach, when respondents place the Republican Party one or more points towards the conservative side of the scale from their placement of the Democratic Party, anywhere on the scales, they are coded as possessing knowledge of the parties' positions on that issue. Placement of the Republican Party one or more points towards the liberal side of the scale relative to the Democratic Party, placement of the parties at the same scale point, and "don't know" responses to one or both party / candidate placements are all coded as incorrect.

Though this measurement strategy is ubiquitous, the motivation for the experiment reported here is the possibility that it may be inherently problematic because of the nature of the scales it utilizes. Specifically, with seven points, the scales are somewhat granular, and they are unlabeled apart from the scale end-points, making them quite abstract, and thus requiring respondents to think of policy in spatial terms, an exercise most citizens are not practiced in. Qualitative interviews with undergraduate survey takers conducted in May of 2019 revealed that the lack of labels on the scales created confusion about how to map an individual's beliefs about a party's policy stance onto the scale. For these reasons it seems likely that the scales are actually difficult to use for party placements, at least for some survey takers.

Indeed, prior research has found measurement problems with these scales in the context of party placements. Alvarez and Franklin (1996) report that survey respondents who hold accurate beliefs about the parties' positions, but who hold these beliefs with some degree of *uncertainty*, are more likely to select the midpoint of these scales than individuals who hold their beliefs with confidence. Moreover, one can also imagine that some survey respondents who confidently hold accurate beliefs about the parties' positions may still satisfice with a midpoint or "don't know" answer to such placements simply because they are unfamiliar with the scales, and are averse to expending the higher cognitive effort and time required to reason through how to map their beliefs onto specific points on them.

These factors seem especially likely to come into play for survey respondents who are less politically knowledgeable and engaged, and who are less likely to have had prior exposure to thinking about government policies in spatial terms. For these respondents, a coarser policy scale with complete labeling might elicit accurate placement beliefs where the more granular, mostly label-free policy scales do not. In the survey experiment reported below, I test this alternative approach. Specifically, I test a three point (i.e. coarser) scale that includes labels on all three scale points in an effort to reduce the possibility of inaccurate measurement from the sources outlined above.

RESEARCH DESIGN

I fielded an original email invitation-to-web (E2W) survey experiment to a sample of registered California voters using SurveyMonkey in July-August 2019. The California voter file includes email addresses for roughly one-in-three of the roughly 20 million registered voters in the state. Political Data Incorporated (PDI), a commercial voter file vendor, provided at no charge a stratified random sample of 120,000 of these voter records from the sampling frame of roughly 7.8 million records on the voter file that include emails.

I randomized the email addresses from the list of 120,000 voter records to receive an email invitation linked to one of two surveys.[4] In both surveys, respondents were asked for their own views and the positions of the Democratic and Republican parties on ten economic issues: general government spending, healthcare, corporate taxes, taxes on the wealthy, offshore oil drilling, leasing of federal lands to private companies, environmental regulation, labor union regulation, education spending, and spending on aid to the poor. Both surveys also included six general political knowledge questions, party identification, self -placement on a seven-point liberal-conservative scale, education, race/ethnicity, gender, and birth year.

The experimental component of the study varied the format of the party placement items across the two surveys.

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[4] Email invitations were sent in blocks of 10,000 per day, randomized to 5,000 per invitation, in July 2019. Emails were sent intermittently over the course of the month.

- In the "ANES" survey, on each issue respondents were asked to place themselves on a 7-point policy scale, and then asked to place the Democratic and Republican parties' on the same 7-point scale, replicating the format of the issue placement questions in the American National Election Studies, the format commonly used by previous scholars including FLT to evaluate party position knowledge. One example is given below.

Some people feel we should have a new health reform which would replace all private health insurance with a government health plan covering all medical and hospital expenses for everyone. Others feel we need a new health reform which would get rid of all government-provided health care, like Medicare and Medicaid, and leave it up to private insurance plans like Blue Cross to provide health care coverage. And, of course, some other people have opinions somewhere in between.

A. Where would you place yourself on this scale?

Replace all private health insurance with a government plan for all						Get rid of all government-provided health care, rely only on private insurance plans	
1	2	3	4	5	6	7	Don't know
○	○	○	○	○	○	○	○

< Page Break >

B. Where would you place the Republican Party on this scale?

Replace all private health insurance with a government plan for all						Get rid of all government-provided health care, rely only on private insurance plans	
1	2	3	4	5	6	7	Don't know
○	○	○	○	○	○	○	○

< Page Break >

C. Where would you place the Democratic Party on this scale?

Replace all private health insurance with a government plan for all						Get rid of all government-provided health care, rely only on private insurance plans	
1	2	3	4	5	6	7	Don't know
○	○	○	○	○	○	○	○

- In the "Trichotomized scale" survey, on each issue respondents were asked to place themselves on a 7-point policy scale, and then asked to place the Democratic and Republican parties' on 3-point labeled policy scales. The mid-point of these scales was labeled as the status quo policy ("leave things as they are"), while the endpoints were labeled with directional policy changes from the status quo. These directional policy changes were consistent with the direction and labeled end-points of the 7-point ANES scale used for self-placement. An example follows.

Some people feel we should have a new health reform which would replace all private health insurance with a government health plan covering all medical and hospital expenses for everyone. Others feel we need a new health reform which would get rid of all government-provided health care, like Medicare and Medicaid, and leave it up to private insurance plans like Blue Cross to provide health care coverage. And, of course, some other people have opinions somewhere in between.

A. Where would you place yourself on this scale?

Replace all private health insurance with a government plan for all						Get rid of all government-provided health care, rely only on private insurance plans	
1	2	3	4	5	6	7	Don't know
○	○	○	○	○	○	○	○

< Page Break >

B. In your view, which of the following statements best describes the Republican Party's position on this issue?

○ Reduce role of private health insurance, increase reliance on government-provided health care

○ Leave things as they are

○ Increase role of private health insurance, reduce reliance on government-provided health care

○ Don't know

< Page Break >

C. In your view, which of the following statements best describes the Democratic Party's position on this issue?

○ Reduce role of private health insurance, increase reliance on government-provided health care

○ Leave things as they are

○ Decrease role of government-provided health care, increase reliance on private health insurance

○ Don't know

o   When a respondent placed both parties at the same endpoint of the 3-point scale, they were asked a follow-up question about the relative position of the two parties on that side of the scale, e.g. for the health care questions above, if a respondent placed both parties at "reduce role of private health insurance, increase reliance on government-provided health care," they were then presented with this follow-up question:

We understand you said that both the Democratic Party and the Republican Party favor reducing the role of private health insurance and increasing reliance on government-provided health care. Do you feel that one party favors a deeper reduction in the role of private health insurance than the other party?

○ Republican Party favors deeper reduction in role of private insurance than Democratic Party

○ Democratic Party favors deeper reduction in role of private insurance than Republican Party

○ Both parties favor same reduction in role of private insurance

○ Don't know

The coding rules for categorizing correct and incorrect party placements in the two conditions were as follows:
- In the ANES condition, the placement of the Republican party at least one scale point in the conservative direction from the Democratic Party anywhere on the seven point scale is coded as correct (1). If the parties are placed at the same scale point, if the Republican

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Party is placed one or more scale points in the liberal direction from the Democratic Party, or if the respondent answers "don't know" to one or both party placements, the placement is coded as incorrect (0).

- In the Trichotomized Scale condition, the coding rules are identical to those for the ANES condition: placement of the Republican party at least one scale point in the conservative direction versus the Democratic Party anywhere on the three point scales is coded as correct (1).[5]

The dependent variable in the study is the mean proportion of correct placements in each condition. Specifically, each respondent's party placement scores are summed, and then divided by the total number of placements (10). The mean of this variable in each condition is then taken. The motivating hypothesis for the study is evaluated by comparing the mean proportion of correct placements in the Trichotomized question format condition to the mean proportion of correct placements in the ANES question format condition.

RESULTS

The 120,000 email invitations to take the survey yielded a total of 1,478 completed surveys (772 in the ANES condition and 706 in the Trichotomized condition), for an overall response rate of 1.2%, well below response rates for the highest quality phone surveys, but modestly better than the average response rates obtained by commercial survey vendors conducting phone and text-to-web surveys. Survey respondent demographics differ in some key respects from the survey sampling frame of all California registered voters with an email address on file with the Secretary of State. As shown in Table 2.1, respondents are somewhat younger (47% under age 35 vs. 39% of the sampling frame), and less Latino (14% vs. 26%) and more white (71% vs. 59%). The largest divergence between the sample and sampling frame is in education: Fully 60% of survey respondents reported having a bachelor's or graduate degree, compared to only 41% of registrants classified as frequent voters and 21% of registrants classified as infrequent or non-voters in a recent study by the Public Policy Institute California.[6] Only 8% of the sample, or a total of 129 cases, report a high school education or less. Because potential differences in political sophistication are a central motivation for testing the alternative placement item in this study, and because the sample contains a much lower share of lower education respondents than the sampling frame, in the analysis below I stratify the differences between experimental groups by educational attainment.

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[5] When the parties are placed at the same scale endpoint in the initial question, and the Republican (Democratic) party is chosen as the more conservative (liberal) party in the follow-up question, the placement is coded as correct (1). Placement of the Republican party at least one scale point more liberal than the Democratic Party on the initial scale is coded as incorrect (0). When the Republican (Democratic) party is chosen as the more liberal (conservative) party in the follow-up question triggered by initial placement of both parties at the same scale endpoint, the placement is coded as incorrect (0). Placement of both parties at the trichotomized scale midpoint ("leave things as they are") is coded as incorrect (0), as are "don't know" answers for one or both placements to the initial question or follow-up question.

[6] https://www.ppic.org/publication/californias-likely-voters/ . Accessed July 15, 2020.

Table 2.1: Survey sample & voterfile demographics

Proprotion of N

		Voterfile 1/		Adult citizens 2/
	Sample	Voters w/emails	All registered	
Sex				
Female	0.5	0.46	0.48	
Male	0.49	0.44	0.44	
Unknown		0.09	0.08	
Age				
18-24	0.2	0.14	0.1	
25-34	0.27	0.25	0.18	
35-44	0.19	0.19	0.16	
45-54	0.11	0.15	0.15	
55-64	0.09	0.13	0.17	
64+	0.13	0.13	0.24	
Race				
African American	0.03	0.03	0.04	
Asian	0.12	0.12	0.11	
Latino	0.14	0.26	0.26	
White-other	0.71	0.59	0.59	
Education				
High school or less	0.08			0.38
Some college or AA	0.32			0.29
BA+	0.60			0.33
Party id / registration	(Party ID)	(Registration)	(Registration)	
Democrat	0.64	0.49	0.46	
Republican	0.24	0.21	0.24	
3rd Party		0.06	0.06	
No party preference	0.11 3/	0.24	0.24	
N	1,478	7,801,234	20,300,000	33,468,690

1/ PDI Inc.

2/ Noninstitutionalized. ACS 2018, 5 year estimates

3/ 3rd party & NPP combined

Examining the distribution of respondent demographics across the two experimental conditions, respondents appear relatively well-balanced on sex, age, and party identification, but less so on race and education (Table 2.2 below).

Table 2.2: Covariate balance
Proportion of N by experimental condition

Demographic	Condition		
	ANES	Trichotomized	P-val on diff
Sex			
Female	0.48	0.50	0.40
Male	0.51	0.49	0.24
Other	0	0.01	0.01
Age			
18-24	0.18	0.18	0.49
25-34	0.24	0.25	0.74
35-44	0.16	0.20	0.18
45-54	0.14	0.11	0.61
55-64	0.10	0.11	0.23
64+	0.18	0.15	0.66
Race			
African American	0.03	0.04	0.30
Asian	0.11	0.08	0.29
Latino	0.16	0.12	0.05
White-other	0.70	0.75	0.07
Education			
HS or less	0.08	0.09	0.79
Some college	0.34	0.29	0.01
BA+	0.58	0.63	0.03
Party identification			
Democrat	0.66	0.64	0.43
Republican	0.25	0.26	0.43
Pure independent	0.09	0.10	0.92
N	772	706	

Turning to the experimental results, Table 2.3 below provides the results of a regression of the mean proportion of placements correct on an indicator variable for the Trichotomized

(treatment) condition, for four groups. I show the results for the full sample, and for each of three education strata, because of the small share of lower education respondents in the sample as noted above.[7] As column 1 in Table 2.3 shows, for the full sample, the mean proportion of placements correct is higher in the Trichotomized than in the ANES condition, but the difference is small (0.88 vs. 0.86) and non-significant. There is also no statistically significant difference between mean placements correct among the sample subgroup with a bachelor's degree or higher (column 2), and among the subgroup reporting some college (column 3).

Table 2.3: Mean party placements correct by question format

	Dependent variable:			
	Placement items correct			
	Full sample	BA+	Some college	No college
	(1)	(2)	(3)	(4)
Constant	0.86*** (0.01)	0.90*** (0.01)	0.83*** (0.01)	0.68*** (0.04)
Trichotomized	0.02 (0.01)	-0.003 (0.01)	0.01 (0.02)	0.16*** (0.05)
Observations	1,478	885	461	129
R^2	0.002	0.0001	0.0003	0.07
Adjusted R^2	0.001	-0.001	-0.002	0.06
Residual Std. Error	0.22 (df = 1476)	0.18 (df = 883)	0.23 (df = 459)	0.29 (df = 127)
F Statistic	2.26 (df = 1; 1476)	0.05 (df = 1; 883)	0.15 (df = 1; 459)	9.13*** (df = 1; 127)

Note:	*p<0.05 **p<0.01 ***p<0.001

However, among respondents with a high school education or less (column 4), the mean proportion of correct placements in the Trichotomized condition is substantially higher than in the ANES condition—0.84 vs. 0.68 correct, or more than 1.5 out of the 10 total issue placements, a difference that is statistically significant at the 0.001 level. The statistical significance of this difference holds after adjusting for multiple tests—in this case four. Thus the trichotomized format item does make an important difference to the measurement of placement knowledge among the least educated respondents in this sample.

Is it possible to say anything about *how* the Trichotomized placement format helps the lowest education respondents compared to the ANES format? While not providing definitive answers, Table 2.4, which provides the type of placement error by education in the two conditions, may give some clues. As shown in the last two rows of Table 2.4, among low education respondents, the share of don't know responses is roughly equal in the Trichotomized and ANES conditions. Where the two formats differ is in the share of respondents reversing the parties' positions, and in the percentage placing them at the same scale point. Using the Trichotomized format, only 1% of low education respondents make each of these errors. This compares to 10% (reversed placement) and 7% (same placement) using the ANES format. Furthermore, both of these error types are reduced in the Trichotomized condition among the two higher education

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[7] To account for covariate imbalance between experimental conditions I also conducted this regression analysis including all covariates. All results were unchanged, see Table 6 in Appendix section 2.A.

groups, though these differences are not statistically significant. It appears then that the Trichotomized format produces less respondent confusion, making survey takers less likely to satisfice by placing both parties at the midpoint or selecting scale points haphazardly.

