The Importance of Knowing 'What Goes With What'

Reinterpreting the Evidence on Policy Attitude Stability

Sean Freeder
Gabriel S. Lenz
Shad Turney

Travers Department of Political Science
University of California, Berkeley

December 4, 2016

What share of citizens hold meaningful views about public policy? Despite decades of scholarship, researchers have failed to reach a consensus. While scholars such as Converse (1964) conclude that few citizens hold meaningful policy opinions, other scholars find that, after correcting for measurement error, most do, even those with low education and low political knowledge. In this paper, we revisit this debate with a concept at the center of Converse's theorizing but neglected by subsequent scholarship: knowledge of which issue positions "go together" ideologically—or what Converse called knowledge of "what goes with what." Individuals hold stable views, we find, 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. We find many US citizens lack this knowledge and about 20-40% hold meaningful views on economic policy issues.

INTRODUCTION

What share of citizens hold meaningful views about public policy? This questions 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) showed 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 by measurement error. For example, Achen (1975) argues that ambiguous survey questions could produce the opinion instability observed by Converse, and that model-based statistical corrections of this error reveal widespread attitude stability. Similarly, Ansolabehere, Rodden, and Snyder (2008) argue 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 after more than 50 years, 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,"[d]emocratic theory loses its starting point" (Achen 1975). These normative concerns are ameliorated, however, if the opinion instability we observe results mostly 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 individuals with low political knowledge. This test, however, has yielded mixed results. Some studies find little difference in opinion stability between sophisticated and unsophisticated respondents (Achen 1975; Erikson 1979; Ansolabehere, Rodden, and Snyder 2008). Other studies find some differences, though they are often not large (Dean and Moran 1977; Converse and Pierce 1986; Feldman 1989; Zaller 1990; Converse 2000; Kinder and Kalmoe 2017). 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 items, such as party identification, achieve the same stability as 25-item scales, and it seems implausible that measurement error could account for that difference. 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; Hill and Kriesi 2001b).

In this paper, we show that this long line of research has yielded mixed results because it has examined differences in opinion stability by *general political knowledge*, a poor proxy for the concept at the heart of Converse's theorizing. Central to attitude stability, Converse argued, was not general political knowledge, but knowledge of "what goes with what"—knowledge 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, Converse hypothesized, they then tend to bring their policy views and ideological preferences into alignment, leading them to 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. Those who do possess this knowledge tend to have stable views, but primarily when they agree with the views of their party. Moreover, these findings hold after correcting for measurement error. Much of the observed randomness in public opinion, therefore, results not from measurement error, but is in the opinions themselves. Our findings reinforce normative concerns about the ability of voters to hold politicians accountable for policy decisions in democratic political systems.

WHAT GOES WITH WHAT

In his seminal 1964 paper, Converse hypothesized that knowledge of what policy issues "go together" on the left and right sides of the liberal-conservative ideological dimension (knowledge of "what goes with what") leads to over-time opinion stability and opinion

"constraint"—having issue opinions that consistently fall on the left or right side of this dimension. "If [what goes with what] information is not successfully transmitted," he writes, "there will be little constraint" (Converse 1964, 212). However, the surveys of the nineteen-fifties and sixties lacked questions on what kind of policies in a given issue area were "liberal" or "conservative," so his proposition could not be directly tested at the time he wrote.

Our innovation is to use political party and candidate issue placement questions in panel surveys conducted since the early 1970s as a proxy for this knowledge, and thereby test his contention. While these surveys lack questions asking respondents to classify policy positions as liberal or conservative, they do ask respondents to place political candidates and parties on policy scales for some of the major issues of the day (and some not so major). These issue placement questions provide a proxy of "what goes with what" knowledge. Because the candidate and party policy positions covered by these surveys map onto the left-right ideological dimension, individuals who correctly identify the relative policy positions of these candidates and parties are correctly placing these policies in their appropriate liberal or conservative "packages," and so demonstrating the type of knowledge Converse believed would correspond with stable policy opinions. Following Sears and Valentino (1997), we call this knowledge "party issue-placement knowledge" or "placement knowledge" for short.

There are several reasons why individuals who possess placement knowledge on an issue—that is, those who know the political parties' and candidates' stances, and thus know "what goes with what"—should also have stable policy opinions on the issue. First, individuals who care deeply about a policy issue and have stable opinions about it—members of "issue publics"—will learn the political parties' and candidates' positions in order to support the party and candidate who holds the same issue position (Converse 1964; Zaller 1985; Iyengar 1986;

Krosnick 1990). Members of these issue publics will thus know what goes with what and hold stable policy opinions over time. Second, individuals with liberal or conservative political predispositions 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 considerations on policy issues aligned with their party. Finally, members of the public might engage in "following," adopting the policy positions of the political candidates or parties they prefer (Lenz 2012). This following could take place for several reasons, including the use of party or candidate positions as a low-information heuristic (Zaller 1992; Bullock 2011), 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). As a result of all of these mechanisms, individuals who possess knowledge of the parties' and candidates' relative positions on a particular issue or set of issues—those with high placement knowledge—should hold stable policy opinions on those same issues. We note that Converse (1964) and his later writing does not explicitly layout all of this reasoning, though we think he implied it in broad strokes.

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 are members of issue publics, while others have stable policy opinions because they "follow the leader." Future research using experimental methods to exogenously vary individuals' level of placement knowledge may provide some insight into this question.

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 over 40 years.

In assessing the role of placement knowledge, we focus on opinion stability rather than constraint, which assesses the extent to which individuals' policy attitudes consistently fall on one or the other side of the liberal-conservative ideological dimension. Converse (1964, 239) argues that stability is the better test because it captures whether people hold meaningful views regardless of whether those views align ideologically, whereas constraint only captures that alignment. The results we present below, however, replicate with constraint.

DATA SOURCES, MEASUREMENT, AND METHODS

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 where party and candidate stances remained distinct, salient, and relatively constant (see SI section 1 for details and excluded panels).[1] We focus on the first and last waves of American National Election Study (ANES) panels, including 1972-1976 and 1992-1996, the British Election Studies' 1992-1997 and 1997-2001 panels, and the Patterson 1976 panel. 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 a simple rule. We count respondents as knowing the candidates' or parties' issue positions if they placed the

---

[1] The Supporting information (SI) is available anonymously at https://goo.gl/sZSkZA.

