How Group Appeals Shape Group-Party Linkages in Two Political Systems

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Abstract

To attract voters, politicians can appeal to their interests and attitudes through policies. They can also appeal to their identities by supplying candidates that belong to their social group or by sending messages that directly target the group. While there is an advanced literature on the role of policy appeals, much less is known about the effects of other appeals, whether social or group-based, or how they work. We conduct a conjoint experiment in Britain and Norway where we estimate the effects of all three types of appeals, with an emphasis on appeals to social class. We find that identity appeals have strong effects, even rivalling those of our policy appeals. In both countries, the effects are driven by appeals that emphasize out-group conflict rather than in-group solidarity. Our findings thus show, in line with the literature on affective polarization, that out-group conflict plays a large role in attracting voters.

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Introduction

A long line of research suggests that people tend to associate parties with long-standing social, cultural or religious groups (e.g. Campbell et al. 1960; Ahler and Sood 2018). Why do these associations between group membership and party preference arise? Lipset and Rokkan (1967, 5) famously emphasized the role that parties play as "essential agencies of mobilization." We provide the first direct test of three different ways in which parties can use strategic appeals to forge links between themselves and social groups. Firstly, parties can make policy appeals, that is, supply policies the group wants or that are in the interest of the group (Evans 2017). Secondly, they can make "social appeals" by supplying descriptive representation, that is, candidates from the group itself (Heath 2015). And finally, they can make group appeals, that is cast themselves as an ally of some social group, absent any elaboration of policy (Robison et al. 2021).

We turn our main attention to the effects of the latter, which has received much less attention in the literature. How do such group appeals affect electoral preferences? How important are they compared to policy appeals? And what are the mechanisms through which these appeals work? We focus on social class, arguably the most studied cleavage in Western politics, and carry out conjoint experiments in Britain and Norway to test a series of pre-registered hypotheses.[1] Our article advances the literature on social cleavages and group polarization in at least three main ways. Firstly, we provide the first test of how policy, social and group appeals help parties attract voters using an experimental design that ensures a stricter test of the effects of the appeals than in previous (mainly observational) work. We also improve on existing experimental studies by including three types of appeals simultaneously. Secondly, we identify a novel, yet intuitive, explanation for how these appeals work, and whether they are more closely linked to perceptions of substantive or symbolic representation. Thirdly, comparatively little research has examined group appeals in particular. We improve on this literature by distinguishing between conflict and solidarity appeals and find stronger conflict effects,

[1]For the Norwegian pre-registration see `https://doi.org/10.17605/OSF.IO/BZCMD`; for the UK version see `https://osf.io/6rnua`.

indicating that group appeals are most effective when containing the trace of struggle between groups.

Party appeals and class polarization

We put forward three hypotheses on how the appeals strengthen class divides, creating class polarization, one for each appeal. First, we propose that a left-wing policy appeal on economic issues will have a positive effect on candidate support from working class respondents and thereby increase the class cleavage (H1). Second, we propose that descriptive representation matters, and that people tend to prefer candidates from their own group (Campbell and Cowley 2014), implying that working class respondents will be more like to support a candidate with a working class occupation (H2). Thirdly, we hypothesize that groups will be more likely to support candidates that cast themselves as an ally of the social group (H3) even if there is no direct reference to policy (Robison et al. 2021, 725-726). Moreover, we examine if the effect of such appeals are stronger if they emphasize out-group conflict or in-group solidarity, a distinction that is lacking in the literature.

How do these different appeals work? One common explanation for social appeals is that voters infer policy positions from a candidate's background. Thus, for example, voters assume candidates with a working-class background are more left-wing (Carnes and Sadin 2015; Arnesen, Duell, and Johannesson 2019). The social background of politicians offers a "low-information short-cut to estimating a candidate's policy preferences" (Popkin 1991, 63). However, if voters only attach value to social appeals because of what they imply about policy positions, then the effects of social appeals may disappear once policy positions are known (Pedersen, Dahlgaard, and Citi 2019). For the effect of social appeals on candidate choice to be more than simply a proxy for policy appeals, voters need to attach an electoral premium to politicians who share their social background beyond the policy or group appeals that the politician might also provide. This may involve an expressive mechanism as well, akin to Pitkin's (1967) notion of symbolic representation, whereby candidates are "believed-in or accepted-as" class representatives.

Group appeals differ from social appeals in that they provide messages *to* a particular social group, rather than messages *from* a particular social group. However, the ways in which the appeals operate may be similar. That is, voters may infer a set of policy priorities from group appeals, and for instance perceive candidates who appeal to the working class as more left wing (Robison et al. 2021). Or group appeals may speak "more to the symbolic concerns tied up in people's social identities" (Thau 2021, 677) or personal affect towards the group in question (Huber, Meyer, and Wagner forthcoming). Yet evidence so far on either of these mechanisms is limited and direct comparisons between social and group appeals are absent. Social and group appeals may therefore provide both rational policy and expressive identity benefits for the group, akin to how linked fate perceptions are related to both material interests and identity concerns (e.g. Donnelly 2021). To investigate these possibilities we test whether different appeals influence perceptions of candidate ideology (tapping into ideas of substantive representation, H4) and/or feelings of representation (tapping into ideas of symbolic representation, H5).

Experimental Design

To test our claims we carry out conjoint experiments in Britain and Norway. In the experiment we present respondents with pairs of fictional candidates, who vary in terms of their social, policy and group appeals across nine different dimensions (see Appendix A for details and context). The dimensions were selected to provide candidates with a rounded set of characteristics and expose respondents to competing signals that they might encounter in the real world. We include social appeals to age, gender, class, and urban-rural residency, and policy appeals on four salient political conflicts covering the economic left-right dimension and GAL-TAN conflicts over socio-cultural issues. Finally, we include conflict-based appeals and solidarity-based group appeals to the working class, as well as a control condition where the candidate emphasizes the importance of voting on election day, without making any class-specific appeal. An example of a conflict-based group appeal to the working class is the candidate saying that "too much attention has been given to the upper middle class in recent political debates, it is time for politicians to prioritize people

from the working class" (based on Robison et al. 2021), while an example of a solidarity-based appeal is the candidate saying that "all working class people have shared interests and need to unite in politics". The sample, data collection, and methodology is outlined in more detail in the online appendix, along with a detailed discussion of the deliberate choice not to include party labels in the conjoint experiment. The online appendix also includes balance tests, estimates of marginal means, and additional results.