Table 2.4: Mean proportion of placements correct and incorrect by error type

ANES vs. Trichotomized format

| Education level | Correct | Incorrect | | | N |
		Parties reversed	Parties same	Don't know	
BA or higher					
ANES	0.90	0.02	0.02	0.05	442
Trichotomized	0.90	0.00	0.02	0.07	443
Some college					
ANES	0.83	0.03	0.04	0.09	263
Trichotomized	0.84	0.02	0.02	0.12	198
High school or less					
ANES	0.68	0.10	0.07	0.15	66
Trichotomized	0.84***	0.01***	0.01***	0.12	63

*p<0.1 **p<0.05 ***p<0.01

DISCUSSION

The relationship between formal education and political knowledge is one of the most widely accepted findings in the study of public opinion (e.g. Converse 1964; Zaller 1992; Delli Carpini & Keeter 1996). A critical takeaway from this survey experiment is that this relationship, at least in the domain of party issue placement knowledge, is not as strong as commonly believed. Some of the ignorance of the parties' issue positions among less educated citizens appears to be an artifact of poor measurement. In table 2.5, I illustrate this point by reporting a regression of mean placements correct in each experimental condition on a three-level factor variable for education (high school or less, some college, BA and higher), along with other demographic covariates. As can be seen in the second row of Table 2.5, the slope coefficient on education *falls in size by more than a factor of two* in the Trichotomized format compared to the ANES format (from .01 to 0.004). Hence, the education-information relationship in extant scholarship on party placement knowledge is notably weaker than previously found, and correspondingly, the democratic capacity of lower education citizens is somewhat higher than is widely believed.

Table 2.5: Education & mean placement items correct by question format

	Dependent variable:	
	Placement items correct	
	ANES format	Trichotomized format
	(1)	(2)
Constant	0.1*** (0.004)	0.1*** (0.003)
education_3	0.01*** (0.001)	0.004*** (0.001)
sexmale	-0.000 (0.002)	0.01*** (0.001)
sexother		-0.003 (0.01)
group_age_survey[30,40)	-0.01*** (0.002)	-0.004* (0.002)
group_age_survey[40,50)	-0.005 (0.003)	-0.003 (0.002)
group_age_survey[50,64)	-0.01*** (0.003)	-0.01** (0.002)
group_age_survey[64,Inf)	-0.01** (0.002)	-0.002 (0.002)
raceLatino	-0.01*** (0.002)	-0.01*** (0.002)
raceAsian	-0.01*** (0.003)	-0.01** (0.003)
raceAfrican American	0.002 (0.005)	-0.01* (0.004)
raceOther	-0.01** (0.003)	-0.004* (0.002)
Observations	763	704
R^2	0.1	0.1
Adjusted R^2	0.1	0.1
Residual Std. Error	0.02 (df = 752)	0.02 (df = 692)
F Statistic	8.8*** (df = 10; 752)	4.6*** (df = 11; 692)

Relatedly, a critical question that arises from these findings is what they imply for the party issue placement knowledge of the mass public as a whole. We can make a back-of-the-envelope estimate of this difference as follows: Assuming that 33% of the electorate has a high school education or less, and assuming that the ten economic items in this survey are a representative sample of salient federal economic policies, the experiment results indicate that placement knowledge in the public as a whole on any given economic issue would be 0.33 x 0.16 ≈ 5 percentage points higher than apparent in surveys using the ANES placement questions. Using FLT's findings on public knowledge as a benchmark, this rough calculation would imply that some 25-45% of the public, rather than 20-40%, knows the parties' positions on salient economic policy issues. Hence, for purposes of accurately documenting the public's knowledge of the parties' policy stances, the alternative survey item tested in this study appears preferable to the ANES format item. At the same time, however, the estimated difference in aggregate knowledge we would find using the superior survey item only heightens normative concerns about the public's capacity to hold its elected representatives accountable, as it shows that even with a survey item more accurately eliciting knowledge, the public's aggregate party issue placement knowledge remains low.

STUDY LIMITATIONS

It is important to note key limitations of the study reported here that stem from the nature of the survey sample. Because invitees self-selected to complete the survey in response to email invitation, the sample is not representative of all California registered voters, but instead has much higher mean education than the sampling frame for the study. Reflecting this higher level of education, mean placement knowledge in the sample was very high: more than 50% of respondents got nine or 10 placements correct, and more than 70% got eight or more placements correct. The high mean level of placement knowledge may result in ceiling effects, reducing variation in placement knowledge that might otherwise be seen in the full sample if the difficulty level of the placement questions was better calibrated to the knowledge level of the target population of the survey takers. Because of these issues, the study should be replicated on a representative sample or samples of registered voters, so that the lowest education respondents are appropriately included.

CONCLUSION

The mass public's low level of general political knowledge, including its apparently low level of party issue placement knowledge, has been a longstanding concern of scholars interested in the public's democratic competence, and specifically its ability to hold elected representatives accountable for their policy decisions. If people don't know where the parties and candidates stand on major policy issues, how can they vote "correctly" based on those issues?

This study investigated whether the apparently low level of placement knowledge in the mass public might actually be at least in part an artifact of poor measurement resulting from the policy scales widely used to elicit this information in opinion surveys.[8] The results support two important conclusions. First, the traditional policy scales do lead to a meaningful underestimate of placement knowledge among lower education survey respondents, who presumably have little or no practice in thinking about policy in spatial terms. Whatever the exact mechanism for the improved performance of the lowest education subgroup in the Trichotomized question format—and it is probably some combination of reduced satisficing and guessing—the novel format's reduced error rate makes a strong case for it as a preferable item for measuring party issue placement knowledge. Thus going forward, scholars studying placement knowledge are recommended to use the alternative format tested in this study to obtain a more accurate picture of the information held by the public.

Second, however, though the difference in placement knowledge found among those with lower education levels is meaningful, it does not substantially alter the picture of widespread lack of placement knowledge in the mass public as a whole. Thus the results reported here reinforce longstanding normative concerns surrounding the "democratic dilemma"—can citizens learn what they need to know to vote correctly?—and related worries about the health of American democracy.

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[8] This was the second survey experiment I conducted examining the effect of placement item format on measured placement knowledge, see Appendix Section 2.B for the results of the first test.

Chapter 3

Learning What Goes With What:
The Diffusion of Party Position Knowledge in The Mass Public

Some scholars have argued that despite the now decades-long trend of elite polarization in the United States, little in the nature of the American mass public's belief systems has changed since the late 1950s. I show, to the contrary, that the American public's knowledge of the Democratic and Republican parties' issue positions has risen in recent years, reaching 50 year highs in 2012-16. In contrast to the literature on partisan-ideological sorting, I find that this spread of party issue position knowledge has not been limited to those highest in political partisanship and engagement, but also includes those lower in partisanship, ideological extremity, and political awareness. Knowledge of the parties' issue positions strongly predicts key features of better organized political belief systems—namely issue attitude stability and consistency, and the link between issue positions and vote choice. Hence, the spread of party position knowledge belies the view of stasis in mass belief systems. The share of citizens who know the parties' positions on most major issues, and thus are more likely to exhibit key markers of better-organized belief systems, has increased to some 50-60% of the public, from at most 30% in the 1970s. I discuss normative implications of this change.

Introduction

How much do Americans know about politics, and what impact does their political knowledge have on their political attitudes and behavior? A substantial body of scholarship has shown that the average American citizen's general political knowledge is fairly low, and their degree of ideological sophistication is minimal (Delli Carpini and Keeter 1993, 1996; Kinder 1998; Converse 2000; Kinder 2006). Not many do well on civics-type knowledge questions in public opinion surveys, such as "Who is the chief justice of the supreme court?" and "How long is the term of a US senator?" Meaningful majorities of the public do not know the Democratic and Republican parties' positions on contentious policy issues such as abortion, health care, and the overall role of government in the economy. (Campbell et. al. 1960; Lewis Beck et. al. 2008; Freeder et. al. 2019)

In this paper, I endeavor to turn scholars' attention to a notable increase in the mass public's political knowledge that has occurred since the 1970s. Specifically, I show that in fact, the share of the public that knows the Democratic and Republican parties' positions on major policy issues has meaningfully grown in recent decades. Overall, I make three distinct contributions. First, I update prior analyses by Layman and Carsey (2002) and Levendusky (2009) to show that party position knowledge has continued to spread in recent years, and I foreground this striking increase over time as a key finding in its own right. Second, I show that knowledge of the parties' positions has spread just as much among those at lower levels of political awareness as among those higher in this attribute. This challenges a conclusion from the research on the sorting of partisanship and ideology (Layman and Carsey 2002; Abramowitz 2010). Third, I show that people who exhibit knowledge of the parties' positions hold political attitudes that are more stable, constrained, and more strongly predictive of voting behavior. In other words, party position knowledge is linked to key features of better organized political belief systems.

I estimate that some 50-60% of the mass public now knows the parties' positions on most major issues, compared to 30% or less in the 1970s. It follows that the segment of the public exhibiting the above-noted markers of better organized belief systems is now larger than at any time since the 1970s.

The paper proceeds as follows. I first review the relationship between party placement knowledge and elite polarization, laying out the reasons why diffusion of this knowledge should increase alongside the latter. I then lay out the empirical findings on the diffusion of placement knowledge in the mass public since the 1970s. This is followed by the empirical findings on the link between placement knowledge and attitude stability and constraint, as well as issue voting. I conclude with normative implications of these findings.

PARTY POSITION KNOWLEDGE, ELITE POLARIZATION, & MASS BELIEF SYSTEMS

In his seminal 1964 paper, Converse searched for signs of well-organized thinking about politics in the mass public, but instead observed widespread inability to use ideological concepts, and issue attitudes that were typically unstable over time and inconsistently liberal or conservative. Since Converse's analysis, the parties in government have dramatically polarized, becoming much more internally homogenous on policy issues and distant from one another on these same issues, thus significantly clarifying the cues sent by Democratic and Republican party elites on major policy issues (Barber and McCarty 2013). Also, as Converse pointed out in 2006, education levels have markedly increased since the late 1950s, potentially enhancing the public's capacity for better organized political thought.

However, scholars disagree about what if any consequences these long term changes have had for the belief systems of the American mass public. Some say that more politically partisan and engaged citizens have learned and mirrored elite polarization to varying degrees. (Layman and Carsey 2002; Layman et. al. 2010; Abramowitz 2010; Levendusky 2009) This literature on partisan-ideological sorting argues that placement knowledge has increased among more politically aware and partisan citizens.

Others, however, say not much has changed. For example, Fiorina (2005) states that Converse's original analysis is still "largely right." Kinder (2006) and Kinder and Kalmoe (2017) also argue that little of the picture Converse painted of the mass public has changed since the late 1950s. Kalmoe provides an excellent contemporary summary of this view (2020, 2, 5-6): "Only the most knowledgeable 20-30% of citizens carry polar, [consistent], stable, and potent ideological orientations... [M]ost people do not notice party-elite guidance that would help them form organized, durable beliefs... Few pay enough attention to absorb those messages, for which political information is the best indicator."

It is my contention that, in fact, more people *have* noticed party-elite guidance, and placement knowledge has diffused further into the mass public than contemporary scholars have recognized, with important consequences for the structure of belief systems among holders of this knowledge. Unlike the sorting literature, however, I show that placement knowledge has diffused just as much among the less politically aware segments of the mass public as among the more politically aware and partisan.

There are multiple reasons to believe elite polarization would lead placement knowledge to broadly diffuse into the public, beyond only those who are more politically partisan and engaged. For one thing, elite polarization has resulted not only in more consistent elite cues, reflecting clearer differences on salient issues, but also to an increase in the *intensity* of the information flow in the media on partisan conflict over issues (e.g. Levendusky and Malhotra 2016). As Zaller (1992) argues, a more intense flow of information should all else equal lead to reception of elite cues by those lower in general political awareness.

Moreover, when elites are polarized, other mechanisms may lead information about party positions to diffuse to those lower in political awareness. For one thing, elite polarization has crystalized the parties' links to other social identities, such as being a gun owner, a Christian evangelical, or a supporter of equal rights for LGBTQ citizens. As a result, those with lower political awareness have increased opportunities and incentives to absorb the parties' issue positions via these pre-existing social identities. (Mason 2018; O'Brian and Mitchell n.d.) For example, an NRA member may encounter other individuals in their social network who are gun enthusiasts and also Republicans, and may thus learn that being an NRA member and a Republican "go together," thereby being exposed to and absorbing the positions of Republicans on other major policy issues.

Separately, but just as importantly, elite polarization has made the differences between the political parties appear more consequential. When citizens lower in political awareness perceive the consequences of party differences as more important and closer-to-home, their indifference or ambivalence toward the parties may decline, thus also making them more likely to absorb elite ideology (Smidt 2017, 366-367). This is a point Converse himself made in 1964 and 2006—that attention to national politics among those lower in political engagement may wax (and wane) with the perceived political stakes at the national level.

Diffusion of placement knowledge in the mass public is important because when people learn where the parties stand on issues, they tend to bring their own policy views and their partisanship into alignment. This alignment of partisanship and policy views occurs, I contend,

because when citizens learn the parties' positions on a given issue they frequently *follow*, that is, they adopt the position of the partisan side they already prefer. This following is critical because when citizens follow their party's issue positions, their policy views become (1) *more consistent*, as they adopt the same stance as their party across multiple issues, and (2) *more stable*, as their issue positions become anchored to their party's stances, which generally change little over time—at least over time horizons limited to several years.

Why do people engage in following behavior when they learn where the parties stand on issues? Broadly, political scientists have developed two approaches to explaining why citizens often follow the issue positions of their preferred party (Leeper and Slothuus 2014, 11). First, in the tradition of Downs (1957), individuals may use the positions of their preferred party as heuristics, i.e. as information shortcuts that provide simple rules of thumb about which policies to support (Carmines and Kuklinski 1990; Sniderman, Brody, and Tetlock 1991; Lupia and McCubbins 1998; Mondak 1993; Popkin 1991; Sniderman and Stiglitz 2012). In this perspective, citizens choose a partisan side because they believe it best represents their general values or material interests. They then trust that their preferred party's overall set of policy positions are the "right" positions for them, thereby enabling them to avoid expenditure of the cognitive resources required to reason through the consequences of specific policy stances on multiple issues (Leeper and Slothuus 2014, 12-14).

The second perspective on following behavior stems from the scholarly tradition of The American Voter, which emphasizes the role of "the political party [a]s an opinion-*forming* agency of great importance" (1960, 128, emphasis added). This perspective views partisanship as a social identity, or a deep emotional attachment to a party, frequently acquired during the early adulthood socialization process (Campbell et al. 1960; Green, Palmquist, and Schickler 2002; Huddy, Mason, and Aarøe 2015). In this perspective, there are multiple theoretical reasons to expect individuals to follow the issue stances of their partisan side when they acquire party position knowledge. First, they may only accept political messages from like-minded elites, as in Zaller's (1992) receive-accept-sample model. As a result, their pools of considerations on policy issues would naturally be consistent with their party's stances on the same issues. Second, they may adopt their party's position(s) due to feelings of partisan loyalty (Leeper and Slothuus 2014, 17). Third, they may do so to conform to the stance of a highly salient social group (Asch 1956). Finally, they may follow to avoid the cognitive dissonance that would occur were they to maintain a policy view that is inconsistent with their partisan identity (Festinger 1962).

I hypothesize that citizens typically engage in following behavior when they acquire party placement knowledge, but some citizens may also *switch partisan sides,* instead of initially following, if they learn that their party is out of step with them on an issue to which they attach high importance. However, these switchers are also likely to end up following their new party on other issues for the reasons outlined above so that, like followers, when they acquire placement knowledge, switchers will usually end up with many or most of their issue positions in alignment with their partisanship (Zaller 2012, 618).

As stated above, the issue attitudes of citizens who follow their party's positions become more consistent and more stable because they become aligned with and anchored by elite ideology. Thus, the spread of placement knowledge means a greater share of the public should exhibit some of the key signs of better organized political thought that Converse looked for some sixty years ago.

