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Who is Ideological? Measuring Ideological Consistency in the American Public

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Abstract: Political constraint and issue consistency are key variables in the study of public opinion, but the existing literature contains many parallel but contradictory accounts of the sources and predictors of ideological constraint. Some posit that constraint is essentially a function of a person's partisan commitment, others suggest it is rooted in participation in politics, while others see a wide range of correlates summarized as "sophistication." Still others deny that constraint exists in the mass public altogether. Contrary to these accounts, we argue that issue consistency exists within the American public and is best predicted by political knowledge, which should be thought of as separate from those other predictors. In fact, after accounting for political knowledge, other variables like partisanship, participation, and demographic variables have little independent relationship to ideological constraint. The data show that political knowledge is about as strong a predictor of issue consistency as is one's self-placed ideology – a widely used proxy for constraint. These results help us understand how citizens think about politics and which groups of people most closely resemble elites in the structure of their opinions. Our findings show that previously hypothesized predictors of constraint – particularly partisanship and participation – are mainly related to ideological constraint through a person's level of political knowledge.

Introduction

Are citizens able to connect political issues – to decide "what goes with what (Converse 1964)?" According to Converse, the American public lacked consistent

¹ Converse first labelled the concept "constraint" by which he meant that certain people's attitudes are highly correlated with the positions of the major ideological camps. Most people's level of constraint is low meaning that their belief system is merely a loose collection of opinions. Others (relatively few) have highly constrained opinions that look like the partisan elites of politics.

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belief systems because they were largely "innocent of ideology (p. 241)." However, Converse's conclusion was based on data collected more than half a century ago. and much modern political science takes for granted that at least some people are ideologically consistent (or "polarized" to use the modern term of art). Though it is well established that American elected officials are deeply polarized into two camps (McCarty, Poole, and Rosenthal 2006), there is far less agreement over the status of the public. In fact, it would be most accurate to say that while some scholarship either point to a constrained public (Abramowitz 2012) or to constrained subsets of the public based on political engagement (Klein 2014), partisan commitment (Jacobson 2012), education (Jacoby 1995; Hetherington 2001), or the politically knowledgeable (Stimson 1975; Jennings 1992; Lupton, Myers, and Thornton 2015), another stream of literature maintains that little has changed since Converse wrote, minimizing the role that ideology plays in the thinking of the general public or even these in key subsets of the population (Bartels 2008; Broockman 2016).

This state of affairs leaves the student of American politics with several different possible accounts to choose from. The public is innocent of ideology. The public is polarized into two constrained camps. Partisanship defines who is constrained. Political engagement is the key factor. And so forth (there are a lot of stories told). The key question which we explore in this paper is which subset, if any, of the contemporary American public is politically constrained? Are Converse's observations of a public that lacks any evidence of ideological thinking still true?

We suggest that there is one characteristic that stands out as the key predictor of constrained issue positions – political knowledge. As we will show, it is not partisans, or one party, or those who participate in politics that appear to think in a way that resembles the unidimensional framework of elite opinion. Instead it is the politically knowledgeable segment of the public that gives the most consistent responses. By "political knowledge" we mean the ability to correctly describe basic institutions of American government and to successfully identify the people and parties who occupy those various institutions. None of the other sub-groups strongly predict how well people's attitudes are described by a single, latent dimension after accounting for a respondent's level of political knowledge. It is only knowledge that divides survey respondents into groups that connect issues by giving consistently ideological responses and groups that do not.

Previous work obscures this simple truth by often looking at a suite of characteristics together, usually some combination of partisanship, participation, knowledge, and interest - often collectively referred to as "political sophistication" or "engagement" (Luskin 1990; Ansolabehere, Rodden, and Snyder 2008;

Abramowitz 2012; Lupton, Myers, and Thornton 2015). However, gathering partisanship, participation, knowledge and interest all together merely obscures what predicts best since these categories contain so much overlap.² The inherent muddiness of this conceptualization means that it is not obvious which of these variables, or something else that is common to all of these groups, is the best predictor of ideological thinking. Our results below will show that among this suite of traits, political knowledge is by far the best predictor of ideological thinking in the public. In fact, it is as powerful as self-classified ideology, probably the single most common variable used in the social sciences to measure ideology.

Political science is unlikely to make progress with so many different understandings of ideological constraint, each holding some sway in the literature. And so this paper, using three different representative samples of the American public (the Cooperative Congressional Election Study, the American National Election Study, and Pew surveys), shows that the subset of citizens with belief systems that most resemble those of elites are the highly knowledgeable.

The implication of this finding is that when polarized elites speak to the public, those most likely to hear the message are the very small group of truly knowledgeable citizens who speak the ideological language of elites. Understanding political issues is hard. Connecting those issues to other, sometimes seemingly unrelated issues, is even more difficult for the mass public. Thus, only those with high levels of political knowledge appear to be capable of making these connections. As a result, partisan gridlock is not simply a reflection of voters, partisans, or the "engaged." Instead, we show that in reality the most likely constituency for polarized politics is not, in fact, partisans or primary election voters, but rather the politically knowledgeable who are most likely to be constrained. The implication is that partisan polarization is essentially a contest between political consumers of different stripes.³ A proper understanding of this fact leads to several conclusions about politics further discussed in the conclusion: it is wrong to deny ideology is a feature of the public; it is a feature of both Democrats and Republicans; and this ideological thinking is more than just a reflection of partisan strength (as important as that may be).

² One might wonder if these items are so correlated that they can be subsumed under a single dimension, but while the correlations are significant a factor analysis (see the Supplemental Materials) demonstrates that all of these indicators load onto separate factors.

³ This is true as long as we are talking about issues and constraint – affective polarization is another matter (Ivengar, Sood, and Lelkes 2012).

