The Emergence of Coherent Political Choices from Incomplete Issue Preferences *

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We provide the clearest evidence to date for an 'issue publics' account that reconciles conceptions of democracy premised on policy voting with longstanding evidence that citizens typically lack 'real', stable opinions on many policy issues. In this account, voters make coherent political choices based on the varying subsets of issues about which they as individuals care and form stable attitudes. Leveraging a novel three-wave panel survey experiment that repeatedly measures British respondents' issue positions and their political choices between hypothetical candidates taking randomised issue positions, we provide the first direct evidence that higher opinion-stability issues have greater causal effect on citizens' political choices. We then evidence hitherto untested issue publics implications: even restricted to issue-based considerations and given average issue opinion instability, individuals' candidate choices are predictable and, when candidates contrast clearly on issues respondents' care about, highly temporally stable. Aggregate issue opinion instability does not prohibit coherent issue voting.

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Introduction

For half a century, the study of public opinion and political behaviour has been deeply shaped by the finding that many citizens give temporally unstable responses to questions about their views on political issues, even as their stated identification with political parties is highly stable (Converse, 1964). This finding, revealed by the first major panel studies of public opinion in the US, and in numerous subsequent data collections in the UK, France and US (Butler and Stokes, 1969; Converse and Pierce, 1986; Kinder and Kalmoe, 2017), has been taken to indicate that an understanding of democracy premised on issue voting—where all citizens make political choices by weighing up candidates and parties in terms of their positions across the range of live political issues—is empirically untenable (Achen and Bartels, 2016). In addition to motivating reconsideration of the normative arguments for democracy, this finding also plays a central role in justifying an identity-based view of political behaviour, in which voting is primarily shaped by social identities (which tend to be stable for most people) rather than by preferences about the political choices that governments take (which are apparently not stable for many people).

In this paper we provide new evidence which challenges these conclusions and which suggests that citizens *can* make coherent and consistent political choices based on issue considerations, even when they lack real opinions on many issues. Our argument builds on Converse's (1964) concept of "issue publics". An issue public is the subset of the population who care a lot about a particular issue and hold real, stable opinions on that issue. If enough citizens were members of *different* issue publics, Converse observed that issue voting in the electorate could be widespread even while most citizens know little about most issues. This issue publics logic has been supported by some observational studies, but the evidence has been disputed in ways we describe below.

In this paper we perform new and more powerful tests of the issue publics account of political choice using a novel panel candidate choice experiment. Fielded to UK voters at six-month intervals, each wave of our survey measured respondents' self-reported positions on the same set of policy issues (covering 34 issues in total) as well as respondents' choices in conjoint experiments where hypothetical political candidates took positions on the same issues. In contrast to existing observational studies, our candidate conjoint experiments eliminate the direct causal

pathway between partisanship and vote choice, enabling us to focus on the connection between issue preferences and political choice. Our respondents made choices between hypothetical candidates about whom they knew only three issue positions; they had no other information about these candidates besides those issue positions. Crucially, we asked respondents to make choices between the *same* pairs of hypothetical candidates in each in each survey wave, yielding a repeated measure of candidate choice.

By exploiting the resulting combination of repeated measures of respondents' candidate choices and their stated issue positions, we generate novel empirical insights concerning issue publics theory and the possibility of issue-based political choice. First, rather than relying on problematic self-reports of issue importance, we leverage respondents' issue opinion measures and candidate choices in a given survey wave to estimate the choice-based importance of each issue (Hanretty, Lauderdale and Vivyan, 2020). This allows us to perform the first direct test of the *importance-stability association* that underpins issue publics theory: that, when making multi-dimensional political choices, citizens attach more causal weight to issues on which they hold more stable opinions. In the aggregate, we find that issues on which citizens have more stable positions are also accorded more weight in citizens' candidate choices. At the individual level, we find that citizens put more weight on candidate proximity on issues for which they personally gave the same issue position in a previous survey wave.

Second, our repeated measures of candidate choices allow us to examine hitherto untested implications of issue public theory concerning the temporal stability and predictability of the *political choices* that citizens make. The reason why the temporal characteristics of respondents' candidate choices are important for understanding political behaviour is the same reason why Converse considered the stability of self-reported issue opinions to be important. The stability and predictability of political choices made repeatedly between the same alternatives can tell us something about the extent to which these choices reflect real and enduring political opinions and decision-making processes, as opposed to being fleeting responses to a survey prompt. Just as past research judges whether voters have meaningful opinions on individual issues by studying the temporal features of reported issue opinions, temporal variation in choices between the same political alternatives can be informative as to whether voters are capable of meaningful

issue-based political choices.

We show that the temporal stability of respondents' candidate choices in our panel conjoint experiments varies depending on the nature of the presented choices in a manner predicted by issue publics theory (we call this *conditional choice stability*). When respondents are faced with pairs of candidates who take positions on issues that tend to elicit stable issue opinions, respondent candidate choices are more stable. When respondents are faced with pairs of candidates who take highly contrasting positions on issues which tend to be accorded high importance in candidate choice, respondent choices are far more stable than when they are faced with candidates who differ very little or only on low importance issues. Further, when we expose people to levels of candidate policy disagreement approaching those seen in real UK elections, the level of candidate choice stability is high in absolute terms.

Finally, in line with an issue publics account where people can make issue-based political choices based on those issues on which they hold real, stable opinions, we find evidence of *choice predictability*. Candidate choices made 6 and 12 months after a respondent gives a set of self-reported issue positions are very nearly as predictable, based on those baseline issue positions, as are contemporaneous candidate choices.

What emerges from our analysis is the clearest demonstration to date that the lack of enduring, well-formed opinions for many citizens on on many political issues—a well-established empirical fact in political science—need not imply that citizens fail to respond to policy positions when voting. Temporally stable and coherent political choices can emerge from individuals making decisions on the basis of the varying subsets of issues that they care about, which are also the issues on which they have stable positions. While this study cannot adjudicate between issue-oriented and identity-oriented explanations of political behaviour in general, it does show how stable issue-oriented voting *can* occur in a context where identity-oriented voting is excluded by experimental design.

Issue opinion stability and candidate choice

In this section we summarise research showing that voters have unstable views on many policy issues. We then outline the debate between those political scientists who claim issue opinion

instability renders issue voting implausible, and those who claim that the evidence is consistent with different individuals voting on the basis of different (and perhaps quite small) subsets of issues (the "issue publics" hypothesis). We argue that making progress in this debate requires empirical evidence that more convincingly disentangles issue- and identity-rooted mechanisms, and then set out our approach.

Enduring evidence of issue opinion instability

In his classic study of early mass survey data, Converse (1964) raises major doubts about citizens' capacity to think about politics in terms of policy issues. Among other analyses aimed at establishing whether citizens' opinions on individual issues stem from coherent, over-arching ideologies ("belief systems"), Converse examines the stability of individuals' issue opinions across different survey waves, arguing that the existence of belief systems should lead to stable issue opinions. He finds that, for several issue questions relating to a variety of policy topics, the correlation between respondents' reported position in one wave and the next was typically modest, and substantially lower than the over-time correlation between self-reported party identification. These patterns, Converse concludes, indicate that "large portions of an electorate do not have meaningful beliefs, even on issues that have formed the basis for intense political controversy among elites for substantial periods of time" (1964, 245).

These findings of modest average issue opinion stability in the US electorate inspired much subsequent research. Supporting the generalizability of Converse's findings, panel survey studies in Britain (Butler and Stokes, 1969, Ch 8) and France (Converse and Pierce, 1986, 247-51) find similarly modest levels of average issue opinion stability, as do those studying the US electorate in subsequent decades (Kinder and Kalmoe, 2017).

Subsequent debate has considered whether modest observed opinion stability indicates a lack of real opinion in the electorate or is really driven by survey measurement error (Achen, 1975; Lacy, 2001). Some have shown, for example, that estimated opinion stability is much higher when one makes different assumptions about measurement error processes in survey responses (Achen, 1975) or through the aggregation of multiple items into summary indices (Ansolabehere, Rodden and Snyder Jr., 2008). However, this measurement error explanation is undermined by

evidence that respondents' degree of issue opinion stability appears to be related to respondent political sophistication in ways that would not be predicted by the measurement error account (Converse and Pierce, 1986; Kinder and Kalmoe, 2017; Freeder, Lenz and Turney, 2019), and that average issue opinion stability across the electorate is at best moderate even when issue opinion items and response options are very precisely stated in order to reduce survey measurement error (Broockman, 2016; Lauderdale, Hanretty and Vivyan, 2018). Regarding summary issue opinion indices, it is also not clear whether these exhibit greater temporal response stability than individual issue opinion items because they average out survey measurement error or because they average out the "lack of crystallized opinion among respondents" (Feldman, 2013).

Thus, existing research offers enduring evidence that voters typically lack stable opinions on many issues. It also offers evidence that this cannot be explained away as an artifact of measurement error, but reflects voters' lack of 'real' attitudes on many issues.

Nonattitudes, issue publics and political choice

Given many citizens' apparent lack of enduring opinions on many issues, several political scientists consider it implausible that large portions of the electorate in democracies vote based on well-formed ideologies that organise their views across all political issues (Converse, 1964; Kinder and Kalmoe, 2017; Achen and Bartels, 2016). More relevant for our purposes is what existing research concludes about the possibility of issue-oriented voting of *any* form – i.e., votes cast on the basis of issue opinions, whether those opinions are ideologically organised or not. In their recent book, Achen and Bartels (2016) take a strong line on this. Reviewing the implications of political science research for the prospects of traditional notions of democratic accountability, they argue that issue voting is an "illusion" (41). Like several other studies (e.g., Campbell et al., 1960; Butler and Stokes, 1969; Kinder and Kalmoe, 2017), they argue that citizens' electoral choices are better understood as the product of social group identities rather than of citizens weighing up their agreement with candidates' or parties' positions across political issues.

Yet in his original study Converse (1964) nonetheless speculated that issue considerations could structure political choices even if citizens do not have ideologically organised opinions across issues and lack real opinions on many issues. Central to his speculation was a hypothesis

that he termed *issue publics*: the idea that different subsets of the population that care primarily about different issues and therefore form real, stable opinions on what government policy on that issue should be. Assigning individual respondents to issue publics based on the stability of their stated opinions on different topics, he suggested that the US public was indeed fragmented into a "plethora of narrower issue publics" (245). Although Converse did not have the data to test whether members of a particular issue public made vote choices based on that issue, he suggested that they might do so.

Some subsequent empirical research provides evidence supporting this proposal. Identifying issue publics by asking respondents to subjectively rate the importance they place on various issues, Krosnick (1990) shows that members of an issue public have more temporally stable self-reported opinions on that issue. He also shows that the relationship between proximity on a given issue and vote choice in Presidential elections is stronger for members of the relevant issue public. Sarlvik and Crewe (1983) report similar findings for UK general election voting (although not using the issue public terminology),[1] as does Gershkoff (2006) for US Presidential voting when measuring issue public membership via content analysis of open-ended ANES survey items. Both Krosnick (1990) and Gershkoff (2006) argue explicitly that their results demonstrate how, through issue publics, policy considerations *can* matter in democratic elections.

All of these studies rely on observational rather than experimental variation in the issue positions of the actors between which respondents choose, and the associations detected in these studies are by no means universally accepted as evidence of issue publics theory. This is partly because those associations could be due to a number of different mechanisms, only some of which involve issue opinions *causing* vote choices (e.g., Brody and Page, 1972; Achen and Bartels, 2016; Leeper and Robison, 2018). Brody and Page (1972) label these mechanisms "policy-oriented evaluation", "projection effects" and "persuasion effects" (457). The policy-oriented evaluation process involves issue considerations causing vote choices: voters consider their own issue positions relative to those of candidates and vote for the candidates based on issue proximity.

[1]Several other UK studies provide evidence that issue opinions are associated with general election vote choices. However, all of these studies analyse either raw issue opinion items un-weighted by issue importance measures (Heath et al., 1991) or issue opinion scales derived from several items and again un-weighted by issue importance measures (Heath, Jowell and Curtice, 1985; Heath, Evans and Martin, 1993; Evans and Tilley, 2017), or both (Fieldhouse et al., 2020).

Persuasion effects occur where voters' issue positions are brought into line with those of the party they identify with, such that an association between issue proximity and voting is observed without issue proximities actually causing vote choices. Projection effects may occur in studies that measure issue proximity based on voters' own placements of parties relative to themselves, since partisan biases may lead voters to perceive a party they identify with to be closer to them on the issues they care about.

Disentangling these identity- and issue-rooted mechanisms is difficult with observational data. The choices voters make in elections are usually between candidates with distinct and long-lived partisan labels who also take on distinct and long-lived policy platforms. Voters rarely get to choose between policy platforms that vary significantly across candidates from the same party, parties have many opportunities to shape their supporters' issue positions, and parties' positions are mostly stable from one election to the next.

