

The Importance of Knowing “What Goes with What”: Reinterpreting the Evidence on Policy Attitude Stability

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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.

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, Ansolabe-

here, 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

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politically sophisticated voters and politically unsophisticated voters, using measures of general political knowledge or participation in politics as a proxy for sophistication. If the observed randomness in opinion stems from measurement, both types of survey respondents should exhibit similar levels of opinion stability. If the randomness is in the opinions, we should observe greater instability among less sophisticated individuals. This test, however, has yielded mixed results. Some studies find little difference in opinion stability between sophisticated and unsophisticated respondents (Achen 1975; Ansolabehere et al. 2008; Erikson 1979). Other studies find differences, although they are often not large (Converse 2000; Converse and Pierce 1986; Dean and Moran 1977; Feldman 1989; Kinder and Kalmoe 2017; Zaller 1990). These mixed results have led some researchers to conclude that observed opinion instability arises primarily from measurement error.

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

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

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

in the opinions of the large share of the public that has failed to absorb elite ideology.

WHAT GOES WITH WHAT

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

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

To measure knowledge of what goes with what, we use questions that asked respondents to place parties and can-

dicates 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 app. sec. 1 for details and excluded panels; the appendix is available online). We focus on the first and last waves of American National Election Study (ANES) panels, including 1972–76 and 1992–96; the British Election Studies’ (BES) 1992–97 and 1997–2001 panels; and the Patterson 1976 panel (Patterson 1980). We also present data from a two-wave survey panel we fielded through Survey Sampling International (SSI) in December 2015 and March 2016, which contains more placement questions than previous surveys.

To measure party-issue placement knowledge on an issue, we use the simple rule outlined above. We count respondents as knowing the candidates’ or parties’ issue positions if they placed the liberal/Democratic candidate or party at a more liberal position on a policy scale than the conservative/Republican candidate or party (Carpini and Keeter 1993; Lenz 2012; Lewis-Beck et al. 2008; Sears and Valentino 1997; Sniderman and Stiglitz 2012). We classify respondents who placed the candidates or parties at the same point on the scale, and those who said “don’t know” for either or both candidates, as ignorant of the relative policy positions. The findings in this article, however, are robust to other coding decisions (see app. sec. 2.3). 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 (Anscombe 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 Anscombe 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 (app. sec. 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 app. sec. 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 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