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; Sears and Valentino 1997; Lewis-Beck et al. 2008; Lenz 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 paper, however, are robust to other coding decisions. 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 also reduces error from guessing.

To reduce measurement error in policy opinions, we construct multi-item scales (Miller and Shanks 1996; Ansolabehere, Rodden, and Snyder 2008). 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 zero, standard deviation one, 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 (SI section 1 describes the items). When examining the relationship between placement knowledge and stability in these scales, we only use placement knowledge measures of items in a given scale.

In assessing stability, we present correlations, despite their well-known drawbacks, because of "tradition" (Achen 1975), and because they also 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, Ch. 2). Correlations are therefore sensitive to the variance of the true attitude (variance of the signal), which we discuss further below (see also SI section 2). The results, however, are similar when we use alternative measures

of stability (see SI section 2). We avoid the use of panel measurement error models, such as Wiley and Wiley models (1970), because they depend on numerous assumptions and attribute noise from any source to measurement error (Converse 1980; Zaller and Feldman 1992; Feldman 1995; van der Veld and Saris 2004), thus failing to differentiate the multiple potential sources of random noise in public opinion surveys (see discussion below). We also remind the reader that correlations of 0.30-0.40 are weak, barely visible in a scatterplot, and indicate "erratic attitude change" over two-year intervals (Achen 1975, 1219). Correlations around 0.50-0.60 represent only slight improvements (see SI section 2).

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 US, the scales have between 19 and 26 items with Cronbach alphas between 0.76 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 SI section 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 don't 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, on the other hand, should have stable views—though 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 Blacks 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 0.40 to 0.56. As noted above, some scholars interpret 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 their 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 = 0.82). The plots show a modest increase in opinion stability as general political knowledge increases, with the correlations rising across the quintiles from 0.37 to 0.59. This increase is consistent with Ansolabehere et al (2008, 225), which 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.

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
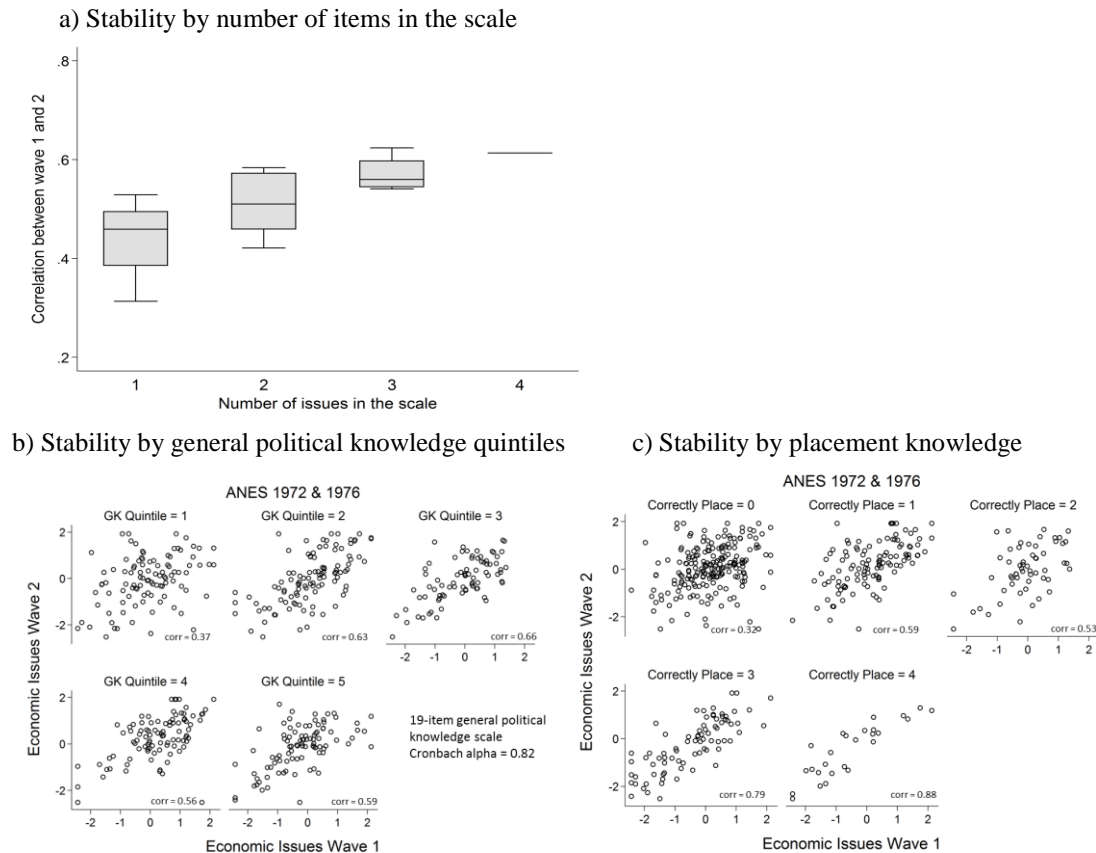
Note: Subfigures b) and c) plot respondents' four-item economic scale scores. N = 475.

Finally, we turn to Converse's 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—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 0.38. Correcting for measurement error by averaging across the four items obviously fails to stabilize their responses. Respondents who correctly place the candidates on one, two, or three of the issues have attitude stabilities that fall neatly in between, with correlations of 0.48, 0.50, and 0.80, 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 all 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 1992-1996 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 just create economic scales. We have six four-item economic policy scales, one three-item scale, and one two-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 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, with the correlation rising about 0.17 on average between the single item and the four-item scales. General knowledge also appears to increase stability by a moderate amount. On the four-item scales, the average increase between the bottom and the top general knowledge quintile is about 0.31. However, as the final column in the table illustrates, the effects of adding scale items and conditioning on general political knowledge pale in comparison to placement knowledge, which is strongly associated with opinion stability, even when using these 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 difference 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 also 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 ten-item scales, with the last five items contributing to only a quarter of that amount. 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 other panels (SI section 2 presents the results). The much greater stability overall likely explains this smaller difference because it

puts a ceiling effect on any increase. The short time between interviews (less than months),

likely explains the stability, as it also likely does for the Patterson panel.