Another concern regarding existing issue publics tests is the reliance on measures of respondents' self-reported subjective issue importance. Respondents' reluctance to label an issue "unimportant" can lead to errors in such measures (Converse and Pierce, 1986; Johns, 2010). Moreover, psychological and political science research demonstrates the difficulties respondents' face introspectively evaluating the personal importance they place on certain factors when making decisions (Wilson, 2002; Nisbett and Wilson, 1977.; Bartle and Laycock, 2012). Such difficulties can, for example, lead them to rate issue importance based more on attention received in recent elite or media debates (Sarlvik and Crewe, 1983, 224; Johns, 2010). Thus, evidence that people tend to assign higher subjective personal importance to issues on which they hold more stable opinions (Krosnick, 1990) does not necessarily imply that they actually place more weight on those stable opinions when making political choices.

In sum, issue publics theory suggests a mechanism by which issue-oriented political choice could occur despite most citizens lacking stable views on most issues. But we lack tests of this theory that clearly disentangle issue-rooted from identity-rooted decision mechanisms, and which convincingly identify those issues upon which citizens' put more causal weight when making political choices.

Our Approach

The central methodological obstacle to research in this area is the need for both repeated measures of the same individuals to assess stability as well as experimental variation in candidate platforms to convincingly establish causal relationships between candidate issue positions and those individuals' candidate choices. We are not aware of any previous panel candidate choice experiments with the structure of the one we report here. . In each of three survey waves, carried out at six month intervals, respondents were: (1) asked to report their positions on the same set of specific positional policy issues and (2) asked to make candidate choices between pairs of hypothetical candidates characterized solely in terms of the randomized positions they take on subsets of those issues (a conjoint experiment). The issue positions of candidates were randomized in the first wave but were fixed thereafter for each respondent in each subsequent wave. Thus, we observe individuals' responses to the same issue position items and candidate choice tasks over multiple time points.

Whereas existing research has examined whether subjective issue importance correlates with issue opinion stability, or whether observed electoral choices are explained by candidate-respondent proximity on issues rated as subjectively important, our data allows us to directly examine whether those issues which tend to elicit more stable respondent opinions really do have a stronger causal effect when respondents come to make multidimensional political choices.[2] Moreover, our repeated choice experiments allow us to examine hitherto untested implications of issue public theory concerning the temporal stability and predictability of respondents' *candidate choices* themselves, and how this varies conditional on issue opinion stability and choice set characteristics.

Our candidate choice experiments also minimise potential projection and persuasion effects by design, and therefore allow us to better identify the effects of issue opinions on choices compared to many existing studies of issue voting or issue publics. Both projection and persuasion mechanisms involve party identity causing vote choice, but party identity cannot directly cause candidate choices in our experiments because hypothetical candidates are defined solely

[2] Note that our approach does not identify which individuals belong to *which* issue public(s). Rather, we estimate which issues are more or less frequently part of the set of issues that respondents care about.

in terms of their policy positions. Regarding projection specifically, the potential for respondents to form biased perceptions of candidate positions is further minimised by the fact that respondents receive very explicit information about each candidate's issue positions. Regarding persuasion, we cannot rule out an indirect form of this mechanism whereby respondents self-report issue positions based on the stance of their preferred real-world party, then in our experiment vote for hypothetical candidates who share their issue positions because they infer those candidates are likely to be from their preferred real-world party. Although this mechanism would still involve citizens holding quite detailed issue-based understandings of parties, we argue that it is unlikely to account for respondent choices in our experiment. First, the independent randomisation of candidate issue positions in our experiment means that respondents will very often encounter candidates who offer policy combinations quite distinct from any real UK party. Second, our experimental results below reveal that, in their choices between candidates, respondents put a great deal of causal weight on issues (such as the death penalty) on which the main UK parties agreed, and which was subject to little debate at the time of the experiment. Respondents would have had difficulty guessing candidate party on such issues.

Leeper and Robison (2018) also use a candidate conjoint experiment to study issue publics theory and thus, like us, are also able to rule out partisan projection and persuasion effects. But they field their conjoint questions in a single wave and test whether conjoint candidate choices can be explained by respondent-candidate issue proximities weighted according to respondents' subjective self-reported issue importance scores. They find little evidence that self-reported issue importance is predictive of issue weighting in candidate choices, but this may reflect weaknesses of the self-reported importance measures. Our approach is to estimate the *revealed* importance weight that respondents attach to issues based on their observed issue positions and choices in the first wave of the survey. We are also able to study stability and predictability of conjoint candidate choices as a function of issue positions over multiple survey waves.

Theoretical Expectations

In this section we develop a series of testable implications based on an "issue publics" account of political choice. Consider a situation where voters choose between two political candidates

A and B at time t. A and B take positions ψ_{jAt} and ψ_{jBt} on a set of positional issues j, each represented on a separate issue-specific spatial dimension. In a simple random utility model of issue voting, each voter i has a most preferred position—an "ideal point"—on each policy dimension ψ_{jit}, and attaches disutility to departures from this position. A voter thus evaluates each candidate based on the "distance" between that candidate's position and their own ideal point on each issue. If we use absolute distance, we can express the aggregate spatial utility from each candidate across a set of issues j as:

$$u_{iA} = -\sum_j |\psi_{jAt} - \psi_{jit}| \qquad\qquad u_{iBt} = -\sum_j |\psi_{jBt} - \psi_{jit}|$$

At the moment of choice t, a voter's total utilities from candidates A and B are the sum of the per-issue voter-candidate distances u_{iAt} and u_{iBt} plus idiosyncratic utility shocks ϵ_{iAt} and ϵ_{iBt}, drawn randomly and independently for each voter at t. The voter's choice between A and B then depends on the difference in the total utility they derive from the two candidates, $(u_{iAt} + \epsilon_{iAt}) - (u_{iBt} + \epsilon_{iB})$. They vote for A if this difference is positive and B if negative. Note that this utility difference has two components: an *issue-based component* $u_{iAt} - u_{iBt}$, which is the difference in summed per-issue voter-candidate distances; and a *random component* $\epsilon_{iAt} - \epsilon_{iBt}$, which is the difference in the utility shocks the voter experiences for each candidate at t.

An issue publics account modifies this simple model in two ways. First, it allows for variation in the extent to which a voter has a well-formed, crystallized, position on each policy issue. One observable indicator of such crystallization is *issue opinion stability*: the degree to which a voter reports similar preferred positions ψ_{jit} on an issue when asked at two different timepoints $t = 1$ and $t = 2$. Following Converse (1964), high issue opinion stability indicates a more real—and thus enduring—view on the issue; low issue opinion stability reflects a lack of real opinion on the issue. Second, the issue publics account acknowledges that issues may be more or less *important* in terms of the weight they are accorded in voters' political decision-making. An issue j gets greater importance weight λ_{ij} the greater the utility penalty a voter attaches to departures from their ideal point on that issue when summing per-issue voter-candidate distances:

$$u_{iA} = -\sum_j \lambda_{ij} \left|\psi_{jAt} - \psi_{jit}\right|$$

Issue publics advocates (Krosnick, 1990; Gershkoff, 2006) argue that the psychological processes that lead a voter to develop stable opinions on an issue (small $|\psi_{ji1} - \psi_{ji2}|$) also lead them to put more importance weight on that issue in their political decision-making (large λ_{ij}). Krosnick (1990), for example, suggests that this helps voters manage information costs, focusing cognitive attention on the consideration of subsets of issues and candidates' positions on those issues. Thus voters make issue-based choices between candidates based on the issue opinions that they care about—and on which they therefore hold stable opinions. This leads to a first testable expectation from the issue publics account:

> *Importance-stability association*: the issues on which voters place more importance weight when making political choices at a particular timepoint are those issues on which voters' issue opinions are more stable.

This expectation has previously been evidenced based on measures of respondent self-reported issue importance (Krosnick, 1990; Gershkoff, 2006), but has not been tested using measures of importance as revealed by respondents' political choices.

The importance-stability association expectation concerns the link between the the temporal stability of issue opinions and the importance of issues for voters' political choices at a particular timepoint. However, the issue publics logic also generates heretofore untested expectations about the *temporal stability of political choices themselves*. To see this, consider a situation where a voter has to choose between the exact same two candidates repeatedly at timepoints $t = 1$ and $t = 2$, with both candidates offering exactly the same positions at both timepoints (as will be the case in the experiments discussed below). What, according to the issue publics model, will makes a voter's choice between the two candidates more or less stable across the two timepoints?

If candidate positions are fixed between $t = 1$ and $t = 2$, the stability of the voter's choice between A and B will be increasing in the stability of both the *issue based component* $u_{iAt} - u_{iBt}$ and the *random component* $\epsilon_{iAt} - \epsilon_{iBt}$ of the utility difference. Regarding the random component, its

stability will decline in the variance of the distribution from which the random candidate-specific utility shocks ϵ are drawn at each timepoint. Of more interest for our purposes is the stability of the issue-based component: this will be greater—and candidate choices therefore more stable—the more the issues under consideration elicit stable opinions for the voter (small $|\psi_{ji1} - \psi_{ji2}|$). This leads to the first of two expectations regarding the conditions of choice stability:

> *Conditional choice stability (i)*: Stability in candidate choices will be higher when the issues under consideration elicit more stable voter opinions

Our second conditional choice stability expectation focuses on the magnitude of the *issue-based component* of the utility difference at $t1$. Given fixed candidate issue positions across $t = 1$ and $t = 2$, a larger difference in the issue-based utility the voter receives from candidates A and B at $t = 1$ increases the absolute value of $u_{iA} - u_{iB}$ at $t1$. This in turn reduces the chance that temporal variation in random utility shocks or in the voter's issue positions is sufficiently large as to reverse the sign of $u_{iA} - u_{iB}$ between $t1$ and $t2$, and therefore makes it less likely that the voter changes their candidate choice between the two timepoints.

What factors increase the absolute difference in the issue-based utility the voter receives from candidates A and B? This difference will be large—and choices between candidates stable—when one of A or B takes positions much closer to the voter on issues to which voters attach high importance weight λ_{ij}. These are *high contrast* choices in terms of issue considerations. By comparison, the absolute difference in candidate utilities will be small—and choices between candidates unstable—when A and B take similar positions on all issues, when A and B take contrasting position only on issues to which voters attach low importance, and/or when A takes closer positions to the voter on some issues while B does on others. These are *low contrast* choices in terms of issue considerations.

This reasoning leads to our second conditional choice stability expectation:

> *Conditional choice stability (ii)*: Given stable candidate issue positions, stability in a voter's candidate choice will be greater the *higher contrast* the choice is in terms of issue considerations

Finally, issue publics theory implies an expectation concerning the predictabiliy of respondent choices between candidates:

> *Choice predictability*: given only information about voters' reported issue positions and the pattern of political choices that they make conditional on those positions at $t = 1$, we can predict choices between the same alternatives about as well at $t = 2$ as at $t = 1$.

The logic for this is as follows. Although voters may have unstable opinions on many issues, the issue publics theory suggests that their stable positions on those issues receive most weight in their choice calculus at both points in time. The issues on which people would ultimately be unstable were already playing little role in their $t = 1$ candidate choices. Thus, whatever lack of predictability there is in the relationship between $t = 1$ issue positions and $t = 2$ candidate choices, it was already present in the relationship between $t = 1$ issue positions and $t = 1$ candidate choices. This renders choices at time $t = 2$ just as predictable based on observed $t = 1$ issue positions and their functional relationship to choices at time $t = 1$, so long as there is temporal stability in the functional linkage between a voter's issue positions at time t and political choices at time t.

Data

We conducted a three wave panel survey of British respondents with waves at six month intervals in January 2018, July 2018 and January 2019. The number of respondents completing each wave was 7506, 3044, and 1650 respectively. The survey was conducted by YouGov.[3] All respondents in each wave were sampled from the respondents to previous waves. The overall level of attrition between waves was by design: YouGov used their standard sampling strategy *within* the set of respondents to the previous waves, with targets of 3000 and 1500 demographically representative respondents in the second and third waves, respectively. Because of this design, the unweighted demographic distributions of respondents to each wave are nearly identical. We

[3]All respondents had previously consented to the use of their anonymous response data at the time when they joined YouGov's UK panel. YouGov UK panelists are compensated based on a points system, convertible to cash once milestone levels are reached, with the reward amount determined by YouGov's estimate of the average time required to complete the survey.

provide descriptive statistics for the attrition process in the supplemental information. YouGov supplied population weights for each survey wave,[4] which we use in all analyses reported below (except for the attrition analysis).

In each wave, the survey instrument consisted of two types of question. First, respondents received seven *issue questions* which asked them to report their preferred position on each of seven positional policy issues. Each issue question offered five different response options which had a logical ordering (the polarity of response alternatives was randomly reversed from 1-5 to 5-1 with probability 0.5). The seven issues about which any given respondent was asked in wave 1 were drawn at random from a 'bank' of 34 issue questions. In subsequent waves a respondent was asked about the exact same issues in the exact same order.

The bank of 34 issue questions from which we sampled was designed to include issues that were currently the subject of elite political debate in the UK and issues that were not. We began by identifying between one and three potential issues for each of the twenty top-level headings used by the Comparative Agendas Project (www.comparativeagendas.net), and reduced to a set of 34 for which reasonably digestible ordered policy alternatives could be developed. The issue questions and response options are reported in the supplemental information.