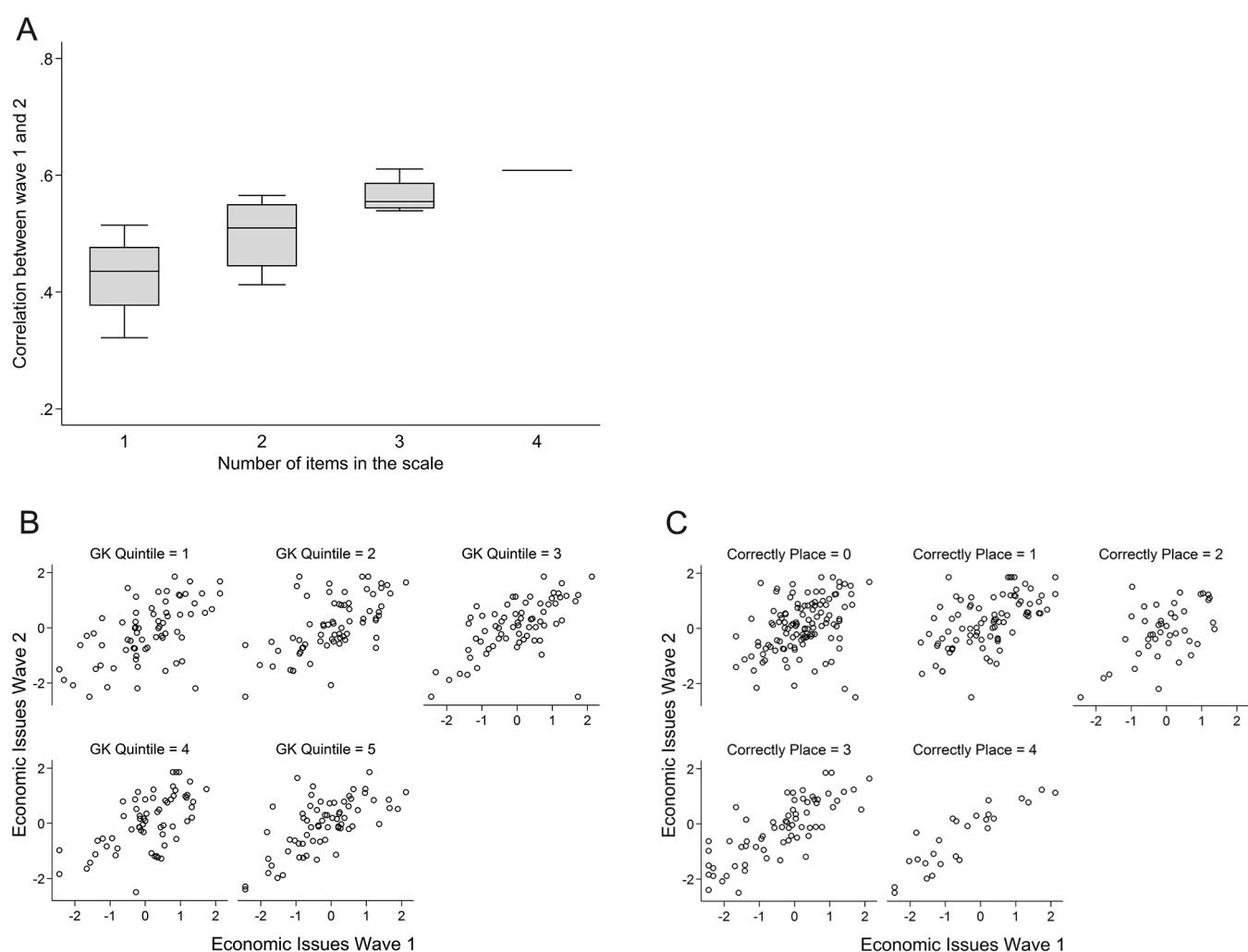


Figure 1. Case study: four-item economic scale in the ANES 1972–76 panel. A, Stability by number of items in the scale; B, stability by general political knowledge quintiles; C, stability by placement knowledge. A shows one line for the scale with four items because we can only make one scale of four items; B and C plot respondents' four-item economic scale scores. $N = 475$.

this pattern as supporting the measurement error account, but averaging will 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 1B, we plot each respondent’s economic issues score in 1976 (*y*-axis) against that respondent’s score in 1972 (*x*-axis), using all four items to calculate the scores. We do so for each quintile of general political knowledge, relying on a 19-item, factual knowledge scale (Cronbach’s $\alpha = 0.75$). The plots show little increase in opinion stability as general political knowledge increases, with the correlations rising inconsistently across the quintiles from 0.57 to 0.67. This increase is consistent with Ansolabehere et al. (2008, 225), who found an average difference in correlations of 0.15 between respondents with high and low general political knowledge. It is also consistent with a measurement error account of instability, since even politically knowledgeable individuals exhibit moderate instability.

Finally, we turn to our hypothesis about the source of instability: does the instability arise primarily from respondents’ ignorance of elite ideology? In figure 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, we repeat this exercise in panels that meet the requirements noted above. The statistics shown here are the same as shown in figure 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 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

Table 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 app. sec. 2. 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 app. sec. 2.6 presents the full results.

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 (app. sec. 2.6 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 noncorrelational 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 1C and one that holds up across the panels.¹ 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 app. sec. 2.3).

These results hold up across a wide range of issues. Table 1 presented mostly economic policy items because panel surveys rarely contain multiple items with party or candidate placements in other issue domains. Figure 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 2 reveals, hold moderately stable views on

“easy issues” (Carmines and Stimson 1989), such as abortion, or on issues involving salient social groups, such as busing to desegregate schools.