DATA SOURCES, MEASUREMENT, AND METHODS

I use all party and candidate issue placements on policy scales in the ANES time series studies from 1972 to 2016, with the exception of 2000 because of the split sample in that year. Placements per study range from a minimum of seven in 2016 to a maximum of 15 in 1996. I code respondents as knowing the party or candidate issue positions if they placed the Republican party or candidate at least one scale point toward the conservative side of the scale from the Democratic party or candidate, anywhere on the issue scale. Respondents who reversed the parties or candidates, placed them at the same scale point, or answered "don't know" to one or both placements are coded as not knowing the positions on that issue.

To illustrate the relationship between placement knowledge and opinion stability, I extend findings from Freeder, Lenz, and Turney (2019) using the 1972-76 and 1992-96 ANES panels, which include candidate and party issue placements along with self-placements. To assess attitude stability I show correlations of issue attitudes between panel waves. To measure consistency of respondent issue attitudes, I present correlations between pairs of issue self-placements for which the ANES also asked candidate and party placements.

I create general political knowledge scales for each respondent by summing factual political knowledge items (one point per correct answer), and then adding from zero up to four points based on the interviewer rating of the respondent's knowledgeability, and zero to four points for their rating of the respondent's intelligence. These general knowledge scales do not include any party issue placements; they do include questions on party ideology e.g. "which party is more conservative?" and "which party favors a more powerful government in Washington?" The scales have between 11 and 18 items, with Cronbach's alphas of 0.78 to 0.88 (mean of 0.82).

THE SOCIAL DIFFUSION OF PARTY PLACEMENT KNOWLEDGE

The share of the American public that holds party placement knowledge has meaningfully increased over the past 50 years. This change is clear using a variety of placement questions and criteria. I begin by looking at the mean percentage correct on all issue placements for parties or candidates in each ANES study over time, shown in Figure 1. The mean percentage correct on single issue placements has risen from an average of 39% in 1972-76 to an average of 69% in 2012-16, for a total gain of 30 percentage points, or nearly double the level prevailing in the 1970s.

Figure 3.1: Placement Knowledge Over Time
Mean % correctly placing parties or candidates
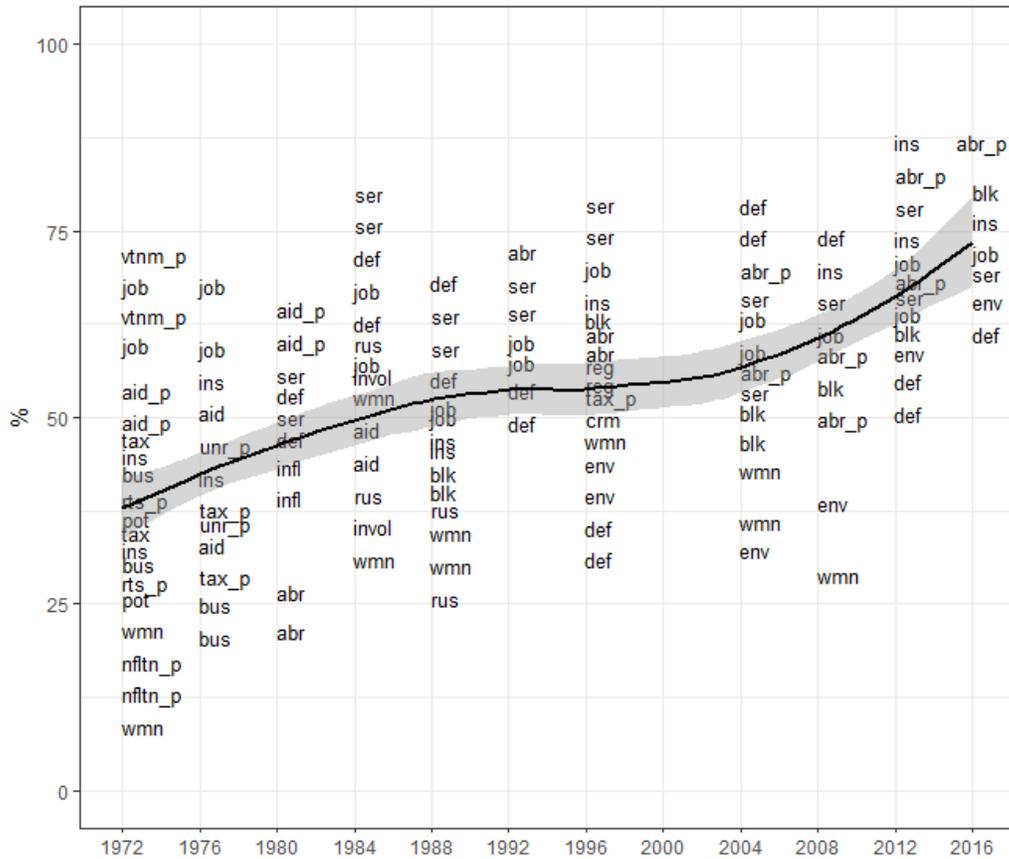
A more stringent measure of placement knowledge requires respondents to correctly answer both candidate *and* party placements on the same issue in a given year. This reduces the probability of correctly guessing a placement from 33% to 11%, though at the cost of fewer total issue placements and a slightly shorter time series (there were no placements for both candidates and parties on the same issue in 2016). By this standard, shown in Figure 3.2, the mean correct is lower over the length of the time series than for candidate *or* party placements shown in Figure 3.1, presumably reflecting the lower probability of lucky guessing, but the gain in the mean percentage correct is almost identical, from 26% in 1972 to 59% in 2012, for a total rise of 33 percentage points.

Figure 3.2: Placement Knowledge Over Time
Mean % correctly placing parties and candidates
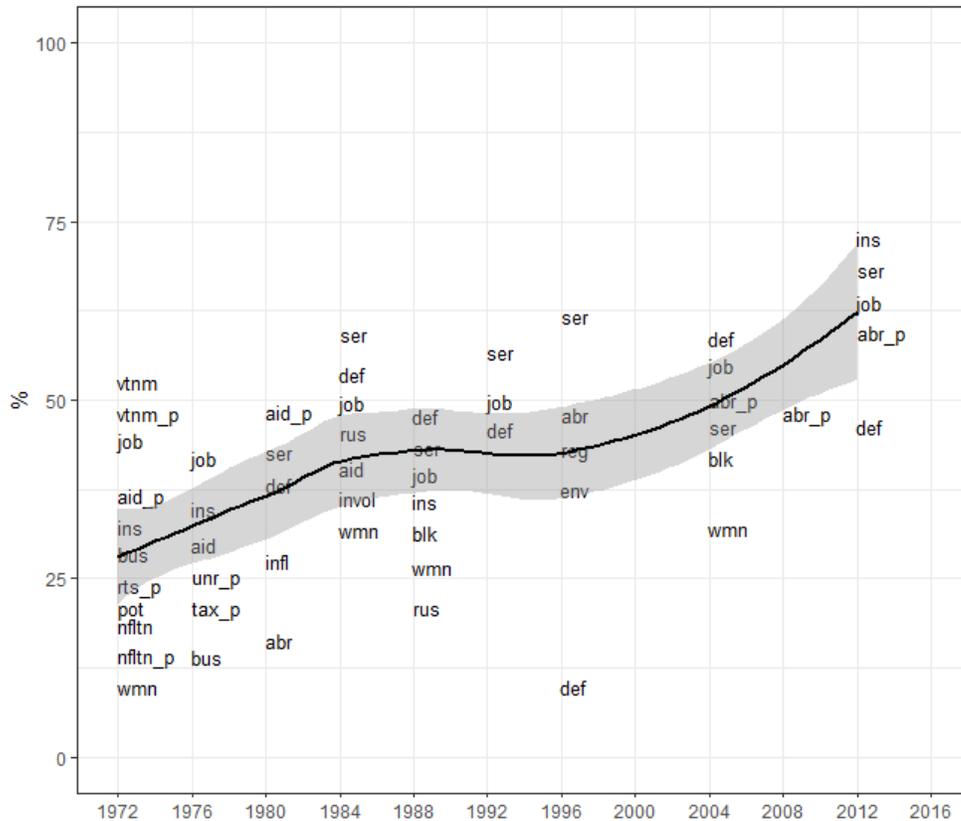
One objection to using all placement items available in each year to evaluate the evolution of placement knowledge over time is that the issues asked in each year may not be of comparable difficulty. As the ANES changed the issue placements it asked over time, perhaps it was inadvertently selecting "easier" issues, or those on which more of the public had always been aware of the parties' positions. To address this potential confound, I created three scales using common placement items in the ANES time series and compared rates of correct placements on the scales over time. The scale with the longest timespan is composed of candidate and party placements on both health insurance and government guaranteed living standards (four items), and is available in 1972, 1976, 1988, and 2012. A six item scale includes these four items plus candidate and party placements for the government spending and services issue, and is available in 1988 and 2012. Finally, a three item scale is composed of party placements on three issues (health insurance, guaranteed living standards, and government spending/services), and is available in 1988, 1996, 2008, 2012, and 2016.

As Figure 3.3 shows, the pattern of correct placements on these scales is similar to that seen when I use placements on all issues available in each year. On the four item scale, the mean share of correct placements rises from 48% of the four items in 1972 to 70% in 2012, a gain of 22 percentage points. This is smaller than the gain of roughly 30 percentage points when using all items in each year, but still a very substantial increase of nearly 50% of the level prevailing at the start of the series. The mean share correct on the six item scale rises from 58% in 1988 to 71% in

2012. Finally, the mean share correct on the three item scale rises from 55% in 1988 to 76% in 2016.

Figure 3.3: Mean proportion of placements correct
ANES time series studies common items
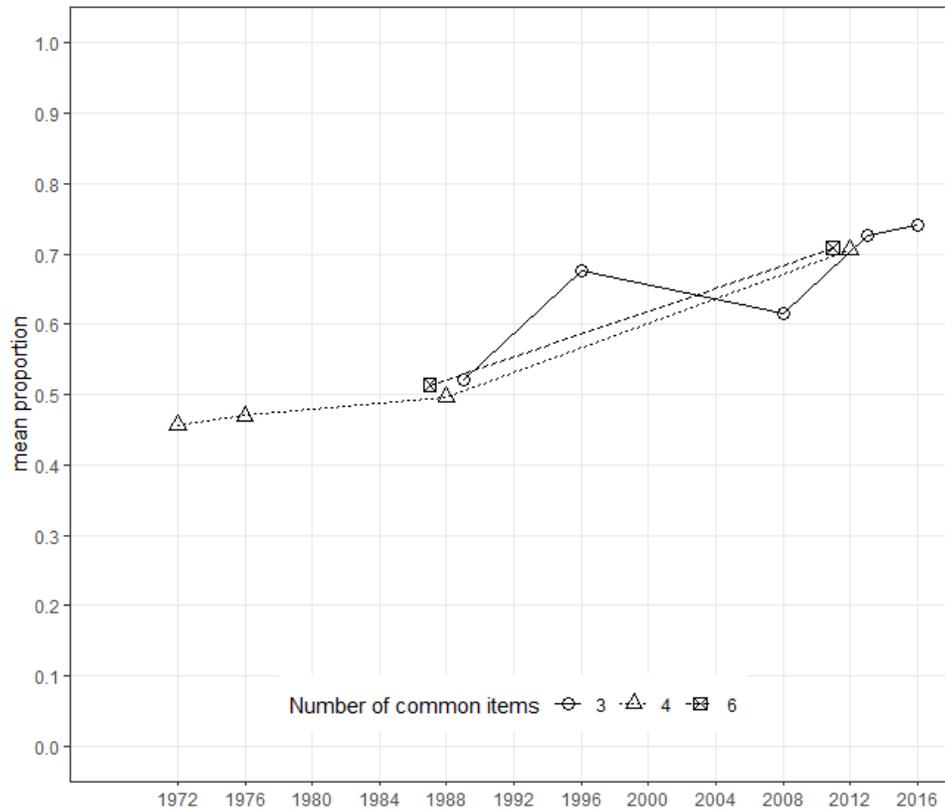
In addition to the rise in mean placement knowledge over time, there is a notable change in the distribution of placement knowledge over time, shown in Figure 3.4.

Figure 3.4: Distribution of scores on four item scale over time
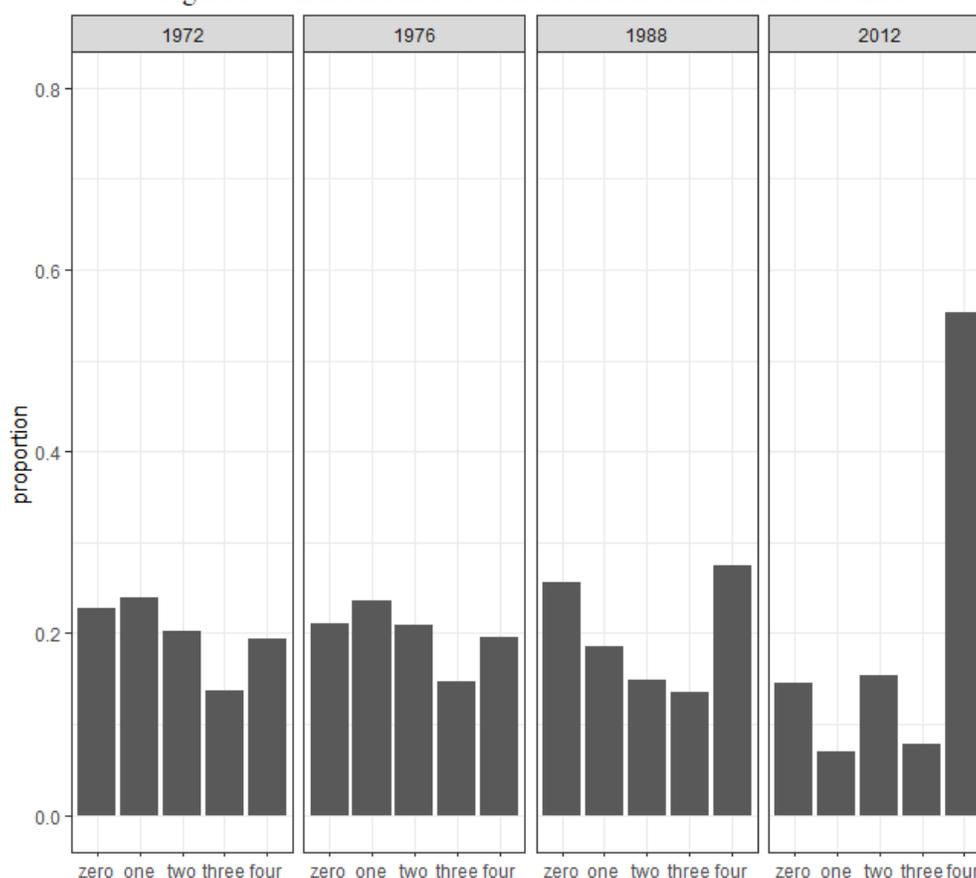
Rather than an upward shift in a normally shaped distribution, with the mean and modal scores remaining roughly equal over time, the distribution changes in shape from roughly uniform to left skewed, with the modal scale score moving to the highest level of the scale over time. In other words, the share of respondents getting all of the placements correct increases the most over time. Looking at the distribution of scores on the four item scale over time in Figure 4, the share of respondents getting all placements correct (1% chance via lucky guessing) nearly triples from the start to the end of the series, rising from 20% in 1972 to 55% in 2012.[9]

Based on this change in the distribution of placement knowledge, I estimate that the share of the public that can place the parties on most major policy issues has increased from 10-30% in the 1970s to 50-60% as of 2012-16. I base this estimate on the share of the sample that correctly places the candidates or parties on at least three-quarters of all issues in a study year. Using this three-fourths standard for "most" issues is admittedly arbitrary, but the estimate does not change dramatically if I modestly adjust the cutpoint up or down from this level. Table 3.1 below reports the sample shares who correctly placed the candidates or parties on at least three-fourths of items using (1) the four common item scale, and (2) all placement items available in a given year. On the four item scale, 30% of the sample placed at least three of the four items correctly in the 1970s.