In the second stage of the survey instrument respondents received three *candidate questions*. In each of these questions a respondent was presented with two hypothetical Parliamentary candidates (labeled "A" and "B") defined solely in terms of their positions on three issues. For each respondent, the three issues upon which candidates took positions (in all three candidate questions) were drawn randomly in Wave 1 without replacement from the set of seven issues about which the respondent had been asked issue questions. For each candidate question in Wave 1, the positions that candidates adopted on each selected issue were drawn randomly and independently from the set of response options offered in the issue questions. Thus, these candidate questions follow the structure of a conjoint experiment (independent randomisation over candidate positions on each issue) but respondents saw different (randomly selected) sets of issues from one another. Respondents were asked whether they would vote for A, B, or whether they were "not sure".

[4]The sampling and the population weights targeted Great Britain: the United Kingdom excluding Northern Ireland.

YouGov

Now imagine that two candidates for Parliament, A and B, were asked about some of the same public policies that we just asked you about. Please look at their answers below and tell us who you would vote if this was all the information you had to go on.

Issue	Candidate A	Candidate B
Full-time factory workers in the UK have average earnings of about £25,000 per year (£500 per week before tax). How much should the chief executive of a large British company listed on the stock exchange typically be paid in comparison to this figure?	No more than **twenty times** this figure (£500,000 per year)	No more than **ten times** this figure (£250,000 per year)
How much should the government try to encourage individuals to make healthy choices in their lives through taxes and other incentives?	The government **should tax products that are harmful when consumed in any quantities**, such as cigarettes and tobacco products.	The government **should tax products that are harmful when consumed in any quantities**, such as cigarettes and tobacco products.
What is your view on strikes?	Strikes **should be banned in the emergency services** (fire, police, and ambulance), but should be allowed in other sectors.	Strikes **should be allowed, whatever the reason**.

Given only the information shown above, who would you vote for?

- I would vote for A
- I am not sure
- I would vote for B

Figure 1: Example of a candidate question.

Figure 1 shows an example candidate question where the the three issues upon which hypothetical candidates take positions are: the level of higher tax rate; degree of state encouragement of healthy choices; and regulation of strikes. The respondent would have already reported their own position on each of the three issues mentioned by the candidates (and on four other issues). They would also be asked two additional candidate questions where candidates take newly randomised positions on the same three issues (with issues presented in the same order).

We stress that although the issues selected for questions and candidate position-taking were randomized at the respondent level in Wave 1, and although the issue positions taken by candidates were randomized for each Wave 1 candidate question, the resulting Wave 1 issue questions and candidate questions received by each respondent were repeated in *exactly* the same way in subsequent waves. This design means that we have substantial information about the stability of stated positions on each of the 34 issues over time, and also a large amount of information about the stability of candidate choices involving varying sets of issues.

Raw Issue Opinion and Candidate Preference Stability

In this section we examine the raw temporal stability of issue opinions and candidate choices in our data. Because we are assessing the correlations between ordinal response data of several kinds, we focus on *polychoric correlations* (Olsson, 1979). The polychoric correlation is defined as the Pearson correlation coefficient that would need to exist between two normally distributed latent variables in order to generate two observed ordinal variables, assuming a cutpoint model to translate those continuous latent variables into the observed ordinal values.

Analyzing response stability with interwave correlations (polychoric or otherwise calculated) makes an important and necessary assumption: that we are interested in stability relative to the range of opinion, not some absolute standard. This is often, but not always, sensible for opinion data where there is no good alternative if we want to make comparisons across issues or other response scales which are otherwise not comparable.[5] Nonetheless, it is important to remember that we are analyzing the magnitude of interwave opinion change relative to the magnitude of

[5]The polychoric correlation is a general method that applies to any two ordinal categorical variables, regardless of whether they have the same response levels or not. This means that it "ignores" mean shifts between two waves of an identically measured variable. If everyone shifts the same distance towards positive values, the polychoric correlation will treat that as a correlation of 1. In our data there is little evidence of systematic mean shifts.

variation in opinion across individuals in a single wave.

Stability of Issue Preferences

In Figure 2, we present the interwave polychoric correlations between self-reported issues positions of respondents who participated in all three waves of the survey. To illustrate the underlying rates of switching between response categories that these polychoric correlations represent, we provide the wave 1 to wave 2 response transition matrices for examples of low, average and high stability issues in Figure 3.

When we compare these to the polychoric correlations between issues analysed in Converse (1964),[6] we find four key results. First, our average Wave 1 - Wave 3 correlation (0.57) is the same as our average Wave 1 - Wave 2 (0.55) and our average Wave 2 - Wave 3 correlation (0.58). This implies, just as Converse observed, that little of the response volatility at the individual-level reflects persistent changes in attitudes. Second, the average correlations we find are substantially higher than those in the data analysed by Converse (0.39), but nonetheless imply moderate stability at best.

Third, the average correlation is a poor guide to issue specific correlations, which vary considerably, and much more than Converse (1964) observed. The polychoric correlation for the most stable issue analysed by Converse (isolationism in foreign policy) is 0.53, compared to a value of 0.25 for the least stable issue (stationing troops in foreign countries). The gap between the most and least stable issue in our data is almost twice as large: the cross-wave polychoric correlations for the most stable issue (foreign aid) are 0.84-0.88, compared to 0.30-0.39 for the least stable issue (inflation versus unemployment). Finally, while Converse noted that party identification was far more stable than issue positions, the polychoric correlation for party identification in Converse's data (0.86) is comparable to the polychoric correlation for our most stable issues (foreign aid and the death penalty).

The fact that we are examining a sample collected by a different survey mode, who were asked about different issues, with a different question format, in a different country separated

[6] Converse (1964) reports values of Kendall's tau. We calculated the corresponding polychoric correlation using the same 1958 to 1960 wave of the ANES analysed by Converse. We were not able to exactly replicate Converse's values of Kendall's tau. Our closest estimates (those based on complete cases) were correlated with Converse's values at 0.98 but had slightly lower numerical values.

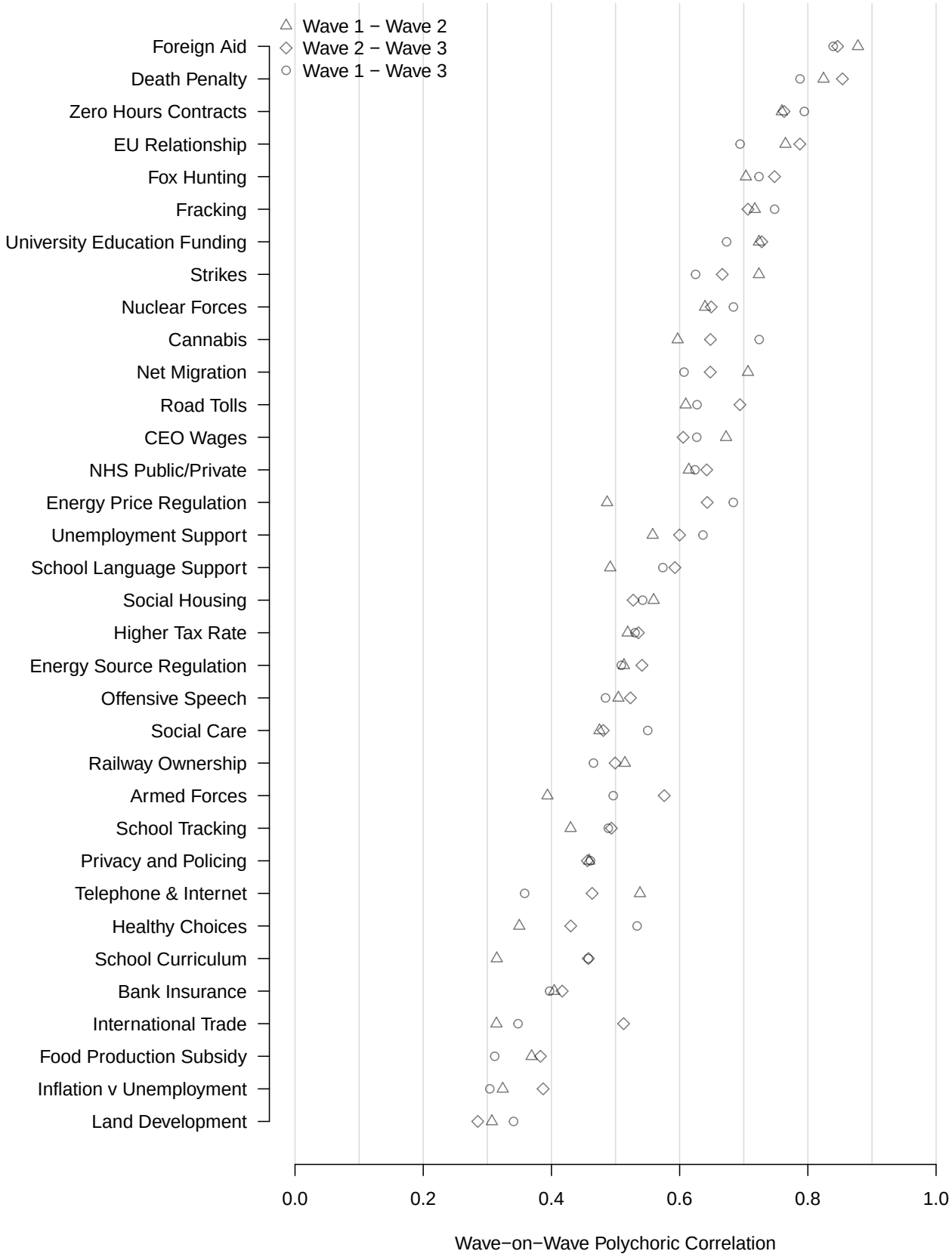

Figure 2: Polychoric correlations in self-reported issue positions between pairs of waves.

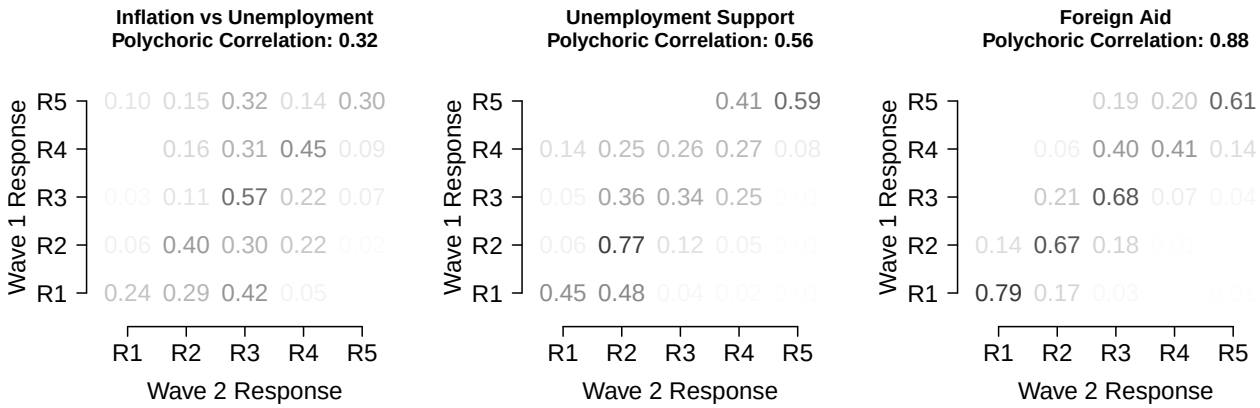

Figure 3: The proportion of issue position responses (R1-R5) reported in the second wave (W2, columns) for respondents giving each response (R1-R5) in the first wave (W1, rows), comparing one of the lowest stability issues (left, Inflation vs Unemployment), an average stability issue (center, Unemployment Support) with one of the highest (right, Foreign Aid).

by six decades, leaves many avenues for understanding observed differences. The key takeaway for our purposes is that average opinion stability across issues is at best moderate, but that this varies widely across issues.

Stability of Candidate Preferences

Figure 4 shows the response transition table for candidate choices, which clearly illustrates that the correlations between Wave 1 and Wave 3 are just as strong as the Wave 1-2 and Wave 2-3 correlations. Using polychoric correlation coefficients (on the three category candidate choice, with intermediate "I am not sure" response), we recover a Wave 1-2 correlation of 0.56, a Wave 2-3 correlation of 0.57, and a Wave 1-3 correlation of 0.55. These are moderate levels of response stability. However it is important to remember that this is an *average* of all of the randomly generated candidate choices that we presented to all respondents, some of which will have involved minute differences between candidates, cross-cutting choices for respondents, or exclusively obscure issues. As we show below, the stability of candidate choice depends greatly on the details of the candidate choices presented to respondents.