Results

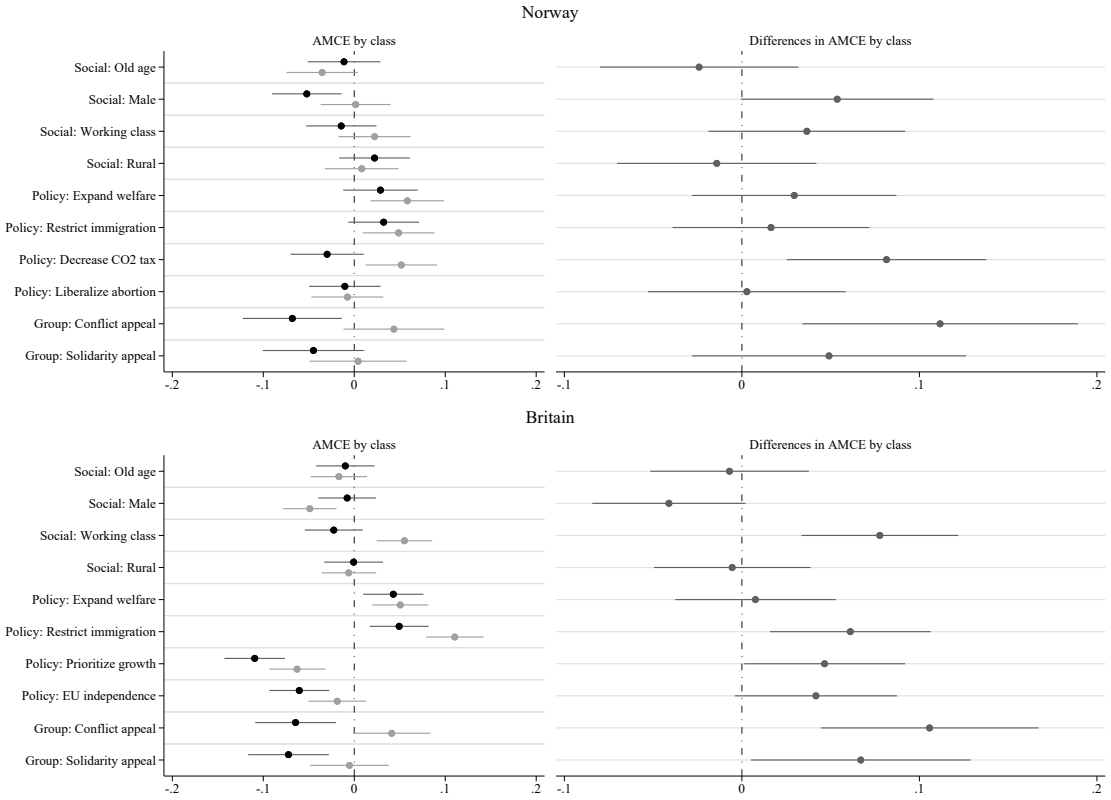
Figure 1 plots the main results. We do not find evidence that economic left-right policies polarize voters along class lines (H1). Although working class respondents are more supportive of candidates who wish to expand the welfare state rather than cut taxes, the direction and magnitude of this effect is quite similar for middle class respondents and the difference in AMCEs by class is not significant.[2] However, in Britain we find that working class respondents are more likely than middle class respondents to select a candidate who wants to restrict immigration, and in both countries we find that working class respondents are less likely to select a candidate with pro-environmental policy appeals. Thus, GAL-TAN appeals are more class-polarizing than welfare state appeals.

Moving to social appeals (H2), we find that British working class respondents are more likely to prefer working class candidates. The difference in the AMCE between working class and middle class respondents is large, and the expected vote share for a working class candidate is about eight percentage points higher for working class voters than middle class voters. In Norway there is less support for the social appeal hypothesis: While working class respondents do show a small preference for working class candidates, and vice versa for middle class candidates, these effects are somewhat smaller and not statistically significant. Still, patterns are similar in the two countries so the contextual variation should not be overstated. To provide a benchmark for these results, online appendix F presents similar analyses by gender and age instead of class, showing that

[2]This attests to the general, cross-class popularity of the welfare state. We may have found more class polarizing effects if we had focused on redistribution directly or social consumption vs social investment, see e.g. Häusermann et al. (2022).

class-polarizing

Figure 1: AMCE of conjoint experiment for Norway and Britain



Note: Black dots are estimates for middle class respondents, light grey dots are estimates for working class respondents, dark gray dots are estimates for the differences in AMCEs by class. The lines show the 95 percent confidence intervals.

candidate gender and candidate age has much smaller gender- and age-polarizing effects than class.

Finally, for the group appeal hypothesis, we find that in both countries the working class are more likely than the middle class to prefer candidates who make group appeals to workers which emphasize class conflict, and the magnitude of the class polarizing effect is relatively strong at over 10 percentage points. By contrast, the solidarity appeals have much smaller class polarizing effects.