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[9] On the six item scale, the share getting all placements correct (.09% chance via lucky guessing) rises from 31% in 1988 to 45% in 2012. For the three item scale, the share getting all items correct (4% chance via lucky guessing) rises from 33% in 1988 to 55% in 2016.

This share rose to 63% in 2012. Using all available items in each study year, only about 10% of respondents correctly placed the parties or candidates on three-fourths or more of the items in the 1970s (there were 20 items in 1972 and 16 items in 1976). This share rose to 50% in 2012 (12 items) and 58% in 2016 (seven items).

Table 3.1: Share of the public with
placement knowledge on most issues, %

	1972	1976	2012	2016
Four common items	30	31	63	NA
All items	10	10	50	58

Note: Cell entries are percentage of ANES sample correctly placing
candidates or parties on at least three-fourths of items asked in the
study year.

The spread of placement knowledge over time has not been limited to those with the strongest partisanship and political awareness, as suggested in the literature on partisan-ideological sorting (Hetherington 2001; Layman and Carsey 2002, 2010; Carsey and Layman 2006; Abramowitz 2010). As shown in Table 3.2 part A, the mean proportion of placements correct on the four item scale has increased just as much among independent leaners and weak partisans as among the strongest partisans. Only among pure independents, who represent just 13% of all respondents in the ANES, does placement knowledge increase by a smaller amount between the 1970s and 2010s. Similarly, Table 3.2 part B shows that placement knowledge has risen just as much among respondents self-placing in the middle of the seven point ideology scale as among those self-placing at the scale's extremes.

Most notably, given the posited link between general political awareness and learning of party issue positions in the sorting literature, the rise in placement knowledge has occurred across all levels of the general political knowledge distribution, as shown in Table 3.2 part C, which partitions placement knowledge on the four item scale into general political knowledge quartiles, using the general political knowledge scales described above. The gains in the mean proportion of placements correct on the four item scale in the bottom three quartiles are just as large as the gain in the top general knowledge quartile.

Table 3.2: Placement knowledge over time by select characteristics

	1972	1976	1988	2012	change first-last
A. Strength of partisanship					
Strong partisans	0.51	0.57	0.62	0.77	.26*
Weak partisans	0.45	0.45	0.46	0.72	.27*
Independent leaners	0.48	0.51	0.54	0.72	.25*
Pure independents	0.35	0.32	0.26	0.40	.06
B. Ideological extremity					
Extemely lib/con		0.59	0.56	0.78	.19*
Very lib/con		0.61	0.66	0.81	.21*
Somewhat lib/con		0.56	0.58	0.78	.21*
Neither lib nor con		0.45	0.49	0.71	.26*
C. General political knowledge quartile					
Top	0.71	0.71	0.78	0.91	.21*
Second	0.51	0.48	0.56	0.80	.32*
Third	0.37	0.38	0.40	0.67	.30*
Bottom	0.22	0.29	0.26	0.46	.17*

Note: Cell entries are the mean proportion of correct placements on the scale of 4 commo
placement items in the ANES. * = significant at .01 level.

There is one important potential objection to the findings reported so far: declining ANES response rates, which have fallen from above 70% as late as the 1990s down to 38% in 2012 and 50% in 2016. As Converse (2000; 2006) argued, falling response rates raise the possibility that more politically interested and knowledgeable individuals compose a growing share of survey samples, making these samples more knowledgeable than the populations they purport to represent. To assess this potential confound I use a simple test. If falling response rates are making samples more knowledgeable, we should see not just party issue placement knowledge but also general political knowledge rising over time in the ANES time series studies. If general political knowledge appears generally stable over time, the increase in placement knowledge we observe is very unlikely to be driven by systematic changes in knowledgeability of the ANES samples due to falling response rates.

To measure general political knowledge through time, I construct a scale of common general knowledge items asked in each ANES study since 1992 (with the exception of 2000): which party holds a majority in the U.S. House (one point), which party holds a majority in the U.S. Senate (one point), correct identification of the Speaker of the U.S. House (one point), and interviewer ratings of knowledgeability (zero up to four points) and intelligence (zero up to four points). Thus the scale has a total of 11 possible points. Figure 3.5 shows that in the period when ANES response rates fell sharply, the mean score on the general political knowledge scale (shown as a proportion of 11 points) changed very little, and certainly does not show any meaningful upward trend. This pattern strongly cuts against the response rate objection to the findings.

Figure 3.5: General political knowledge over time
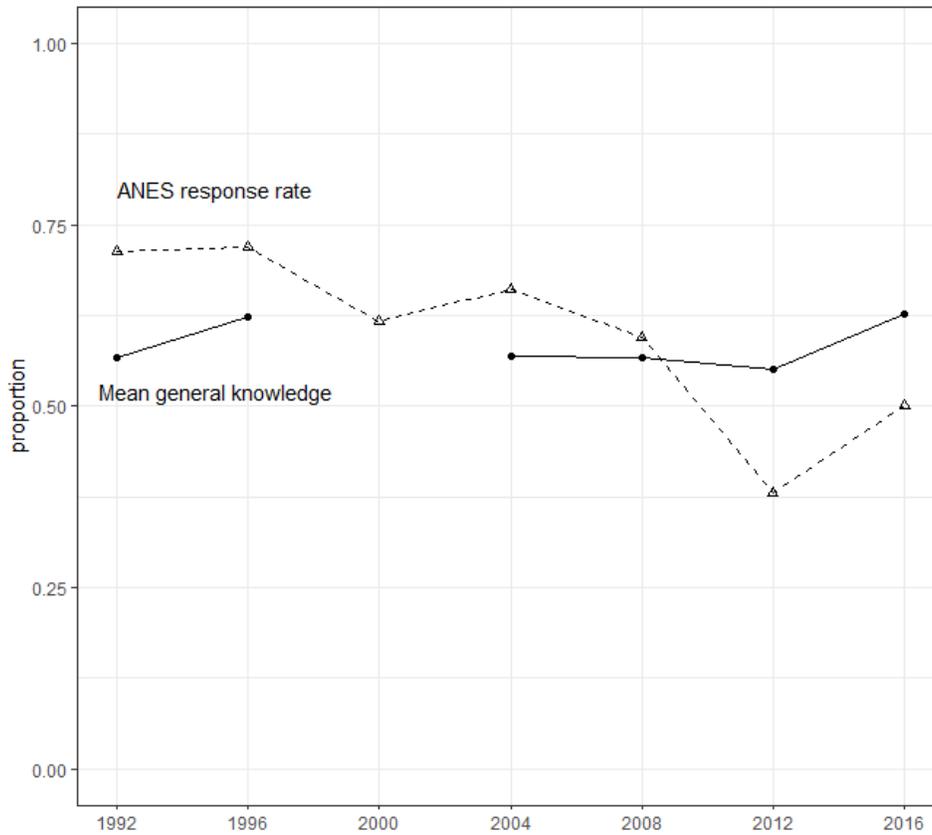
To sum up, a meaningful share of the American public learned the Republican and Democratic parties' issue stances between the 1970s and the 2010s. Based on the share of respondents correctly answering at least three-fourths of all placements in a given year, I estimate the share of the public with knowledge of the parties' positions on most issues stood at 50-60% in 2012-16, compared to 30% or less in the 1970s. The gains in knowledge were not limited to the most partisan and politically engaged, but included those with moderate political orientations and those lower in general political knowledge. Importantly, these findings do not appear to be the result of declining response rates to ANES surveys over time.

PARTY PLACEMENT KNOWLEDGE AND BELIEF SYSTEM ORGANIZATION

Since Converse's 1964 paper, public opinion scholars have commonly used two criteria to judge the extent to which individuals' political belief systems can be characterized as "well organized": (1) the over-time stability of held issue attitudes and (2) the degree to which these issue attitudes are consistently liberal or conservative, or their degree of shared structure, also known as constraint (Kinder and Kalmoe 2017, 21). In this section I extend recently-published findings and present novel results to show that placement knowledge strongly predicts these issue attitude characteristics, as well as the correlation between issue positions and vote choice.

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Why does placement knowledge predict these attribute features? To recap the logic, when citizens learn the parties' issue positions, they tend to bring their own issue attitudes and partisanship into alignment. This can happen via changing one's issue positions to match one's party, changing one's party to match one's position on one or more issues, or some combination of both processes. I hypothesize that most often people follow, for the reasons detailed above, but undoubtedly all of these outcomes are realized to varying degrees among those who learn the parties' positions on major issues (e.g. Levendusky 2009, 2010; Carsey and Layman 2006).

Whatever the mix of these changes, however, there are two sets of empirical implications that flow from this logic. First, among those who know the parties' positions, most will agree with their party. Figure 3.6 below, from Freeder, Lenz, and Turney (2019, S.I. section 4), shows that this implication is strongly born out in the ANES time series studies. Among those who correctly place the candidates and parties on a given issue, about 80% of respondents hold the same position as their party, where the expectation of this occurring via chance is 38%.

Figure 6:   Agreeing on the Issues and Placement Knowledge, ANES 1972-2012
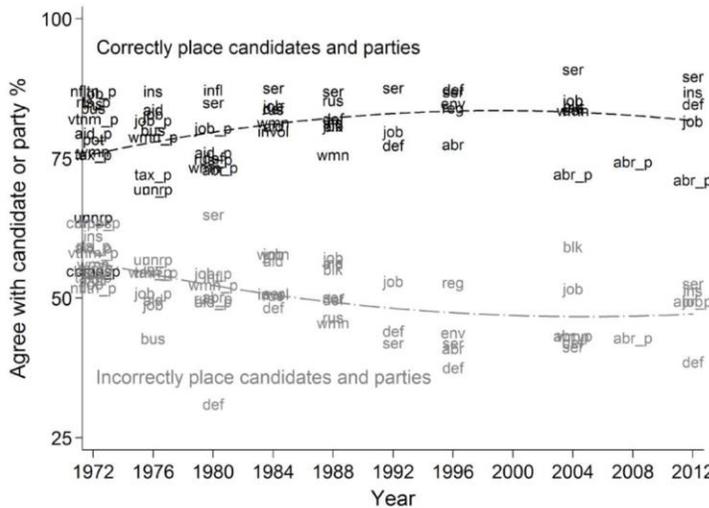
Note: The figure shows the percent agreeing with their party or with their candidate (measured with vote decision) among people who correctly and incorrectly placed the parties and the candidates. It does so for all policy issues where the ANES asked for both party and candidate positions. We measure 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.

The second implication is that, with the ballast of elite ideology, individuals with placement knowledge, particularly those who agree with their side, will have more stable and consistent issue attitudes, and a stronger association between these attitudes and their vote choice. This implication is also strongly born out in the data as I show next.

Placement Knowledge and Issue Attitude Stability

Freeder, Lenz, and Turney (2019) show using the 1972-76 and 1992-96 ANES panels that possessing placement knowledge strongly predicts policy attitude stability. Here I extend these findings by reporting correlations between issue self-placements in panel waves one and two for

those who lack placement knowledge ("Don't knowers"), those who hold placement knowledge but do not agree with their side ("Disagreers"), and those who know the parties' positions and agree with their side ("Agreers").[10] For Don't Knowers, the mean correlation on issue opinions between waves is 0.36. For Disagreers, the correlation between waves is on average about the same as for Don't Knowers in these two panels. For Agreers, however, the correlation roughly doubles that of the other two groups, standing at over 0.7 on average across issues—a level of stability that approaches that of party identification.

Table 3.3: Issue attitude stability by placement knowledge in ANES panels

	Don't know party positions	N	Know & disagree	N	Know & agree	N	Know & agree vs. don't know	Know & agree vs. disagree
1972-76								
guarantee jobs & liv standards	0.33	339	0.34	49	0.76	111	0.43	0.42
school busing	0.41	977	0.43	24	0.87	111	0.46	0.44
health insurance	0.48	382	0.26	30	0.78	60	0.30	0.52
aid to minorities	0.38	804	-0.01	56	0.78	121	0.40	0.79
urban unrest	0.25	358	0.38	22	0.58	49	0.33	0.20
taxes on high incomes	0.26	376	0.14	33	0.64	46	0.38	0.50
1992-96								
services vs. spending	0.26	225	0.03	81	0.76	181	0.50	0.73
defense spending	0.38	302	-0.02	22	0.62	125	0.24	0.64
guarantee jobs & liv standards	0.32	66	0.32	71	0.69	142	0.37	0.37
abortion	0.55	53	0.76	91	0.83	140	0.28	0.07
Mean (equally weighted)	**0.36**		**0.26**		**0.73**		**0.37**	**0.47**
Mean (N weighted)	**0.36**		**0.43**		**0.78**		**0.42**	**0.35**

Note: cell entries are correlations between issue self-placements in waves one and two unless otherwise noted.

Placement Knowledge and Issue Attitude Constraint

Next, I report novel findings showing that placement knowledge also strongly conditions the second key feature of better organized belief systems noted above, namely issue attitude consistency or constraint. Since Converse, scholars have produced a large literature on the correlates of issue attitude consistency. At various times, for example, researchers have found that constraint is linked to education (Jacoby 1995), political participation (Klein 2014), or intensity of partisanship (Jacobson 2012). Two recent careful contributions on this question find that general political knowledge is the best predictor of constrained issue attitudes. (Kinder and Kalmoe 2017, 37-39; Barber and Pope 2018) As Barber and Pope write (2018, 98): "We suggest that there is one characteristic that stands out as the key predictor of constrained issue positions—[general] political knowledge... [I]t is not partisans, or one party, or those who participate in politics that appear to think in a way that resembles the unidimensional framework of elite opinion... it is the politically knowledgeable segment of the public that gives the most consistent responses [to issue self-placements]."

I test the correlations between any two given issues using the set of all 22 issues for which I have placement responses for both candidates and parties in the ANES cumulative file (1972-2012). I disaggregate each issue pair by whether an individual correctly places both candidates *and*

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[10] Individuals are coded as holding placement knowledge only if they place the candidates and parties correctly in *both* panel waves.

parties on both issues, and also by their level of general political knowledge (by quintile). Table 3.4 below reports the averages of these correlations, as well as the percentage of individuals on average who correctly placed the candidates and parties. The relationship between general political knowledge and attitude constraint vanishes for those who do not possess placement knowledge. On the other hand, having placement knowledge significantly improves constraint by at least 0.3, regardless of one's level of general knowledge.

Table 3.4: Attitude Constraint in the ANES, 1972-2012

Correctly place on both issues	General knowledge quintiles				
	1	2	3	4	5
No	0.10	0.10	0.11	0.13	0.13
Yes	0.41	0.40	0.46	0.47	0.50
Percent Yes	10.8	19.7	31.3	46.4	69.2

Table 3.5 shows that this relationship holds across ANES study years.