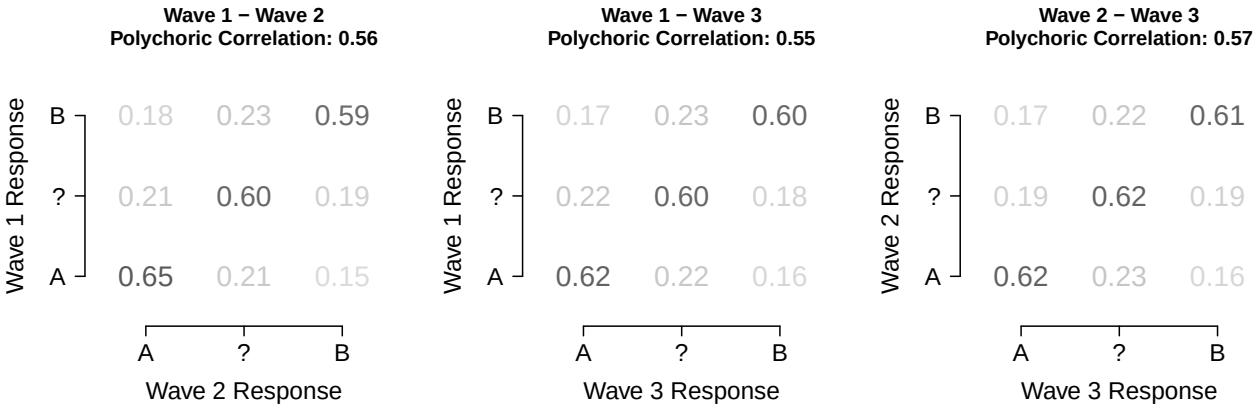

Figure 4: The proportion of candidate choices in later waves for respondents giving each choice option in earlier waves, comparing waves 1 and 2 (left), waves 1 and 3 (center), and waves 2 and 3 (right). The three response options are preferring candidate A (A), being not sure (?), and preferring candidate (B).

Candidate Choice Model

To test the issue public expectations developed above, we must use our combined issue question and candidate choice data to generate three key quantities of interest: (1) the estimated average importance respondents attach to different issues; (2) the estimated issue-based utility differences that each candidate choice presents for each respondent; and (3) the predicted candidate choices a respondent makes conditional on respondent and candidate issue positions.

We obtain these quantities by fitting the model of candidate choice based on the theoretical random utility model described earlier. This model captures how respondents penalize candidates who deviate from the respondents' stated preferences on each issue.

Consistent with the theoretical expectations section earlier, the utility component of this empirical model is a linear-loss "spatial" model of preferences, where ψ_{jk} are the locations of the five policy positions k for issue j on an issue-specific policy dimension. We assume that the utility of each candidate platform for a respondent is equal to the sum of the absolute differences between the locations of their preferred position (ψ_{ji}) and the candidate platform positions (ψ_{jA}, ψ_{jB}) on the three presented issues ($j = 1, 2, 3$):

$$u_{iA} = -\sum_{j \in 1,2,3} |\psi_{jA} - \psi_{ji}| \qquad u_{iB} = -\sum_{j \in 1,2,3} |\psi_{jB} - \psi_{ji}|$$

As we set out in our theoretical expectations earlier, we assume that at the moment of the survey response t, a voter's total utilities from candidates A and B are the sum of the per-issue voter-candidate distances u_{iAt} and u_{iBt} plus idiosyncratic survey response shocks ϵ_{iAt} and ϵ_{iBt}, drawn randomly and independently for each voter at t. The voter's choice between A and B then depends on the difference in the total utility they derive from the two candidates, $(u_{iAt} + \epsilon_{iAt}) - (u_{iBt} + \epsilon_{iB})$.

Under standard assumptions,[7] this choice structure yields an ordered logistic response model for the observed candidate choice outcomes "I would vote for A" (A), "I am not sure" (NS), and "I would vote for B" (B). Given (unobserved) utilities for each respondent i for Candidate A and B of u_{iA} and u_{iB} respectively, and threshold parameters γ_1, γ_2, get the response model:[8]

$$log\left(\frac{p(NS) + p(B)}{p(A)}\right) = u_{iB} - u_{iA} - \gamma_1$$

$$log\left(\frac{p(B)}{p(A) + p(NS)}\right) = u_{iB} - u_{iA} - \gamma_2$$

We estimate this model by Bayesian posterior simulation, implemented in Stan (Carpenter et al., 2016). We impose uniform priors on all parameters and report posterior means and 95% central intervals.

We do not have enough data for each respondent i to estimate individual-level λ_{ij} importance scores for each issue j.[9] However, this model can be used to generate a population-level measure of *importance* for each issue from the variation in the estimated ψ on each issue in combination with the variation in respondents' positions (Hanretty, Lauderdale and Vivyan, 2020). This measure reflects the extent to which respondents punish hypothetical candidates who take positions across the distribution of positions that are endorsed by other members of the public. For any issue j, the importance score is equal to:

[7] If ϵ_{iAt} and ϵ_{iBt} follow a Type 1 extreme value distribution (Gumbel distribution) than $\epsilon_{iAt} - \epsilon_{iBt}$ has a logistic distribution.

[8] The larger the absolute values of γ_1, γ_2, the more likely the respondent is to be indifferent between the two platforms. If $|\gamma_1| = |\gamma_2|$, voters treat A and B symmetrically. If $\gamma_1 \neq -\gamma_2$, respondents systematically prefer either A or B due to order effects.

[9] We can model variation in importance at the individual level as a function of covariates, which we do below.

$$\chi_j = \sum_{k=1}^{5} \sum_{k'=1}^{5} \pi_{jk} \pi_{jk'} \left| \psi_{jk} - \psi_{jk'} \right|$$

where π_{jk} is the proportion of respondents who prefer the kth position on that issue. The measure is "the population average disutility citizens feel towards the opinions held by their fellow citizens" (Hanretty, Lauderdale and Vivyan, 2020, 527).[10]

This measure of estimated importance for each issue constitutes our first empirical quantity of interest, used below. For our second quantity of interest, we use the utility component of the fitted choice model to compute the estimated issue-based utility difference $u_{iB} - u_{iA}$ that each observed candidate choice presents for each respondent (given the estimated locations of their stated issue positions and of candidate issue positions). For our third quantity of interest, we use the predicted candidate choice probabilities from wave 1 to predict candidate choices in later survey waves.

Testing Issue Publics Expectations

We now use quantities of interest derived from the choice model described in the last section to test for the empirical patterns we should observe based on issue publics theory.

Testing for a Stability-Importance Association

As discussed above, the *importance-stability association* expectation posits that voters will attach greater importance weight in their candidate choices to issues on which they have more stable opinions.

We first test this at the *aggregate* level by examining whether the estimated stability of opin-

[10] Hanretty, Lauderdale and Vivyan (2020) report several empirical checks on the reasonableness of the modelling approach used here, both in terms of its ability to predict individual candidate choice and to measure issue importance. First, their inspection of the estimated orderings of policy alteratives on each issue (which are not enforced in the estimation) suggests respondents made choices in the conjoint as though they perceived the alternatives in the logical order intended. They also estimate a 'relaxed' version of the choice model that does not impose a spatial structure on respondents' utilities over candidate positions. They find that estimates from this relaxed model are still consistent with the proximity spatial model, in that respondents tend to receive highest estimated utility on an issue from candidates at the same position to them, and utility tends to decline as candidate positions move further away from the respondent's position on the issue.

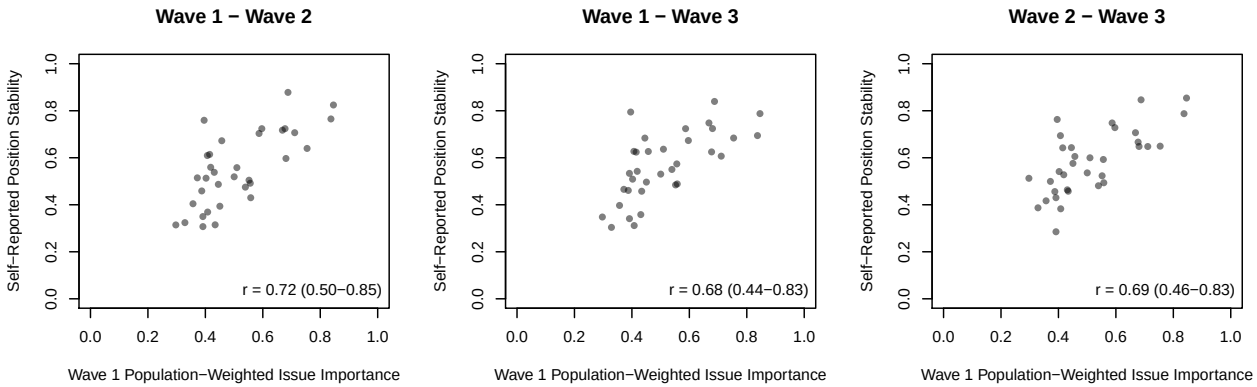

Figure 5: Self-reported issue stability (polychoric correlation) between waves as a function of issue importance—the extent to which respondents punished hypothetical candidates who deviated from their positions—as measured in wave 1.

ion on an issue (as measured by polychoric wave-to-wave correlations above) is associated with the importance of an issue (as estimated based on the above choice model). Figure 5 shows that, across the issues we examine, the estimated importance of an issue is very highly correlated with the over-time stability of respondents' self-reported positions on an issue. This is true whether one examines Wave 1-2, Wave 1-3 or Wave 2-3 issue position stability, as a function of Wave 1 estimated issue importance.

We next test for a stability-importance association at the *individual* level, examining whether the estimated importance attached to an issue in respondents' Wave 2 candidate choices is greater when respondents maintain the same position on that issue between Wave 1 and 2. To do so, we fit an augmented candidate choice model to our Wave 2 survey data. This model is the same as the above candidate choice model, except that the utility component of the model now allows the importance weight attached to the distance between respondent i's position and the candidate position on issue j to vary as a function of whether respondent i has maintained the same position on issue j between Wave 1 and 2 ($X = 1$) or has changed that position in any way ($X = 0$):

$$u_{iA} = -\sum_{j \in 1,2,3} e^{\beta X_{ji}} \left|\psi_{jA} - \psi_{ji}\right| \qquad u_{iB} = -\sum_{j \in 1,2,3} e^{\beta X_{ji}} \left|\psi_{jB} - \psi_{ji}\right|$$

Here, β captures the average degree to which a respondent with a perfectly stable Wave 1-2 position on an issue attaches greater weight to candidate deviations from their Wave 2 position

on this issue than does a respondent who has changed position on the issue from Wave 1 to 2. We include the natural exponential of βX_{ji} in the model to constrain the overall $\lambda_{ij} = e^{\beta X_{ji}}$ weight to be positive. β is estimated from the data under an improper uniform prior.

Estimating a candidate choice model in this way, we estimate β to be positive (0.10) and distinguishable from zero [95% central interval: 0.03, 0.18]. We can then compute $e^{\hat{\beta}}$ to obtain the estimated multiplicative effect of issue opinion stability on issue weight in political choices. In their candidate choices people put an average of 11% [95% CI: 3%, 20%] higher weight on issues on which they have stable opinions compared to issues on which they have unstable opinions. Note that this analysis is based on an noisy dichotomisation of individual-level stability, and so is likely to underestimate the stability-importance association.[11]

In sum, the issues on which respondents heavily penalize hypothetical candidates who diverge from their preferred position tend to be the same issues where respondents give more stable self-reported positions at six and twelve month intervals. We show that this is true on average at the level of issues, but also as a function of individual-level variation in stability within issues. In other words, we find evidence for an *stability-importance association* across issues and across individuals within issues.

Testing conditional choice stability

We now focus on the temporal stability of respondents' candidate choices directly, testing our two *conditional choice stability* expectations. The first of these predicts that candidate choices will be more stable when the issues under consideration elicit more stable respondent opinions. To test this, we estimate a model of the polychoric correlation of individual candidate choice responses across a given pair of survey waves, using as a predictor the average wave 1-2 stability of issue opinion on the three issues randomly selected for the respondent's candidate questions. This test requires a modelling framework that allows polychoric correlations to vary as a function of covariates, which we describe in the supplemental information. This is a test which does not use any information about the individual respondents' issue positions—only the average stability of the three issues selected for each respondent, which is fully randomised and does not depend

[11] Even respondents with well developed views on an issue might move a single category, and 20% of respondents picking categorical responses at random will give the same response in adjacent waves.