TABLE 1: THE SOURCE OF OPINION STABILITY—CORRELATIONS FOR MANY PANELS

	Number of items in scale						General knowledge quintiles						Number of correct placements						
Panel	1	2	3	4	5	Diff.	1	2	3	4	5	Diff.	0	1	2	3	4	5	Diff.
Five-item policy scale																			
All Policy 92-96	.53	.55	.64	.68	.71	**.18**	.45	.59	.76	.81	.84	**.39**	.42	.46	.57	.62	.82	.86	**.44**
Four-item policy scales																			
Econ ANES 72-76	.40	.46	.52	.56		**.16**	.37	.63	.66	.56	.59	**.22**	.32	.59	.53	.79	.88		**.56**
Econ BES 92-95	.43	.52	.57	.61		**.18**	.42	.47	.55	.66	.81	**.39**	.25	.27	.49	.63	.76		**.51**
Econ BES 92-96	.45	.55	.60	.64		**.19**	.43	.46	.62	.74	.82	**.39**	.21	.51	.33	.61	.80		**.59**
Econ BES 92-97	.43	.52	.57	.60		**.17**	.37	.59	.52	.69	.78	**.41**	.23	.28	.52	.49	.76		**.53**
Econ BES 97-01	.38	.45	.50	.53		**.15**	.38	.41	.61	.73	.60	**.22**	.32	.37	.40	.65	.76		**.44**
Econ Patterson 76	.56	.62	.69	.74		**.18**	.63	.63	.66	.77	.88	**.25**	.68	.70	.84	.86	.89		**.21**
Ave.	.44	.52	.58	.61		**.17**	.43	.53	.60	.69	.73	**.31**	.34	.45	.52	.67	.82		**.48**
Three-item policy scales																			
Econ ANES 94-96	.56	.62	.69			**.13**	.40	.59	.69	.70	.81	**.41**	.38	.40	.72	.86			**.48**

Note: For scatterplots and regression lines for each study by number of correct placements, see SI section 2. The table omits the results from the 10-item SSI panel we ran in 2015-16 due to space constraints, but figures 2 and 4 show results from it and SI section 2 presents the full results. The results are similar with alternative measures of placement knowledge (see SI section 2.3).

These findings hold up when we use non-correlational measures of stability, including (1) the absolute value of change in attitudes and (2) a measure of attitude "crystallization," which is an indicator variable coded one if respondents place themselves on the same side of a scale in both waves, and zero otherwise (Zaller 1985). With both these measures, these short placement knowledge scales generally outperform general knowledge scales in their ability to explain attitude stability, though their advantage becomes slight. We present these results and discuss the advantages and disadvantages of these measures in SI section 2. The robustness of these findings to alternative measures addresses an ever present concern with correlations: that the differences in variance drive differences in correlations. Those who know the positions have higher variances (more extreme views) than those who do not, a pattern evident figure 1c and that holds up across the panels.[2] One can interpret this as a problem with correlational measures of attitude

---

[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

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' own policy views (see SI section 2.3).

These results hold up across a wide range of issues. Table 1 presents 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 overtime correlations in their opinions than those who incorrectly place them, though the gap varies considerably across items and across panels. Of course, placement knowledge is only one route to 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.

(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
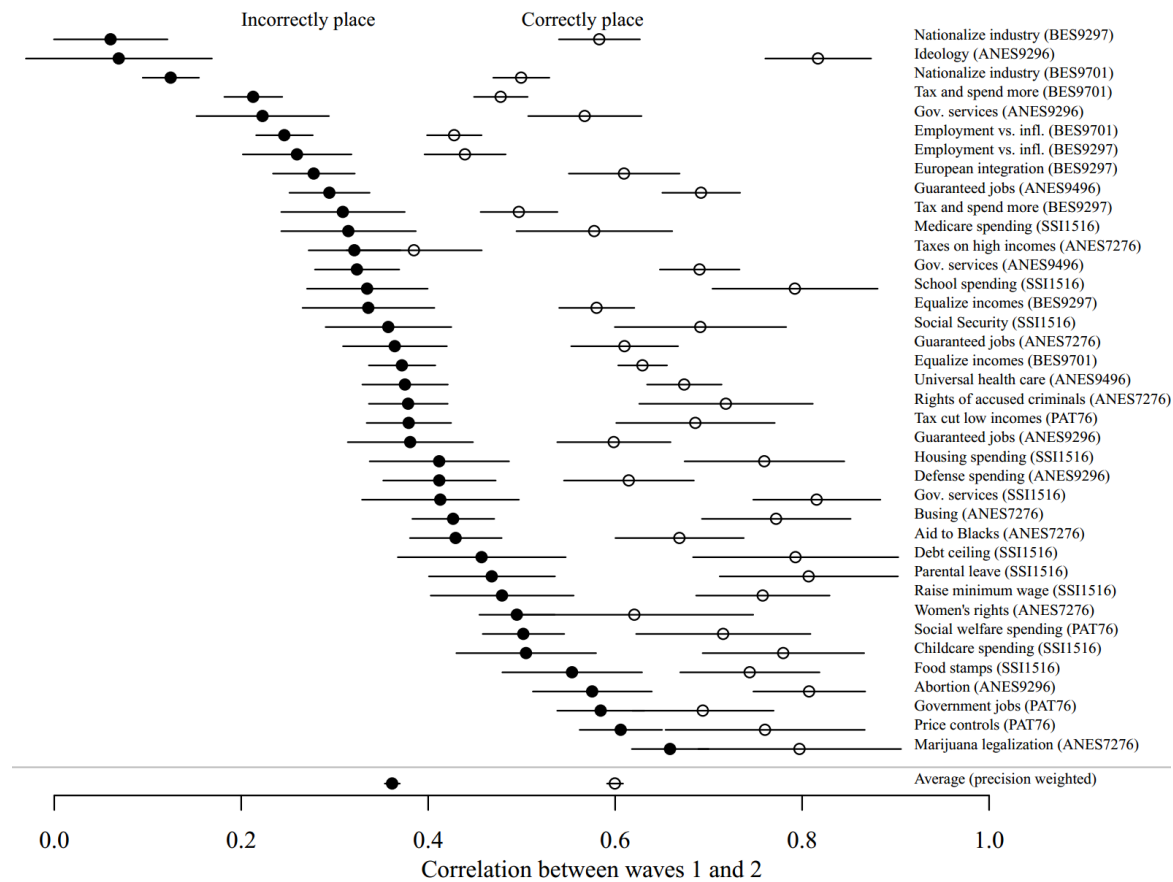
Note: The figure shows the correlation between respondents' views on the item in wave 1 and wave 2 by whether they correctly placed the parties or candidates on that item. Using Fisher's transformation, the error bars show 68% confidence intervals (one standard error). For comparison, the correlation between respondents' partisan identification in 2 waves is typically between 0.75-0.85 in the ANES panels (Ansolabehere et al. 2008, 221). To make the figure more readable, we only show the estimates from the 1992-1997 waves of the BES panel, and so omit the 1992-1995 and 1992-1996 items—including them leaves the result unchanged. Number of issues: 38. Number of responses: 29,317. Number of unique respondents: 6116.