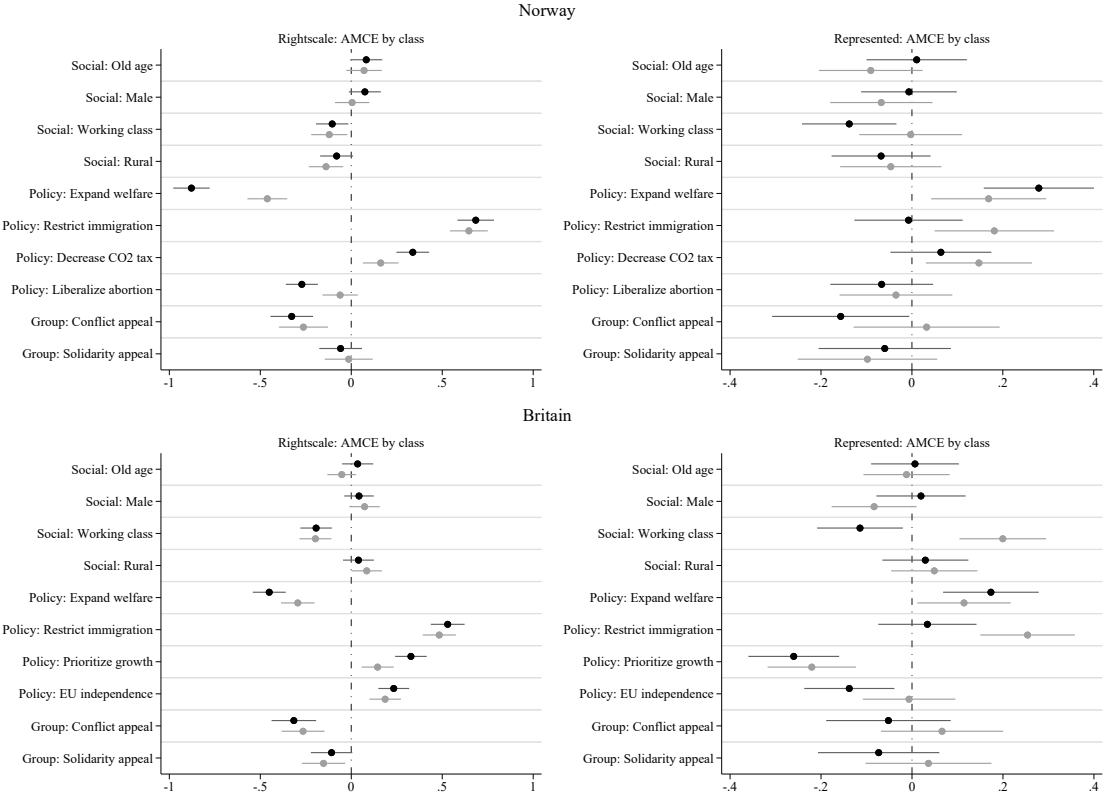
Overall, these results provide support for our main hypotheses. We find strong evidence in Britain that working class voters are more likely than middle class voters to prefer candidates from working class backgrounds (H2) and candidates who make group appeals specifically targeted at the working class (H3), over and above any policy stance they may advocate. We find limited evidence that class polarization is shaped by pol-

icy on left-right issues (H1), although immigration and climate policy positions create stronger differences across voters along class lines, indicating that class politics (and perhaps politics in general) is today more closely linked to "cultural" policies than it was in the past. Overall, patterns are not that different in Norway, although effects (especially for social appeals) are generally smaller and often not significant.

To explore the mechanisms through which the appeals work, we turn to their impact on perceptions of candidate's ideology and representativeness. The left hand panels of Figure 2 show the AMCEs by class for the perceived ideology of the candidate on a left-to-right scale (see Figure A3 for differences in AMCEs). Candidates making group appeals to the working class are perceived as more left-wing, by both working class and middle class respondents. As before, the effects are stronger for group appeals that emphasize class conflict, suggesting that group appeals are of greater heuristic value if they emphasize conflict. Group appeals may therefore not only increase support for a specific policy (Huber et al. 2024) but may also carry a policy signal themselves. Moreover, in both Britain and Norway, and for both classes, we find that voters also use social appeals to make inferences about candidate ideology. Working class candidates are perceived as being more left-wing than middle class candidates, even when averaging across their stated policy positions. Still, as we should expect, the effects of social and group appeals on candidate ideology are dwarfed by the effect of welfare policy and immigration policy.

The second mechanism we explore is feelings of representation. The right hand panels of Figure A3 shows the AMCE by class for whether respondents feel represented by the candidate. In Britain there is strong evidence that working class candidates are perceived as better representatives by the working class (and worse representatives by the middle class). The magnitude of this representational difference is greater than for any other candidate attribute or policy, indicating the strong expressive identity people attach to class in Britain (Evans, Stubager, and Langsæther 2022) and a strong link between descriptive representation and feelings of symbolic representation. For the group appeals, we find that both solidarity and conflict appeals go in the expected direction, as working class respondents feel more represented and middle class respondents less represented

Figure 2: AMCE of mechanisms for Norway and Britain



Note: Black dots are estimates for middle class respondents, light grey dots are estimates for working class respondents. The lines show the 95 percent confidence intervals.

(however, the differences between them are not significant, see Figure A4). In Norway, we again find that the effects of social and group appeals to class are weaker than in Britain, while policy appeals are stronger. In particular, restrictive immigration policy produces class polarization on feelings of representation in both countries.

In the appendix, we dig further into the role of representation as a mechanism by conducting a simple mediation analysis, where we decompose the effects of the appeals into direct and indirect effects (see Tables A3 and A4). In general we find small indirect effects, suggesting that other mechanisms are more important, with the main exception that feelings of representation mediate the role of social appeals for vote choice. We also examine whether the effects of class appeals depend on the class background of the candidate who makes the appeal (Figure A12). Estimates suggest that there is a complementarity between appeals and class background, but our sample sizes prevent us from making firm conclusions.

Conclusion

This article provides the first direct test of how voters respond to social and group appeals, using a conjoint design that controls for candidates' positions on the most important policy dimensions in two different countries. This provides a stronger test than previous studies, which have relied either on vignette experiments (Robison et al. 2021), or have studied a limited number of appeals and policies (e.g. Arnesen, Duell, and Johannesson 2019). Yet, even when controlling for other appeals, including the most important policy positions, we still find that social and group appeals have class-polarizing effects on candidate choice and perceptions, with particularly pronounced effects in Britain. We focus on candidate choice, however, social and group appeals may also mobilize voters, so future studies might examine effects on outcomes like political efficacy, political trust, and political participation for different social groups.

Moreover, by considering the mechanisms through which these appeals operate, we move beyond how these appeals work (or do not work) in practice, and also shed light on why such appeals may be more effective in some political systems. In both Britain and Norway we find strong class polarizing effects of group appeals that emphasize class conflict, but we do not find much evidence that class solidarity appeals polarize voters along class lines. This suggests that group appeals are less "symbolic" than previous work suggests (Robison et al. 2021), and are more effective in attracting support when they signal policy implications by alluding to distributional struggle. For social appeals, we find strong class-polarizing effects in Britain, while this the pattern is weaker in Norway.

