

‘Reasoning about Politics’ Experimental Designs ^{*}

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This document outlines three research designs for three survey experiments proposed in the ‘Reasoning about Politics’ project proposal submitted in support of my application for a Leverhulme Research Fellowship.

How do voters justify their political beliefs? Political discussion requires that, beyond listing the positions they hold, people articulate reasons or justifications for their policy preferences. Reason-giving is central to contemporary accounts of liberal theory (Rawls, 1997) and democratic deliberation (Thompson, 2008; Gutmann and Thompson, 2009), which suggest that democratic legitimacy stems from the public justifications that citizens and politicians give for their political choices. Scholars have also speculated that the process of justifying one’s political beliefs may also affect the content of such beliefs. For instance, when voters deliberate about justifications, they are thought to express positions that are more coherent and more moderate, and are more likely to tolerate political differences with others. That is, the very practice of defending proposals with reasons may change voters’ preferences.

Despite the importance of reason-giving in democratic politics, the study of public justifications remains in its infancy. Important foundational work describes the types of justification that voters (Colombo, 2019) and elites (Steenbergen et al., 2003) employ, but no existing research evaluates how reasoning affects voter attitudes. The research I propose to undertake for this project would develop our understanding of the role that justifications and reasons play in public opinion about politics. My project will dramatically expand the available descriptive evidence on the justifications that voters use, but also, crucially, will provide answers to important causal questions about the relation-

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ship between justifications and political attitudes. In particular, I will conduct a series of novel online survey experiments addressing three interlinked research questions:

1. Do voters make different political choices when encouraged to justify their decisions?
2. Are voters more tolerant of alternative political views when they consider the justifications offered by others?
3. Do voters' justifications influence how they process new information?

Before turning to the strategy for answering each of these questions, I start by distinguishing between three concepts that are central to the structure of all three experimental designs below: policy issues, positions, and justifications. A **policy issue** refers to an issue that is subject to some level of political debate, where government could plausibly take action. Across the three experimental designs described below, I will evaluate voter attitudes across a common set of 10 policy-issues: "The UK's relationship with the EU", "Immigration", "Health", "Race and ethnicity", "Student tuition fees", "Government responses to COVID-19", "Welfare and unemployment support", "Foreign aid", "Crime", and "Taxation and inequality". These policies are all marked by clear political divisions, both among politicians and the public, but these disagreements are likely to be based on different types of justifications across issues. For instance, voters are more likely to use moral or principle-based justifications when considering issues like "LGBTQ+ rights" and "Taxation and inequality", but may be more likely to use pragmatic justifications when considering issues like "Student tuition fees" or "Government responses to COVID-19".

Second, a **position** is the view that a survey respondent takes on a particular policy issue. For each of the policy issues defined above, respondents will be asked to select from a set of two opposing policy options the policy that comes closest to their position.

I provide examples of the relevant survey prompt for two issues in the appendix to this document.

Third, a **justification** is a reason provided by a survey respondent in defense of their policy position on a given issue. Justifications can take two forms in the experiments described below. First, a respondent might provide an “open-ended” justification for their position in a text box during the survey. Alternatively, in some designs below, respondents will be asked to select their most important justification from a fixed list of alternatives.

Experiment One

A popular view in public opinion research is that voters’ political beliefs are ill-informed, incoherent, and unstable ([Achen and Bartels, 2017](#)). However, these conclusions may tell us less about the failures of voters, and more about weaknesses in the instruments we use to measure voter preferences. Survey respondents are typically asked to report positions on complex policy issues without space for contemplation, deliberation, or justification. When providing quick-fire, top-of-the-head responses, it is unsurprising that voters occasionally express contradictory beliefs, or give responses that vary haphazardly over time. Drawing on “dual-process” theories from social psychology ([Evans, 2008](#)), I hypothesise that when prompted to provide justifications for their political beliefs before stating their positions, respondents will provide systematically different responses than they would otherwise. Articulating their justifications gives people reason to slow down and consider their line of thought more fully, which may affect the beliefs they subsequently endorse.