Year	Correctly place on both issues	General knowledge quintiles				
		1	2	3	4	5
1972	No	0.07	0.09	0.13	0.13	0.13
	Yes	0.58	0.42	0.53	0.56	0.52
1976	No	0.16	0.13	0.13	0.16	0.17
	Yes	0.42	0.52	0.42	0.52	0.49
1980	No	0.08	0.09	0.06	0.06	0.09
	Yes	0.36	0.37	0.43	0.36	0.47
1984	No	0.15	0.05	0.12	0.13	0.10
	Yes	0.38	0.40	0.47	0.46	0.52
1988	No	0.12	0.12	0.06	0.14	0.13
	Yes	0.47	0.42	0.43	0.46	0.48
1992	No	-0.00	0.05	0.09	0.03	-0.11
	Yes	0.20	0.28	0.37	0.47	0.47
1996	No	0.03	0.06	0.13	0.08	0.08
	Yes	0.58	0.30	0.43	0.51	0.55
2004	No	0.07	0.11	0.12	-0.02	0.12
	Yes	0.25	0.35	0.51	0.45	0.51
2012	No	0.04	0.09	-0.04	0.07	0.11
	Yes	0.35	0.40	0.39	0.42	0.48

Note: The table shows the average of all pairwise correlation between issues in which the ANES asked respondents to place the candidates and the parties. 65 issue questions. 20,605 respondents. Year 2000 excluded because of the split sample. Number of issue questions varies from 14 in 1972 to three in 1992 with all other years having at least five.

This simple analysis reveals that placement knowledge strongly conditions the correlations between held issue attitudes regardless of general knowledge. At the same time it shows that general knowledge has almost no discernible effect on the correlation between issue pairs when an individual does not know where the parties stand on the issues. This is the first demonstration in the public opinion literature of the strong connection between issue specific placement knowledge and issue attitude constraint.

Placement Knowledge, Issue Attitudes, and Vote Choice

Placement knowledge also strongly conditions the relationship between issue attitudes and vote choice. When voters know where the parties and their candidates stand on issues, voters' policy views predict their votes. When they do not know the positions, their policy views do not predict their votes.

I illustrate this point by conducting regressions with the six issues on which the ANES most frequently asked respondents both self and party placements from 1972 to 2016: Government guaranteed jobs and living standards, government spending versus services, health insurance, environmental protection, defense spending, and aid to African-Americans. For each issue in each year it is available, I conduct two OLS regressions, one for those with placement knowledge on that issue and one for those without placement knowledge. I regress presidential vote choice (coded 0-1) on issue self-placement (recoded to 0 to 1), party identification, ideology, education, income, age, gender, and indicator variables for race. This procedure produces 44 regressions for those with placement knowledge and 44 regressions for those without placement knowledge.

For those with placement knowledge, the regression coefficient on issue self-placement is statistically significant in all 44 regressions (40 at the 0.000 level), and substantively large (greater than 0.1) in 37 of them. The median regression coefficient for those with placement knowledge is significant at the 0.000 level and has a value of 0.26—meaning a shift from the most liberal to the most conservative point on the issue self-placement scale is associated with a 26 percentage point increase in the probability of voting for the Republican presidential candidate. For those without placement knowledge, the regression coefficient on issue self-placement is statistically significant in only 10 out of the 44 regressions, and the coefficient is incorrectly signed in 35 of them. Among those without placement knowledge, the median regression coefficient is -0.09 and is not significant. Figure 3.7 below displays the distribution of these issue self-placement regression coefficients by placement knowledge.

Figure 3.7: Regression Coefficients on Issue Self Placement by Placement Knowledge
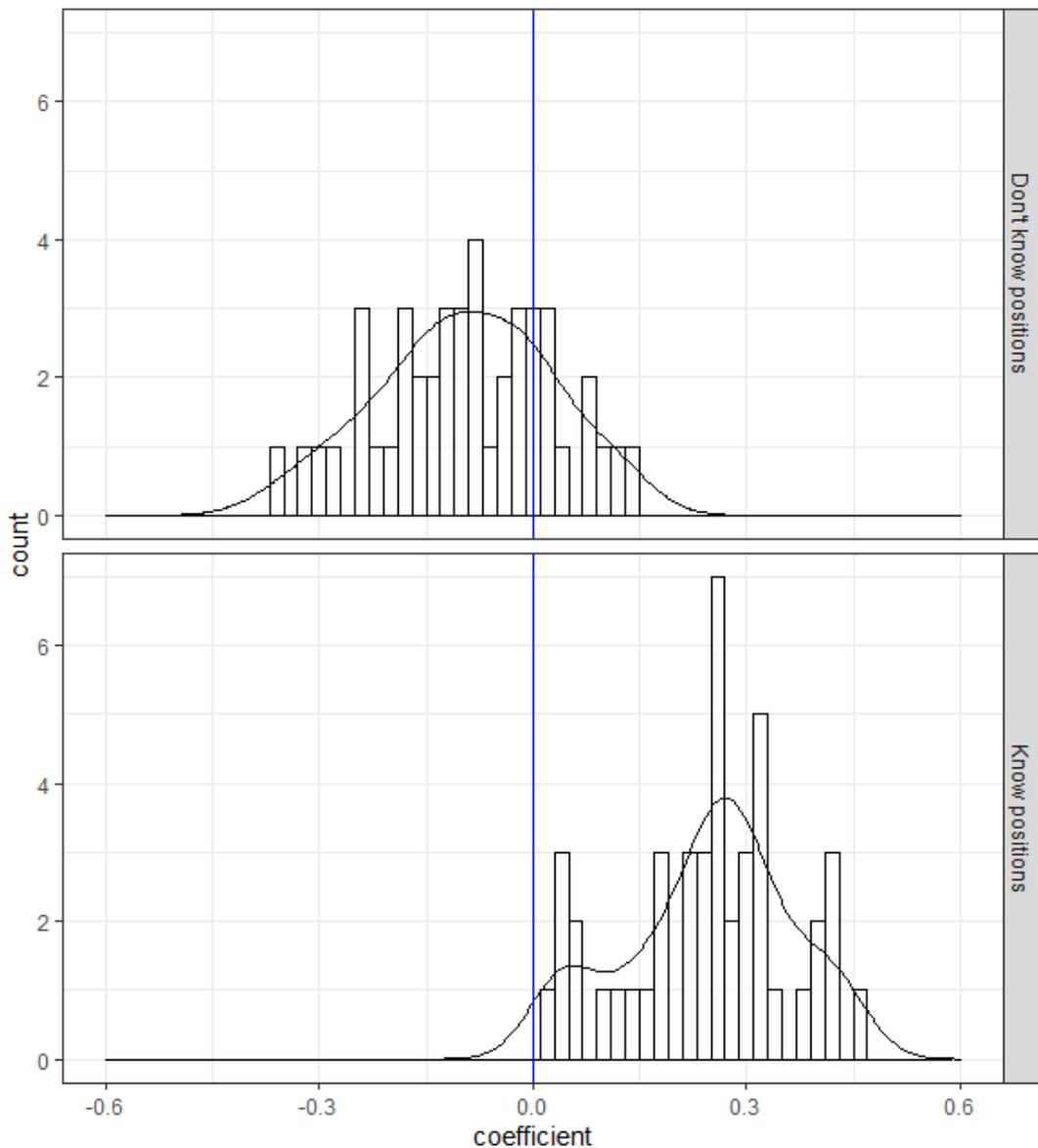
Note: The histogram shows coefficients on issue self-placement from regressions of presidential vote choice (coded 0-1) on issue self-placement (recoded to 0-1), party id, ideology, education, income, age, gender, and indicator variables for African American and Hispanic ethnicity.

Decades of research have found that attitudes on individual issue items in surveys rarely show large, statistically significant effects in explaining voting decisions or approval of elected officials (Kinder 1998). The novel findings presented here show that one explanation for these inconsistent findings is that these studies have not conditioned vote choice on knowledge of the parties' issue positions. To some extent, this may seem obvious. If people do not know where the parties or candidates stand on the issues, how can their votes reflect these issue stances? Still, the results presented here represent the first analysis to demonstrate the strong conditioning effect of placement knowledge on the link between issue attitudes and vote choice.

DISCUSSION

The share of the American public that knows where both the parties and presidential candidates stand relative to each other on most issues has increased to some 50-60% compared to 30% or less in the 1970s. This diffusion of placement knowledge has occurred across the spectrum of general political knowledge. Knowing where the parties stand predicts higher issue attitude stability and consistency, as well as the correlation between issue attitudes and vote choice. Therefore, a larger share of the American public holds more stable, constrained, and "potent" issue attitudes than at any time since the 1970s.[11]

But how substantively meaningful is the change I have identified, i.e. does a change in roughly one quarter of the population—from 30% or less to 50-60%—represent a meaningful increase? On the one hand, the share of the public with placement knowledge on most issues has roughly doubled, and appears to now stand at half or a bit more of the public. The size of this change in relative and absolute terms is substantively significant and worthy of scholarly attention. Moreover there is no a priori reason to think that the diffusion of placement knowledge has stopped.

On the other hand, however, about half the public still cannot place each party on all or most major issues. The public is still characterized by dramatic differences in general political knowledge, with a relatively low mean and high variance (Converse 2000). The changes implied by my findings for measures of belief system organization for the full American public are small. For example, given that the inter-item correlations of issue self-placements for those with placement knowledge are on average higher by 0.3, as I find above, and that roughly one quarter of the population has gained placement knowledge, the implied gain in the inter-item correlation for the full population is $0.3*0.25= 0.08$, a small difference. The core point is that Converse conceptualized belief system organization as a continuum and that individuals who know where the parties stand on most major issues are situated at a higher point on this continuum than those who lack this knowledge.

The normative implications of these findings is ambiguous. An optimistic interpretation is that as more of the public has become informed about the substantive differences between the political parties, more of the electorate now has ideologically consistent issue preferences that are highly predictive of their vote choices. Thus an increased share of citizens are voting for the candidates/party who share their interests, i.e. a larger share of the public is "voting correctly." (e.g. Levendusky 2010) Indeed, examining voting patterns over time, Pierce and Lau (2019) argue elite polarization has had just this effect: "Although some political pundits have expressed concern that political polarization has a deleterious effect on voter behavior, others have argued that polarization may actually benefit voters by presenting citizens with clear choices between the two major parties... We find that ideological polarization among elites, along with ideological sorting and affective polarization among voters, all contribute to the probability of citizens' voting correctly... We conclude that to the extent that normative democratic theory supposes that people vote for candidates who share their interests, polarization has had a positive effect on voter decision-making quality, and thus democratic representation, in the United States."

There is also evidence for a more pessimistic interpretation, however. Studies of voter sorting have found that when citizens become aware of the parties' policy differences, they more often change their own policy preferences to match the views of their already-preferred side, than

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[11] By "potent" issue attitudes I mean only that there is a strong correlation between issue self-placements and vote choice, not that the former are the cause of this linkage.

change their partisanship to match their pre-existing policy views. (Carsey and Layman 2006; Levendusky 2009) These findings are consistent with other studies that find widespread following behavior in mass publics, e.g. partisans appearing to blindly follow party elites on major policy issues. (Lenz 2012; Slothuus and Bisgaard 2020) They are also consistent with experimental evidence showing elite polarization causing citizens to follow the issue positions of their preferred party (Druckman, Peterson, and Slothuus 2013; Slothuus and de Vreese 2010). If citizens often follow along with the policy views of the party they prefer for non-policy reasons, much of the learning of party positions that has taken place in the American mass public since the 1970s would not have improved the quality of democratic representation in the United States. The findings of Pierce and Lau would, if anything, indicate a degradation in the quality of representation, in that when it comes to policy views, the parties are leading a larger share of the public by their noses.

Whatever one's normative assessment, knowledge of the parties' policy stances has spread to a notably larger share of the public since the 1970s, most likely due to party elite polarization. Those with placement knowledge tend to have more stable and consistent issue attitudes. Hence, the nature of the mass public's belief systems has undergone some degree of meaningful change over the past five decades. Continuing to monitor the evolution of the public's placement knowledge and its consequences will remain a key task for scholars going forward.

Conclusion

This dissertation advances the state of knowledge in American public opinion along several dimensions. At the heart of these advances is the concept of *party placement knowledge*, or citizens' knowledge of which political party is more conservative on a given public policy issue. The dissertation's first key finding is that citizens who know where the parties stand on an issue tend to agree with their party and have stable views on that issue. Citizens who lack placement knowledge have policy opinions that are unstable over time. Because party placement knowledge conditions policy attitude stability, the dissertation is able to solve a decades-long puzzle in the public opinion literature over the source of instability in citizen policy opinions in surveys: this instability is not measurement error, rather it reflects real volatility in the opinions of the substantial share of citizens who do not know where the parties stand on policy issues. This finding reinforces normative concerns about the public's democratic competence raised by scholars who have long been troubled by the over-time instability of the public's policy attitudes.

The second key finding is that citizens' policy views are not only more stable but also more consistently liberal or conservative when they possess placement knowledge. The conditioning effect of placement knowledge on both issue attitude stability and consistency provides strong circumstantial evidence that when forming their policy opinions, citizens frequently *follow the positions of their preferred political side*, rather than choosing sides because of where the Democrats and Republicans already stand on salient policy issues, as in the "Folk Theory of Democracy." This finding also reinforces normative concerns about the public's capacity to hold its representatives accountable for their votes and stances on policy issues.

The third key finding is that party placement knowledge has spread to a greater share of the public since the 1970s, most likely as the result of party elite polarization. This polarization has produced ever louder and more consistent messages in the media on where the parties stand on policy issues, and those messages appear to have been absorbed by a growing share of the mass public. This spread of placement knowledge coincides with the spread of better organized or well-structured belief systems in the mass public, as elite ideology provides an anchor for the issue positions of a growing share of the public. This finding tempers to some extent the concerns raised in Chapter 1, insofar as it indicates that a larger share of the public has more stable policy attitudes. However the spread of knowledge between the 1970s and early 2010s should not blind us to the fact that some 40-50% of the public still lacks placement knowledge on most issues. Moreover, to the extent that more widespread issue attitude stability and consistency reflect *following* behavior, it is not at all clear that better organized belief systems are synonymous with greater democratic capacity, but would if anything reflect a degradation in this trait in the mass public.

Fourth and finally, this dissertation contributes to knowledge by laying out a superior measurement instrument for tapping party placement knowledge in the mass public. It shows that when employing simpler scales, lower education respondents show higher placement knowledge than when the traditional scales are utilized to tap this knowledge. Scholars would be well advised to use this alternative measure going forward, although it is also important to note that the difference it will make for placement knowledge in the public as a whole is likely moderate.

In sum, this dissertation demonstrates that party placement knowledge indexes key features of issue attitudes, and has been spreading over time (even as it has likely been modestly underestimated through time). As a result, scholars would be well advised to treat party placement knowledge as a separate domain of political knowledge, distinct from general political knowledge,

where it has previously been subsumed. Armed with this construct, this dissertation demonstrates, scholars are better equipped to understand the nature and evolution of mass belief systems.