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, and so know "what goes with what," their attitudes tend to be stable, as Converse hypothesized. 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 the surprising levels of ignorance of party and candidate positions in the US (Carpini and Keeter 1993; Layman and Carsey 2002; Lewis-Beck et al. 2008). Analyzing surveys from 1972 to 2012, 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 in the ANES. Using both candidate and party placements substantially reduces correct guesses (see SI section 3.1). For the panels we are analyzing here, Table 2 presents the percentage of respondents at each level of placement knowledge, showing that most respondents cannot correctly place the candidates on all or most of the items. For example, only 2% correctly place the candidates and parties on all five items in the 1992-96 ANES all-policy scale, and only 7% correctly place them on four of the five items. Comparing these percentages with the correlations in table 1 reveals that, depending on the panel, between 25% and 50% of the US public appears to have moderately stable attitudes (0.70 correlation above). The only US survey where this share approaches 50% is the three-item, ANES 1994-1996 Economy scale, a period when welfare spending and redistribution were especially salient in US politics. The other US panels suggest only around 25% of the public has stable attitudes. 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 SI, we examine whether we are underestimating or overestimating party issue-

placement knowledge and conclude that we are probably overestimating it (see SI section 3.2). In sum, these findings peg the share of respondents with stable attitudes in the lower range of 25-50% in the US, and 40-60% in Britain.

To summarize, attitude instability appears to arise, not primarily from measurement error, but from the opinions themselves—in particular, from the opinions of the majority in the US who are ignorant of where the parties and candidates stand on any given issue, ignorant of "what goes with what." In the next section, we examine whether only a subset of these 25-50% who know the positions actually hold stable views: those who also initially agree with their party.

TABLE 2: PERCENTAGES OF PANEL RESPONDENTS BY PLACEMENT KNOWLEDGE LEVELS

	Number of correct issue placements						
Panel	0	1	2	3	4	5	N
Five-item policy scale							
All ANES 92-96	17%	18%	12%	16%	18%	19%	559
Four-item policy scales							
Econ ANES 72-76	43	23	12	17	5		475
Econ BES 92-95	11	11	16	20	42		910
Econ BES 92-96	10	8	15	21	46		819
Econ BES 92-97	10	8	19	22	40		840
Econ BES 97-01	17	17	19	23	24		2271
Econ Patterson 76	57	20	12	8	3		660
Ave.	25	15	16	19	27		
Three-item policy scale							
Econ ANES 94-96	33	18	19	30	.		1257

Note: For each panel, this table shows the percent of respondents who fall into each level of placement knowledge. The results are similar with alternative measures of placement knowledge (see SI section 2.3).

STABILITY AND AGREEMENT WITH YOUR PARTY/CANDIDATE

Converse's reasoning leads us to two further predictions we can test about the relationship between placement knowledge, agreement with one's party or candidate, and attitude stability, predictions that are distinct from those of alternative explanations for these findings (a fact we address at greater length in a subsequent section).

First, we expect a strong positive relationship between placement knowledge and agreement with the policy positions of an individuals' preferred party or candidate. This relationship should be especially pronounced for two reasons. Individuals who care deeply about an issue will likely hold stable views on it and will likely join the party that agrees with them on this issue. Separately, individuals without strong pre-existing opinions on the issue will learn and adopt the positions of the party or candidate they prefer for other reasons, and so will also tend to hold stable opinions (as long as the parties/candidates do not change their position, and as long as the individual remembers the position).

We find strong support for this prediction: when people know the positions, they tend to agree with their party at high rates. Our best estimates of this rate comes not from the panels we use in the above analysis, but from the 1972-2012 ANES surveys where we can examine individuals who correctly place the parties and the presidential candidates (which, as noted above, substantially reduces correct guesses). Among individuals who are voting for the candidate of their party, about 80% agree with their party on a given issue, measured by being on the same side of the scale as their party. Given that most of the ANES questions are seven-point scales with a "don't know" option, we would expect about ($3/8 \times 100 =$) 37.5% to agree by chance, which is about what we find among those who incorrectly place the parties and candidates (40%). This pattern is surprisingly stable across issues and across years. In the panels we analyze above, the difference between these estimates is somewhat lower, probably because of poorer measurement: 70% versus 40%. For further details on these calculations and item-level estimates, see SI section 4.

We would also expect that, conditional on knowing the candidates' or parties positions', those individuals who agree with their party's position should exhibit higher attitude stability.