To assess the hypothesis that reason-giving affects attitudes, survey respondents in the first experiment will be randomly assigned into two groups with equal probability. In a first survey wave, respondents in each group will be asked to report their positions

on three issues (sampled at random from the broader set of 12) in current UK politics. Respondents in the control group will only be asked questions on their policy positions. Respondents in the treatment group will be asked, before giving their policy preferences, to provide two justifications for their positions on each issue. The survey will prompt the respondents to think carefully about the reasons that they support a given side of an issue, and to report these in a text box. After providing their justifications, they will then answer the same set of policy questions as the control group. In the second survey wave, respondents will again be randomly allocated into two groups, and asked to report their preferences (and justifications, depending on their treatment allocation) on the same set of political issues that they responded to in wave one. The experiment therefore represents a 2 x 2 factorial design, with 4 treatment conditions in total (Control-Control; Control-Treatment; Treatment-Control; Treatment-Treatment).

1500 respondents will be sampled from YouGov's online panel, which will enable me to gather a rich set of pre-treatment political characteristics for each respondent. With this number of respondents the experiment will produce 450 observations of individual open-ended justifications per policy (4500 in total), and approximately 375 respondents in each of the 4 treatment conditions.¹

This design will enable me to address two separate questions about voter justifications. First, I will use the open-ended text responses from the treatment group to provide descriptive evidence on the *types* of justification that the UK public use to defend their political beliefs. Existing work in this area ([Colombo, 2019](#)) decomposes public justifica-

¹Given the large total number of policy issues, and the fact that each respondent will answer questions addressing only a subset of three of those issues, even a large number of respondents will result in only a small number of observations within each treatment-policy pairing. With 1500 respondents who provide information on 3 issues each, the average number of observations within each treatment-policy condition would be approximately 112. As a consequence, this experimental design will not be sufficiently well-powered to draw precise conclusions about the relative use of different justification types, or the causal effect of reasoning, in each specific policy area. However, by using a multilevel-modeling framework in the style of [Blumenau and Lauderdale \(2020\)](#), I will be able to characterise the average and variance of the treatment effects of interest.

tions into two broad types: *pragmatic* justifications, which rely on consequentialist cost-benefit style reasoning, and *principled* justifications, which relate to morality or social norms and values. As described above, this experiment will generate many thousands of open-ended texts reporting the justifications behind respondents' policy positions across different issues. As such, it would be infeasible to manually classify justifications either into any categorisation scheme. Instead, I will analyse the text data using both supervised and unsupervised machine learning approaches. For the supervised approach, I will train existing supervised learning algorithms on a sample of justifications that I will manually code into the categories proposed by [Colombo \(2019\)](#). This will allow me to relate the findings from my data, in the UK context, to the justifications put forward by voters in the Swiss context. For the unsupervised approach, I will leverage recent advances in statistical topic modeling ([Zhu, Ahmed and Xing, 2012](#); [Roberts et al., 2014](#)) and dictionary-based word-embedding models ([Blumenau and Hargrave, 2020](#); [Rice and Zorn, 2019](#)) to inductively explore the types of justification endorsed by UK voters.

Second, the random assignment of respondents to treatment and control groups – which ensures that the groups are equal on average with respect to both observed and unobserved characteristics – will allow me to draw conclusions about the *causal* effects of reason-giving on political attitudes. There are three main attitudinal outcomes of interest, all of which capture some dimension of “opinion quality” ([Price and Neijens, 1997](#)). First, using the approach described in [Sturgis, Roberts and Allum \(2005\)](#), I will measure the degree to which voters express “consistent” attitudes across issue areas. Second, making use of the panel structure of the experiment, I will assess the degree to which voters provide stable responses across survey waves ([Krosnick, 1990](#); [Broockman, 2016](#); [Hanretty, Lauderdale and Vivyan, 2020](#)). Third, to capture the idea that reason-giving might prompt voters to adopt less extreme positions ([Cohen, 2007](#)), I will measure the attitudinal polarization between voters on the same issue. If reason-giving is an im-

portant part of the process by which voters form their political opinions, then these measures will vary predictably across treatment conditions. In general, I expect respondents who are compelled to provide reasons for their policy positions in both waves will report attitudes that are more consistent, less polarised, and more stable over time than the attitudes reported by the control group in both waves. Respondents in the groups that are only encouraged to provide justifications in only one wave (i.e the Treatment-Control and Control-Treatment groups) will have intermediate outcomes on these four attitudinal variables.