Perspectives on Ideology and Constraint

Constraint is about more than self-classification. It is about knowing "what goes with what." It is well-known that many citizens are symbolically conservative in their label, but operationally liberal (Ellis and Stimson 2012; Bauer et al. 2016). Constraint is inherently about issue connections and thus the operational beliefs of citizens. Converse said of the truly ideological that they "rely in some active way on a relatively abstract and far-reaching conceptual dimension as a yardstick against which political objects...were evaluated" (Converse 1964, p. 216). Noel notes this idea by saying, "The shared set of preferences may be logically coherent and derived from first principles." This demanding standard is difficult to measure in a survey context and so most scholars do not measure constraint via the connections to abstract standards. Instead the mere presence of a structured and shared belief system suffices (Noel 2013; Freeder, Lenz, and Turney 2016; Kinder and Kalmoe 2017). This measurement strategy is increasingly common with the advent of large-N national surveys that are the best available measure of attitudes about a wide range of political issues (Jessee 2009; Bafumi and Herron 2010; Peress 2013), and a strategy that we follow here.

The goal is to discern what best predicts constraint in citizens. The literature ranges from the view that the public can be described as two camps that are "highly polarized" along a "single dimension," (Campbell 2016, p. 1) to the view that a citizen's operational ideology tells us "nothing" about citizen views on any issue (Broockman 2016) – leaving the student of ideology with a wide range of perspectives to choose from. In what follows we briefly describe various schools of thought, concluding with our own view that the key correlate of issue consistency is political knowledge – distinct from related variables like participation or partisanship. In fact, knowledge actually predicts constraint about as well as does self-classified ideology.

Non-Ideology

Use of ideological scales to analyze dyadic representation is increasingly questioned in the discipline (Sniderman and Stiglitz 2012; Lewis and Tausanovitch 2015). Broockman (2016) argues that "ideology" tells us about issue consistency but does not "say much" about citizen views on any given issue because ideological scales:

tend to capture citizens' degree of ideological consistency across policy domains ('this citizen has liberal views on two-thirds of issues') but say little about citizens' views within domains, on issues themselves.... [F]or the vast majority of citizens who support an idiosyncratic mix of liberal and conservative policies, their middling scores imply nothing about their view on any issue, not allowing us to do better than guessing when predicting which side of an issue they are likely to be on (p. 182, 205, emphasis added).

Broockman argues that issue attitudes, while strongly held, are rarely connected and thus should cannot be thought of as constraint, distinguishing him from Converse who believed that the public lacked firm attitudes altogether. The latter argued for non-attitudes, while Broockman argues that the public is characterized by a unique constellation of attitudes – some deeply held – that in no way resemble the structure of elite opinions. Neither sees a prominent role for ideology to play in the American public, though for quite different reasons.

This skepticism about constraint and ideology spills over into broader theories of lawmaking and representation. Hacker and Pierson (2014) question the unidimensional "master theory" of Anthony Downs, saying that the "contemporary politics often looks very different than the world described by Downs" (p. 634). Ahler and Broockman (2016) deny the utility of using Downsian spatial models of ideology because "Citizens are indifferent to ideology in the presence of issue information." Instead of a shared issue structure, they argue that "each citizen's pattern of views across issues appears unique," a pattern that may have nothing at all to do with how elites' issue opinions are structured. As a result, "each citizen is likely to be 'disconnected' from the positions their representatives take." Similarly, Achen and Bartels (2016) minimize the role of constraint by arguing that voters cannot be rescued from the "charge that they are too uninformed or too disengaged to play a meaningful role in the democratic process" (p. 91), describing issue-based voting as an illusion driven by a reliance on supposition and folk theory.

But this "minimalist" view, first labeled by Iyengar, Sood, and Lelkes (2012), is far from the only perspective on ideology. Others suggest that the key issue is not answering whether the general public are constrained, but rather which particular subsets of the public could be shown to exhibit a degree of ideological consistency that reflects that of elites. Simply stated, "what characteristic defines the constrained?" This characteristic could be partisanship (Layman and Carsey 2002), party differences (Grossmann and Hopkins 2015), or political participation (Abramowitz 2012). We outline the broad strokes of these arguments and then suggest that none of these factors is as relevant as is political knowledge.

Partisanship

Layman and Carsey (2002) argue that the subset of the public who identify with one of the two major parties is growing more constrained as the parties extend

conflicts across new issues. Their claim is that as the parties have diverged, the mass public has responded by growing more ideologically consistent – a process they call "conflict extension" since people extend their conflicts across multiple issues. But, importantly, they note that this is not a universal phenomenon, "Only party identifiers who are aware of party elite polarization on each of the issue dimensions have brought their social welfare, racial, and cultural issue attitudes toward the consistently liberal or consistently conservative stands of Democratic and Republican elites" (p. 786). In a similar vein, Baldassarri and Gelman (2008) find that strong partisans "have grown more consistent in their beliefs" (p. 408). They note that "partisanship not only has an impact on voting behavior... but plays a more important role in partitioning voters according to their issue preferences" (p. 440).

The main idea here is that persons who affiliate with a party (which Layman and Carsey operationalize as the strong partisans and the weak partisans, but not the independent leaners) have brought their views more and more into line with the stereotypical views of their respective party showing that respondents are more constrained, consistent, and, in the eyes of some, polarized (Campbell 2016). Independents have not done this, they argue, because they are less likely to extend the conflict across issues by connecting disparate policies together into the same structure as party leaders. Thus an alternative hypothesis to the nonideological public is one in which partisans are constrained but the rest of the public is not.