Why the difference? In both countries, social appeals send a strong policy signal, and middle class and working class voters alike, are more likely to perceive working class candidates as left-wing than middle class candidates, even when averaging across policy positions. To some degree, this supports accounts of social representation that emphasize the heuristic value of social appeals – and the low-information short cut they provide for policy positions. However, we suggest that there might also be an expressive mechanism in play – akin to Pitkin's (1967) notion of symbolic representation whereby candidates are "believed-in or accepted-as" class representatives. In Britain, we find that social appeals

do send such a symbolic signal. Working class people are much more likely than middle class people to feel represented by a candidate with a working class background. Indeed, the magnitude of this effect is greater than for any other candidate attribute or policy, indicating the strong expressive identity people attach to class in Britain and a strong link between descriptive representation and feelings of symbolic representation. Yet in Norway, we find no effect of the social appeal for working class people. This suggests that sending a policy signal through social appeals may not be enough, just by itself, to exert a significant impact on vote choice, which is supported by the generally small indirect effects we find in the mediation analysis. In the eyes of voters, although there is a link between descriptive and *substantive* (policy) representation; the link between descriptive and *symbolic* representation may be more important, and this link may be culturally bounded. Accounts of social representation that emphasize the policy signals that different social characteristics send may therefore somewhat overstate their case.[3]

These findings have broader implications. A common narrative claims that class divisions have declined over time and been replaced by other group divisions and identities. To the extent that this is the case, our study shows that when candidates differ in their (class-based) policy, social, and group appeals, there is substantial class polarization among citizens. The potential for such class based mobilization has therefore not entirely gone away. Moreover, the effects of such social and group appeals may be even more important for other groups, particularly when membership of those groups is associated with a strong policy signal or affective identification (see also Huber et al 2024). To this end, future work may fruitfully consider the range of different signals that social and group appeals provide, to both ingroups and outgroups alike.

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[3]We have limited ability to explore this conjecture further, but Table A5 and Table A6 present mediation analysis where we explore whether the effects of the appeals on feelings of representation are mediated by the perceived ideology of the candidate. We find no evidence of this for working class voters neither in the UK or Norway, but perceived ideology does partly mediate feelings of representation for middle class respondents in the UK

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Online appendix

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A Context, data collection, design choices, and conjoint tables

Britain and Norway represent particularly suitable cases for testing our hypotheses since they differ from one another in terms of the salience of class in society. Whereas in Britain the class divide has traditionally been considered the main political cleavage, in Norway class differences are less visible, income differences are smaller[4] and social class plays a lesser role in Norwegian politics. The countries also represent two different political systems: One first-past-the-post, two(-and-a-half) party system and one PR, multiparty system. By comparing two different cases, we are therefore able to probe the generalizability of our findings across different social and political contexts.

To provide a direct test of how policy appeals, social appeals, and group appeals affect group-party linkages, we carry out conjoint experiments (Hainmueller, Hopkins, and Yamamoto 2014) in Britain and Norway. Conjoint experiments are particularly useful for our purposes since they allow us to jointly estimate the effects of all appeals. Moreover, because the estimates of one type of appeal are averaged across the other appeals, the design reduces the concern that, for example, the effect of a social appeal to the working class picks up the effect of a policy appeal. In addition, the conjoint design more closely mimics the choice voters make in elections, as voters have to trade-off many – sometimes competing - preferences when making their candidate choice.

In the experiment we present respondents with pairs of fictional candidates, who vary in terms of their social, policy and group appeals across nine different dimensions. The conjoint table for respondents in Britain is illustrated in Table A1; and for Norway in Table A2. The nine dimensions were carefully selected to provide candidates with a rounded set of characteristics, and to expose respondents to range of different and competing signals, which they might reasonably expect to encounter in the real world.

The social appeals we include are some of the most studied in the literature on the social antecedents of political behaviour— age, gender, class, and urban-rural residency. Candidates may be young (30) or old (60), female or male, and have a working class or middle class occupation. We specify six different job titles and average across occupations that represent the two classes rather than choosing one occupation to represent each class. This design makes it more likely that we capture respondents' preferences related to the class of the candidate rather than preferences related to specific occupations, in a manner that also preserves statistical power. Candidates may also have an urban or a rural background.

We include policy appeals on four different issues, which capture salient political conflicts in each country. These appeals cover the traditional left-right conflict over public goods production and resource redistribution, and GAL-TAN conflicts over socio-cultural issues. These issues are all associated with class and may therefore polarize voters along class lines (for an overview see Evans and Langsæther 2021).

In both countries, like many others, economic left-right issues still make up a crucial aspect of political competition. Class differences are consistently found on such issues, and the working class is more left-wing then the service classes (e.g. Langsæther and Evans 2020; Evans and Tilley 2017; Rennwald 2020). We therefore opted to include such an issue, where the candidate either supports expanding the welfare state (even if this means increasing taxes) or cutting taxes (even if this means cutting back on the welfare state). However, recent evidence points to the fact that there is less class differences

[4]Confer, for instance, the differences in Gini coefficient: `https://data.worldbank.org/indicator/SI.POV.GINI?locations=NO-GB&most_recent_value_desc=true`.

on such broader preferences for welfare state and social spending (Lindh and McCall 2020) and more over priorities related to e.g. social consumption versus social investment (Häusermann et al. 2022). Our measure may therefore underestimate the class-polarizing effects of other policies on the economic left-right dimension.

Beyond economic left-right issues, we include country-specific GAL-TAN issues. In Norway – in addition to economic left-right issues – immigration, climate-environment, and moral issues have consistently been found to be among the major dimensions of political conflict (see e.g. Hesstvedt, Aardal, and Bergh 2023). For immigration, we opted for a standard position where the candidate either wants to make it easier or harder for people to get asylum in Norway. Abortion is related to moral issues, and while there is almost no political conflict over access to self-determined abortion in Norway, there was a very salient discussion at the time of the data collection about whether to keep the legal limit to week 12 or 16, and it is on this issue we let the candidates have different appeals. We therefore chose this issue to represent this dimension. Similarly, the CO2 tax was at the time of the data collection probably the most prominent issue related to climate and the environment in Norway, and was therefore chosen to represent that dimension.

In Britain, immigration is also an important issue and we measured this the same way as in Norway. Climate and environmental issues are also important, but there was no debate over CO2 taxes in Britain. We therefore opted instead for a more standard measure of whether the candidate wants to combat climate change (even if it causes slower economic growth), or increase economic growth (even if it causes climate change). Moral issues, on the other hand, are not so high on the political agenda in Britain. Instead, Britain's relationship with the EU is a key issue in the British political debate. We therefore let the British candidates hold positions on this issue, either by wanting closer cooperation with the EU or greater independence from the EU. (In Norway, on the other hand, the EU question was completely off the political agenda at the time of the data collection (Bergh, Hesstvedt, and Karlsen 2022) and was therefore not included for the Norwegian candidates).