Experiment Two

How well do people understand the political beliefs of others? A distinctive feature of contemporary political debate is the sense that opposing groups frequently “talk past” one another, failing to engage with the arguments and justifications that each side sees as central to their position. The attitudes that voters hold on particular policies are commonly underpinned by deep-seated moral intuitions ([Clifford and Jerit, 2013](#); [Kertzer et al., 2014](#)), and people rely on these “moral foundations” to justify their views of different policy alternatives ([Hatemi, Crabtree and Smith, 2019](#)). However, recent research suggests that, when advocating for their political beliefs, voters make arguments that are grounded in their own moral values, rather than in the values that might be central for people on the other side of the issue ([Feinberg and Willer, 2015](#); [Voelkel and Feinberg, 2018](#)). Given that this is likely to reduce the efficacy of such appeals, one implication is that citizens may be unaware or mistaken about the reasons that underpin the preferences of others, particularly when they differ from their own. If true, this is normatively troubling because a crucial requirement of citizens in liberal democracies is that they possess at least some understanding of the views of others in society. As [Thompson \(2008, 507\)](#) suggests, “knowledge of the political views of other participants...is as im-

portant as knowledge of issues. If you are to respect your fellow [citizens] you have to understand their views and their reasons for holding them.”

The second experiment in this project is designed to 1) assess the degree of misunderstanding between voters regarding political justifications, and 2) evaluate whether encouraging voters to adopt the perspectives of those on opposing sides of an issue increases their tolerance of political differences.

To address these questions, respondents in experiment two will be randomly assigned to one of two groups. Each group will answer questions on their policy positions, and then complete a multiple-choice task selecting from a list of potential justifications relevant to the policy area. Respondents in the control group will be asked to report their positions on a series of issues before indicating their main reasons for supporting *their own* positions from the list of justifications. Respondents in the treatment group will also report their preferences, but will subsequently select what they see as the main reasons for someone taking the *opposing* stance on each issue. To ensure that the justifications provided to respondents are grounded in real voter attitudes, I will construct these lists in each policy area by carefully studying the answers given by the treatment group in experiment one. In that way, the descriptive findings from that experiment will inform the design of this experiment. Respondents will again be sampled from YouGov’s online panel. Each of the 2000 respondents will be asked to provide their position on 3 policies, and select 2 justifications from the pre-specified list for each policy.

This design addresses two questions. First, to what extent are voters able to identify the reasons that people on the opposite side of a policy give to justify their positions? This descriptive question can be answered by comparing the distribution of justifications selected by the treatment group to the distribution of justifications selected by the control group. This comparison will allow me to assess whether and to what degree voters can infer the justifications that are seen as important by their political “oppo-

nents”. Specifically, for each policy area, I will calculate the proportion of times that each justification is selected by respondents in the treatment group and the control group, and will calculate the mean absolute error of these proportions.² The MAE will therefore serve as a summary statistic for the degree to which voters on average misunderstand the justifications of those on the opposite side of each issue. Crucially, I will use this statistic to explore how political misunderstanding varies by both voter characteristics and by policy area.³ By assessing whether voters can identify the reasons that underpin opposing view-points, and describing how this varies across voters and issues, this experiment will therefore be informative about the degree of misunderstanding across political divides in contemporary UK politics.

Second, does considering the justifications held by others make voters more tolerant of alternative political views? Existing evidence suggests that perspective-taking (as encouraged through in-person interaction) can reduce exclusionary attitudes (Kalla and Broockman, 2020), and normative scholars suggest one benefit of reason-giving discourse is that it helps to “promote mutual respect when no agreement is possible” (Gutmann and Thompson, 2009, 20). Similarly, when voters are exposed to conflicting political views, they are less likely to express antipathy towards those with opposing points of view (Mutz, 2002). Indeed, one of the key theoretical mechanisms that underpins the prediction that communicating across lines of political difference will increase tolerance of others is that such communication “‘puts on the table’ the various reasons and arguments that different individuals have in mind” (Fearon, 1998, 62). As (Mutz,

²Imagine a policy area in which there are three potential justifications – A, B and C – for a given position. *Supporters* of that position in the control group might select those justifications with probability [0.15, 0.3, 0.55]. By contrast, *opponents* of that position in the treatment group might select those justifications with probability [0.4, 0.4, 0.2]. The mean absolute error for that policy position would therefore be $\frac{(|0.15-0.4|+|0.3-0.4|+|0.55-0.2|)}{3} = 0.2$. We can repeat this calculation for each position, in each policy area.