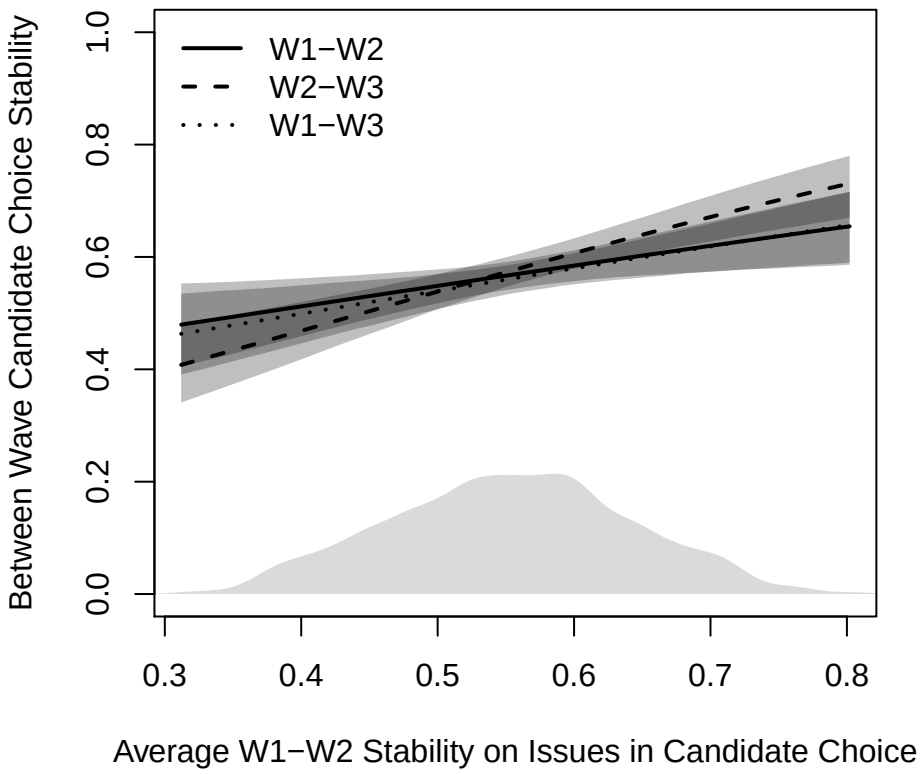

Figure 6: The stability of respondents' candidate choices across waves as a function of the wave 1-2 average stability of issue positions for the three issues presented for candidate choice. The density of average wave 1-2 issue opinion stability for the three issues presented for candidate choice in the experiment is provided in grey.

on respondent characteristics at all. Partly for this reason, it is a relatively conservative test: it relies on *aggregate* measures of issue opinion stability, which will be a noisy reflection of the stability of the respondent's own opinions on the three issues presented in their candidate questions; and, for a given level of average issue opinion stability, it averages over both low contrast candidate choices (which are likely to be more unstable) and high contrast candidate choices (which are likely to be more stable).

Figure 6 plots the fitted regression lines from our latent variable model. It shows that the stability of candidate choices across waves does increase when the three issues selected for the respondents' candidate questions exhibit higher average wave 1-2 opinion stability. The associations are significantly positive for all three pairwise wave comparisons.[12] The estimated wave 1-2 polychoric correlations in candidate choice rise from 0.48 for those candidate comparisons

[12]The simulated posterior probability of a negative coefficient is 0.00375 in the Wave 1 - Wave 2 analysis, 0 in the Wave 2 - Wave 3 analysis, and 0.00175 in the Wave 1 - Wave 3 analysis.

in our data that involve the issues with lowest average issue opinion stability (0.31), to 0.65 for those comparisons in our data that involve issues with the highest average issue opinion stability (0.81). The strength of this estimated relationship—a 17 point change in choice stability across the range of issue opinion stability treatments in our experiment—is substantial given the fact that it is purely based on aggregate stability rather than any respondent-specific information.

The second of the *conditional choice stability* expectations predicts that candidate choices will be more stable when voters are presented with higher contrast candidate combinations. The candidate questions that respondents faced in our experiment were randomly generated and therefore varied widely in how "high contrast" they were likely to be for a respondent. Some respondents got a high contrast choice, in which candidates were defined in terms of high importance issues and one candidate was clearly closer to them than the other on all of those issues. Some respondents received a more difficult, low contrast choice, either because candidates were defined solely in terms of low importance issues, or because candidates were defined in terms of high importance issues but one candidate was closer on some of those issues but further on others. We measure the degree of "contrast" for each observed respondent-candidate question in our data as the absolute value of the estimated difference in the respondent's issue-based utility between candidates, as estimated by fitting our candidate choice model to the wave 1 data. A larger estimated utility difference indicates a higher contrast candidate question for a respondent. We test our second conditional choice stability expectation by including this measure of candidate choice contrast as the sole predictor of the polychoric correlation of individual candidate choice responses across a given pair of survey waves.

Figure 7 plots the relationship between the estimated wave 1 utility difference and the stability of candidate choice across different wave pairs. The stability of candidate choices across waves at the individual level is powerfully predicted by the degree of contrast a candidate question presents for a respondent in wave 1. For the candidate comparisons that present the lowest contrast for respondents—i.e., where the predicted utility difference is close to 0 and the respondent is close to indifferent between candidates—the estimated polychoric correlations are just over 0.4. However, the estimated polychoric correlation rises to 0.8 and above for the comparisons that present among the highest contrast in our data—i.e., where the candidate utility

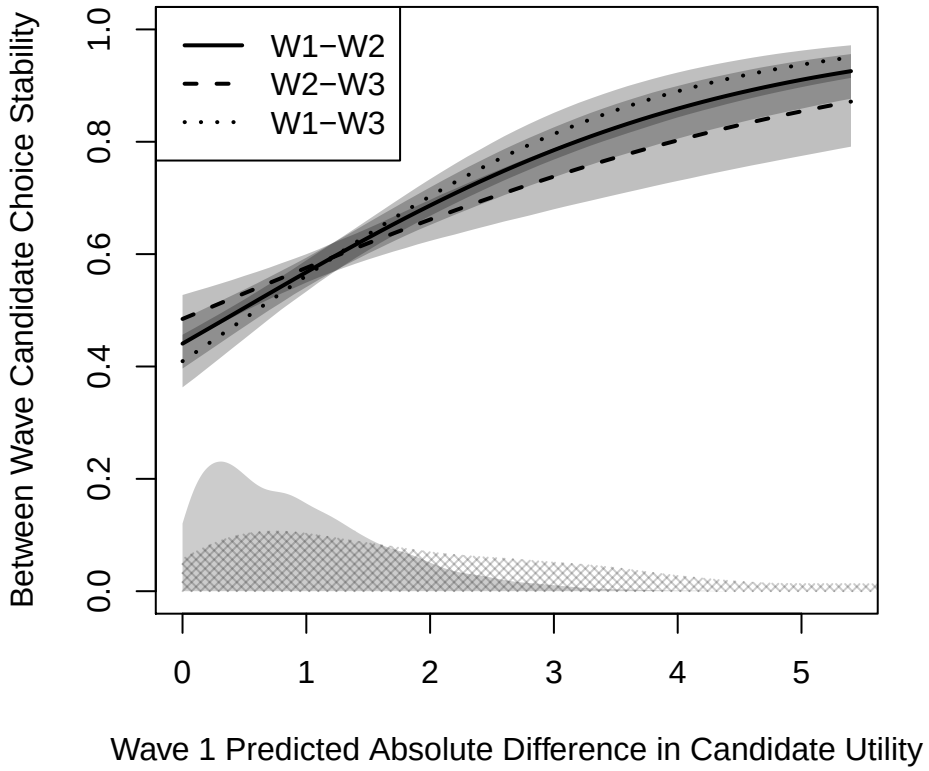

Figure 7: The stability of candidate choice across waves as a function of the wave 1 predicted absolute difference in candidate utility. The density of absolute differences in candidate utility in the experiment is provided in solid grey at the bottom of the plot. The density of absolute differences in utility between real party positions is shown in cross-hatch.

difference is about 3 or above, on a log-odds scale. While comparisons of polychoric correlation magnitudes across different question types are at most suggestive, we note that the respondents who received relatively "high contrast" candidate choices achieved stability levels across the three waves approaching the most stable individual issues, as well as the Converse party identification benchmark.

The distribution of candidate utility differences induced by our experiment is in large part a function of the randomisation structure of the experiment. It is therefore not directly representative of the distribution of issue-based utility differences that voters are likely to experience when comparing parties and candidates in the UK. Are the candidate utility differences observed in our experiment small or large compared to those that would be induced for our respondents by real policy disagreements of real parties on the 34 issues considered here?

To assess this, we coded the positions of the Conservative, Labour and Liberal Democrat parties on all 34 issues based on their public policy pronouncements (see supplemental information for details). We then combined these party positions with our wave 1 measures of respondent issue positions and wave 1 fitted candidate choice model to simulate issue-based utility differences for a sample of hypothetical pairwise choices between real party platforms defined over three issues at a time. Specifically, for each of 1,000 simulated issue-based utility differences, we: (1) sampled a wave 1 respondent; (2) sampled a pair of parties from among Labour, Conservative and Liberal Democrat, with sampling in proportion to the first and second-place constituency finishes achieved by these parties at the 2017 election; (3) randomly sampled three issues; (4) computed the absolute issue-based utility difference for the respondent given their self-reported positions and the party positions on the three issues, and given the parameters from the fitted wave 1 candidate choice model.

The resulting distribution of simulated issue-based utility differences between party issue positions is shown in cross-hatch in Figure 7. Comparison of this and the solid distribution makes clear that the real UK parties offer *greater* issue-based contrasts for voters than do the conjoint-generated candidates in our experiments: the average simulated absolute utility difference between parties was 1.97, compared to an average absolute utility difference of 0.92 for respondent-candidate choices in our experiment. Based on the fitted regression lines presented

Figure 7, the average absolute issue-based utility difference between *parties* would generate a predicted choice stability (polychoric correlation) of between 0.65-0.70, substantially higher than the unconditional average choice stability of 0.55-0.57 observed in our experiment.

Even these hypothetical party pairwise choices represent an understatement of voters' experienced differences between the parties in real elections. People get to choose which issues to pay attention to when making choices in real elections, rather than being limited to a randomly selected three which may not include the issues they care about most. In sum, we would expect real issue-based choice stability to be higher than the average choice stability in our experiment, because the comparisons generated by the randomisation were less clear than real party differences on the same issues, and real candidate comparisons are not constrained to a random set of three issues.

Testing choice predictability

The third expectation that we test is *choice predictability*. If it is only stable issue positions that condition vote choices, given voters' reported issue positions and the pattern of political choices they make conditional on those positions at one time point, we should be able to predict political choices at future time points about as well as we can predict political choices at the current time point. Issue positions may change from wave to wave, but if these changes for a given voter are on the issues that voters are not putting weight on in their decision, it should not matter very much which wave's issue positions we use to predict their vote on a given candidate comparison, they should all work about as well in expectation.

To test this we use the same choice model that enabled us to estimate importance statistics to construct predicted probabilities of choosing either candidate for each respondent. In Figure 8 we examine the extent to which the predicted response probabilities based on the Wave 1 response model and Wave 1 self-reported issue positions predict Wave 1, Wave 2, and Wave 3 candidate choices.[13] Since these are fitted on Wave 1 responses, they necessarily fit Wave 1 choices as well as possible. For our purposes here, the most immediate point is that there is remarkably little apparent decline in the predictive power of the model across waves. That is,

[13]We provide average log-likelihoods for the cross-wave predictions in the supplemental information.

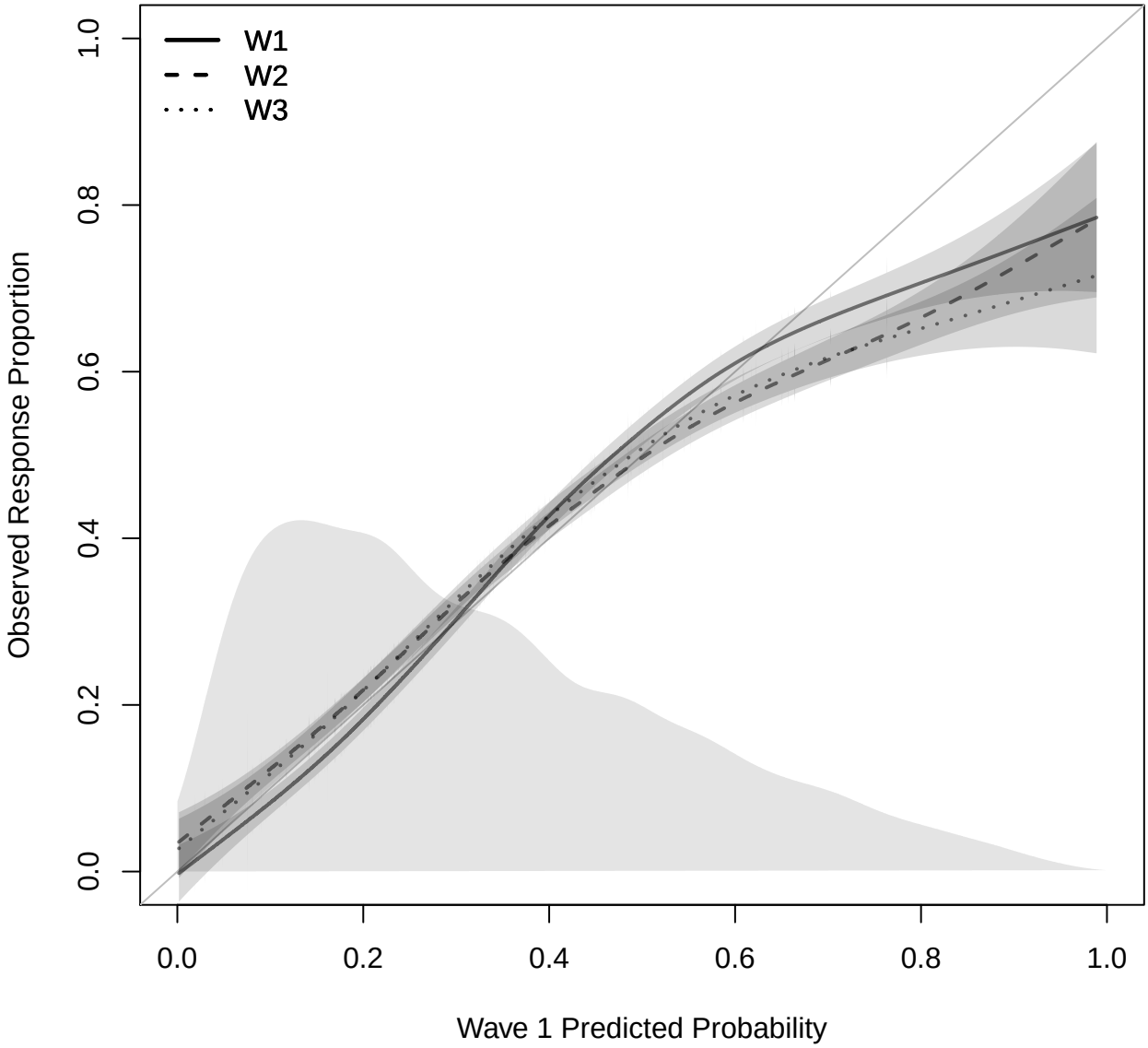

Figure 8: Observed probability of selecting a candidate in waves 1, 2 and 3 as a function of predicted response probability based on wave 1 estimates of choice model and self-reported issue position measured in wave 1.

when we predict which candidate a respondent will choose based on their wave 1 self-reported issue position and the general tendency of wave 1 respondents to penalize deviations in the wave 1 candidate choice, we predict the respondent's wave 2 and 3 candidate choices nearly as well as their wave 1 candidate choice. This is despite the fact that we are ignoring any changes in their wave 2 and wave 3 self-reported issue positions on the issues included in the conjoint. It is also despite the fact that the candidate choices are only moderately stable *on average* at the individual level (see Figure 4).[14] Many respondents' issue position responses are changing substantially from wave to wave, but this instability that has concerned political scientists since Converse (1964) does not translate to respondents' candidate choices. Citizens appear to be ignoring the issues on which their survey responses are volatile when making choices between candidates.