They should do so either because they care enough about the issue to have switched to the appropriate party (i.e., join an issue public) or because they were willing to adopt the parties' issue package. The minority of those who know their party's positions, but disagree with it, are either not in the issue public or unwilling to follow their party, so lack this anchor for their opinions. Consequently, a Zaller-like sampling of salient considerations may dominate their opinion generating process, leading to instability. To examine this prediction, we pool the panel cases. Table 3 shows average single-item attitude stability (correlations) by whether respondents possess placement knowledge on a given issue and whether they agree with their party on that issue (operationalized as those whose self-placement falls on the same side of the scale as their party in wave 1). As expected, placement knowledge corresponds with stability for those who agree with their party, but not for those who don't.

The first part of table 3 examines the larger pool of single-items, those shown in Figure 2. Among those who correctly place the candidates/parties on an issue and agree with their party/candidate, the average correlation is 0.72. Among those who correctly place but disagree, the average correlation is only 0.25, a large difference. This pattern also emerges when we use placement knowledge on the multi-item scales. Among those who correctly place candidates on 100% of the items, the stability correlation is 0.83 for those who agree with their party/candidate, and 0.23 for those who do not. Apparently, people only hold stable opinions when they know their party's positions *and* agree with them. Figure 3 visually displays the item-level correlations. 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.

To recap, we present three pieces of evidence that support Converse's contention about the relationship between knowledge of "what goes with what" and opinion stability. First, placement knowledge strongly conditions opinion stability, even after correcting for measurement error with multi-item scales. Second, a substantial majority of those with high placement knowledge agree with their party, a much higher share than would be expected by chance. Third, among those who possess high placement knowledge, only these "agreers" hold relatively stable opinions, while those who don't agree with their party are unstable. This latter finding further cuts the percent of the public that appears to have stable views. Instead of the 25-50% range we mentioned above, only between 70 and 80% of those individuals agree with their party and so actually hold stable views. So, the true range is likely closer to 20%-40%.

TABLE 3: ATTITUDE STABILITY BY PLACEMENT KNOWLEDGE AND AGREEMENT WITH PARTY OR CANDIDATE AMONG PARTISANS

Agree with party in wave 1	Place positions correctly on single item		Percent of positions correctly placed on multi-item scales				
	No	Yes	0%	25%	50%	75%	100%
No	0.28	0.25	0.26	0.18	0.18	0.17	0.23
Yes	0.42	0.72	0.33	0.45	0.57	0.68	0.80
N responses	25,200		22,203				
N respondents	4,424		4,252				
N panel questions/scales	38 issue questions		32 issue questions in 8 multi-item scales				

Note: Average of single item, over-time correlations for eight panels listed in Table 1, with the exception of the 10 items in the SSI panel, which we exclude because most of the questions had few response options, too few to estimate the stability among people who agree with their party in wave 1 (see SI section 1 for the questions). We weight the estimates so that each study receives equal weight, counting the BES 92-97 panels as one study. Figure 3 presents the item-level results.

FIGURE 3: ATTITUDE STABILITY BY PLACEMENT KNOWLEDGE AND AGREEMENT WITH PARTY OR CANDIDATE ON SINGLE ITEMS AMONG PARTISANS
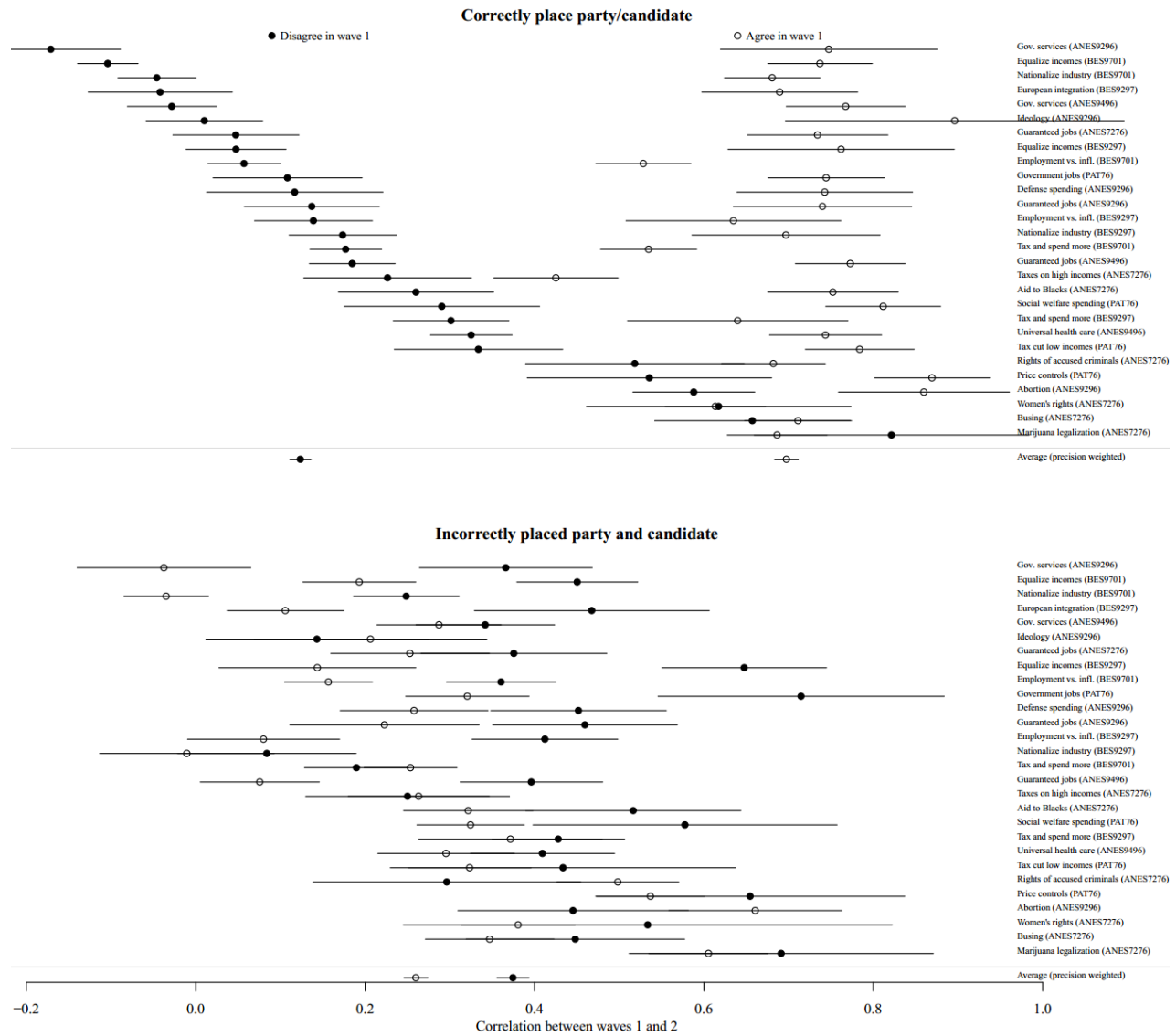
Note: The figure shows the correlation between respondents' views on the item in wave 1 and wave 2 by whether they correctly placed the parties or candidates on that item. Using Fisher's transformation, the error bars show 68% confidence intervals (one standard error). The figure is based on the data in the left side of Table 3 (see the Ns in that table). To make the figure more readable, we only show the estimates from the 1992-1997 waves of the BES panel, and so omit the 1992-1995 and 1992-1996 items—including them leaves the result unchanged. The averages in this figure diverge somewhat from those in the left side of Table 3 because they exclude to BES ways and because calculations weight the data differently.