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

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

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 app. sec. 3.1). For the panels we are analyzing here, table 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 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 (sec. 3.2). In sum, these findings peg the share

1. Interestingly, the variance pattern is complex. Consistent with Broockman (2016), we find that low placement knowledge respondents have higher variance responses across single items (compared to those with high placement knowledge) but lower variance responses on 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).

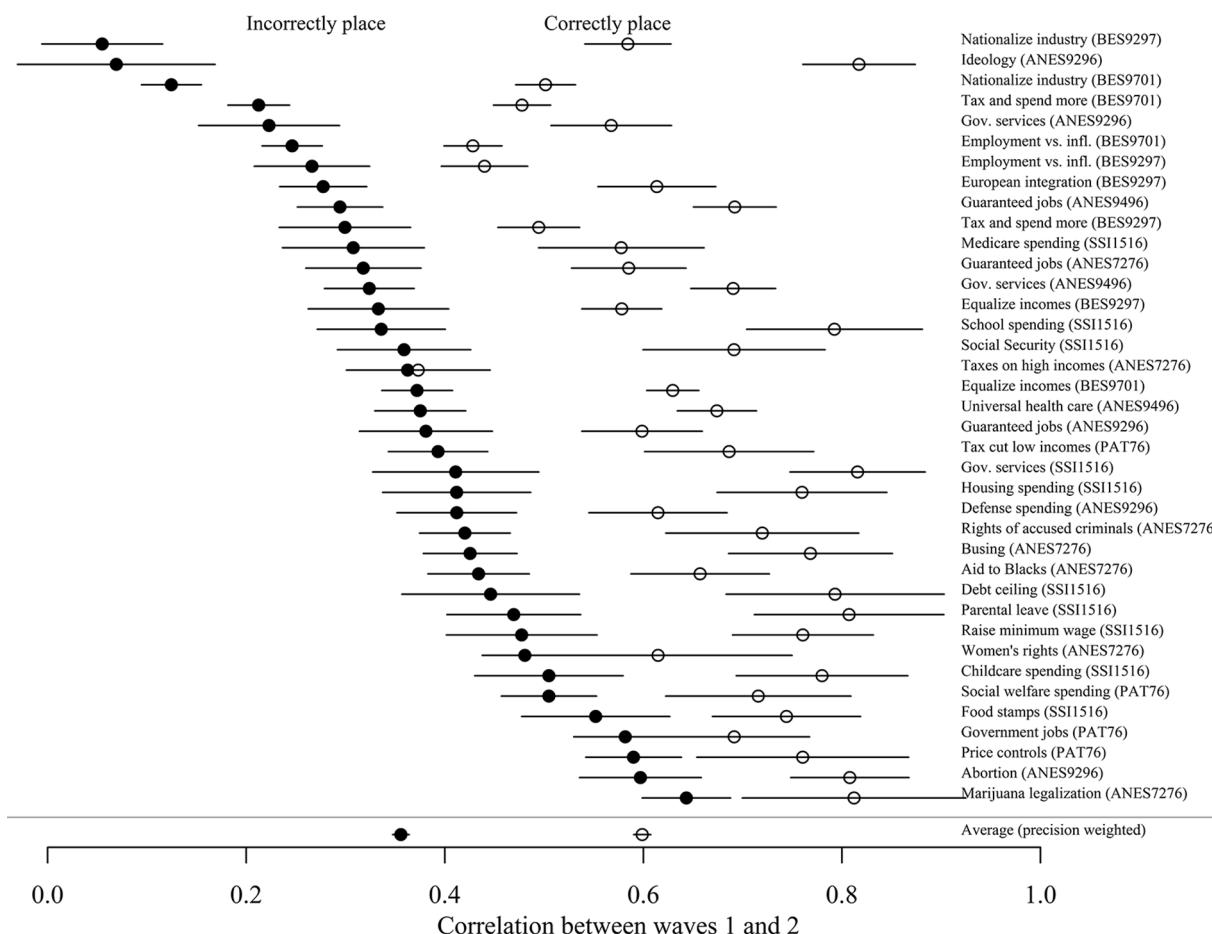


Figure 2. Stability correlations by placement knowledge for individual items. Correlation between respondents' views on the item in wave 1 and wave 2 by whether they correctly placed the parties or candidates on that item. Using Fisher's transformation, the error bars show 68% confidence intervals (1 SE). For comparison, the correlation between respondents' partisan identification in two waves is typically between 0.75 and 0.85 in the ANES panels (Anscombe 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.