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Appendix

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 onhis/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:

1   **Unemployment and Inflation**

Tick the box you think comes closest to **your own** views

| Getting people back to work should be the government's top priority | | | | | | | | | | | | Keeping prices down should be the government's top priority |

A   B   C   D   E   F   G   H   I   J   K

Tick the box you think comes closest to the **Conservative Party's** views

| Getting people back to work should be the government's top priority | | | | | | | | | | | | Keeping prices down should be the government's top priority |

A   B   C   D   E   F   G   H   I   J   K

Tick the box you think comes closest to the **Labour Party's** views

| Getting people back to work should be the government's top priority | | | | | | | | | | | | Keeping prices down should be the government's top priority |

A   B   C   D   E   F   G   H   I   J   K

2   **Taxation and Government Services**

Tick the box you think comes closest to **your own** views

| Put up taxes a lot and spend much more on health & social services | | | | | | | | | | | | Cut taxes a lot and spend much less on health & social services |

A   B   C   D   E   F   G   H   I   J   K

Tick the box you think comes closest to the **Conservative Party's** views

| Put up taxes a lot and spend much more on health & social services | | | | | | | | | | | | Cut taxes a lot and spend much less on health & social services |

A   B   C   D   E   F   G   H   I   J   K

Tick the box you think comes closest to the **Labour Party's** views

| Put up taxes a lot and spend much more on health & social services | | | | | | | | | | | | Cut taxes a lot and spend much less on health & social services |

A   B   C   D   E   F   G   H   I   J   K

3   **Redistribution**

Tick the box you think comes closest to **your own** views

| Make much greater efforts to make people's incomes more equal | | | | | | | | | | | | Be much less concerned about how equal people's incomes are |

A   B   C   D   E   F   G   H   I   J   K

Tick the box you think comes closest to the **Conservative Party's** views

| Make much greater efforts to make people's incomes more equal | | | | | | | | | | | | Be much less concerned about how equal people's incomes are |

A   B   C   D   E   F   G   H   I   J   K

Tick the box you think comes closest to the **Labour Party's** views

| Make much greater efforts to make people's incomes more equal | | | | | | | | | | | | Be much less concerned about how equal people's incomes are |

A   B   C   D   E   F   G   H   I   J   K

Nationalisation and Privatisation

Tick the box you think comes closest to **your own** views

| Nationalise many more private companies | | | | | | | | | | | | Sell off many more nationalised industries |

A   B   C   D   E   F   G   H   I   J   K

Tick the box you think comes closest to the **Conservative Party's** views

| Nationalise many more private companies | | | | | | | | | | | | Sell off many more nationalised industries |

A   B   C   D   E   F   G   H   I   J   K

Tick the box you think comes closest to the **Labour Party's** views

| Nationalise many more private companies | | | | | | | | | | | | Sell off many more nationalised industries |

A   B   C   D   E   F   G   H   I   J   K

European Union

Britain should:	Tick the box you think comes closest to **your own** views											Britain should:
Do all it can to unite fully with the European Union												Do all it can to protect its independence from the European Union
	A	B	C	D	E	F	G	H	I	J	K	

Britain should:	Tick the box you think comes closest to the **Conservative Party's** views											Britain should:
Do all it can to unite fully with the European Union												Do all it can to protect its independence from the European Union
	A	B	C	D	E	F	G	H	I	J	K	

Britain should:	Tick the box you think comes closest to the **Labour Party's** views											Britain should:
Do all it can to unite fully with the European Union												Do all it can to protect its independence from the European Union
	A	B	C	D	E	F	G	H	I	J	K	

Patterson 1976 Panel: Interviews in June and October

Four-item economic scale Social welfare spending

70. Please look at Card 9 (YELLOW). There is a lot of talk these days about the level of spending by the federal government for social welfare programs.

Some people feel that the current level of social welfare spending is necessary because almost everyone receiving this government help really needs it. Others feel a great deal of this social welfare spending is wasted because a lot of people receiving this government help don't deserve it.

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?

	Current Level of Social Welfare Spending Is Necessary				A Great Deal of Current Social Welfare Spending Is Wasted			Haven't Thought About It	
Yourself	1	2	3	4	5	6	7	8	26

ASK FOR EACH CANDIDATE THE RESPONDENT "KNOWS SOMETHING ABOUT."								Don't Know	
George Wallace	1	2	3	4	5	6	7	8	27
Morris Udall	1	2	3	4	5	6	7	8	28
Hubert Humphrey	1	2	3	4	5	6	7	8	29
Edward Kennedy	1	2	3	4	5	6	7	8	30
Jimmy Carter	1	2	3	4	5	6	7	8	31
Jerry Brown	1	2	3	4	5	6	7	8	32
Frank Church	1	2	3	4	5	6	7	8	33
Gerald Ford	1	2	3	4	5	6	7	8	34
Ronald Reagan	1	2	3	4	5	6	7	8	35

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.   19

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.   Col. #

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?

	Tax Cut to Benefit All Income Groups the Same				Tax Cut to Benefit Modest & Low Income Groups the Most			Haven't Thought About It	
Yourself	1	2	3	4	5	6	7	8	62

Price and Wage Controls

76. 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.   20

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

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?

	Wage & Price Control				No Wage & Price Control			Haven't Thought About It	
Yourself	1	2	3	4	5	6	7	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.   20

Some people want a federal job program, where the government _directly_ provides jobs to those who cannot otherwise find employment.   Col. #

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			Haven't Thought About It	
Yourself	1	2	3	4	5	6	7	8	59

SSI 2016 Panel

70

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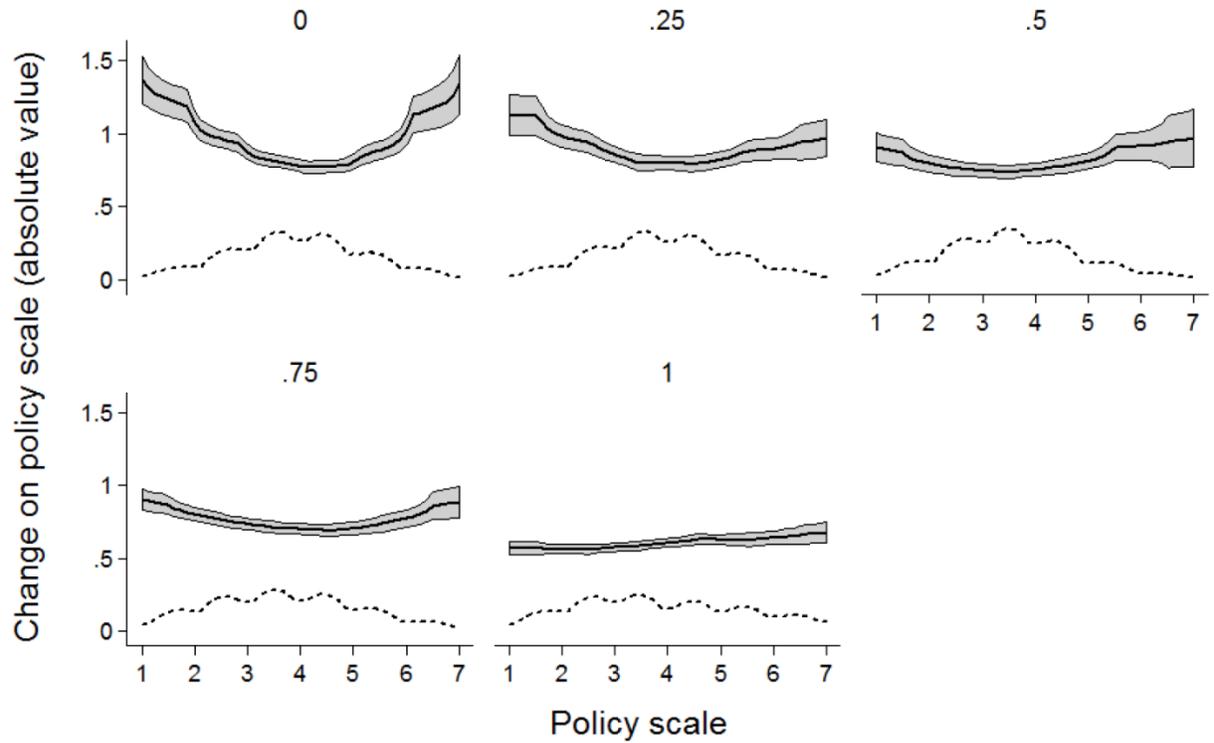
Note: Solid line shows the average change on multi-item scales (absolute value). Dashed line shows the distribution of policy responses on the multi-item scales in wave 1. Figure pools across all multi-item scales.

1.6: SCATTER PLOTS FOR EACH MULTI-ITEM POLICY SCALE

FIGURE A1.6.1
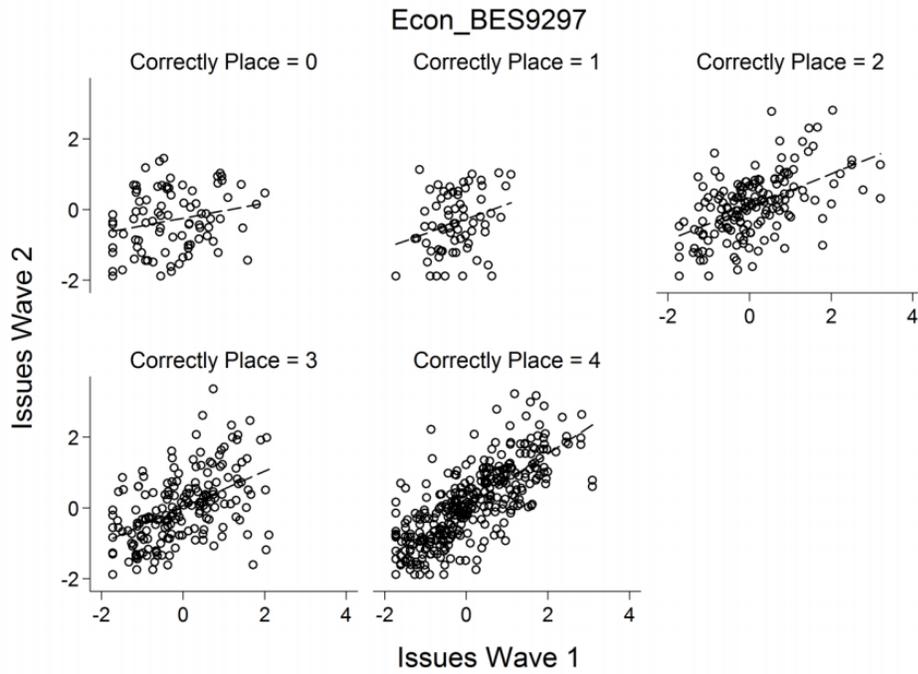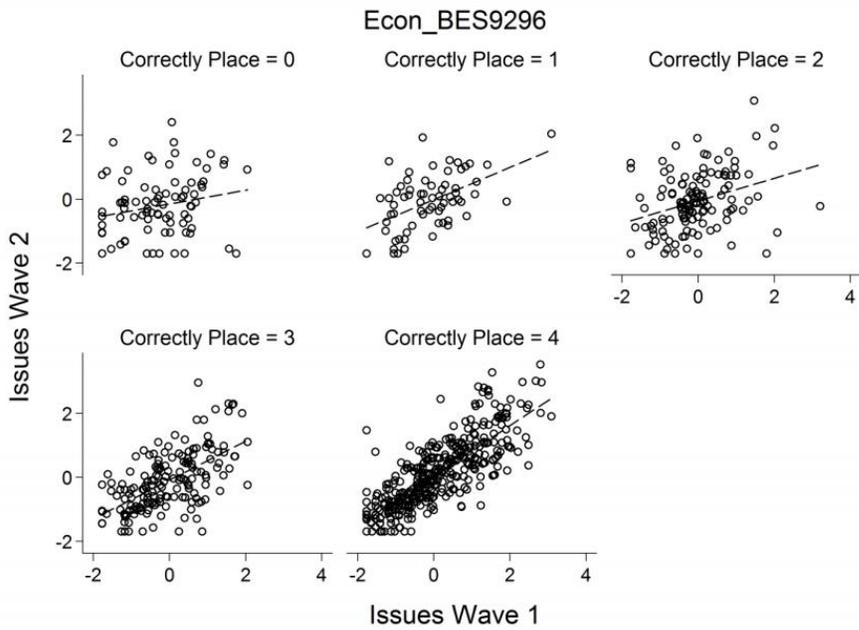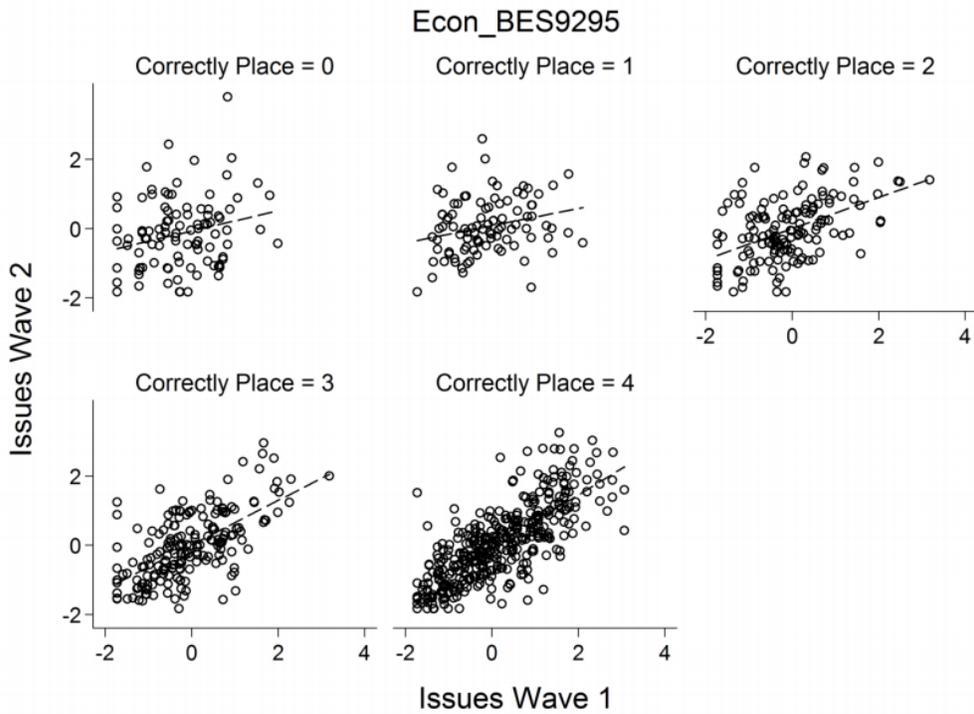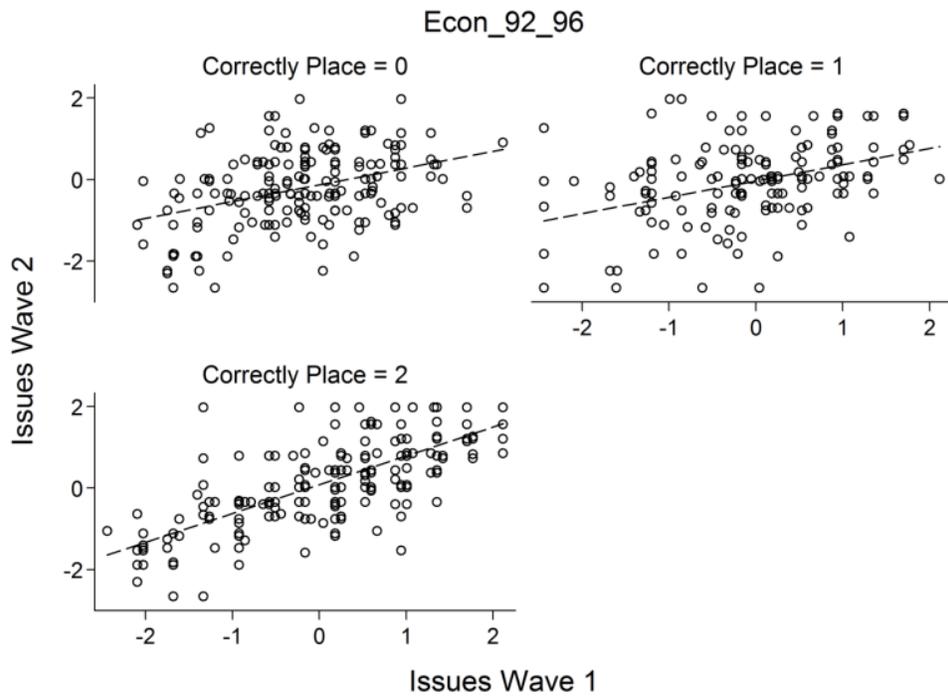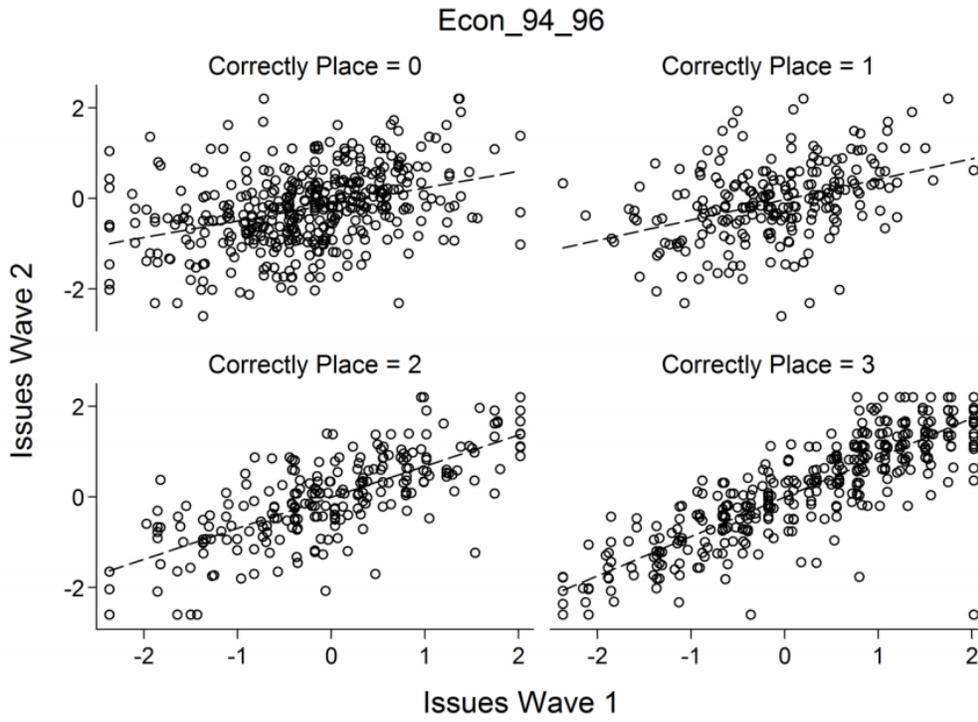
All_92_96