WOULD MORE SCALE ITEMS CORRECT FOR MEASUREMENT ERROR?

Due to the scarcity of placement questions in panel surveys, we can only include

relatively few items in the scales we analyze. This is unfortunate, given that previous studies

have used issue scales with more than 30 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?

We find that additional items would not 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 2015-2016 SSI panel we conducted, which included 10 economic items. The effect of adding scale items, the figures 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 place the candidates on all four issues (see SI section 5.2 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, a conclusion we provide additional support for below.

Finally, we find that even when we lack placement knowledge questions, we can still use general knowledge items to test these predictions. While general knowledge and placement knowledge are only moderately related overall, they are strongly related at the extremes. That is,

those extremely high (low) on general knowledge correctly place the parties at high (low) rates (see SI section 2.6). Therefore, those at the bottom of the general knowledge scale should lack stability and gain little from combining items into multi-item scales, while those at the top should demonstrate stability and gain a great deal more from doing so. Examining the bottom and top deciles of general knowledge, this is precisely what we find, and we present the results in SI section 2.7.

FIGURE 4: STABILITY BY PLACEMENT KNOWLEDGE AND NUMBER OF SCALE ITEMS

a) All four-item economic scales pooled   b) SSI 2015-2016 10-item panel
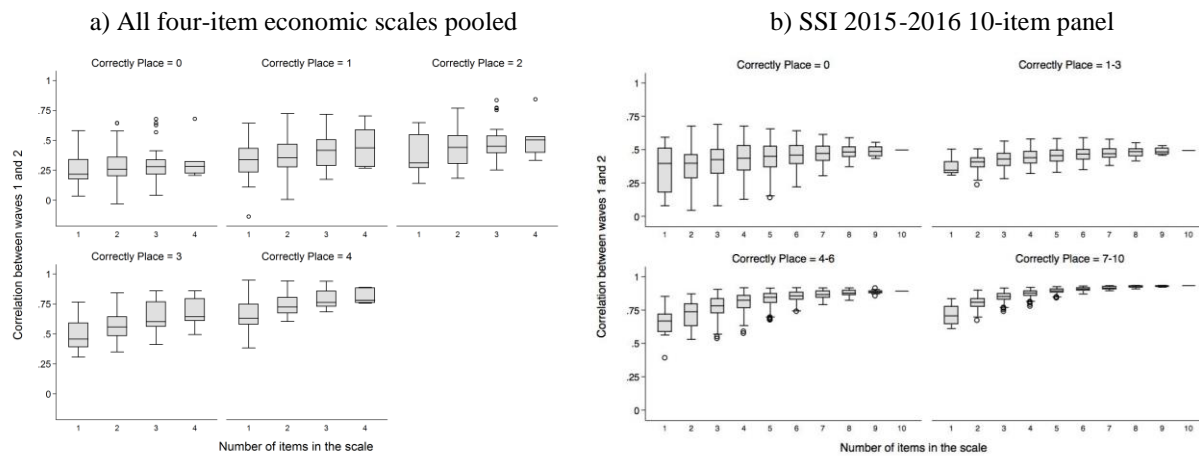
Note: Sub-figures show the results by the number of correct placements. In subplot a), we include six two-wave panels with a total n= 5,975 (see Table 2 for the list). We show the plot for each of the six panel waves separately in SI section 2.4. In subplot b), n=336, n=136, n=92, n=139, from lowest to highest correct placement categories, respectively.

WHY MULTI-ITEM SCALES INCREASE STABILITY: IT'S NOT JUST MEASUREMENT ERROR

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 these findings highlight a mistake 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; Steyer and Schmitt 1990; Zaller and Feldman 1992; Feldman 1995; van der

Veld and Saris 2004).[3] 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, let $\hat{y}_i$ equal the true attitude for individual i, and y_i be the measured attitude for i. Each of 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 (2013): "[C]orrecting 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.

---

[3] Inaccuracy resulting from systematic biases in measurement would not necessarily decrease with more scale items.

ADDRESSING ALTERNATIVE EXPLANATIONS

HOLDING CONSTANT STABLE CONFOUNDERS

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 large mass of the public who lack the anchor of elite policy positions evince low opinion stability, even after correcting for measurement error. Those who possess this knowledge tend to have stable views when they agree with their preferred party and candidate. Perhaps, however, placement knowledge correlates with some other stable variable that accounts for this relationship. We list four examples of potential stable confounders, but there are many.

- *Age*: Older individuals may be more likely to know what goes with what, and have more stable attitudes over time.

- *Differential attentiveness*: Respondents who answer survey questions haphazardly would exhibit low stability across survey interviews and incorrectly place the candidates or parties, while consistently attentive respondents might place them correctly and hold stable views.

- *Accurate survey takers*: Some respondents may generally evince less measurement error across all survey items, leading them to place the parties correctly and accurately report their own position, leading them to appear stable.