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

Table 2. Percentages of Panel Respondents by Placement Knowledge

Panel	Number of Correct Issue Placements						<i>N</i>
	0	1	2	3	4	5	
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. Percentage of respondents who fall into each level of placement knowledge. Results are similar with alternative measures of placement knowledge (see app. sec. 2.3).

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 app. sec. 2.1 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.

We begin by pitting general political knowledge against placement knowledge with the multi-item scales. Table 3 presents the findings. Each row shows the results of two

regressions, one using the crystallized attitudes measure as the dependent variable and the other using the absolute change in attitudes measure as the dependent variable. The first row of table 3 presents the estimates for general political knowledge. It shows that, for the crystallized attitudes measure of stability, an additional correct item increases the probability of remaining on the same side of the scale by 0.02. Although this might seem small, shifting from the bottom to the top of a 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 $0.4 (2 \times 4 \times .05)$ 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 ($p < 5.4 \times 10^{-14}$), 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.

Table 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)	.05 (.00)	.11	8,116	-.02 (.00)				.02	7,956
Placement knowledge no. of items correct	.01 (.00)	.04 (.00)	.54 × 10 ⁻¹⁴	.14	8,116	-.04 (.00)			.04	7,956
Both				.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)	.08 (.00)	.05	39,364	-.03 (.00)				.03	37,027
Placement knowledge no. of items correct	.01 (.00)	.07 (.00)	.57 × 10 ⁻⁶³	.07	39,364	-.02 (.00)	-.21 (.01)	3.0 × 10 ⁻⁴²	.04	37,027
Both				.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)	.42 × 10 ⁻³²	.06	23,675	-.02 (.00)	-.16 (.01)	7.0 × 10 ⁻²³	.05	22,669
Respondent fixed effects06 (.00)		.27	23,675	...	-.13 (.01)	.27	22,669	
Plus individual, other party, neutral candidate/										
party preference coded 0 on treatment	...									
Plus initially agree with your party or										
candidate coded 1 on treatment	...									

Note. Diff. = difference. Each row presents two separate regressions: one with crystallized attitudes as the dependent variable and one with absolute change 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 Anscombe 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.

The next three rows of table 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.²

Next, table 3 examines whether this finding holds within respondent, using respondent fixed effects. That is, we examine whether respondents who correctly place the parties/candidates on item x but not on item y hold stable views on item x but not on item y . By only examining within-respondent variation, we can rule out alternative explanations based on any fixed characteristics of respondents, such as how attentive they are to survey questions, how old they are, how partisan they are, and so on. Of course, we can only conduct this analysis among respondents who know the party/candidate positions on some issues but not others, so we exclude those who correctly place them on none or all of the items. (Note that in these models, we can no longer include general political knowledge because it does not vary within respondent.) Row 7 of table 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 ($2 \times 1 \times 0.06$), a moderate effect given the within-respondent standard deviation on crystallized attitudes of 0.42. Placement knowledge's effect therefore holds within respondent. Attentiveness to the survey or other fixed characteristics cannot account for this finding.

Finally, table 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 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 3 visually displays the item-level correlations for “agrees” and “disagrees.” 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 “agrees” 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

2. 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 app. sec. 5.6).