Conclusion

We have four key findings in this paper. First, respondents tend to penalize hypothetical candidate deviations from their own positions more on issues where respondents tend to give more stable responses, both comparing across issues in the aggregate and also comparing respondents with different levels of observed stability within issues (*stability-importance association*). Second, hypothetical candidate choices are more stable when the issues on which candidates take positions are those that tend to elicit more stable issue opinions (*conditional choice stability (i)*). Third, hypothetical candidate choices are far more stable when candidates present clearer issue-based contrasts for respondents (*conditional choice stability (ii)*), and are highly stable in absolute terms when issue-based contrasts are as high as they are likely to be real elections. Finally, hypothetical candidate choices made at a distance of 6 months and 12 months have very nearly as strong relationships to self-reported issue positions as do the candidate choices made in the same survey wave as those self-reports (*choice predictability*).

As is often the case with experimental research, how we interpret these findings depends on

[14] The model is somewhat overconfident where it makes very strong predictions that a candidate will be preferred, which means that some respondents are giving "not sure" respondents regardless of the candidate positions they are presented with. Hanretty, Lauderdale and Vivyan (2020) note that an exponent on the utility loss of 0.7 fits the data slightly better than the exponent of 1 that they use for their main measure, which is another way of noting that respondents are not quite as decisive in selecting candidates where there is a very large utility difference as the model's functional form implies.

how far we are willing to extrapolate from these experimental findings to the broader political world. Our interpretation is that this illustrates how stability in political choices—particularly choices over parties or candidates—can emerge from issue voting even when many respondents lack stable issue positions on many issues. The key is that most citizens do have *some* issues where they have stable views, and that those are the issues that influence their vote choices. Citizens tend to ignore candidate positions on the issues that the citizen does not know or care about, which are the issues on which citizens express unstable views. The set of citizens who care about a given issue are Converse's "issue public" for that issue. While our analysis does not identify and classify individual respondents into these, it does identify the varying degrees to which the public, on average, are thusly engaged with each issue.

When we ask respondents to self-report positions on policy issues, responses are only moderately stable on average across respondents and issues. However this masks the fact that, for certain issues, response stability is reasonably high for many respondents, and even for those issues where respondents typically exhibit low response stability, there are still some respondents who do possess stable positions. When we give respondents hypothetical candidate choices that involve low-stability issues, cross-cutting disagreements, or indistinguishable candidates, candidate choices are unstable over time. But where we provide candidate choices with clear contrasts for respondents, we find high candidate choice stability even with a purely hypothetical candidate choice involving just three issues, no partisan or other cues, and a twelve month interval between our first and last wave. We suspect that the real political system gives even relatively inattentive voters more information about candidate/party positions than this, making meaningful issue-based vote choices plausible as a mechanism for observed levels of voting stability.

These findings come from what is, to our knowledge, the first *panel* candidate conjoint experiment, recording respondents' repeated choices between the *same* randomly generated candidates with the *same* attributes at lengthy (six month) intervals. As such, they also speak to a methodological research agenda concerning how much political scientists can learn about real voter preferences through their increasing deployment of conjoint experiments involving choices between hypothetical candidates (e.g., Hainmueller and Hopkins, 2015; Horiuchi, Smith and Yamamoto, 2018; Franchino and Zucchini, 2015). Existing research in this area shows that,

despite potential concerns about respondent satisficing, respondent reactions to candidate attributes vary little as experimental complexity increases, either in terms of number of choice tasks (Bansak et al., 2018) or number of candidate attributes (Bansak et al., 2021). It also shows that, despite concerns that conjoint experiment artificiality may lead to erroneous inferences, attribute effects estimated from conjoint experiments closely track those estimated from real world political choices (Hainmueller, Hangartner and Yamamoto, 2015). What our novel panel conjoint adds is further evidence that conjoint experiments can induce respondents to reveal enduring, and in that sense *real*, political preferences when presented with choices between candidates who offer clear and consistent contrasts on attributes that respondents care about.

Returning to the broader substantive question of what our findings imply for understandings of political choice, we stress that we have not provided evidence in this paper to argue *against* identity-based theories of voting behaviour. We do not even endorse the view that these perspectives should ultimately be understood as competing theories. Social group identities may play a key role in shaping voters' issue positions or priorities (e.g., Conover, 1984; Evans and Tilley, 2017, Ch 4). We have also not provided evidence that voting behaviour is ideological: nothing in our analysis assumed that (or assessed whether) citizens' opinions across multiple issues are organized according to "belief systems" (Converse, 1964) such that large numbers of citizens agree on what positions go with each other across issues.

What we have shown is a possibility result: even given the varying and limited engagement of citizens with most political issues, citizens can nevertheless often make stable, coherent political choices over candidates even when those candidates are defined solely in terms of issue positions. The well-established body of evidence of aggregate instability in citizen issue opinions does not imply that citizens cannot vote in stable, coherent ways based on issue positions alone.

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The Emergence of Coherent Political Choices from Incomplete Issue Preferences - Online Appendix *

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*This version: July 22, 2021.

Panel Attrition

In this section, we report unweighted respondent demographics by panel wave. Because the attrition in our panel was by design, and respondents within each wave were sampled from those completing previous waves in order to match demographic targets, the demographic compositions of all waves are nearly identical.

Table A1: Age distribution by survey wave.

	Wave 1	Wave 2	Wave 3
18-25	0.08	0.08	0.09
25-30	0.05	0.05	0.04
30-35	0.07	0.07	0.07
35-40	0.09	0.09	0.09
40-45	0.09	0.09	0.10
45-50	0.12	0.12	0.13
50-55	0.07	0.06	0.06
55-60	0.09	0.08	0.08
60-65	0.10	0.10	0.10
65-70	0.13	0.13	0.12
70-75	0.08	0.08	0.08
75-80	0.03	0.02	0.02
80-85	0.01	0.01	0.01
85+	0.00	0.00	0.00

Table A2: Qualifications distribution by survey wave.

	Wave 1	Wave 2	Wave 3
None	0.19	0.19	0.20
Level 1	0.03	0.03	0.03
Level 2	0.19	0.19	0.18
Other	0.10	0.09	0.09
Level 3	0.18	0.19	0.19
Level 4+	0.31	0.32	0.31

Table A3: Gender distribution by survey wave.

	Wave 1	Wave 2	Wave 3
Male	0.46	0.46	0.46
Female	0.54	0.54	0.54

Table A4: Political attention (2017 BES self-report) distribution by survey wave.

	Wave 1	Wave 2	Wave 3
0	0.05	0.05	0.05
1	0.03	0.03	0.04
2	0.05	0.05	0.06
3	0.05	0.05	0.05
4	0.06	0.06	0.06
5	0.13	0.14	0.14
6	0.15	0.15	0.14
7	0.25	0.25	0.25
8	0.11	0.10	0.10
9	0.06	0.06	0.06
10	0.06	0.06	0.07

Table A5: 2015 general election vote distribution by survey wave.

	Wave 1	Wave 2	Wave 3
Con	0.29	0.29	0.28
Lab	0.25	0.25	0.26
LD	0.06	0.06	0.06
UKIP	0.11	0.11	0.10
Green	0.04	0.04	0.04
SNP	0.03	0.03	0.03
PC	0.00	0.00	0.00
Other	0.02	0.02	0.01
None	0.19	0.20	0.21

Table A6: 2016 referendum vote distribution by survey wave.

	Wave 1	Wave 2	Wave 3
Leave	0.45	0.46	0.46
Remain	0.42	0.41	0.40
None	0.12	0.13	0.14

Table A7: 2017 general election vote distribution by survey wave.

	Wave 1	Wave 2	Wave 3
Con	0.35	0.35	0.36
Lab	0.33	0.32	0.32
LD	0.07	0.07	0.06
UKIP	0.02	0.02	0.02
Green	0.01	0.01	0.01
SNP	0.03	0.03	0.03
PC	0.00	0.00	0.00
Other	0.01	0.01	0.01
None	0.18	0.19	0.20

Polychoric versus Kendall's Tau Correlation Table

Table A8: Polychoric correlations (P) and Kendall's tau correlations (T) in self-reported issue positions between pairs of waves (W).

Issue	PW1W2	PW2W3	PW1W3	TW1W2	TW2W3	TW1W3
Land Development	0.31	0.29	0.34	0.26	0.25	0.27
Inflation v Unemployment	0.32	0.39	0.30	0.25	0.31	0.26
Food Production Subsidy	0.37	0.38	0.31	0.27	0.30	0.24
International Trade	0.31	0.51	0.35	0.26	0.40	0.27
Bank Insurance	0.40	0.42	0.40	0.31	0.30	0.30
School Curriculum	0.31	0.46	0.46	0.26	0.36	0.34
Healthy Choices	0.35	0.43	0.53	0.29	0.36	0.44
Telephone & Internet	0.54	0.46	0.36	0.42	0.38	0.30
Privacy and Policing	0.46	0.46	0.46	0.37	0.35	0.36
School Tracking	0.43	0.49	0.49	0.32	0.37	0.35
Armed Forces	0.39	0.58	0.50	0.33	0.46	0.41
Railway Ownership	0.51	0.50	0.47	0.38	0.36	0.34
Social Care	0.47	0.48	0.55	0.37	0.39	0.41
Offensive Speech	0.50	0.52	0.48	0.36	0.38	0.35
Energy Source Regulation	0.51	0.54	0.51	0.39	0.42	0.38
Higher Tax Rate	0.52	0.54	0.53	0.41	0.42	0.42
Social Housing	0.56	0.53	0.54	0.45	0.44	0.45
School Language Support	0.49	0.59	0.57	0.40	0.49	0.46
Unemployment Support	0.56	0.60	0.64	0.44	0.48	0.52
Energy Price Regulation	0.49	0.64	0.68	0.38	0.52	0.55
NHS Public/Private	0.61	0.64	0.62	0.49	0.50	0.49
CEO Wages	0.67	0.61	0.63	0.52	0.46	0.47
Road Tolls	0.61	0.69	0.63	0.45	0.53	0.46
Net Migration	0.71	0.65	0.61	0.57	0.50	0.48
Cannabis	0.60	0.65	0.72	0.49	0.52	0.59
Nuclear Forces	0.64	0.65	0.68	0.53	0.51	0.54
Strikes	0.72	0.67	0.62	0.59	0.54	0.50
University Education Funding	0.72	0.73	0.67	0.57	0.58	0.54
Fracking	0.72	0.71	0.75	0.59	0.58	0.62
Fox Hunting	0.70	0.75	0.72	0.55	0.60	0.57
EU Relationship	0.77	0.79	0.69	0.66	0.69	0.59
Zero Hours Contracts	0.76	0.76	0.79	0.61	0.63	0.67
Death Penalty	0.82	0.85	0.79	0.70	0.72	0.66
Foreign Aid	0.88	0.85	0.84	0.76	0.76	0.74
Average	0.55	0.58	0.57	0.44	0.47	0.45

Average Cross-Wave Predictive Log-Likelihood

We can assess the relative degree to which self-reported issue positions at each wave predict candidate choices at each wave. Table A9 shows the average log-likelihood of the observed candidate choices in each wave, when predicted using the model fit on wave 1 plus the respondent issues positions reported in each wave. The final column shows the equivalent predictions from a null model that ignores self-reported positions of individual respondents, and predicts choices based on the average choices across respondents. The candidate choices in a given wave are predicted better by the self-reported issue positions of respondents in that wave than they are by the self-reported issue positions of respondents in previous (or future) waves, but using positions from any of the waves predicts better than a null model that ignores respondents positions.