Asymmetries across Parties

The idea that polarization among elites is asymmetrically driven by Republican movement to the right has broad consensus (McCarty, Poole, and Rosenthal 2006; Mann and Ornstein 2012). However, the issue of whether or not this asymmetry is mirrored among the general public remains controversial. Grossmann and Hopkins (2015) argue that the parties are ideologically asymmetric by drawing distinctions between how ideological Republicans and Democrats are. They suggest that Republicans are ideological while Democrats are not. Their reasoning arises from the argument that Republicans are united by symbol and abstract principle, while Democrats are united only by group interest and a shared partisan identity.

⁴ See also Layman, Carsey, and Horowitz (2006).

The asymmetry, according to Grossmann and Hopkins (2015), is that while Republicans are unified by a broader idea of symbolic conservatism, among Democrats, "[s]ymbolic liberals represent one important element of the larger Democratic coalition" but only one piece of the coalition. Accordingly, ideology is not the organizing principle for Democrats in the same way that it is for Republicans. For Democrats "abstract ideology does not serve as a fundamental bond unifying the party membership as it does for Republicans" (p. 134). Thus, they argue that defining ideology in a similar way for both parties "conflate[s] specific issue positions and broader views of government" and will "provide inconsistent results" (Grossmann and Hopkins 2016, p. 67). While our aim is not to test the full complexity of their argument, we seek to uncover if these differences in appeals to symbolic ideology lead to differences in operational issue constraint between the parties. Simply stated, are there differences in the level of issue constraint across the two parties?

Political Participation

A third possibility about issue constraint is that participation in politics may be the key variable that explains which sub-groups hold constrained opinions. This line of reasoning readily concedes that the general public is not constrained, but a subset of participators – whether those are general election or primary election voters – are constrained in their opinions. Those who make this argument often focus on the "engaged" portion of the public. Abramowitz (2012) argues that "there are vast differences in political interest, knowledge, and activity among the public" (p. 16). His argument is that the "engaged" public is really the group that has coherent ideological tendencies. Abramowitz uses a number of factors - interest in the campaign, caring about who wins, political knowledge and participation – as his key measures. Participation gets pride of place however, since Abramowitz focuses on voters and largely dismisses non-voters, who may look much more like what Converse described. Jacobson (2012) further suggests that participation in politics is related to constrained thinking as one differentiates not just between non-voters and voters, but between general election voters and those who regularly participate in the primary process. Indeed, a number of studies point to a polarized and ideological primary electorate as one of the primary drivers of elite-level polarization (Hill 2015).⁵

⁵ See also (McGhee et al. 2014) for a more detailed explanation of theoretical expectations regarding primary systems and polarization in American legislatures.

Political Knowledge

In contrast to this previous literature, we suggest that the presence of issue constraint in the mass public is best predicted by political knowledge. When we try to eliminate the muddiness of previous measures by clearly separating out these various concepts we find that knowledge stands apart from participation, party affiliation, or strength of partisanship. For instance, while both Baldassarri and Gelman (2008) and Abramowitz (2012) make much of sophistication, they rely on a combination of measures that include partisanship, participation and interest (along with knowledge in the case of Abramowitz). While the research we discuss above suggests that other features or behavior predict constrained thinking, we suggest that these relationships exist mostly through their correlation with political knowledge. That is, after accounting for political knowledge, factors like party identification, strength of partisanship, and participation become much less predictive of consistent issue opinions.

We hypothesize that knowledge is key because holding a consistent belief structure is cognitively taxing. Lane (1962) showed that average citizens have deeply complex, disorganized, and sometimes contradictory beliefs. They sometimes emphasize concrete, knowable and proximate issues, while in other cases embrace abstract principles and aphorisms. To know "what goes with what," one must first know the "what" of a number of issue positions. Understanding political issues and forming coherent and sustaining opinions on those issues requires a great degree of cognitive power and attention to elites (Lenz 2012). However, ideological constraint requires an additional step. To hold beliefs that mirror the pattern of issue positions held by elites, a person must also be able to know how various issues on seemingly unrelated topics are connected to one another. For example, it is not enough for a person to have an opinion on abortion policy and the protection of public lands. They must also know that a good liberal should support less government regulation of abortions but greater government activity in the protection of public lands. This is an even more complicated task that requires a great deal of political knowledge. Furthermore, a person who has knowledge of the partisan composition of Congress and the presidency, the contemporary issues being debated by these institutions, and the policy proposals being put forward by each of these actors is even better equipped to correctly connect these seemingly disparate policy issues. On the other hand, belonging to a particular political party or turning out to vote (even in a primary election) requires very little of a person in terms of political knowledge or issue constraint.

The idea that certain more educated respondents might be more ideological is not utterly new in the literature (Hetherington 2001; Kinder and Kalmoe 2017). But previous work has frequently grouped together knowledge with other beliefs or behaviors (Stimson 1975; Knight 1985; Jennings 1992; Lupton, Myers, and Thornton 2015). For example, Lupton, Myers and Thornton (2015) find that political sophistication is positively related with the degree to which a person's political opinions are unidimensional. However, their measure of sophistication includes not just political knowledge, but also self-described political interest, vote frequency, and political participation in other campaign activities. It is this melding of these different elements that hampers how we understand constraint. However, when those factors are separated and measured independently, the relationship between issue consistency and knowledge clearly emerges. It is not that the other factors are irrelevant predictors, they are just secondary to knowledge, a factor which is so important that it is equivalent in predictive power to self-described ideology.

Based on the prior work that we have described, the remainder of the paper seeks to test the various hypotheses that arise from these theories.