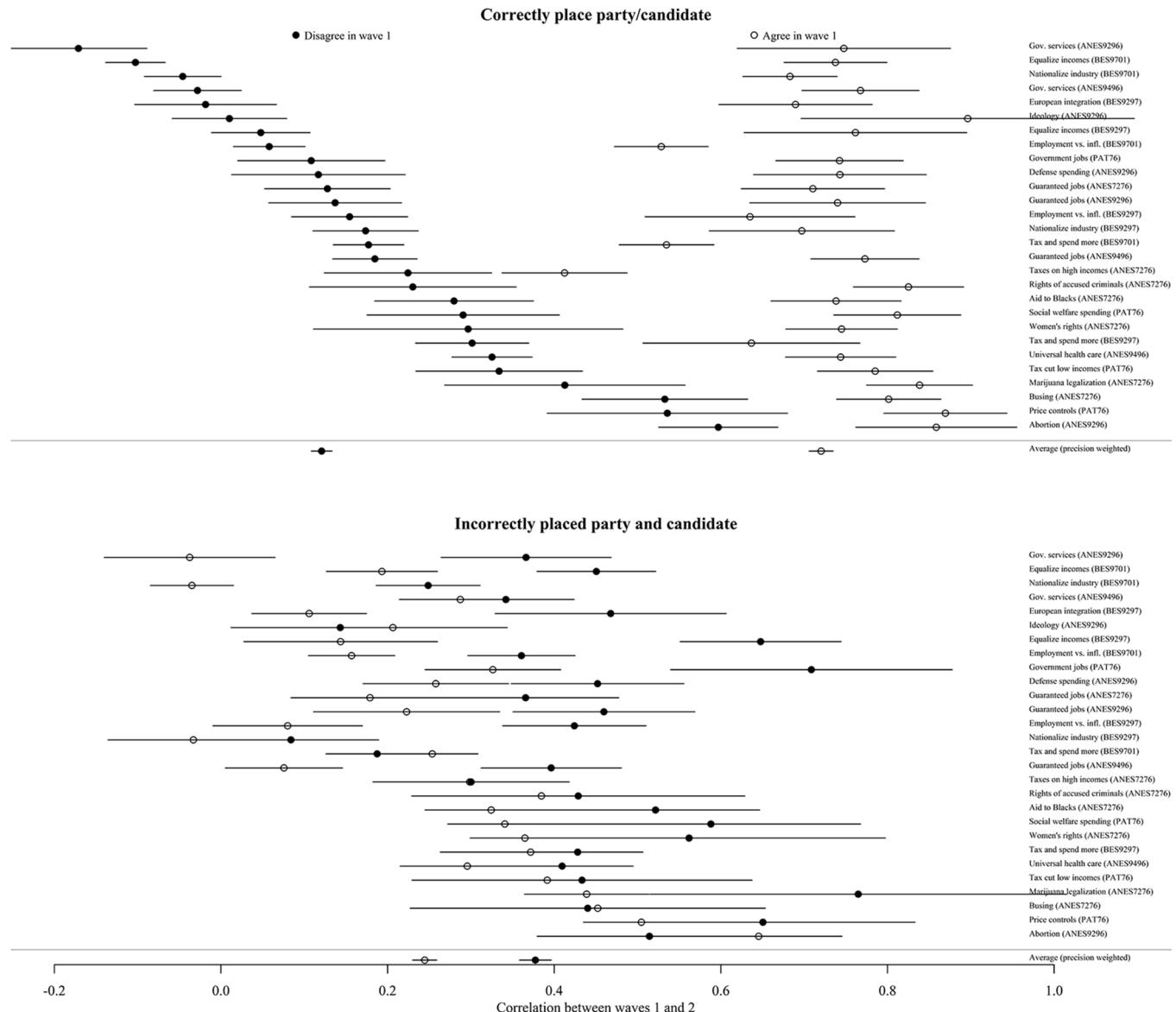


Figure 3. Attitude stability by placement knowledge and agreement with party or candidate on single items among partisans. Correlation between respondents' views on the item in wave 1 and wave 2 by whether they correctly placed the parties or candidates on that item. Using Fisher's transformation, the 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.

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, artifactualy 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 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 app. sec. 5.5 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).