Table A9: The average log-likelihood for predicting the candidate choices in each wave (rows), using the self-reported issue positions from each wave (columns) or a null model.

	W1 Position	W2 Position	W3 Position	Null Model
W1 Choice	-0.949	-0.986	-0.986	-1.097
W2 Choice	-1.002	-0.953	-0.987	-1.096
W3 Choice	-1.002	-0.997	-0.951	-1.097

Modelling Polychoric Correlation as a Function of Covariates

First, we define the response model for the observed response in terms of two continuous latent variables Y^*_{i1} and Y^*_{i2}, one for each period t.

Then we define these two latent variables in terms of a stable, respondent specific component ν_i and a respondent-period-specific component ϵ_{it}

$$Y^*_{it} = \nu_i + \epsilon_{it}$$

$$\nu_i \sim N(0, \rho_i)$$

$$\epsilon_{it} \sim N(0, 1 - \rho_i)$$

If we model ρ_i as a constant ρ then we are estimating a single polychoric correlation for all respondents. If we allow $\rho_i = \frac{exp(\beta X_i)}{1+exp(\beta X_i)}$ to vary across respondents, either as a function of attributes of the respondent or of the issues entered into the candidate choice, we can then model how response stability depends on these characteristics. Note that while in general correlations can be negative, in this application of modelling stability we do not expect any negative correlations and so the logistic form above is a sensible parametrization. We estimate this model by Bayesian posterior simulation, implemented in Stan (Carpenter et al., 2016), imposing uniform priors on all parameters and report posterior means and 95% central intervals.

Prompts, Policy Alternatives and Party Positions

The full prompts and policy alternatives for each item, together with our estimates of the party positions on these issues, are provided below. Our estimates of party positions are based on party manifestos and other public statements. Statements in the 2017 manifestos were treated as authoritative, followed by statements in the 2015 and 2010 manifestos and other public statements in that order. For some issues we were unable to estimate party positions. For example: we were unable to locate Labour or the Liberal Democrats' position on social care, a politically sensitive issue where the Conservative party's unusually clear manifesto commitment to cost-sharing arguably cost them votes in the 2017 election. Notwithstanding this we were able to identify positions for 33 of 34 issues for the Labour party, 32 of 34 issues for the Conservative party, and 31 of 34 issues for the Liberal Democrats. Where we report statistics which average over issue positions (as we do in the left hand side of Figure 5) we impute the position which minimizes the differences between the parties. A full description of the basis for coding each party, including quotes from party manifestos where applicable, is contained in the replication data.

Issue 1: Inflation v Unemployment

Prompt: If there is a tradeoff between maintaining low inflation (stable prices) and low unemployment, what is the best balance?

Alternative 1: **Low inflation should take priority** over low unemployment.

Alternative 2: **Low inflation should usually take priority**, except where there is a risk of exceptional levels of unemployment. *[Con]*

Alternative 3: Inflation and unemployment should be given **equal priority**. *[LibDem]*

Alternative 4: **Low unemployment should usually take priority**, except where there is a risk of exceptional levels of inflation. *[Lab]*

Alternative 5: **Low unemployment should take priority** over low inflation.

Comparative Policy Agenda Category: General Domestic Macroeconomic Issues

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Issue 2: CEO Wages

Prompt: Full-time factory workers in the UK have average earnings of about £25,000 per year (£500 per week before tax). How much should the chief executive of a large British company listed on the stock exchange typically be paid in comparison to this figure?

Alternative 1: No more than **two times** this figure (£50,000 per year)

Alternative 2: No more than **five times** this figure (£125,000 per year)

Alternative 3: No more than **ten times** this figure (£250,000 per year)

Alternative 4: No more than **twenty times** this figure (£500,000 per year) *[Lab]*

Alternative 5: **Whatever salary** company owners (shareholders) think is appropriate *[Con] [LibDem]*

Comparative Policy Agenda Category: General Domestic Macroeconomic Issues

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Issue 3: Higher Tax Rate

Prompt: Given that UK residents pay income tax at a rate of 40% on income from £43,000 to £150,000, which of the following comes closest to your view on the proper tax rate for incomes over £150,000?

Alternative 1: Income over £150,000 should be taxed at **40%**

Alternative 2: Income over £150,000 should be taxed at **45%** *[Con] [LibDem]*

Alternative 3: Income over £150,000 should be taxed at **50%** *[Lab]*

Alternative 4: Income over £150,000 should be taxed at **60%**

Alternative 5: Income over £150,000 should be taxed at **80%**

Comparative Policy Agenda Category: General Domestic Macroeconomic Issues

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Issue 4: Privacy and Policing

Prompt: What is your view on how the UK should balance privacy with policing and anti-terrorism activities?

Alternative 1: The police and the security services **should not be able to intercept or read any communications**.

Alternative 2: The police and the security services should be able to intercept and read a communication **if they can convince a judge that it would lead to serious crime being prevented**.

Alternative 3: The police and the security services should be able to intercept and read a communication **if they can convince a judge that it would lead to serious crime being prevented or criminals being arrested**. *[LibDem]*

Alternative 4: The police and the security services should be able to intercept and read a communication **if they believe that it would lead to serious crime being prevented or criminals being arrested**. *[Lab] [Con]*

Alternative 5: The police and the security services **should be able to intercept and read any communications.**

Comparative Policy Agenda Category: General Civil Rights, Minority Issues, and Civil Liberties

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Issue 5: Offensive Speech

Prompt: What is your view on offensive/hate speech?

Alternative 1: Government **should not stop people from saying offensive things**, no matter who is affected.

Alternative 2: Government should stop people from saying things that offend people of different **races**.

Alternative 3: Government should stop people from saying things that offend people of different **races or religions**.

Alternative 4: Government should stop people from saying things that offend people of different **races, religions, or sexual orientations**. *[Lab]*

Alternative 5: Government should stop people from saying things that offend people of different **races, religions, sexual orientations, or political beliefs**.

Comparative Policy Agenda Category: General Civil Rights, Minority Issues, and Civil Liberties

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Issue 6: Healthy Choices

Prompt: How much should the government try to encourage individuals to make healthy choices in their lives through taxes and other incentives?

Alternative 1: The government **should not try to influence individuals to make healthy choices in their lives**.

Alternative 2: The government **should encourage people to make healthy choices in their lives through information campaigns only**. *[Con]*

Alternative 3: The government **should tax products that are harmful when consumed in any quantities**, such as cigarettes and tobacco products.

Alternative 4: The government **should also tax products that are harmful when consumed in excess**, such as soft drinks. *[Lab] [LibDem]*

Alternative 5: The government **should ban products that are harmful in all quantities and tax those that are harmful in excess**.

Comparative Policy Agenda Category: General Health

Issue 7: NHS Public/Private

Prompt: How should the NHS be organised?

Alternative 1: There should be **no involvement of private organisations in the NHS**, and existing private healthcare providers should be nationalized.

Alternative 2: There should be **no new involvement of private organisations in the NHS**. Existing private healthcare providers should continue to operate as before. *[Lab]*

Alternative 3: **The NHS should be partially privatized**, and public and private providers should compete on the basis of quality. The government should decide how much medical providers can charge. *[Con] [LibDem]*

Alternative 4: The NHS should be **fully privatized, but the government should decide how much medical providers can charge**.

Alternative 5: The NHS should be **fully privatized, and medical providers should be allowed to charge their own fees**.

Comparative Policy Agenda Category: General Health

Issue 8: Food Production Subsidy

Prompt: How should the government be involved in subsidising (financially supporting) UK food production?

Alternative 1: Food from other countries should be **taxed to discourage consumption** and government should **subsidize the production of food in this country**.

Alternative 2: Food from other countries should not face any special taxes, but the government should **subsidize the production of food in this country**.

Alternative 3: Food from other countries should not face any special taxes, but the government should **subsidize the production of essential foods in this country** (flour, eggs, butter, milk, etc). *[Con]*

Alternative 4: Food from other countries should not face any special taxes and the **government should not subsidize the production of food in this country**. *[Lab] [LibDem]*

Alternative 5: **The UK should rely more on food from other countries** and government should support current farmers switching into other work.

Comparative Policy Agenda Category: General Agriculture

Issue 9: Zero Hours Contracts

Prompt: What is your view on zero hours contracts (contracts with no guarantee of hours or income)?

Alternative 1: Zero hours contracts **should be permitted** under whatever terms employers and employees agree to.

Alternative 2: Zero hours contracts **should be permitted, but employers should commit to employment hours at least one day in advance**, and pay wages when they cancel with less notice. *[LibDem]*

Alternative 3: Zero hours contracts **should be permitted, but employers should commit to employment hours at least one week in advance**, and pay wages when they cancel with less notice.

Alternative 4: **Workers on zero hours contracts should be subject to a higher minimum wage than normal contracts.** *[Con]*

Alternative 5: **Zero hours contracts should be illegal**. *[Lab]*

Comparative Policy Agenda Category: General Labor and Employment

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Issue 10: Strikes

Prompt: What is your view on strikes?

Alternative 1: Strikes **should be banned**.

Alternative 2: Strikes **should be banned in the emergency services** (fire, police, and ambulance), but should be allowed in other sectors.

Alternative 3: Strikes **should be banned in the emergency services and other critical sectors** (health, transport, communications, energy), but should be allowed in other sectors.

Alternative 4: Strikes **should be allowed in all sectors, but only to improve pay and working conditions**. *[Con] [LibDem]*

Alternative 5: Strikes **should be allowed, whatever the reason**. *[Lab]*

Comparative Policy Agenda Category: General Labor and Employment

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Issue 11: School Curriculum
Prompt: Who should decide what is taught in schools ("the curriculum")?
Alternative 1: **Individual schools** should decide what is taught.
Alternative 2: **Local governments should set a core curriculum**, but individual schools should decide the rest.
Alternative 3: **Local government should set the curriculum for all subjects**
Alternative 4: **The UK government should set a core curriculum**, but individual schools should decide the rest. *[LibDem]*
Alternative 5: **The UK government should set the curriculum for all subjects**. *[Lab] [Con]*
Comparative Policy Agenda Category: General Education

Issue 12: University Education Funding
Prompt: Who should determine the cost of, and pay for, university education?
Alternative 1: The **UK government should pay for university education** for UK students who enter university. *[Lab]*
Alternative 2: The **UK government should pay for most of the cost of university education** for UK students, aside from a fee of less than £1000 per year to be paid by the student.
Alternative 3: The **UK government should pay for some of the cost of university education** for UK students, aside from a fee of less than £3000 per year to be paid by the student.
Alternative 4: The **UK government should not pay for the cost of university education, but should provide loans** to ensure that all students are able to take up a position at university regardless of family resources. *[Con] [LibDem]*
Alternative 5: The **UK government should not pay for the cost of university education**, and students should pay for their university education through family resources and private student loans.
Comparative Policy Agenda Category: General Education

Issue 13: School Tracking
Prompt: How should schools deal with students with different levels of ability?
Alternative 1: **Schools should not select students on the basis of ability**, and should treat all students the same way.
Alternative 2: Schools should not select students on the basis of ability, but **pupils with different levels of ability in different subjects should be put into different classes for those subjects** ("setting"). *[Lab] [LibDem]*
Alternative 3: Schools should not select students on the basis of ability, but **pupils with different levels of general ability should be put into different year groups ("streaming").**
Alternative 4: Most schools should not select students on the basis of ability, but **selective schools should be available for a small number of talented students**. *[Con]*
Alternative 5: **Schools should select students on the basis of ability.** Selective schools or "grammar schools" should be available across the country.
Comparative Policy Agenda Category: General Education

Issue 14: Fracking
Prompt: "Fracking" is a process of injecting a high pressure water mixture into rock to enable the extraction of natural gas and petroleum from underground or under the seabed.
Alternative 1: Fracking should be **illegal** in the UK. *[Lab] [LibDem]*
Alternative 2: Fracking should be **limited to offshore drilling**.
Alternative 3: Fracking should be **limited to offshore and unpopulated areas**.
Alternative 4: Fracking should be **allowed where landowners and local councils both permit it**. *[Con]*
Alternative 5: Fracking should be **allowed where local landowners permit it**.
Comparative Policy Agenda Category: General Environment

Issue 15: Fox Hunting

Prompt: Which of these comes closest to your view on fox-hunting?

Alternative 1: Fox hunting with hounds for pest control or sport **should be allowed without restriction** *[Con]*

Alternative 2: Fox hunting with hounds for **pest control should be allowed, but fox hunting for sport should be banned**.

Alternative 3: Fox hunting with hounds for **pest control should be allowed, but foxes must be shot with guns rather than killed by the hound**. Fox hunting for sport should be banned. *[Lab]*

Alternative 4: Fox hunting with **guns for pest control should be allowed, but fox hunting with hounds should be banned**.

Alternative 5: **Fox hunting should be illegal** without exception

Comparative Policy Agenda Category: General Environment

Issue 16: Energy Source Regulation

Prompt: Electricity can be generated in different ways (including coal, nuclear and wind). How involved should the government be in deciding how we produce electricity?