- H1 Non-Ideology: There is no segment of the public except perhaps for a tiny fraction – that really displays the characteristics of ideology by holding connected opinions in the same way that elites do.
- H2 Partisanship: The segment of the public that holds such connected opinions is defined by the parties. Strength of partisanship should predict measured ideology.
- H3 Asymmetry across Parties: The segment of the public that holds such connected opinions is defined by partisanship, where there is a significant difference between the parties.
- H4 Political Participation: The segment of the public that holds such connected opinions is defined by participation in politics. Being a voter or a primary voter should be correlated with measured ideology.
- H5 Political Knowledge: The segment of the public that holds such connected opinions is defined by political knowledge. While more knowledgeable groups behave in ways consistent with constraint as Converse described it, less knowledgeable people do not.

It is our contention that only the last of these claims is supported by the data. In the following section we show that the characteristic that truly predicts issue constraint is having a thorough knowledge of politics and the language people use to discuss it – something true of a small portion of the general public.

Data and Empirics

To test our hypotheses, we explore data from three recent, large-N surveys of Americans. Each of these surveys contain a number of questions regarding respondents' positions on a range of issues that have recently been debated by members of Congress. The 2012 version of the Cooperative Congressional Election Study (CCES) asked respondents 10 questions that were designed to mimic roll call votes that were recently cast in Congress. Each question posed a binary option to respondents by asking them if they supported or opposed a particular policy. These policies related to tax policy and budgets, health care and birth control policy, free trade, ending "Don't Ask Don't Tell," and the Keystone Pipeline. The specific question wording for these 10 questions is included in the Supplemental Materials. We also use data from the 2014 Pew Research Center's survey on political polarization in America. In this survey the respondent is presented with two different statements regarding broader issues that are often debated between the contemporary parties. For example, one question asks respondents "...whether the first or the second statement comes closer to your own views - 1. Government is almost always wasteful and inefficient or 2. Government often does a better job than people give it credit for." We use 10 of these questions from the survey. The exact wording for each question is also contained in the Supplemental Materials. Finally, we use data from the 2012 cross section of the ANES study. This study includes a number of policy questions that range across economic, civil rights, and national defense policies.

The three datasets are similar in some respects (policy driven questions for a national sample), but quite different in other respects such as survey mode, question content, and the question format. While the CCES and ANES focus on specific policies, the Pew survey deals in broad views of American values more generally. Furthermore, the ANES questions are mostly not dichotomous (unlike the CCES), allowing respondents to take a range of positions. These differences are important for our thesis. In such disparate environments we are able to find patterns that are not just broadly similar, but are nearly indistinguishable. While we do believe that some survey characteristics might change things slightly, the results here give us great confidence that we are finding reliable patterns that are true of public opinion broadly and not a particular set of respondents or questions.

Using these data, we consider each hypothesis in turn. First, dealing with the minimalist hypothesis, we establish that issue constraint exists – despite the fact that individual issues are not highly correlated and there is a lot of issue incoherence in the public. We then turn to subsets of the electorate and show that levels of issue consistency are equal across all partisan subgroups, whether split by partisan strength or across the parties. We also show that political participation has very little correlation with constrained responses and that knowledge is unambiguously correlated with constraint. Our conclusion is that ideologically consistent responses are most strongly predicted by political knowledge – even in the presence of those other variables that are often used to capture political sophistication or engagement like partisanship, participation and other demographic factors.

Non-Ideological Thinking

We begin by considering whether or not constraint is present at all among the American public. What is the correlation across individual issues questions? Using both the CCES and Pew survey data, we find that in most cases correlations across issues are quite low. In fact, in many cases the correlation approaches zero (only 0.18 on average in the CCCS and only 0.21 in the Pew data). Superficially this supports the minimalist position. Furthermore, the correlations in the surveys are dramatically lower than issue correlations in the Senate. The difference between the mass public and elites is stark. In the Senate, the average issue correlation is 0.67, which is dramatically higher than the correlation between the same issues in the mass public. In fact, the minimum correlation in the Senate (excluding the US Korea Free Trade Agreement, which cuts across traditional partisan lines) is higher than the maximum correlation value among voters. Figure A1 in the Supplemental Materials shows the individual correlations for each issue in each survey. In nearly all cases the correlations are low. But since we know that aggregating several issue questions can lead to a fairly robust measure of constrained opinion (Ansolabehere, Rodden, and Snyder 2008), what happens when we aggregate these issues?

To estimate whether voters hold consistent issue positions, we use the survey questions in the CCES and Pew surveys to create a measure of issue consistency. The basic idea is that if opinions are structured according to a broad, predictable framework, we should be able to use a respondent's view on some issues to predict their opinion on a different, unrelated issue. Using the CCES (or Pew Survey) we take nine of the votes to estimate a one-dimensional measure of issue consistency for each respondent. Using this ideal point estimate we then see how well the measured ideology of respondents predict the preferences of those same respondents on the omitted tenth vote. The method of omitting each vote one

⁶ We obtain Senate roll calls here: http://www.senate.gov/legislative/LIS/roll_call_lists/vote_ menu_113_1.htm.

⁷ In the Supplemental Materials we report the same results, but using the self-described ideology of the respondent from a 7-point Likert scale question as the independent variable rather than the modeled ideal point. The results are quite similar to those reported in the main paper.

at a time overcomes the problem of endogeneity by avoiding using a person's response on an issue to predict itself. If, as claimed by the ideological minimalists, issue positions are idiosyncratic and unstructured across the population, then the measure estimated using the nine votes should be a poor predictor of the tenth omitted vote.

Though we only examine the first dimension of the underlying data (in keeping with the literature), that should not be taken to mean we believe that multidimensional models are necessarily inappropriate (Lupton, Myers, and Thornton 2015). However, our efforts here focus on measuring how well the first dimension of the data explain issue positions. It is important to note that our method does not force certain questions to load onto the first dimension. Indeed the fact that we did not select issues that should be correlated with one another means that may not happen at all. Unlike confirmatory factor analysis where questions are assigned to dimensions, we allow the model to endogenously determine the best way to structure the latent dimension. This is a key difference when studying the public because certain issues may be highly correlated among elites but not among the public.