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 “agrees” 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, we find, do not appear to benefit those lacking placement knowledge. Figure 4A presents attitude stability by number of correct placement items and by the number of scale items. It does so for all of the four-item scales shown in table 1 and, in each subplot, shows box

and whisker plots for all possible scales of lengths 1–4. Figure 4B presents plots for the 10-item scale in the 2015–16 SSI panel we conducted, which included 10 economic items.

The effect of adding scale items, the plots show, depends on respondent placement knowledge. Those lacking this knowledge (Correct Place = 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 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 app. sec. 5.1 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

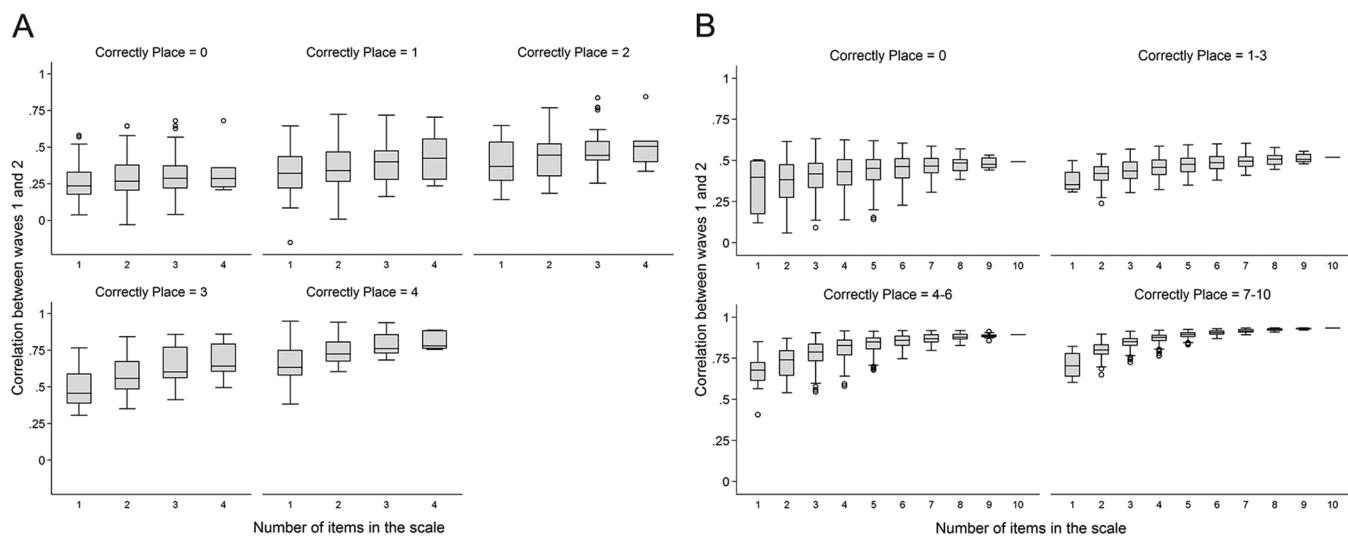


Figure 4. Stability by placement knowledge and number of scale items. A, All four-item economic scales pooled; B, SSI 2015–16 10-item panel. Subplots show the results by the number of correct placements. In A, we include six two-wave panels with a total $N = 5,975$ (see table 2 for the list). We show the plot for each of the six panel waves separately in app. sec. 5.2. In B, $n = 336$, $n = 136$, $n = 92$, and $n = 139$, from lowest to highest correct placement categories, respectively.

Table 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	.70	.70	.71	.71	.71	.72	.72	.72	.70
4	.37	.48	.51	.55	.58	.61	.63	.65	.67	.68	.68	.69	.70	.71	.72	.73	.73	.74	.74	.74	.75	.75	.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

Note. Correlation between the same 25 ANES (American National Election Study) economic items in 1992 and 1996 by general political knowledge quintiles and by the number of items in the scale. Following Anscombe 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 report the average of these correlations for each number of scale items. $N = 534$. See app. sec. 5.3 for more details.