Finally, we include group appeals to the working class. We have one control condition where the candidate simply emphasizes the importance of voting on election day without making any class-specific appeal. The idea here is to have an "active" control so as to avoid the working-class appeals picking up voters simply liking a candidate who makes an appeal of whichever type. We then have two conflict-framed group appeals to the working class. The first one is a replication of the measure used by Robison et al. (2021), where the candidate states that "Too much attention has been given to the upper middle class in recent political debates, it is time for politicians to prioritize the working class!" The second one states that "the rich are getting more powerful while working class voices are not being heard, now it's the workers' turn!" It is important to notice that we refer to power and voices, rather than wealth and redistribution, to make this a group rather than a policy appeal. We also specify two solidarity-based group appeals to the working class. The first says that "All working class people have shared interests and need to unite in politics!", emphasizing the shared interests that may motivate group-based political action in social psychological models (Huddy 2013, 750). The second is based on functional underpinnings of group identity, where the key function is to promote internal cooperation (Huddy 2013, 743): "All working class people need to turn out to vote to improve their common situation!".

We did not include an appeal to the middle class. The reason for this is partly because such an appeal is, in the British and Norwegian context, somewhat unrealistic

and could be off-putting to large segments of the electorate (imagine a politician saying that "too much attention has been given to the working class in recent political debates, it is time to prioritize the upper middle class!"). In that case, our estimate of the working class appeal would be severely inflated as it would not be the effect of the working class appeal compared to a class-neutral appeal, but rather to the (somewhat strange) middle class appeal. The ideal solution would have been to include both a class-neutral appeal, a middle class appeal, and a working class appeal. However, this would reduce our statistical power to detect an effect in the first place. Given that we are estimating effects on subgroups (working class and middle class people) we thought it important to not split the main treatments into too many levels. And so, in this trade-off, we opted for a more neutral appeal.

All attribute levels are fully randomized with equal probability for each level of an attribute to appear. Thus, respondents may face candidates with profiles that cut-across traditional left-right divides, such as a candidate with a right-wing economic policy who makes a group appeal to the working class.[5] Our analysis focuses on three main outcome questions, one measuring candidate preference and the other two measuring potential mechanisms. After seeing the candidate profiles respondents were asked which of the two candidate profiles they would prefer if they had to vote for one of them. Next they were asked to what extent each of the candidates would represent 'someone like them' (scale 1-7). This is our measure of perceived representation. Finally, they were asked to place each candidate on a scale from left to right (scale 1-7). This is our measure of perceived ideological position of the candidate.

Our key independent variable is respondents' social class. The ideal measure when considering the effects of social and group appeals is class identity. Feelings of representation should primarily improve by appeals to the working class for people actually identifying with the working class. This is therefore also the preferred measure in the seminal study on this topic by Robison et al. (2021). In Britain, class identity is an established measure included in very many surveys over long periods of time and is well-studied (see e.g. Evans, Stubager, and Langsæther 2022, for a recent example). We therefore used class identity in Britain.

In Norway, by contrast, at the time of data collection planning, class identity had not been included in any of the national election studies for more than 20 years and had hardly been studied in that period. Objective class, on the other hand, was established, studied, and well-measured with the much-used EGP schema. We therefore opted to use this rather than take our chances on a measure we did not know would work in Norway.[6]

However, since then, class identity re-appeared in the most recent Norwegian election study. Analyses of this measure found that the class identity measure works well in Norway, people still identify with classes, and – crucially for our purposes – class identity correlates well with objective class (Hesstvedt and Langsæther 2023). This latter point

[5]Although such uniform designs have been criticized for lacking external validity (De la Cuesta, Egami, and Imai 2022), we think it is important to decouple class-based group appeals from left-wing policy appeals since group appeals may be used strategically by right-wing politicians to gather support from working class communities. Donald Trump stating that he would be the champion of the working class is a prime example. But more generally Populist Right parties' often use anti-elite messages to consolidate and further extend their support among the lower classes (Betz 2018, 89). In Norway, for instance, the anti-immigration party (The Progress Party) has described itself as "the new workers' party".

[6]Where class IIIb; V; VI; VIIa; and VIIb refer to the working class and class I refers to the middle class.

suggests that we would probably not get very different results using class identity instead of objective class. And to the extent that results differ, we would expect our estimates to be conservative, since we expect the group appeals to have stronger effects based on class identity than on objective class.

For the British sample we recruited respondents through YouGov's online UK Omnibus panel. This draws respondents from an online panel of approximately 800,000 people to construct a quota sample representative of the British public with respect to age, sex, education and region. We surveyed a total of 2001 respondents in May 2023. For the Norwegian sample we recruited respondents through Kantar's online panel, which has a similar infrastructure as the UK panel. The analysis includes 2931 respondents, which were interviewed in January and February 2022. In both countries, each respondent was shown two pairs of candidates.

All models are estimated using linear regression, with outcomes measured on their original scale and standard errors clustered on respondent. We do not include any covariates since there is no evidence that randomization was not properly implemented (see Table A8).

Table A1: Conjoint table (UK).

Social Appeals	
	Candidate characteristics...
Age	30;60
Gender	Woman; man
Occupation	Factory worker; bus driver; care worker; lawyer; journalist; banker
Born and raised in	Big city; countryside
Policy Appeals	
	Candidate wants to...
Economic left-right	...expand the welfare state, even if it means increasing taxes ;
	...reduce taxes, even if means making welfare cuts to reduce taxes
Immigration	...make it easier for people to get asylum in Britain ;
	...make it harder for people to get asylum in Britain
Climate/environment	...combat climate change, even if it causes slower economic growth ;
	...increase economic growth, even if causes climate change
Brexit	...ensure closer cooperation with EU ;
	...ensure greater independence from the EU
Group Appeals	
	Candidate states that...
Neutral	It is important that everyone votes on election day!;
Conflict	Too much attention has been given to the upper middle class in recent political debates, it is time for politicians to prioritize people from the working class;
Conflict	The rich are getting more powerful while working class voices are not being heard, now it's the workers' turn!;
Solidarity	All working class people have shared interests and need to unite in politics!;
Solidarity	All working class people need to turn out to vote to improve their common situation!