³Because each respondent will select 2 justifications for each of 3 policies, this design will result in $(2 * 3 * 1000)/8 = 750$ observations of selected justifications *for each policy* in the control group, and the same number in the treatment group. This means that the design will be adequately powered to make precise comparisons for each policy position in each policy area between the proportion of times each justification is selected in the treatment and control group.

2002, 114) argues, “exposure to people of different political views increases awareness of rationales for differing viewpoints and thus increases political tolerance.” However, no existing work directly tests whether encouraging voters to think through the reasons and justifications of people who take different positions induces greater tolerance for diverse political view points.

By comparing respondents in the treatment and control groups in the second experiment, I will assess how much voters dislike those who hold opposing views; and whether voters see positions that are different to their own as legitimate. To measure tolerance towards those with opposing views, respondents will be asked questions after the justification prompts that capture a) how difficult they find it to *take the perspectives of* those with opposing views; b) the degree to which they *dislike* those who hold opposing views; and c) whether they see alternative positions on different issues as *legitimate*. The wording for these questions is given in the appendix to this document. I expect voters in the treatment group – who are asked to engage with the potential justifications that people on the other side of an issue might hold – to be more tolerant and understanding of different views than voters in the control group. Given the large number of respondents in each treatment group ($N_{\text{treatment}}, N_{\text{control}} = 1000$), this design will be adequately powered to detect even relatively small effects of the treatment on tolerance attitudes.

Experiment Three

Political scientists often express dismay that voters are insufficiently responsive to new information that contradicts their existing political beliefs (Bisgaard, 2019; Achen and Bartels, 2017; Flynn, Nyhan and Reifler, 2017; Jerit and Barabas, 2012). As Zaller (1992, 44) argues, “People tend to resist arguments that are inconsistent with their political predispositions”. However, the processes by which voters rationalize away inconvenient

information are less well understood. I argue that one potential mechanism for these behaviours may stem from the fact that people rarely hold a single justification for their political beliefs, but rather have many overlapping reasons for their preferences.

One prominent framework for understanding political beliefs is the “expectancy-value” model of attitude formation, in which a citizen’s attitude concerning a policy is described as a weighted function of a set of N “evaluations” that the citizen holds about that object: $attitude = \sum_{i=1}^N v_i \cdot w_i$, where v_i represents the evaluation of the policy on a given attribute, and w_i is the weight assigned to that attribute when evaluating the policy overall (Leeper and Slothuus, 2018). Previous work uses this distinction to describe different modes through which opinion change might occur: when information affects the *weight* that voters put on different attributes of a policy, this is generally understood to provide evidence of framing effects (Nelson, Clawson and Oxley, 1997; Chong and Druckman, 2007a), while when communication affects a voter’s *evaluation* of those attributes this is thought to be evidence of persuasion (Hopkins and Mummolo, 2017).

This model also suggests, however, one mechanism through which voters might resist new information that contradicts their current attitudes. Rather than refusing to revise their evaluation of a policy in the face of a counter-argument, voters might instead process challenging information by mentally *re-ordering the reasons* they deem to be most important for justifying their opinions. That is, when faced with information that challenges an existing justification, it may be cognitively easier to reduce the weight put on that justification (and increase the weight on other justifications) than it is to change the overarching political belief. Consider, for example, a voter who believes that immigration is undesirable because they believe high-levels of immigration suppress the wages of native workers. Such a voter, when provided with information showing that immigration does not have a depressive effect on wages, may mentally down-weight the economic justifications for their positions and instead put more weight on, for instance, cultural

reasons for their opposition. Consistent with this view, I expect that voters who are exposed to counter-arguments will not dramatically shift their policy *positions*, but they will provide significantly different *rankings of the justifications* they cite in support of those positions.