- *General policy expertise*: Some respondents may have considerable policy knowledge, which leads them to accurately place parties and have stable opinions on a wide range of issues.

Finding that some variable other than placement knowledge instead explains stability may or may not change our conclusions about whether voters generally have stable views, but might have normative implications (see the conclusion). Studies have found numerous correlates

of issue knowledge (Wright and Niemi 1983; Conover and Feldman 1989; Hansen and Benoit 2007), but not of attitude stability (Achen 1975; Erikson 1979; Leeper 2014).

The most compelling way to rule out stable confounders as an explanation for these findings is by conducting within-respondent analyses and therefore holding constant the respondent. We can do this because the panels asked multiple policy items and most respondents correctly placed the parties or candidates on some but not all or none of the items. We cannot conduct this within-individual analysis with correlations, since they are a group level property. We therefore conduct it with two individual-level measures of stability: (1) absolute value of change in attitudes and (2) attitude crystallization, which is an indicator variable coded one if respondents place themselves on the same side of a scale in both waves and zero otherwise (Zaller 1985). Due to space constraints, we present these results in the supporting information (see SI section 5.2). They show that placement knowledge consistently predicts within-respondent opinion stability across all the panels, with t-values of 6 for the absolute value measure and t-values of 13 for the crystallized attitudes measure (using robust standard errors clustered at the respondent level). In the SI, we also present the closest approximation to this analysis using correlations, which yields similar results. We can therefore be confident that placement knowledge itself is associated with stability rather than a stable confounder, such as those listed above.

ADDRESSING OTHER ALTERNATIVES

Party issue-placement knowledge corresponds with stability, we have argued, because when people know the candidate and party issue positions, they tend to agree with their candidate or party. Of course, other interpretations of this relationship are possible. We have come up with three alternative mechanisms not ruled out by the within-respondent test above:

- *Heterogeneous measurement error*: Individuals 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.

- *Policy-specific expertise*: Placement knowledge on an issue likely correlates with policy expertise on an issue, and that expertise may be issue specific and lead to attitude stability.

- *Agree with me or not*: Individuals who hold stable views on an issue may be better able to place elites. They know where they stand and can therefore place the parties relative to themselves (e.g., they agree with me or not).

These three explanations may seem hard to assess, but we have in fact already presented evidence above that cuts against them. Specifically, we have shown that placement knowledge on an issue leads to stable views on that issue when people agree with their party or candidate—a prediction straight from Converse (1964). Table 3 and figure 3 above present this evidence, showing that placement knowledge fails to increase stability among people who disagree with their candidate or party. It is among the more stark findings in this paper. None of these alternative mechanisms makes this prediction. Instead, all three would lead us to expect that placement knowledge should correspond with greater attitude stability regardless of whether people agree with their party or candidate. We present additional evidence that is inconsistent with these alternative explanations in SI section 5.4.

In sum, these findings appear robust. Alternative explanations face numerous barriers. They must be within respondent and they must predict that attitude stability only occurs among respondents who correctly placed the candidates and agree with them (in wave one). Any potential alternative explanation that cannot account for those two patterns is not an alternative explanation.

ATTITUDE CONSTRAINT AND ISSUE VOTING

In testing the prevalence of meaningful views within the public, we have thus far focused on over-time attitude stability. We have done so because, following Converse (1964, 239), we think stability is the best (though imperfect) test of meaningful attitudes. Researchers have also explored two related tests of meaningful attitudes: (1) attitude constraint, that is, whether policy opinions correlate with one another and (2) issue voting, that is, do respondents vote for parties and candidates that agree with them on the issues. Although not the focus of this paper, we show in the SI (sections 6 and 7) that party issue-placement knowledge strongly conditions attitude constraint and issue voting. Any group of respondents ignorant of the candidates' and parties' positions on pairs of issues have near zero correlations between their issue opinions—that is, their policy attitudes are unconstrained. Likewise, policy views fail to correspond with voting choices among respondents with low placement knowledge, even with multi-item scales.

When voters are ignorant of elite policy positions, their own policy opinions play little role in their voting decisions, and correcting for measurement error leaves that result unchanged. To some extent, this may seem obvious. If people do not know where the parties or candidates stand on the issues, how can they hold them accountable for those stances? Nevertheless, these findings suggest that a substantial part of the electorate lacks the knowledge necessary to engage in this basic form of policing their elected representatives.

CONCLUSION

In this paper, 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 mostly in the opinions themselves. In particular, the instability is in the views of individuals who remain ignorant of the parties' positions. In so doing we show that

some 20-40% of the U.S. public holds stable preferences on salient economic public policies. What implications do these findings have for 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 policy and judge politicians on their policy stances. They are, however, consistent with an "issue publics" view of democracy, in which citizens pick a party based on one policy issue, then follow the party on most other policy issues. They are also consistent with a view in which policy plays little role in many citizens political choices—one in which citizens pick their parties for non-policy reasons and then follow their parties on policies.

The finding with the most far-reaching implications is that voters hold stable views primarily when they know their party's stance and agree with it. Even voters who appear to have some knowledge on specific issues—i.e. know the parties' positions—have unstable views unless they agree with their party (in wave 1). The lack of stable views independent of party is striking. We investigated the pervasiveness of stable views because they may reflect meaningful views, but the stable views we found may be anything but meaningful.

The lack of stable views independent of party raises concerns the competitiveness of elections. Although determining the direction of causation between policy views and party is beyond the scope of this paper, these findings are consistent with a high level of voters following their parties or candidates. Numerous studies have documented this tendency of people to adopt views consistent with their party or political leader (Campbell et al. 1960; Abramowitz 1978; Jacoby 1988; Layman and Carsey 2002; Cohen 2003; Carsey and Layman 2006; Lenz 2012; Broockman and Butler 2014). Indeed, imagining how we could find such high rates of voter agreement with their party on policy (above 80%) without considerable following is hard. If

voters adopt their party's views on most issues and come to hold those positions dearly, their partisan attachment may strengthen. They 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 their Republican Party because of their newly held gun stance. Such a tendency will render elections less competitive by entrenching the parties.