Table A2: Conjoint table (Norway).

Social Appeals	
	Candidate characteristics...
Age	30;60
Gender	Woman; man
Occupation	Factory worker; Electrician; Nurse; Professor; Engineer; CEO
Born and raised in	Big city; countryside
Policy Appeals	
	Candidate wants to...
Economic left-right	...expand the welfare state, even if it means increasing taxes ;
	...reduce taxes, even if means making welfare cuts to reduce taxes
Immigration	...make it easier for people to get asylum in Norway ;
	...make it harder for people to get asylum in Norway
Climate/environment	...increase the carbon tax;
	...reduce the carbon tax
Moral issue	...expand the right to abortion to week 18;
	...keep the right to abortion at week 12
Group Appeals	
	Candidate states that...
Neutral	It is important that everyone votes on election day!;
Conflict	Too much attention has been given to the upper middle class in recent political debates, it is time for politicians to prioritize people from the working class;
Conflict	The rich are getting more powerful while working class voices are not being heard, now it's the workers' turn!;
Solidarity	All working class people have shared interests and need to unite in politics!;
Solidarity	All working class people need to turn out to vote to improve their common situation!

Note: English translation from Norwegian.

Figure A1: Screenshot of conjoint experiment for UK respondents.

YouGov

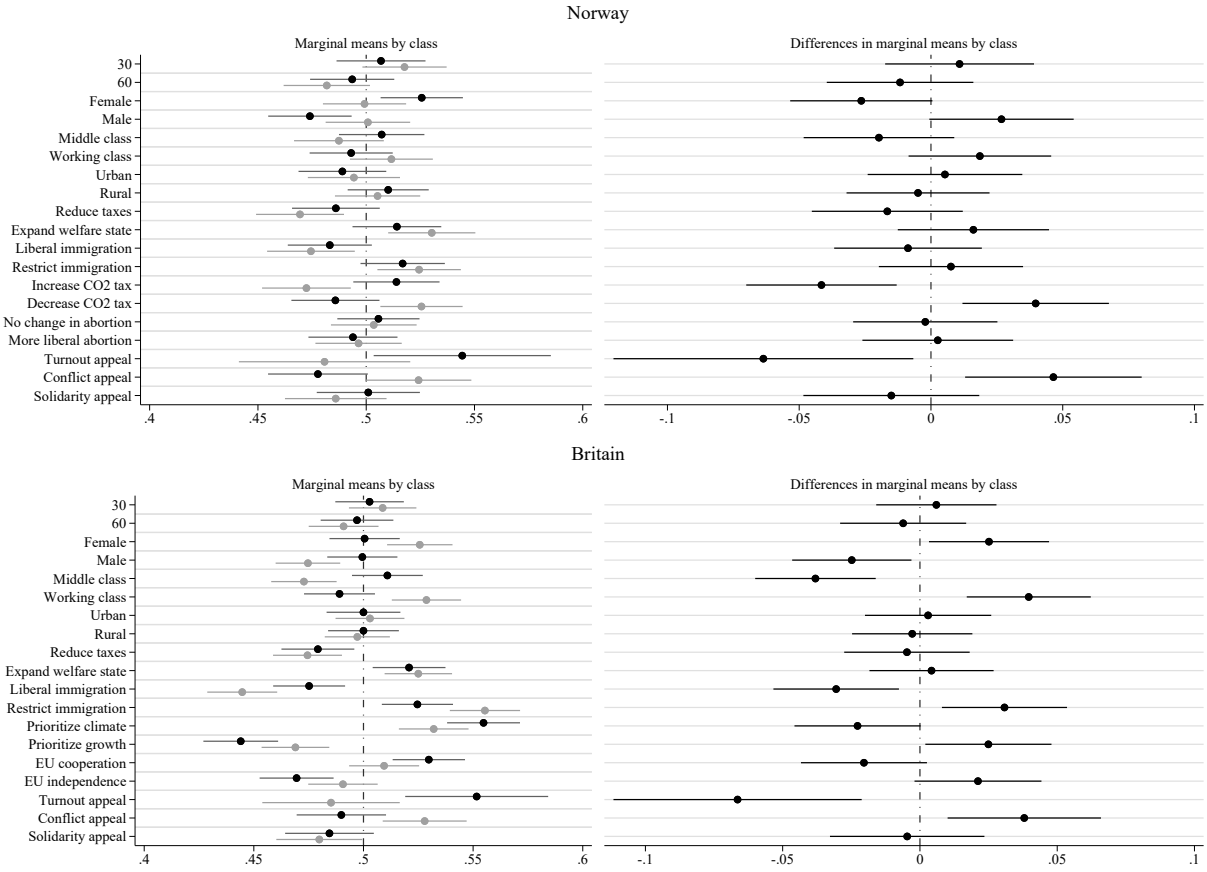
We will now present two politicians; A and B – and ask you to evaluate them. Please read their profiles carefully.

	Candidate A	**Candidate B**
Age	60	60
Gender	Man	Woman
Previous occupation	Bus driver	Journalist
Born and raised in	Countryside	Countryside
Politician wants to...		
Economic	Expand welfare provision, even if it means increasing taxes	Reduce taxes, even if it means making welfare cuts
Immigration	Make it easier for people to get asylum in Britain	Make it harder for people to get asylum in Britain
Climate	Increase economic growth, even if causes climate change	Combat climate change, even if it causes slower economic growth
Brexit	Ensure closer cooperation with EU	Ensure greater independence from the EU
Message	"Too much attention has been given to the upper middle class in recent political debates, it is time for politicians to prioritize people from the working class!"	"All working class people have shared interests and need to unite in politics!"

B Marginal means

In the main text we present AMCEs, which are the estimates of main interest since they give us the causal effects of the appeals relative to the contrast/control appeals. The subgroup AMCEs give us the causal effects of attribute levels for each class, and comparisons of AMCEs across classes give us the difference in causal effects. However, since these causal effects are always estimated against a contrasting appeal (or treatment if you like), it is recommended to also present Marginal Means (MM), in particular when one is interested in differences across subgroups (Leeper, Hobolt, and Tilley 2020). The MMs shows the probability that a candidate with the particular attribute level is selected and can thus be estimated for all levels of an attribute. This feature is useful because support for the comparison appeal can differ across groups, and differences in AMCEs across groups do not tell us whether it is, e.g. the relative popularity of the working class appeal or the turnout appeal that differs across the classes. This might matter for interpretation of results.