Issues Wave 2

Correctly Place = 0   Correctly Place = 1   Correctly Place = 2

Correctly Place = 3   Correctly Place = 4   Correctly Place = 5

Issues Wave 1

FIGURE A1.6.2

Econ_BES9701

Correctly Place = 0   Correctly Place = 1   Correctly Place = 2

Issues Wave 2

Correctly Place = 3   Correctly Place = 4

Issues Wave 1

FIGURE A1.6.3

Econ_BES9297

Correctly Place = 0   Correctly Place = 1   Correctly Place = 2

Correctly Place = 3   Correctly Place = 4

Issues Wave 2

Issues Wave 1

FIGURE A1.6.4

Econ_BES9296

Correctly Place = 0   Correctly Place = 1   Correctly Place = 2

Correctly Place = 3   Correctly Place = 4

Issues Wave 2

Issues Wave 1

FIGURE A1.6.5

Econ_BES9295

FIGURE A1.6.6

Econ_92_96

FIGURE A1.6.7

Econ_94_96

FIGURE A1.6.8

Econ_76

FIGURE A1.6.9

Econ_SSI1516

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 Chapter 1, 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 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 main body. 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.

```
------------------------
              |  Place
              |  correctly
      study   |  No    Yes
------------+-----------
   All_92_96 | 0.35   0.58
   Econ_7276 | 0.30   0.54
     Econ_76 | 0.62   0.72
   Econ_92_96 | 0.31   0.48
   Econ_94_96 | 0.30   0.56
Econ_BES9295 | 0.53   0.61
Econ_BES9296 | 0.56   0.63
Econ_BES9297 | 0.53   0.60
Econ_BES9701 | 0.50   0.65
Econ_SSI1516 | 0.44   0.62
              |
       Total | 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.

```
---------------------------------------------
             | General knowledge quintiles
      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.

```
---------------------------------------------
             | Percent placement correct
       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 | 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
             |
         Avg. | 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.