To assess this claim, respondents in experiment three will again be randomly assigned into two groups. In the control group, voters will be asked to report their positions on one randomly selected policy issues. After providing their positions, voters will be asked to rank the importance of a set of reasons that justify their position on the policy for which they provided their position. As before, the set of justifications presented to respondents will be constructed on the basis of a close reading of the justifications provided by respondents in the treatment group in experiment one. Again, the prompt wording is given in the appendix.

In the treatment group, respondents will complete the same set of tasks, but will first be presented with counter-points - written in the style of short opinion pieces - which relate to one of the specific justifications available to them in the subsequent ranking task.⁴ For instance, in the policy area of immigration, respondents in the treatment group might read a short article which emphasises that immigrants to the UK are net contributors to the UK tax base, and which would contradict justifications about the cost of immigration to the government purse. Having read the persuasion treatment, respondents will then provide their position on the issue at hand, and complete the justification ranking task. I will analyse the effects of the informational treatment on two different outcomes. First, I will evaluate whether counter-arguments affect the positions that respondents take on each policy area. Second, I will measure the effect that these counter-arguments have on the ranking of the relevant justifications.

⁴This type of framing prompt is common in a large literature on political persuasion. See, for example, [Chong and Druckman \(2007b\)](#), [Blumenau and Lauderdale \(2020\)](#), [Hopkins and Mummolo \(2017\)](#), [Chong and Druckman \(2010\)](#), and [Chong and Druckman \(2007a\)](#).

Respondents will again be sampled from YouGov's panel panel. Each of the 2000 respondents will be asked to provide their position and rankings on one policy. As before, given the large number of policy issues, even a large number of respondents will result in only a small number of observations within each treatment-policy pairing. This design will produce 200 respondents on average in each policy area who will be equally divided between treatment and control groups. As a consequence, this design will not provide precise treatment effects within each specific policy area. However, I will again employ a multilevel-modeling framework to characterise the distribution of treatment effects across policy areas using the strategy outlined in [Blumenau and Lauderdale \(2020\)](#).

Appendix

The experimental designs described above require writing a large number of survey prompts across 10 different policy areas. As such, I will spend the first half of the fellowship year designing and implementing these designs. Nevertheless, in this appendix I present some draft survey prompts for each of these experimental designs. These prompts remain subject to change throughout the development period of the experiments.

Experiment 1: Draft survey wording

Experiment one requires voters to report their policy positions and their justifications. The wording for the relevant prompts will vary according to the policy area under consideration. Here I provide illustrative examples for each prompt-type using the policy area of immigration.

Policy position prompt

Some people think the government should impose stricter immigration controls to prevent people from other countries living and working in the UK. Others think that the government should reduce immigration barriers.

Which of the following statements comes closest to your view?

- 1. The government should impose stricter immigration controls.*
- 2. The government should reduce immigration barriers.*

Open-ended justification prompt

You previously said that you think the government should [impose stricter immigration controls/reduce immigration barriers].

Thinking carefully about your own views, in the text boxes below, please provide two reasons why you think the government should [impose stricter immigration controls/reduce immigration barriers].

Experiment 2: Draft survey wording

Experiment two requires voters to report their policy positions and their justifications, and also to answer questions about tolerance towards others. The wording for the relevant prompts will vary according to the policy area under consideration. Here I again provide illustrative examples for each prompt-type using the policy area of immigration. Note that the choices offered to respondents in the multiple-choice questions will be informed by the open-ended answers given by respondents in experiment one. The items here should therefore be considered as illustrative.

Policy position prompt

Some people think the government should impose stricter immigration controls to prevent people from other countries living and working in the UK. Others think that the government should reduce immigration barriers.

Which of the following statements comes closest to your view?

- 1. The government should impose stricter immigration controls.*
- 2. The government should reduce immigration barriers.*

Multiple-choice justification prompt

[For respondents who select “Impose stricter immigration controls”]

Control group prompt: You previously said that you think the government should impose stricter immigration controls. Looking at the list of reasons given below, which are the two most important reasons to you for justifying your view.