Figure A2: Marginal means.



Note: Black dots are estimates for middle class respondents, light grey dots are estimates for working class respondents, dark gray dots are estimates for the differences in MMs by class. The lines show the 95 percent confidence intervals.

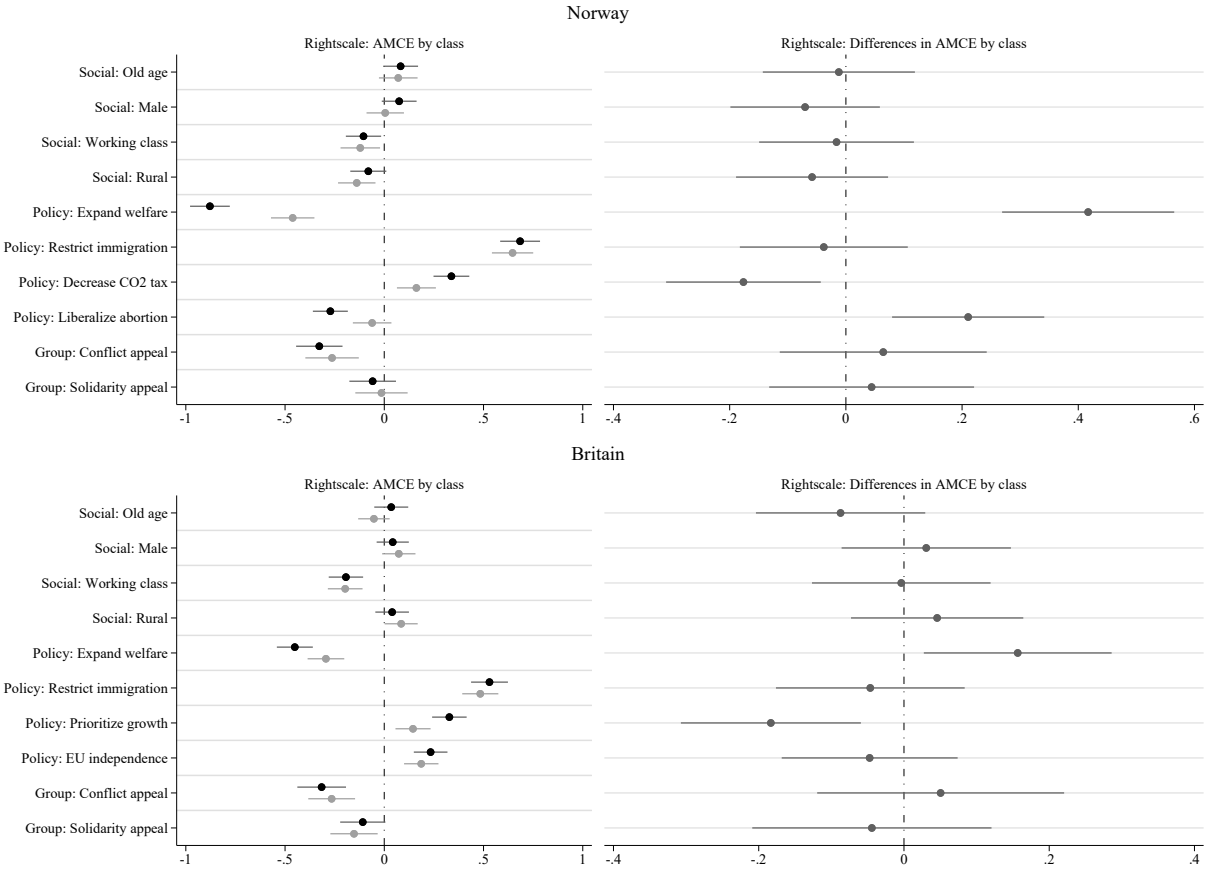
Figure A2 presents marginal means and class differences in MMs within each attribute level. We see that in both countries, the patterns of the MMs for the candidate class aligns

with the respondent class. The same is true for the left-right policy appeal in Norway, while in the UK the differences are negligble. For group appeals, we see that MMs for the conflict appeals, but not the solidarity appeals, match respondent class. Moreover, we also see that the turnout appeal is popular among middle class respondents, which is as expected since we have no direct middle class appeal, thus the turnout appeal is the only appeal they receive that is not an appeal to the working class.