Not only should we potentially worry about the followers, but we also need to worry about the majority on any given issue that remains ignorant of the parties' stances and that therefore doesn't know whether they agree with their party. These individuals' views tend to be unstable and so may be unduly influenced by whatever considerations happen to be salient. 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 present study is not without limitations. In particular, we can mostly only conduct the multi-item scales analysis with economic issues, though the single-item analysis includes a broad range of economic and social issues. We also lack questions meeting our criteria about "general policy-related dispositions" (Miller and Shanks 1996), though evidence suggests these are less stable than policy-specific issues (Ansolabehere, Rodden, and Snyder 2008, 224). We would have especially liked to analyze questions about support for policies that benefit particular groups, such as the poor or minorities. In addition, some of the questions wording are less than ideal and cover obscure policy issues such as nationalization of industries or the tradeoff between employment and inflation, though we note the surveys also included many questions on common policy issues such as Medicare and universal healthcare that exhibited low stability.

Scholarly controversy over the interpretation of attitude instability has continued for decades. Based on these findings, it appears that this controversy has persisted in part because scholars have lacked measures of the concept at the core of Converse's (1964) central hypothesis: that knowledge of what goes with what should largely explain attitude stability (and constraint). By measuring what goes with what across numerous panels, we appear to have solved the observational equivalence problem, revealing that much of the instability in the mass public's policy views is in the opinions themselves. Many people lack meaningful views on any given issue and thus lack the ability to hold their representatives accountable or vote intelligently on referenda, while others hold meaningful views—or at least stable views—but often only when they know about and agree with the views of their party.

The Supporting information (SI) is available anonymously at https://goo.gl/sZSkZA.

REFERENCES

Abramowitz, Alan. I. 1978. "Impact of a Presidential Debate on Voter Rationality." *American Journal of Political Science* 22(3): 680-90.

Achen, C. 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.

Ansolabehere, 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: I. A Minority of One against a Unanimous Majority." *Psychological monographs: General and applied* 70(9): 1-70.

Broockman, David E, and Daniel M Butler. 2014. Testing Theories of Elite Influence in Mass Publics: Randomized Field Experiments with Elite Communication.

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: 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.

Conover, Pamela Johnston, and Stanley Feldman. 1989. "Candidate Perception in an Ambiguous World." *American Journal of Political Science* 33(4): 912-40.

Converse, Philip E. 1980. "Comment: Rejoinder to Judd and Milburn." *American Sociological Review* 45(4): 644-46.

Converse, Philip E, and Roy Pierce. 1986. *Political Representation in France*. Cambridge, MA: Harvard University Press.

Converse, Philip E. 1964. "The Nature of Belief Systems in Mass Publics." In *Ideology and Discontent*, edited by David E. Apter. New York: Free Press.

Converse, Philip E. 2000. "Assessing the Capacity of Mass Electorates." *Annual Review of Political Science* 3: 331-53.

Dean, Gillian, and Thomas Moran. 1977. "Measuring Mass Political Attitudes: Change and Uncertainty." *Political Methodology* 4: 383-424.

Erikson, Robert S. 1979. "Src Panel Data and Mass Political-Attitudes." *British Journal of Political Science* 9(1): 89-114.

Feldman, S. 1995. "Answering Survey Questions: The Measurement and Meaning of Public Opinion." In *Political Judgment: Structure and Process*, edited by Milton Lodge and Kathleen M. McGraw, 249–70. Ann Arbor, MI: The University Of Michigan Press.

Feldman, Stanley. 1989. "Measuring Issue Preferences: The Problem of Response Instability." *Political Analysis* 1: 25-60.

Hansen, Glenn J., and William L. Benoit. 2007. "Communication Forms as Predictors of Issue Knowledge in Presidential Campaigns: A Meta-Analytic Assessment." *Mass Communication and Society* 10(2): 189-210.

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.

Kinder, Donald R, and Nathan P Kalmoe. 2017. *Neither Liberal nor Conservative*. Chicago, IL: Chicago University 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.

Leeper, Thomas J. 2014. Are Strong Opinions More Stable? In *Annual meeting of the Midwest Political Science Association*. Chicago, IL.

Lenz, Gabriel S. 2012. *Follow the Leader? How Voters Respond to Politicians' Policies and Performance*. University of Chicago Press.

Lewis-Beck, Michael S, William G Jacoby, Helmut Norpoth, and Herbert F Weissberg. 2008. *The American Voter Revisited*. Ann Arbor, Michigan: University of Michigan Press.

Lord, Frederic M., and Melvin R. Novick. 1968. *Statistical Theories of Mental Test Scores*. Reading, Mass.: Addison-Wesley Pub. Co.

Milgram, Stanley. 1974. *Obedience to Authority: An Experimental View*. New York: HarperCollins.

Miller, Warren E., and J. Merrill Shanks. 1996. *The New American Voter*. Cambridge, Mass.: Harvard University Press.

Moore, David W. 2008. *The Opinion Makers: An Insider Exposes the Truth Behind the Polls*. Boston: Beacon Press.

Sears, D. O., and N. A. Valentino. 1997. "Politics Matters: Political Events as Catalysts for Preadult Socialization." *American Political Science Review* 91(1): 45-65.

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 *Studies in Public Opinion: Gauging Attitudes, Non-Attitudes, Measurement Error, and Change*, edited by Willem E. Saris and Paul M. Sniderman, 37-59. Princeton, NJ: Princeton University Press.

Wiley, David E, and James A Wiley. 1970. "The Estimation of Measurement Error in Panel Data." *American Sociological Review* 35(1): 112-17.

Wright, John R., and Richard G. Niemi. 1983. "Perceptions of Candidates' Issue Positions." *Political Behavior* 5(2): 209-23.

Zaller, J. 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 Univ. Press.

Zaller, John, and Stanley Feldman. 1992. "A Simple Theory of the Survey Response." *American Journal of Political Science* 36(3): 579-616.

Zaller, John R. 1985. Analysis of Information Items in the 1985 Anes Pilot Study. In *ANES Pilot Study Report, No 002261*.