- 1. Immigration reduces wages and undercuts British workers.*
- 2. Immigrants claim benefits for them and their families, costing the government money which should be spent on other things.*
- 3. Immigration damages Britain’s own culture and traditions.*
- 4. Immigration increases pressure and demand for public services.*
- 5. Immigration increases the level of crime.*
- 6. Immigration increases the threat we face from terrorism.*

Treatment group prompt: You previously said that you think the government should impose stricter immigration controls. Other people take the opposite view. Looking at the list of reasons given below, which do you think are the two most important reasons for to people who believe that the government should reduce immigration barriers.

- 1. Immigration brings people to fill highly skilled jobs where there is a current shortage of British workers.*
- 2. Immigration brings more people to the UK who pay more in taxes than they claim in benefits.*
- 3. Immigration brings people to the UK who are willing to fill low-paid jobs that British workers won’t do*
- 4. Immigration brings people to the UK who have fresh ideas to start new business and create jobs*
- 5. Immigration brings in foreign students who fund our universities*
- 6. Immigration gives Britain a more diverse culture*
- 7. Immigration gives Britain a more diverse cuisine*

[For respondents who select “Reduce immigration barriers”]

Control group prompt: *You previously said that you think the government should reduce immigration barriers. Looking at the list of reasons given below, which are the two most important reasons to you for justifying your view.*

1. Immigration brings people to fill highly skilled jobs where there is a current shortage of British workers.
2. Immigration brings more people to the UK who pay more in taxes than they claim in benefits.
3. Immigration brings people to the UK who are willing to fill low-paid jobs that British workers won't do
4. Immigration brings people to the UK who have fresh ideas to start new business and create jobs
5. Immigration brings in foreign students who fund our universities
6. Immigration gives Britain a more diverse culture
7. Immigration gives Britain a more diverse cuisine

Treatment group prompt: *You previously said that you think the government should reduce immigration barriers. Other people take the opposite view. Looking at the list of reasons given below, which do you think are the two most important reasons for to people who believe that the government should impose stricter immigration controls.*

1. Immigration reduces wages and undercuts British workers.
2. Immigrants claim benefits for them and their families, costing the government money which should be spent on other things.
3. Immigration damages Britain's own culture and traditions.
4. Immigration increases pressure and demand for public services.
5. Immigration increases the level of crime.
6. Immigration increases the threat we face from terrorism.

Tolerance towards others prompt

Do you agree or disagree with the following statements about people who hold different political views to your own?

- I find it difficult to take the perspective of those who hold political views that are different from my own
- I actively dislike people who hold political views that are opposed to my own
- Regardless of the reasons they give, I find it hard to accept the political views of others when they differ from my own

Experiment 3: Draft survey wording

Policy position prompt

Some people think the government should impose stricter immigration controls to prevent people from other countries living and working in the UK. Others think that the government should reduce immigration barriers.

Which of the following statements comes closest to your view?

- 1. The government should impose stricter immigration controls.*
- 2. The government should reduce immigration barriers.*

Justification ranking prompt

[For respondents who select “Impose stricter immigration controls”]

You previously said that you think the government should impose stricter immigration controls.

Looking at the list below, please order these reasons according to how important they are to you for justifying your views on immigration. The reason you think is most important should be put at the top of the list, and the reason you think is least important should be put at the bottom of the list.

- 1. Immigration reduces wages and undercuts British workers.*
- 2. Immigrants claim benefits for them and their families, costing the government money which should be spent on other things.*
- 3. Immigration damages Britain’s own culture and traditions.*
- 4. Immigration increases pressure and demand for public services.*
- 5. Immigration increases the level of crime.*
- 6. Immigration increases the threat we face from terrorism.*

[For respondents who select “Reduce immigration barriers”]

You previously said that you think the government should impose stricter immigration controls.

Looking at the list below, order these reasons according to how important they are to you for justifying your views on immigration. The reason you think is most important should be put at the top of the list, and the reason you think is least important should be put at the bottom of the list.

- 1. Immigration brings people to fill highly skilled jobs where there is a current shortage of British workers.*

2. Immigration brings more people to the UK who pay more in taxes than they claim in benefits.
3. Immigration brings people to the UK who are willing to fill low-paid jobs that British workers won't do
4. Immigration brings people to the UK who have fresh ideas to start new business and create jobs
5. Immigration brings in foreign students who fund our universities
6. Immigration gives Britain a more diverse culture
7. Immigration gives Britain a more diverse cuisine

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