To estimate the ideological positions of survey respondents, we use a standard ideal point model that produces one estimate for each respondent (Clinton, Jackman, and Rivers 2004). If citizens or voters consider issues in a way that is similar to the grouping of issue preferences by elites, then this parameter will represent the degree to which a person is consistently liberal or conservative on a unidimensional policy scale. Those with "moderate" scores represent respondents who hold a mixture of liberal and conservative positions.8

Using this model, we then assess how well the ideal point that is estimated with the nine issue questions predicts the voter's response to the omitted, tenth issue question. This method best approaches the concept of constraint as knowing "what goes with what." If the ideal point model is merely a collection of unconnected policy preferences it should not succeed in predicting the issue positions of respondents. To assess the performance of the models, and because the response option is binary, we use the area under the Receiver Operating Characteristic (or ROC) curve as a measure of model performance. The ROC curve is a diagnostic measure of how well the model performs beyond the null model by plotting the true positive rate against the false positive rate. As we intend to measure how well ideology does beyond "simply guessing," this measure is perfectly suited

⁸ It is important to note that this measure, while indicating the degree to which an individual is ideologically consistent, it does not indicate the extremity of their opinions. See (Broockman 2016) for a discussion of this point.

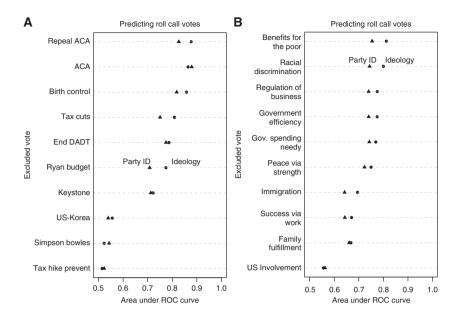
to the cause. An ROC value of 0.5 indicates a model that performs no better than the null. A value of 1 indicates a model with perfect classification. In the Supplemental Materials we also show a different measure of model fit by looking at the percent correctly classified and the value of the coefficient on ideology as well as the standard error of that estimate. The results are substantively similar.

To benchmark how well the model of constraint predicts issue questions, we conduct the same analysis but replace the estimated ideal point on the right hand side of the equation with a series of dummy variables measuring the party identification of the respondent. With near universality scholars identify partisanship as one of the most powerful predictors of voter's issue preferences (Bartels 2000). Thus, how well a measure of issue consistency does at predicting preferences can be measured by comparing its performance to a similar model that uses partisanship in the same way. Because of the unique relationship between strong partisans, weak partisans, independent leaners, and pure independents on vote choice and issue preference, we create seven dummy variable and include six of those seven dummies in the model (we omit the variable for pure independents).

If the claims of ideological minimalists are right, the model that uses the respondent's ideal point as the predictor should not be good at predicting the omitted vote. Contrary to this hypothesis, the predicted accuracy of the models is substantially better than guessing. Figure 1 shows that we can clearly reject the non-ideological hypothesis. Moreover, the performance of the ideological model is similar to a model that uses partisanship as the predictor. This is noteworthy given the well-established relationship between partisanship and issue preferences. According to this metric, the ideological model performs excellently. In each case the ideological model is at least as accurate as the partisan model in predicting respondents' issue preferences.9 This is true in both the CCES (left panel) and Pew survey (middle panel). In the Supplemental Materials we replicate this result by including both partisanship and ideology in the same model to predict the omitted vote. Even after accounting for party, ideology remains a strong predictor of one's issue position. The inescapable conclusion is that a minimalist view of ideology is mistaken, unless one believes that partisanship is only minimally related to issue positions as well.

Though we will make more of the comparison to elites below, it is worth pausing here to compare these results to those of US Senators. The final panel of Figure 1 shows the predictive power of a model of ideology on vote choice

⁹ Similar to our findings, Ansolabehere, Rodden, and Snyder (2008) find that the aggregation of a number of survey items performs nearly as well as partisanship in predicting presidential vote choice.



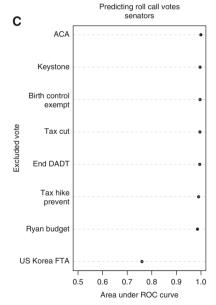


Figure 1: Predicting Votes Using Ideology.

(A) CCES data, (B) Pew data, (C) Senate roll call votes. The points show the area under the ROC curve from a logit model with the issue position (y-axis label) as the dependent variable and the ideal point (circles) or partisanship (triangles) of the respondent as the independent variable. For example, we predict a respondent's opinion on the Keystone Pipeline using an ideal point generated from the other 9 votes shown in the figure.

among elites. To conduct such a model we take eight roll call votes that were cast in the Senate that also appeared on the CCES survey in 2012 (giving us strong comparability across populations). Using these eight votes we conduct the same procedure as outlined above – create an ideal point by scaling seven of the eight votes together and then using that estimated ideal point to predict the senators' positions on the omitted vote. After doing this eight times – once for each vote - we then plot the area under the ROC curve for each model in the right panel of Figure 1. The results diverge from the other two panels of Figure 1 that use citizen responses. In many cases the area under the ROC curve approaches 1. Thus, while ideology does powerfully predict the preferences of the average citizen, the predictive power of those models does not compare to the same level of accuracy as when applied to elites in office. This is consistent with a scenario in which voters are not using an all-encompassing unidimensional ideological scale when deciding their position on any one particular issue. Rather, one dimension gets the researcher quite far – as far as partisanship, but not nearly as far as when working with members of Congress. This is an important piece of evidence as it suggests that respondents' ideologies are a coarse reflection of the activity going on in the elite institutions of Congress. These results nevertheless go decisively against the minimalist position that ideology is completely absent in the mass public. The question remains which subset of the public looks most like elites.