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 4 (see also app. sec. 5.3, 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 pool respondents access to answer survey questions and (2) reduces noise from those who lack placement knowledge. To formalize this point, let \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 (Anscombe et al. 2008, 224). We would have especially liked to analyze additional items on policies that benefit particular groups, such as the poor or ethnic minorities.

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

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REFERENCES

- Abramowitz, Alan. I. 1978. "Impact of a Presidential Debate on Voter Rationality." *American Journal of Political Science* 22 (3): 680–90.
- Achen, Christopher H. 1975. "Mass Political-Attitudes and Survey Response." *American Political Science Review* 69 (4): 1218–31.
- Achen, Christopher H., and Larry M. Bartels. 2016. *Democracy for Realists: Why Elections Do Not Produce Responsive Government*. Princeton, NJ: Princeton University Press.
- Anscombe, Stephen, Jonathan Rodden, and James M. Snyder. 2008. "The Strength of Issues: Using Multiple Measures to Gauge Preference Stability, Ideological Constraint, and Issue Voting." *American Political Science Review* 102 (2): 215–32.
- Asch, Solomon E. 1956. "Studies of Independence and Conformity." Pt. 1, "A Minority of One against a Unanimous Majority." *Psychological Monographs: General and Applied* 70 (9): 1–70.
- Broockman, David E. 2016. "Approaches to Studying Policy Representation." *Legislative Studies Quarterly* 41 (1): 181–215.
- Broockman, David E., and Daniel M. Butler. 2014. "Testing Theories of Elite Influence in Mass Publics: Randomized Field Experiments with Elite Communication." Unpublished manuscript.
- Bullock, John G. 2011. "Elite Influence on Public Opinion in an Informed Electorate." *American Political Science Review* 105 (3): 496–515.
- Campbell, Angus, Philip E. Converse, Warren E. Miller, and Donald E. Stokes. 1960. *The American Voter*. Chicago: University of Chicago Press.
- Carmines, Edward, and James Stimson. 1989. *Issue Evolution: Race and the Transformation of American Politics*. Princeton, NJ: Princeton University Press.
- Carpini, Michael X. Delli, and Scott Keeter. 1993. "Measuring Political Knowledge: Putting First Things First." *American Journal of Political Science* 37 (4): 1179–206.
- Carsey, Thomas M., and Geoffrey C. Layman. 2006. "Changing Sides or Changing Minds?" *American Journal of Political Science* 50 (2): 464–77.
- Cohen, Geoffrey L. 2003. "Party over Policy: The Dominating Impact of Group Influence on Political Beliefs." *Journal of Personality and Social Psychology* 85 (5): 808–22.
- Converse, Philip E. 1964. "The Nature of Belief Systems in Mass Publics." In David E. Apter, ed., *Ideology and Discontent*. New York: Free Press.
- Converse, Philip E. 1980. "Comment: Rejoinder to Judd and Milburn." *American Sociological Review* 45 (4): 644–46.
- Converse, Philip E. 2000. "Assessing the Capacity of Mass Electorates." *Annual Review of Political Science* 3:331–53.
- Converse, Philip E., and Roy Pierce. 1986. *Political Representation in France*. Cambridge, MA: Harvard University Press.
- Dean, Gillian, and Thomas Moran. 1977. "Measuring Mass Political Attitudes: Change and Uncertainty." *Political Methodology* 4 (4): 383–424.
- Erikson, Robert S. 1979. "SRC Panel Data and Mass Political-Attitudes." *British Journal of Political Science* 9 (1): 89–114.
- Feldman, Stanley. 1989. "Measuring Issue Preferences." *Political Analysis* 1:25–60.
- Feldman, Stanley. 1995. "Answering Survey Questions: The Measurement and Meaning of Public Opinion." In Milton Lodge and Kathleen M. McGraw, eds., *Political Judgment: Structure and Process*. Ann Arbor: University of Michigan Press, 249–70.
- Hill, Jennifer L., and Hanspeter Kriesi. 2001a. "Classification by Opinion-Changing Behavior: A Mixture Model Approach." *Political Analysis* 9 (4): 301–24.
- Hill, Jennifer L., and Hanspeter Kriesi. 2001b. "An Extension and Test of Converse's 'Black-and-White' Model of Response Stability." *American Political Science Review* 95 (2): 397–413.
- Iyengar, Shanto. 1986. "Whither Political Information." Report to the NES Board of Overseers Center for Political Studies, University of Michigan.
- Jacoby, William G. 1988. "The Impact of Party Identification on Issue Attitudes." *American Journal of Political Science* 32 (3): 643–61.
- Jennings, M. Kent. 1992. "Ideological Thinking among Mass Publics and Political Elites." *Public Opinion Quarterly* 56 (4): 419–41.
- Karol, David. 2009. *Party Position Change in American Politics*. New York: Cambridge University Press.
- Kinder, Donald R., and Nathan P. Kalmoe. 2017. *Neither Liberal nor Conservative*. Chicago: University of Chicago Press.