```
---------------------------------------------
             | General knowledge quintiles
       study |    1     2     3     4     5
-------------+-------------------------------
    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:
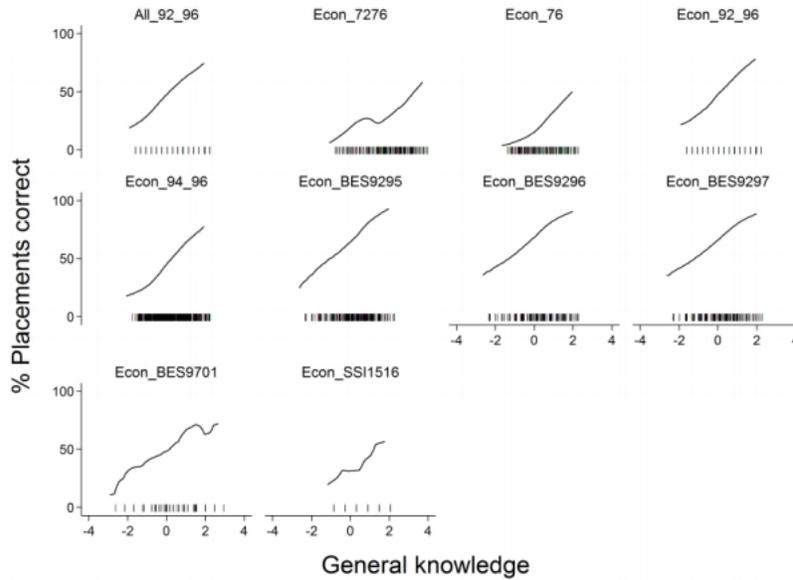
```
---------------------------------------------------------------------
              |        General political knowledge deciles
        study |   1     2     3     4     5     6     7     8     9    10
 -------------+------------------------------------------------------
    All_92_96 |  19%   32%   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 |  18    23    30    37    39    60    58    73    67    89
 Econ_BES9295 |  38    51    57    62    68    75    74    83    89    96
 Econ_BES9296 |  41    52    59    66    73    80    81    90          95
 Econ_BES9297 |  40    52    58    63    69    76    81    86          93
 Econ_BES9701 |  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 main body, 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 chapter, 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:
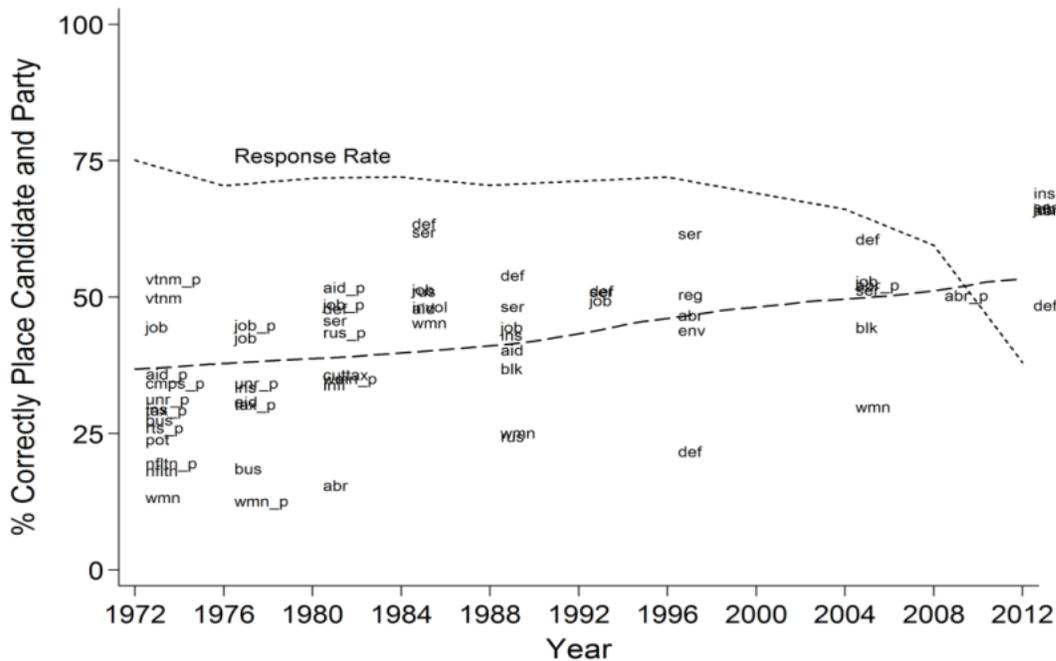
Note: This figure shows the percent correctly placing the presidential candidates relative to each other (the Democrat as more liberal than the Republican) and the parties for all the issues on which the ANES asked for presidential candidate placements and party placements. We categorize respondents 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

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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?

	Percent placing both candidates at the opposite extreme			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 7	Self at 1 or 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 main body, 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 ($.75 \times 3/8 + 0.08 \times 6/8 + .19 \times 3/8 * 100 = 41\%$).

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 chapter, 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 in wave 1	Place positions correctly on single item	
	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

Agree with party in wave 1	Place positions correctly on single item	
	No	Yes
Treating midpoint responses as not crystallized		
No	44%	27%
Yes	71	82
Treating midpoint responses as crystallized		
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 in wave 1	Place positions correctly on single item	
	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 main body)

Number of correct placements	Number of items in scale				Implied true correlation
	1	2	3	4	
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
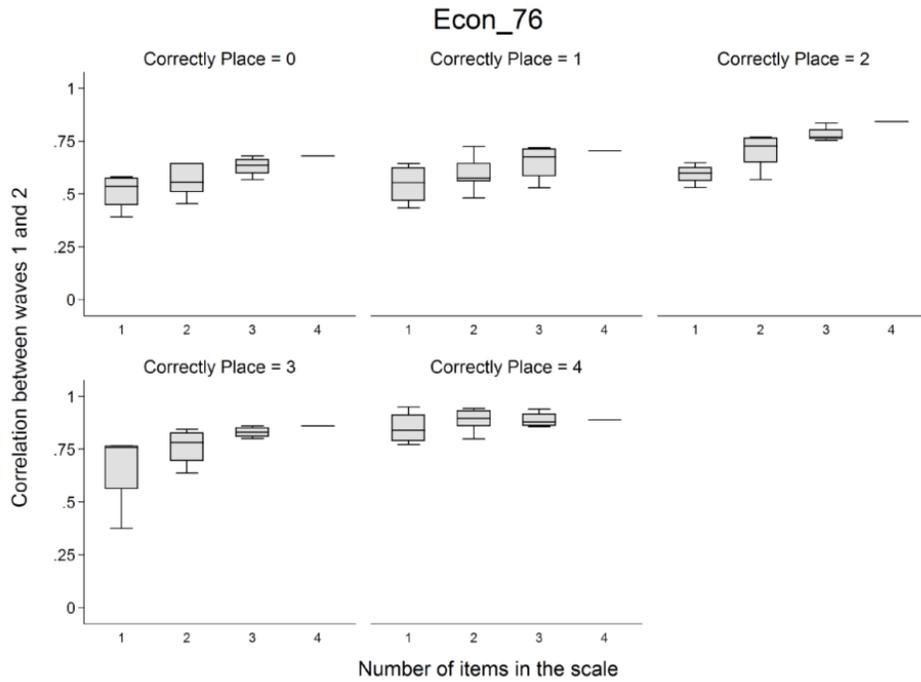
Figure A1.18.2: BES 1997-2001 panel
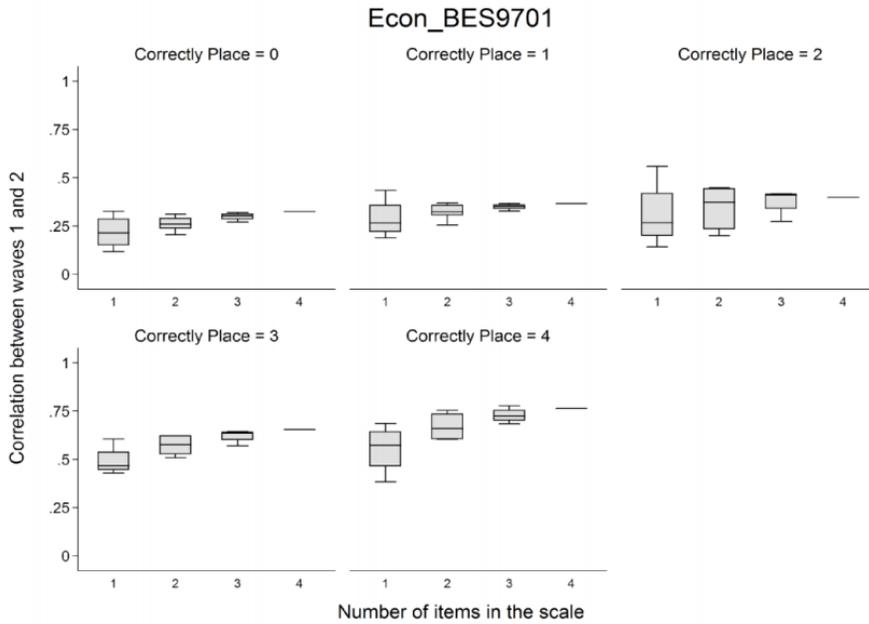

Figure A1.18.3: BES 1992-97 panel
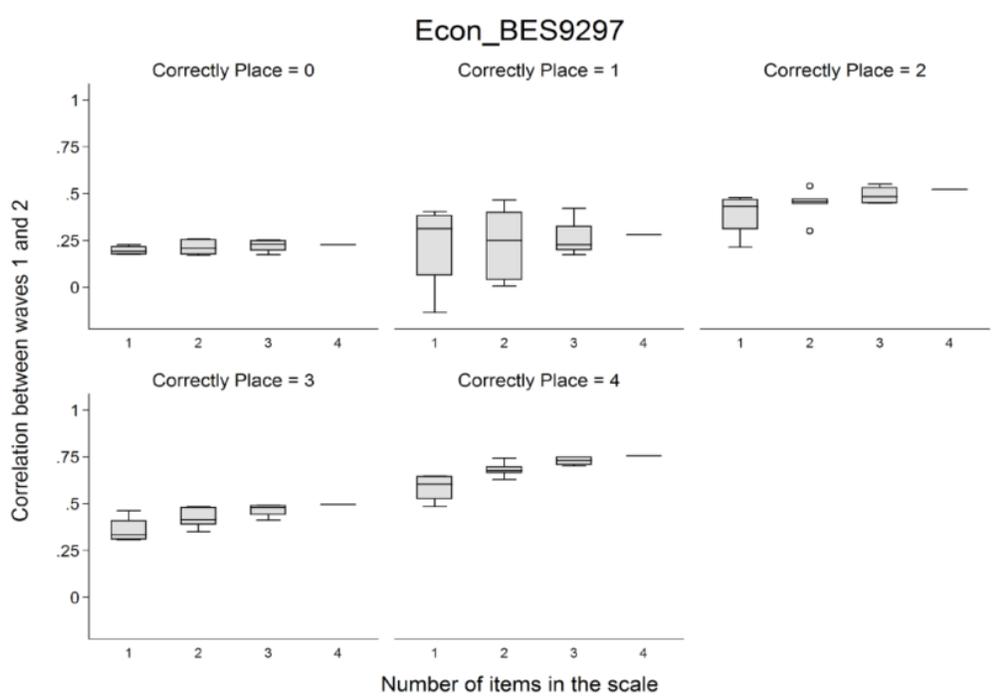
Figure A1.18.4: BES 1992-96 panel
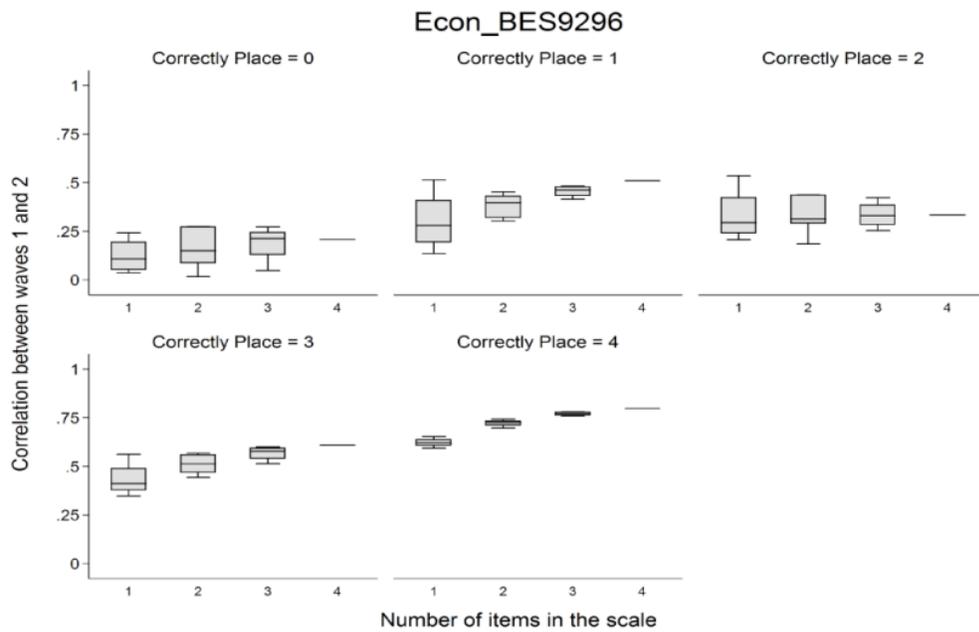

**Figure A1.18.5: BES 1992-95 panel**

Econ_BES9295
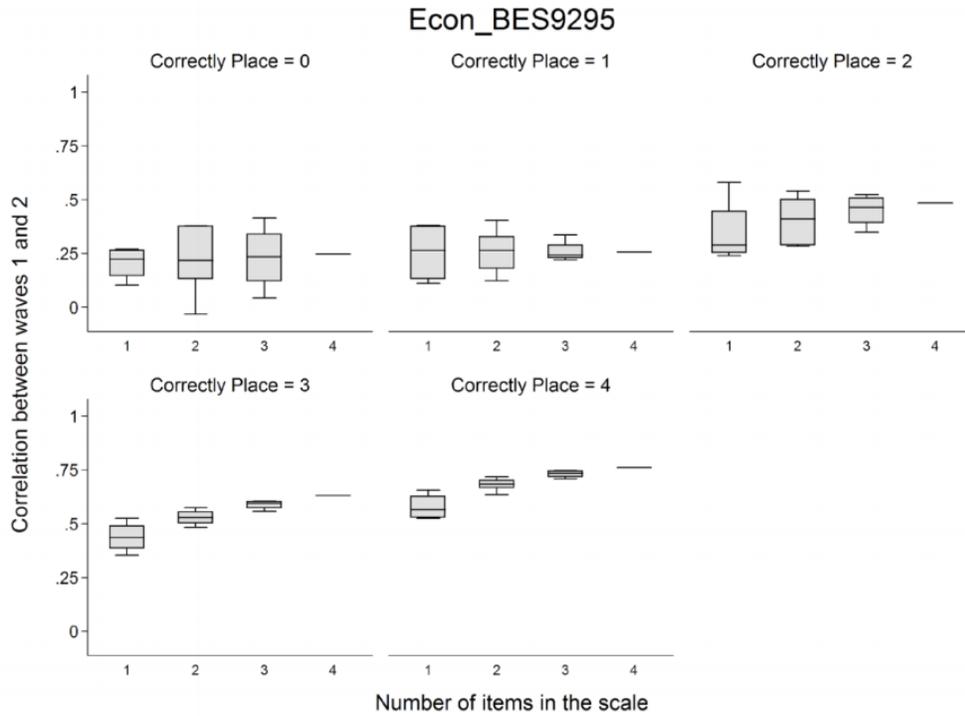
Figure A1.18.6: ANES 1972-76 panel

Econ_7276
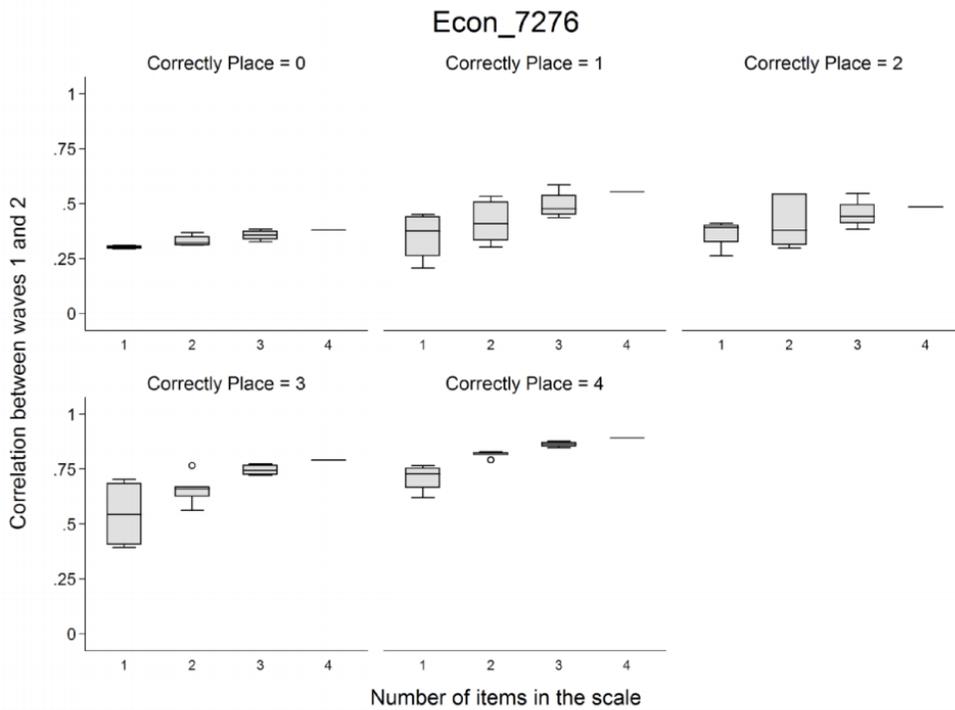
1.19: STABILITY AT THE EXTREMES OF POLITICAL KNOWLEDGE

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 Chapter 1 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:
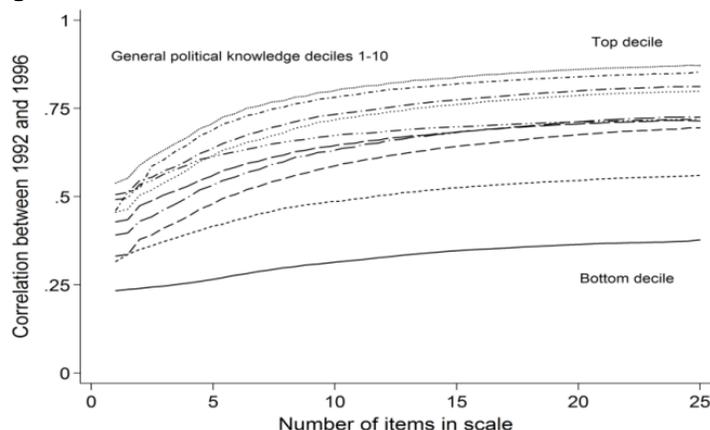
1.20: REPLICATION WITH ACHEN (1975) MEASURE

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 ($p < 0.000001$).

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 main body. 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

Placement knowledge	Economic scale correlations 1992 and 1997		N col 1	N col 2
	(1) Placement knowledge 1992 and 1997 (Same wave)	(2) Placement knowledge 1995 and 1996 (Different wave)		
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 A figure: Mean policy position by year (1970–2010), showing Strong Republicans (dotted) at top to Strong Democrats (solid) at bottom. Y-axis ranges from 1 (lib) to 7 (con).
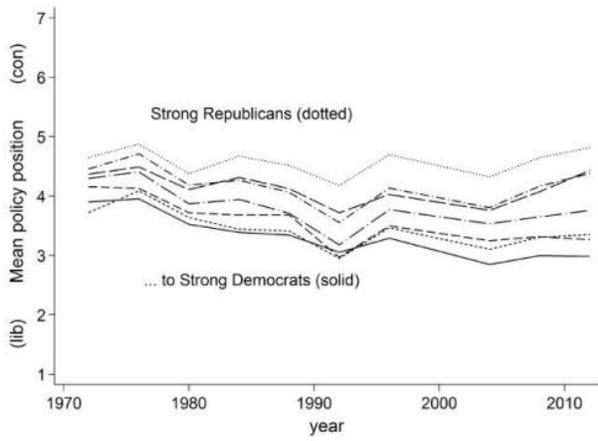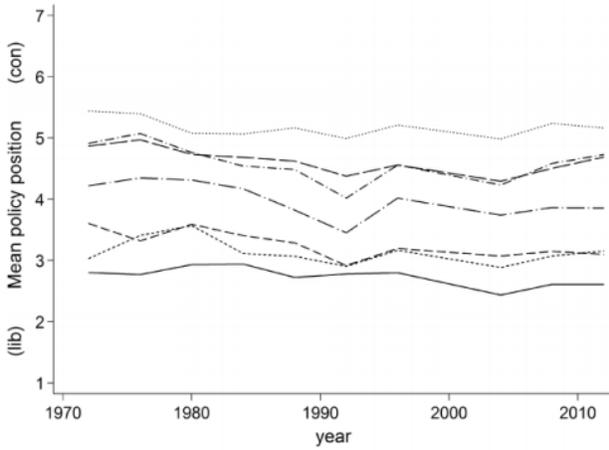
Panel B

Panel C
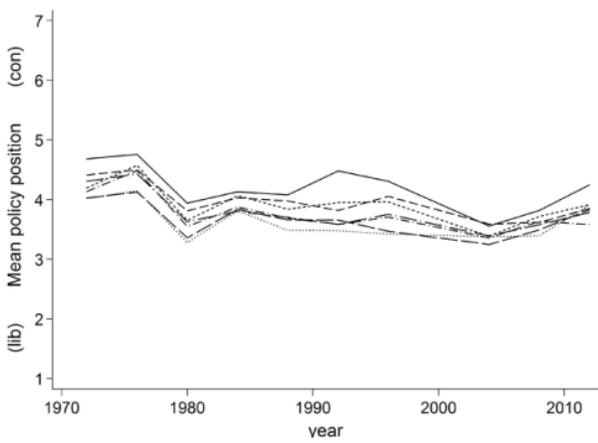
2.1: Regression analysis of survey experiment results with covariates

Table 2.1.1: Placement knowledge ANES vs. Trichotomized formats

	Dependent variable:					
	Placement items correct					
	No college		Some college		BA+	
	(1)	(2)	(3)	(4)	(5)	(6)
Trichotomized	0.16*** (0.05)	0.16*** (0.05)	0.01 (0.02)	0.01 (0.02)	-0.003 (0.01)	-0.01 (0.01)
general political knowledge		0.59*** (0.10)		0.34*** (0.05)		0.28*** (0.03)
sexmale		0.004 (0.05)		0.001 (0.02)		0.01 (0.01)
sexother		-0.11 (0.19)		0.07 (0.15)		-0.34*** (0.12)
group_age_survey[30,40)		-0.13 (0.08)		-0.09*** (0.03)		-0.02 (0.02)
group_age_survey[40,50)		-0.07 (0.12)		-0.07* (0.04)		-0.01 (0.02)
group_age_survey[50,64)		-0.21*** (0.07)		-0.06** (0.03)		-0.07*** (0.02)
group_age_survey[64,Inf)		-0.24** (0.09)		-0.09*** (0.03)		-0.03 (0.02)
raceLatino		0.01 (0.06)		-0.06** (0.03)		-0.10*** (0.02)
raceAsian		-0.03 (0.08)		-0.12*** (0.04)		-0.04** (0.02)
raceAfrican American		0.05 (0.14)		0.05 (0.06)		-0.04 (0.03)
raceOther		-0.04 (0.07)		-0.05 (0.03)		-0.04** (0.02)
Constant	0.68*** (0.04)	0.35*** (0.08)	0.83*** (0.01)	0.67*** (0.04)	0.90*** (0.01)	0.72*** (0.03)
Observations	129	128	461	460	885	879
R^2	0.07	0.36	0.0003	0.17	0.0001	0.13
Adjusted R^2	0.06	0.29	-0.002	0.14	-0.001	0.12
Residual Std. Error	0.29 (df = 127)	0.26 (df = 115)	0.23 (df = 459)	0.22 (df = 447)	0.18 (df = 883)	0.17 (df = 866)
F Statistic	9.13*** (df = 1; 127)	5.32*** (df = 12; 115)	0.15 (df = 1; 459)	7.39*** (df = 12; 447)	0.05 (df = 1; 883)	11.11*** (df = 12; 866)

Note: *p**p***p<0.01

2.2: Alternative Placement Format Experiment July 2016

In the July 2016 IGS Survey, I randomly assigned half of the full sample of 2,112 respondents to one of two types of party issue placement questions, to test whether question format affects the measurement of placement knowledge.

One group (541 cases) was presented with the standard ANES issue placement questions, which ask respondents to place first one of the major political parties on a seven-point issue scale shown by itself on a single page, and then to place the other major party on the same scale *on the following* page. I call these *sequential placement* items. The second group (517 cases) was asked to place the two parties on the same seven point scale, *at the same time* on a single page. I refer to these as *simultaneous placement* items. The hypothesis motivating this test was that asking for party placements with the parties listed side-by-side on the same scale, rather than asking for the party placements sequentially one after the other, would increase measured placement knowledge by simply providing a cue to respondents to make a direct comparison of the parties on the issue being queried.

Question format had a small but notable effect on measured placement knowledge in this survey experiment. The mean proportion of correct placements was 2 to 5 percentage points higher in the simultaneous placement condition than in the sequential placement condition (See table below).

Table 2.2.1:
Proportion of sample correctly identifying Dem as more liberal than Rep Party

Issue	Question Type		
	(1) sequential placements	(2) simultaneous placements	(2)-(1)
abortion	0.78	0.82	0.05
gun control	0.78	0.80	0.02
social security	0.65	0.70	0.05
environment	0.68	0.73	0.05
mean	0.72	0.76	0.04
N	541	517	

The difference in the mean proportion of correct placements of 4 percentage points between the two question formats (0.76 vs 0.72) was statistically significant at the.05 level (p=0.011, see test of difference in means below).

```
Table 2.2.2: Two-sample t test with unequal variances
-------------------------------------------------------------------------------
Variable |    Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+---------------------------------------------------------------------
pk_4_seq |    541    .7208872    .0134188    .3121134    .6945278    .7472467
pk_4_sim |    517    .7640232    .0132324    .3008735    .7380272    .7900192
---------+---------------------------------------------------------------------
combined |  1,058     .741966    .0094471    .3072857    .7234287    .7605032
---------+---------------------------------------------------------------------
diff |            -.043136    .0188457                -.0801153   -.0061567
-------------------------------------------------------------------------------
diff = mean(pk_4_seq) - mean(pk_4_sim)                            t =  -2.2889
Ho: diff = 0                     Satterthwaite's degrees of freedom =  1055.92

Ha: diff < 0                       Ha: diff != 0                    Ha: diff > 0
Pr(T < t) = 0.0111        Pr(|T| > |t|) = 0.0223          Pr(T > t) = 0.9889
```