Partisans and Ideological Responses

The next two hypotheses – partisan ideology and asymmetric partisan ideology - relate directly to the parties and how partisans behave. Does being a strong partisan relate to one's levels of constraint, and is this something that is more true of one party than the other? Figure 2 displays the results of the ideal point models as described before. However, in this case we run separate models for respondents who identify with either of the two parties. We further subset the data by each person's strength of partisan attachment (similar Pew data is in the Supplemental Materials). We then plot the area under the ROC curve for each of these models. As before, each point in Figure 2 represents the results of a different model. The results show little differences in ideological constraint between the levels of partisan strength within either party. Independent leaners, weak partisans and strong partisans all appear to be approximately equally consistent in their issue positions. Furthermore, there is little difference between Democrats and Republicans. Partisans of either side are equally constrained. It is true that the weak partisans tend to score just a bit lower than the other groups, but this is

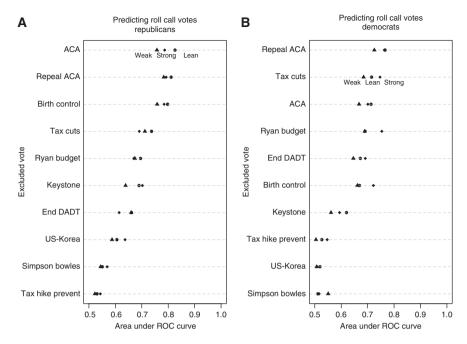


Figure 2: Predicting Votes Using Ideology – By Party and Partisan Strength. (A) CCES data, (B) Pew data. There are relatively few differences between levels of party strength in how ideology predicts ideological responses to questions.

not always the case (e.g. tax cuts, the Ryan budget, ending DADT) and the differences that exist are always minor.

This analysis omits pure independents and, of course, it is possible that dividing by strength of partisanship hides pattern that exist when we simply consider whether a person identifies with a political party at all. Figure 3 displays the partisan differences across the two datasets when the model includes any respondent that identifies (or leans towards) the Republican, Democratic, or no party altogether. The clear pattern is that Democrats, Republicans, and pure independents are nearly equally ideological in each case. Sometimes Democrats (triangles) are more ideological and sometimes Republicans (circles) are, but there is no clear pattern to indicate that one party is more ideologically constrained than the other, nor that independents are dramatically less constrained than their partisan counterparts. The results suggest that there are no significant differences in ideological thinking keyed to either strength of partisanship or party affiliation. We can reject both the partisan ideology and the partisan asymmetries hypotheses.

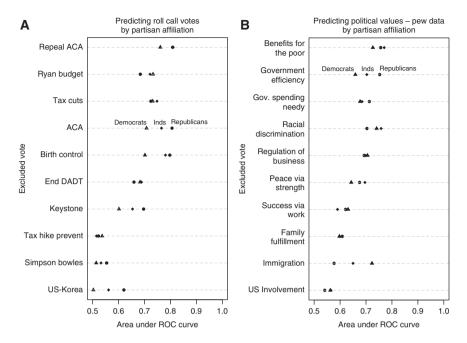


Figure 3: Predicting Votes Using Ideology – By Party.

(A) CCES data, (B) Pew data. The differences between Democrats (triangles), Independents (diamonds) and Republicans (circles) are not substantial or consistent (sometimes Democrats are more ideological than Republicans and vice versa). This result does not depend on the use of either the CCES that emphasizes discrete policy positions or the Pew data that emphasizes broad worldviews.

Participation, Knowledge and Ideological Responses

We now turn to the two remaining hypotheses about participation, knowledge, and their relationship to ideological thinking. To measure participation we use the CCES validated vote that indicates whether the respondent voted in the 2012 presidential primary and general elections. To measures political knowledge, we create a summative index of answers to eight factual knowledge questions related to the operation of the US government. The median respondent in the CCES answered 6 of these questions correctly while nearly 10% answered none correctly and slightly more than 25% correctly answered all 8 questions. In the

¹⁰ These questions include knowing the party in control of the House, Senate, and state legislature, and the party of the respondent's governor, house member, and senators.

Supplemental Materials we show the full distribution of knowledge responses. We then divide respondents into three groups, those answering fewer than four questions correctly (28% of respondents), those answering between four and six (32% of respondents), and those answering more than six questions correctly (40% of respondents). We then conduct the same ideal point estimation process for each of these subgroups (participation and knowledge) and predict the omitted vote, recording each time the performance of the model. We then plot the area under the ROC curve for each model and question.

Is one, or both, of these factors related to constrained responses in the American public? As these data show, both are related, but participation is only weakly related to constraint while knowledge is strongly related. Figure 4 displays the ROC results for different levels of political knowledge (in the right panel) and participation (in the left panel). Focusing on the left panel, there are some differences

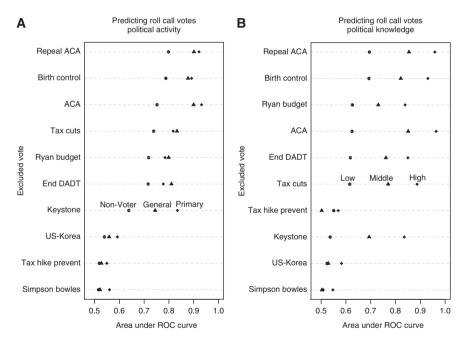


Figure 4: Predicting Votes Using Ideology – By Political Knowledge and Vote Frequency. (A) and (B) come from CCES data. In the left panel, which displays the results by validated vote status (non-voters, general election voters, and primary election voters) the differences are far less strong. Typically, both general election and primary election voters are much higher than non-voters, but there is no difference in levels between those two groups. The right panel shows the level of ideological responses by level of political knowledge. The differences are significant between each group.

between non-voters and the other two groups - general election and primary election voters. However, there is no clear pattern and only minimal differences between general and primary election voters. The right panel, however, shows a completely different story. In this case, levels of ideology are of great importance. Low knowledge respondents are only rarely able to display much ideological behavior beyond the null model and only on issues of the greatest salience (like the ACA or birth control). In contrast, mid-range and high knowledge voters look substantially different compared with previous graphs – regardless of other factors.