Alternative 1: The government should **leave electricity generation to the market**. *[Con]*

Alternative 2: The government should **not subsidise any types of electricity generation, but should set targets for different types**. *[Lab]*

Alternative 3: The government should **subsidise certain types of electricity generation over others**. *[LibDem]*

Alternative 4: The government government **should ban certain types of electricity generation, and should subsidise other types of electricity generation**.

Alternative 5: The government should **nationalise electricity generation and determine the types of electricity generation in use**.

Comparative Policy Agenda Category: General Energy

Issue 17: Energy Price Regulation

Prompt: Who should set energy prices?

Alternative 1: Energy companies **should be able to set whatever tariffs they like**.

Alternative 2: Energy companies **should be able to set their own tariffs, but they should be required to let customers know if a better deal is available elsewhere**. *[LibDem]*

Alternative 3: Energy companies **should be able to set tariffs, but the government should be able to cap certain rates**. *[Lab] [Con]*

Alternative 4: The government **should set tariffs for the energy companies**. Energy companies should have to compete on the quality of service.

Alternative 5: The government **should nationalise energy companies and set its own tariffs**.

Comparative Policy Agenda Category: General Energy

Issue 18: Net Migration

Prompt: Net migration is the number of immigrants who come to the UK minus the number of emigrants who leave the UK to live elsewhere. The current UK population is about 65 million and in 2015 the level of net migration was 333,000. Which of the following figures is closest to the appropriate level of net migration into the UK per year?

Alternative 1: There should be **no net migration.**

Alternative 2: **No more than 65,000 per year** (0.1% of UK population) *[Con]*

Alternative 3: **No more than 130,000 per year** (0.2% of UK population)

Alternative 4: **No more than 325,000 per year** (0.5% of UK population)

Alternative 5: There should be **unlimited UK net migration** *[LibDem]*

Comparative Policy Agenda Category: General Immigration and Refugee Issues

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Issue 19: School Language Support

Prompt: Many schools teach students whose first language is not English. Should such students be given support in school?

Alternative 1: **Schools should not provide support for such students, and should only teach in English**.

Alternative 2: **Schools should not be required to provide support for such students, but should be allowed to do so. Schools should only teach in English.**

Alternative 3: **Schools should provide support for all students whose first language is not English**, but should only teach in English. *[LibDem]*

Alternative 4: Schools should provide support for all students whose first language is not English, and should offer **bilingual teaching in some classes**.

Alternative 5: **Bilingual schools should be set up** wherever there are large communities whose first language is not English.

Comparative Policy Agenda Category: General Immigration and Refugee Issues

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Issue 20: Railway Ownership

Prompt: How should railways in the UK be owned and operated?

Alternative 1: The rail network and the rail operating companies should be **publicly owned. Fares should be set by the government so that they are affordable for most people.**

Alternative 2: The rail network and the rail operating companies should be **publicly owned. Fares should be set by the government to cover operating and maintenance costs.** *[Lab]*

Alternative 3: The rail network and the rail operating companies should be **in part publicly owned, and in part privately owned. Fares should be set by the government to cover operating and maintenance costs.** *[LibDem]*

Alternative 4: The rail network and the rail operating companies should be **privately owned. Fares should be set by the government to cover operating and maintenance costs.**

Alternative 5: The rail network and the rail operating companies should be **privately owned. Rail operating companies should set fares.** *[Con]*

Comparative Policy Agenda Category: General Transportation

Issue 21: Road Tolls

Prompt: Which of these comes closest to your view on how we should pay for the road network? Currently the cost of the road network is paid for by general taxation rather than by charging a toll, or fee, for use of the roads.

Alternative 1: **All roads should be toll roads**.

Alternative 2: **Motorways should be toll roads**, but other roads should be free to use.

Alternative 3: **New developments (new bridges, tunnels, motoroways) should be toll roads**, but all other roads should be free to use.

Alternative 4: **Only the most expensive new developments (bridges, tunnels, motorways) should be toll roads**.

Alternative 5: **No roads should be toll roads**. *[Lab] [Con] [LibDem]*

Comparative Policy Agenda Category: General Transportation

Issue 22: Death Penalty

Prompt: The death penalty was abolished as a punishment for murder in the UK in the 1960s. What are your views on the death penalty?

Alternative 1: The death penalty **should not be used**. *[Lab] [Con] [LibDem]*

Alternative 2: The death penalty **should be available only for multiple murders**.

Alternative 3: The death penalty **should be available as punishment for any murder**.

Alternative 4: The death penalty **should be the usual punishment for murder**, but should not be mandatory.

Alternative 5: The death penalty **should be mandatory for murder**.

Comparative Policy Agenda Category: General Law, Crime, and Family Issues

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Issue 23: Cannabis

Prompt: How should cannabis be regulated?

Alternative 1: **Cannabis should be legal.** Anyone should be free to possess or sell cannabis.

Alternative 2: **Cannabis should be legal.The sale of cannabis should be restricted to licensed sellers**. *[LibDem]*

Alternative 3: **Cannabis use should be decriminalized.** Police should not charge individuals for possessing cannabis for personal use. Producing or selling cannabis should continue to be a criminal offence.

Alternative 4: **Cannabis should be illegal.** People possessing cannabis for personal use should be fined. People producing or selling cannabis should be sent to jail. *[Lab] [Con]*

Alternative 5: **Cannabis should be illegal. Both people possessing cannabis for personal use, and people producing or selling cannabis, should be sent to jail.**

Comparative Policy Agenda Category: General Law, Crime, and Family Issues

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Issue 24: Unemployment Support

Prompt: What level of support should the government provide for UK citizens of working age who are not employed?

Alternative 1: **People should be paid unemployment benefit whilst they are out of work.** This unemployment benefit should last as long as the person is unemployed.

Alternative 2: **People should be paid unemployment benefit whilst they are out of work.** This unemployment benefit should last as long as the person is unemployed, and **as long as they can show that they are actively seeking a job.** *[Lab] [Con] [LibDem]*

Alternative 3: **People should be paid unemployment benefit in their first few months out of work** only.

Alternative 4: **People should not generally be paid unemployment benefit, except where they are unable to work because of a disability or injury they got whilst working**.

Alternative 5: **There should be no unemployment benefit.** Individuals unable or unwilling to find work should be supported by family, friends, or charities.

Comparative Policy Agenda Category: General Social Welfare

Issue 25: Social Care

Prompt: Many older people require personal care and special accommodation to help them carry out everyday activities. How should we pay for this personal care?

Alternative 1: **Individuals should pay all of the cost**.

Alternative 2: **Individuals should pay if they have more than £20,000 in savings**, or a home worth more than £20,000.

Alternative 3: **Individuals should pay if they have more than £120,000 in savings**, or a home worth more than £120,000. *[Con]*

Alternative 4: **Individuals should pay if they have more than £240,000 in savings**, or a home worth more than £240,000.

Alternative 5: The **government should pay all the cost**.

Comparative Policy Agenda Category: General Social Welfare

Issue 26: Land Development

Prompt: Which level of government should decide how land is to be developed?

Alternative 1: None – **those who own the land** should be free to decide how it is developed

Alternative 2: The **immediate community** (eg a parish council or a neighbourhood forum) *[LibDem]*

Alternative 3: The **local authority** (eg a county council, a borough council or a city council) *[Lab] [Con]*

Alternative 4: A **regional body** (eg the Scottish Parliament, Welsh Assembly)

Alternative 5: The **national government** should set land development policy.

Comparative Policy Agenda Category: General Community Development and Housing Issues

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Issue 27: Social Housing

Prompt: Currently local councils and housing associations provide affordable social housing. How much social housing should there be in the UK?

Alternative 1: There should be **social housing for any UK citizen who wants it**, and the government should provide funding to construct as much social housing as necessary.

Alternative 2: Social housing **should be expanded** through additional government funding to provide housing for a larger fraction of the population. *[Lab] [LibDem]*

Alternative 3: Social housing **should be maintained at its current level**, with replacement housing built when residents purchase their units through right-to-buy. *[Con]*

Alternative 4: Existing social housing should be privatised when residents are able to purchase it through right-to-buy, and **there should be no new social housing built.**

Alternative 5: **All existing social housing should be privatised** by selling it off to residents or property management companies.

Comparative Policy Agenda Category: General Community Development and Housing Issues

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Issue 28: Bank Insurance

Prompt: Which of the following is closest to your view on how banks and bank deposits should be insured against failure?

Alternative 1: **Banks should be allowed to fail**, even if it means that depositors lose money.

Alternative 2: **Bank deposits should be fully insured by the government, but if banks fail they should be closed**.

Alternative 3: **Banks requiring government assistance in a crisis should be nationalised and then sold back into the private sector** once the crisis is over. *[Con] [LibDem]*

Alternative 4: **Banks requiring government assistance in a crisis should be nationalised and then kept under government control**. *[Lab]*

Alternative 5: **Banks should be nationalised** and kept under government control.

Comparative Policy Agenda Category: General Banking, Finance, and Domestic Commerce

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Issue 29: Nuclear Forces

Prompt: Which of the following is closest to your view on how the UK nuclear forces should be structured?

Alternative 1: The UK should **unilaterally decommission all nuclear weapons**, and no longer maintain a nuclear deterrent.

Alternative 2: The UK should **seek multilateral decommissioning of all nuclear weapons** around the world. Until that agreement is achieved, **should reduce its own stock of nuclear weapons**. *[LibDem]*

Alternative 3: The UK should **seek multilateral decommissioning of all nuclear weapons** around the world. Until that agreement is achieved, **should maintain its current stock of nuclear weapons**. *[Lab]*

Alternative 4: The UK should just **maintain its current stock of nuclear weapons**. *[Con]*

Alternative 5: The UK should **expand its nuclear deterrent forces**.

Comparative Policy Agenda Category: General Defense

Issue 30: Armed Forces

Prompt: Which of the following is closest to your view on how the UK armed forces should be structured?

Alternative 1: The UK should **abolish its armed forces**.

Alternative 2: The UK should maintain **armed forces able to defend the country** if it is invaded.

Alternative 3: The UK should maintain **armed forces able to defend the country and launch small-scale operations abroad** for peace-keeping or conflict prevention. *[Lab] [Con] [LibDem]*

Alternative 4: The government should maintain **armed forces able to defend the country and fight a large scale war** in another part of the world.

Alternative 5: The government should maintain **armed forces able to fight multiple large scale wars** in different parts of the world.

Comparative Policy Agenda Category: General Defense

Issue 31: Telephone & Internet

Prompt: Which of the following is closest to your view on how telephone and internet services should be provided?

Alternative 1: Telephone/internet services should be **provided by the private sector.**

Alternative 2: Telephone/internet services should be **provided by the private sector**, but **private sectors should be made to supply rural areas if no one else will**. *[Lab] [Con] [LibDem]*

Alternative 3: Telephone/internet services should be **provided by a mix of private and publicly owned companies**.

Alternative 4: Telephone/internet services **should be nationalised** and **the government should set prices to cover costs**.

Alternative 5: Telephone/internet services should be **nationalised** and **provided for free**.

Comparative Policy Agenda Category: General Space, Science, Technology, and Communications

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Issue 32: International Trade

Prompt: Which of the following is closest to your view on international trade?

Alternative 1: The UK should seek **free trade with all countries in the world**. *[Con]*

Alternative 2: The UK should seek **free trade only with democratic countries**. *[LibDem]*

Alternative 3: The UK should seek **free trade only with countries that have similar labour rights to the UK**. *[Lab]*

Alternative 4: The UK should seek **free trade agreements only with countries that have similar labour rights and wage levels to the UK**.

Alternative 5: The UK should **not seek free trade agreements**, and should protect its own industries against foreign competition.

Comparative Policy Agenda Category: General Foreign Trade

Issue 33: EU Relationship

Prompt: Which of the following is closest to your view on the relationship between the UK and the European Union?

Alternative 1: The UK **should remain a member of the EU, and sign up to EU agreements we had previously opted out of**, like the single currency and the Schengen border-free area.

Alternative 2: The UK **should remain a member of the EU**. *[LibDem]*

Alternative 3: The UK **should be out of the EU, but stay part of the single market**, which includes rules allowing "freedom of movement".

Alternative 4: The UK should **be out of the EU and out of the single market**, **but should participate in some EU programmes** (e.g., in research, education, and nuclear energy) *[Lab] [Con]*

Alternative 5: The UK should **be out of the EU and out of the single market**, and should not participate in any EU programmes.

Comparative Policy Agenda Category: General International Affairs and Foreign Aid

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Issue 34: Foreign Aid

Prompt: The UK currently gives around 0.7% of its national income to other countries in the form of aid. Many countries regard this figure as a target. Which of the following is closest to your view on foreign aid?

Alternative 1: The UK should give **no foreign aid**.

Alternative 2: The UK should give **a small amount of foreign aid** (between 0.3 and 0.4% of national income).

Alternative 3: The UK should give **the current amount of foreign aid** (0.7% of national income). *[Lab] [Con] [LibDem]*

Alternative 4: The UK should give **a larger amount of foreign aid** (1% of national income)

Alternative 5: The UK should give **a substantial amount of foreign aid** (around 1.4% of national income).

Comparative Policy Agenda Category: General International Affairs and Foreign Aid

References

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