- Krosnick, Jon A. 1990. "Government Policy and Citizen Passion: A Study of Issue Publics in Contemporary America." *Political Behavior* 12 (1): 59–92.
- Layman, Geoffrey C., and Thomas M. Carsey. 2002. "Party Polarization and 'Conflict Extension' in the American Electorate." *American Journal of Political Science* 46 (4): 786–802.
- Lenz, Gabriel S. 2012. *Follow the Leader? How Voters Respond to Politicians' Policies and Performance*. Chicago: University of Chicago Press.
- Lewis-Beck, Michael S., William G. Jacoby, Helmut Norpoth, and Herbert F. Weissberg. 2008. *The American Voter Revisited*. Ann Arbor: University of Michigan Press.
- Lord, Frederic M., and Melvin R. Novick. 1968. *Statistical Theories of Mental Test Scores*. Reading, MA: Addison-Wesley.
- Milgram, Stanley. 1974. *Obedience to Authority*. New York: HarperCollins.
- Miller, Warren E., and J. Merrill Shanks. 1996. *The New American Voter*. Cambridge, MA: Harvard University Press.
- Moore, David W. 2008. *The Opinion Makers*. Boston: Beacon.
- Patterson, Thomas E. 1980. *The Mass Media Election: How Americans Choose Their President*. New York: Praeger.
- Sears, David O., and Nicholas A. Valentino. 1997. "Politics Matters: Political Events as Catalysts for Preadult Socialization." *American Political Science Review* 91 (1): 45–65.
- Sniderman, Paul M., and Edward H. Stiglitz. 2012. *The Reputational Premium: A Theory of Party Identification and Policy Reasoning*. Princeton, NJ: Princeton University Press.
- Steyer, Rolf, and Manfred J. Schmitt. 1990. "Latent State-Trait Models in Attitude Research." *Quality and Quantity* 24 (4): 427–45.
- van der Veld, William, and Willem E. Saris. 2004. "Separation of Error, Method Effects, Instability, and Attitude Strength." In Willem E. Saris and Paul M. Sniderman, eds., *Studies in Public Opinion*. Princeton, NJ: Princeton University Press, 37–59.
- Wiley, David E., and James A. Wiley. 1970. "The Estimation of Measurement Error in Panel Data." *American Sociological Review* 35 (1): 112–17.
- Zaller, John. 1985. "Analysis of Information Items in the 1985 ANES Pilot Study." American National Election Studies Pilot Study Report no. 002261.
- Zaller, John. 1990. "Political Awareness, Elite Opinion Leadership, and the Mass Survey Response." *Social Cognition* 8 (1): 125–53.
- Zaller, John. 1992. *The Nature and Origins of Mass Opinion*. New York: Cambridge University Press.
- Zaller, John. 2012. "What *Nature and Origins* Leaves Out." *Critical Review* 24 (4): 569–642.
- Zaller, John, and Stanley Feldman. 1992. "A Simple Theory of the Survey Response." *American Journal of Political Science* 36 (3): 579–616.