Political knowledge and participation are positively correlated (0.32 in the CCES data) and so it may be the case that the positive relationship observed between voting, knowledge, and ideological consistency could be conflated by the correlation between these two variables. In the Supplemental Materials we show the proportion of voters who fit into each category of political knowledge and activity. Though there is a difference between primary voters and general election voters in terms of knowledge, that difference is much more muted than the difference between voters and non-voters, where the difference is much larger. As we would expect, those who participate more by voting tend to be more knowledgeable. The median primary voter answered 7 knowledge questions correctly while the median general election voter answered 6 knowledge questions correctly and the median non-voter answered 4 of these questions correctly.¹¹

Partial Effects

The previous sections have tested the various hypotheses regarding the use and prevalence of ideological thinking in the American public. The results show that public opinion does contain consistent patterns and that partisanship, party asymmetry and political participation are not strongly related to levels of ideological thinking. On the other hand, our results show that political knowledge is strongly related to ideological consistency and opinion constraint. In this section we test these hypotheses together in a regression model to see if political knowledge remains as the strongest determinant of constrained opinions. To do this, we use the basic ideal point model that we describe above with the ten policy items asked

¹¹ Figure A9 in the Supplemental Materials displays these results. What we see is that after accounting for levels of political knowledge, increased participation in voting does not relate to increased ideological constraint. The different groups of voters (or non-voters) have equally ideological opinions within knowledge groups. Figure A10 shows the opposite relationship ideology by knowledge after accounting for participation.

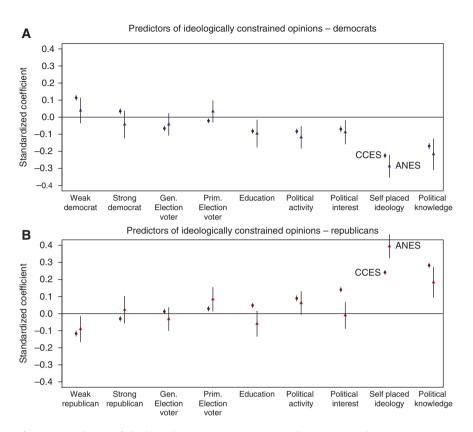


Figure 5: Predictors of Ideological Opinions among CCES and ANES Respondents. Each point shows the standardized coefficient from an OLS model in which a respondent's estimated ideal point is the dependent variable and each x-axis label is an independent variable. Among both Democrats (A) and Republicans (B), self placed ideology and political knowledge are the strongest predictors of ideological constraint. This is true in both the CCES (diamonds) and ANES (triangles).

in the CCES survey and essentially all of the policy questions asked in the 2012 ANES survey (a full list of these variables is in the supplemental materials). To test for asymmetries across parties we conduct separate analyses for Republicans and Democrats. Among Republicans, those with more conservative positions on all ten items have larger values on the ideal point scale. Among Democrats, those with more liberal positions on the ideal point scale have smaller (more negative) scores. We then regress the measure of ideology on political knowledge, voting behavior,

¹² Because the ANES responses are not dichotomous, we use a factor analysis model rather than the ideal point model in the CCES.

strength of partisanship, an index of political participation (donating, rally attendance, campaign volunteering, and placing a yard sign on your property), political interest, self-placed ideology, and a variety of demographic variables that are also related to political opinions, including an overall measure of education attainment. This allows us to test the marginal relationship of each of these factors.

The results in Figure 5 display standardized coefficients to allow direct comparisons across variables.¹³ These coefficients show that even after controlling for a variety of factors, political knowledge remains, by far, the strongest factor related to ideological issue positions. This is true among both Republican and Democratic respondents in both the CCES (circles) and ANES (triangles) surveys. In fact, the relationship between political knowledge and constraint is as strong (or nearly as strong) as a respondent's own self-placed ideology and their issue constraint. Among Republicans in the CCES, the coefficient on knowledge is 0.28, indicating that a one standard deviation increase in knowledge is associated with a 0.28 standard deviation increase in issue consistency. The next largest coefficient is a respondent's own self-placed ideology, which has essentially the same predictive power.

Variables associated with political interest, activity, and education are less than half the magnitude of political knowledge. Coefficients on voting and partisan attachment are significantly smaller. The same broad patterns are true among Democrats. The coefficient on knowledge is smaller among Democrats than among Republicans (-0.17 compared with 0.28), nevertheless, the relationship between political knowledge is substantially larger than any of the other variables. These same patterns are present in the ANES models as well. Focusing on the CCES data among Republicans, if we add up all of the coefficients on general election voting, primary election voting, and the other factors included in the participation index, this combined effect remains smaller than the effect of being a high knowledge Republican. In other words, the predictive power of political knowledge is larger than the cumulative power of general election voting, primary election voting, donated to a campaign, placing a yard sign, working for the campaign in some way and attendance at a rally. Only a vanishingly small number of citizens do all of these things (1% of CCES respondents). In our view this comparison alone illustrates the power of political knowledge as a predictor of ideology. Nothing else approaches the strength of this relationship, and this is true in each of the models displayed in Table A1 in the Supplemental Materials.¹⁴

¹³ The regression models from which this figure is derived are displayed as Table A1 in the Supplemental Materials.

¹⁴ The method is also robust to changes in methodology. We ran the ANES scale using both an ideal point model where the items were dichotomized (presented here) and using a factor analysis. The results are essentially the same.

The two variables that stand out as being the most powerful are clearly knowledge and self-placed, symbolic ideology. Among Democrats the coefficients in the ANES are not distinguishable from one another and on the CCES they are distinguishable (because of the large sample size but are about the same magnitude. Among Republicans knowledge is more important than symbolic ideology on the CCES (though that is not true on the ANES). The broad picture is that these two variables stand out from all of the others in their ability to predict ideological thinking and are not, given these data, obviously distinguishable from one another in their predictive power.

This is a quite impressive finding given that symbolic ideology is so often used as an implicit proxy for constraint.15

It is important not to oversell the power of ideology. There is a school of thought that suggests that the public's preferences can be described well by a single dimension (Campbell and Cannon 2006; Bishop 2009; Jacobson 2012; Abramowitz 2013). While we have found that constraint is more likely to exist among the more knowledgeable, it is also true that that even those with the most knowledge fall far short of the levels of political knowledge found among elites. Figure A12 in the appendix shows that the gulf between ordinary people who just happen to know a great deal about politics and Senators is quite large. Ideology is a relevant feature of mass opinion among the more knowledgeable, but it is not anything like what we see among elites.

Discussion

So who holds constrained views? Who knows "what goes with what" and uses this framework to structure their political beliefs? The simple answer is that the most consistently constrained citizens are very likely to be the most knowledgeable citizens and that this relationship is just as important as the one between self-placed ideology and constraint. This is so, in our view, because knowledge is a prerequisite for making those connections between issues. We have shown this in multiple ways, but will focus our discussion here on the analysis of the partial effects in the regression analysis. Despite the correlations between concepts like

¹⁵ In the Supplemental Materials we point out both that the results do not appear to be due to low knowledge respondents being less capable of taking surveys because find that the average across time correlation for below average knowledge respondents is 0.38 which is higher than the figure for the across issue correlation among above average knowledge respondents (0.22). Differences in issue constraint appear to be due to knowledge levels and not simply measurement error due to survey taking. See Table A2 for the full set of these results.

partisanship, participation, and political knowledge, the answer is clear that knowledge is the most important of these predictors. It strongly outperforms other characteristics like partisanship or participation. Indeed the influence of knowledge is so strong that it appears to predict constraint about as well as does self-placed ideology – a very high bar indeed.

Furthermore, our results disprove the idea that ideology is not a feature of the public's thinking altogether. Rather, it is a vital concept that is clearly part of how some people think – especially the highly knowledgeable. As those who minimize the role for ideology correctly argue, individual issue preferences are only minimally correlated. However, those relatively weak correlations add up to something important in a model that averages over several issues, thus at least partially dealing with measurement error (Ansolabehere, Rodden, and Snyder 2008). In fact, this scale does just as well as individual partisanship – perhaps the key variable in political behavior and public opinion – at predicting mass political attitudes on individual issues. Any variable that captures one third of the variation in the public's issue positions deserves the attention of social scientists interested in measurement.

This paper also adds to a growing literature regarding asymmetric variation in ideological opinions within the public. Recent scholarship has asked if there is a difference in the way that Democrats and Republicans *think* and *talk* about ideology (Grossmann and Hopkins 2015). While our data cannot speak to each of these concepts, regarding operational ideology, our results suggest a simple outcome: both parties' adherents are equally constrained.

Finally, it is important to understand that these results suggest that if we are worried about ideology being excessive in the mass public we should not blame participation in politics or simply being a strong partisan, because the effects of each of these factors do not compare to the importance of political knowledge. The vast majority of Americans may only have a blurry picture of what politics is, how it works, and what government does, but those who do manage to clear up their vision (about 25% in the CCES) appear to also give more clearly ideological responses, though we acknowledge complex causality issues are not solved here. However, when polarized politicians speak to the public, the politically knowledgeable are most able to interpret those ideological signals. They make the connections across the issues and speak the language, even if they do not fully resemble their elected leaders. Partisan gridlock is therefore not just a reflection of the relationship between elites and the masses – it is a reflection of who can speak the language – a relatively small, but not unimportant, subset of the populace.

If these results suggest anything, it is that we need much more and better attention to the project of measuring citizen constraint, since distinguishing who can relate to elite signals and who cannot is an essential part of understanding how politics and polarization work. We see three conclusions to add about constraint, partisanship and polarization in the American public. First, the only group that really has a chance of responding to polarized elite signals is the group of highly knowledgeable citizens. Any effort to find "polarization" outside of that group will inevitably come up short, because the non-knowledgeable simply do not have enough political awareness to connect their issue positions consistently to party issue positions. This leads to our second point: while issue polarization is low among average citizens, we still might find a form of polarization among this group that is based on group attachment rather than issue positions. In other work we show that citizens adopt the positions of their party leader, regardless of what those positions are (Barber and Pope n.d.). In essence we find a shallow, unprincipled polarization rooted in party loyalty rather than deeply held issue positions like the ones Converse envisioned.

Finally we would add that previous scholarship suggesting that ideology is epiphenomenal to issue positions is clearly incorrect. In fact, a brief review of Figure 1 reveals that a measure of ideology does as well or often better than partisanship at predicting issue positions. The conclusion should be that though ideology is expensive to measure it is an important feature of many citizens' worldviews.

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