C Additional outcomes

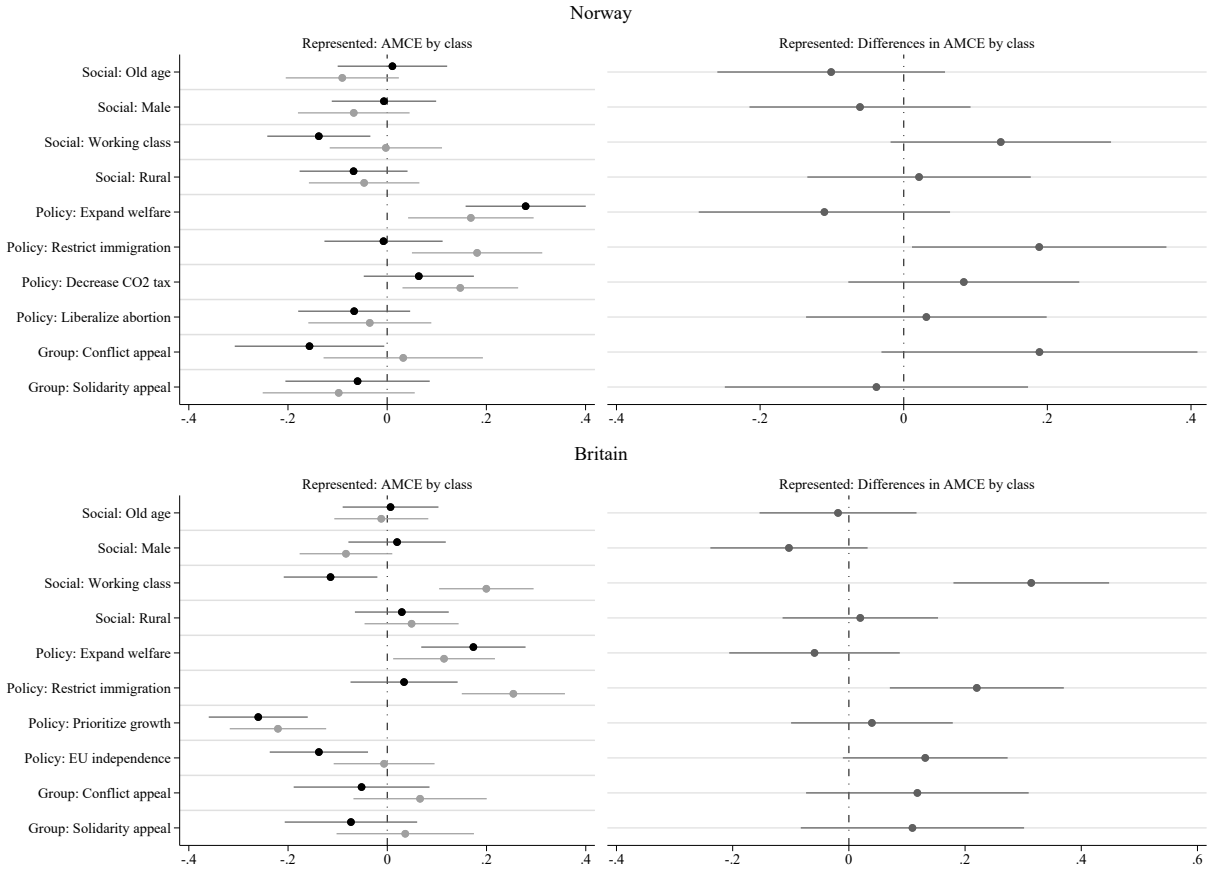
In the experiment we asked respondents to select a candidate, report the perceived ideology of the candidate (scale 1-7), and to what extent they feel that the candidate represents people like you (scale 1-7). In this section we present the AMCEs and MMs for these outcomes, as well as the estimated differences in these estimands. See main text for discussion of the results.

Figure A3: AMCEs on perceived ideology of the candidate.



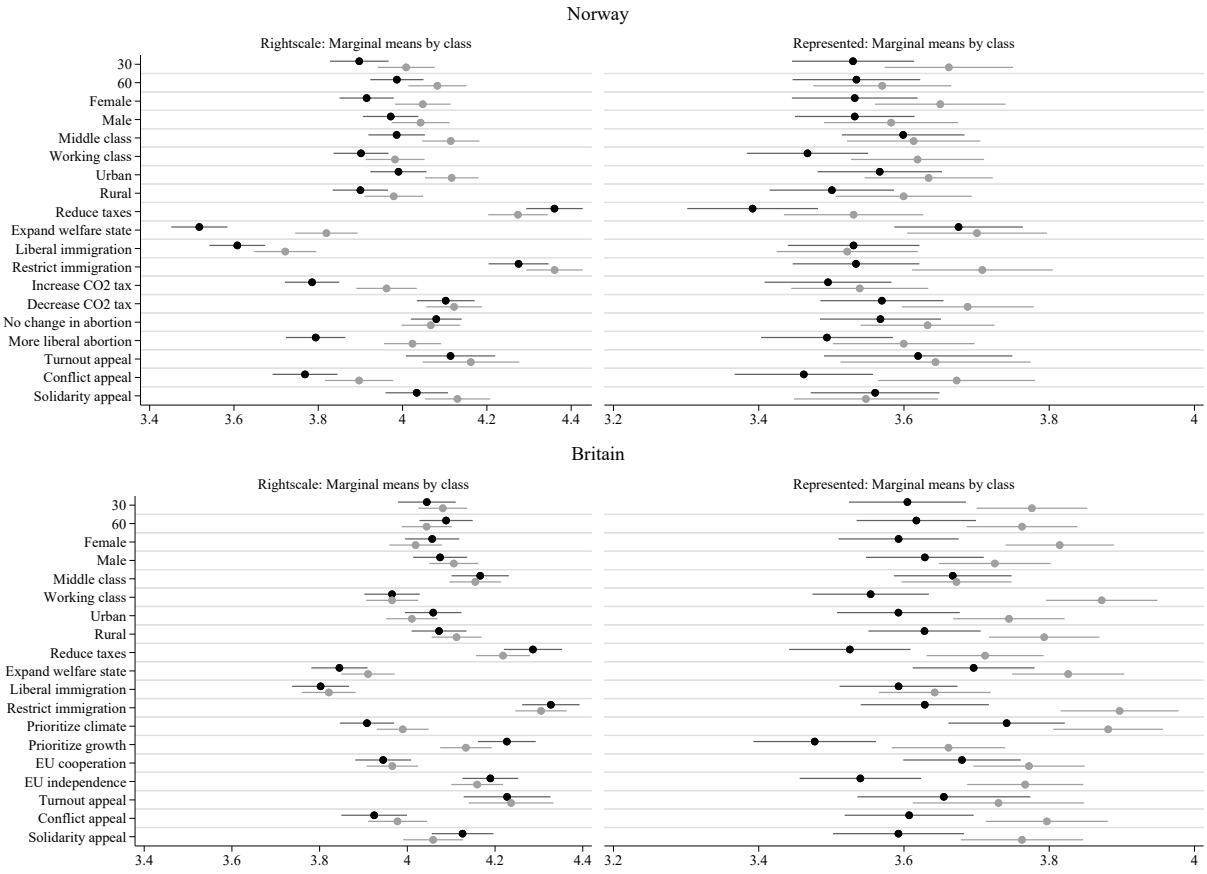
Note: Black dots are estimates for middle class respondents, light grey dots are estimates for working class respondents, dark gray dots are estimates for the differences in AMCEs by class. The lines show the 95 percent confidence intervals. Outcome is the rating of the candidate profile on a scale from 1 (left) to 7 (right).

Figure A4: AMCEs on feeling of representation by the candidate.



Note: Black dots are estimates for middle class respondents, light grey dots are estimates for working class respondents, dark gray dots are estimates for the differences in AMCEs by class. The lines show the 95 percent confidence intervals. Outcome is the feeling of representation by the candidate profile on a scale from 1 (low) to 7 (high).

Figure A5: Marginal means for perceived ideology and feeling of representation by the candidate.

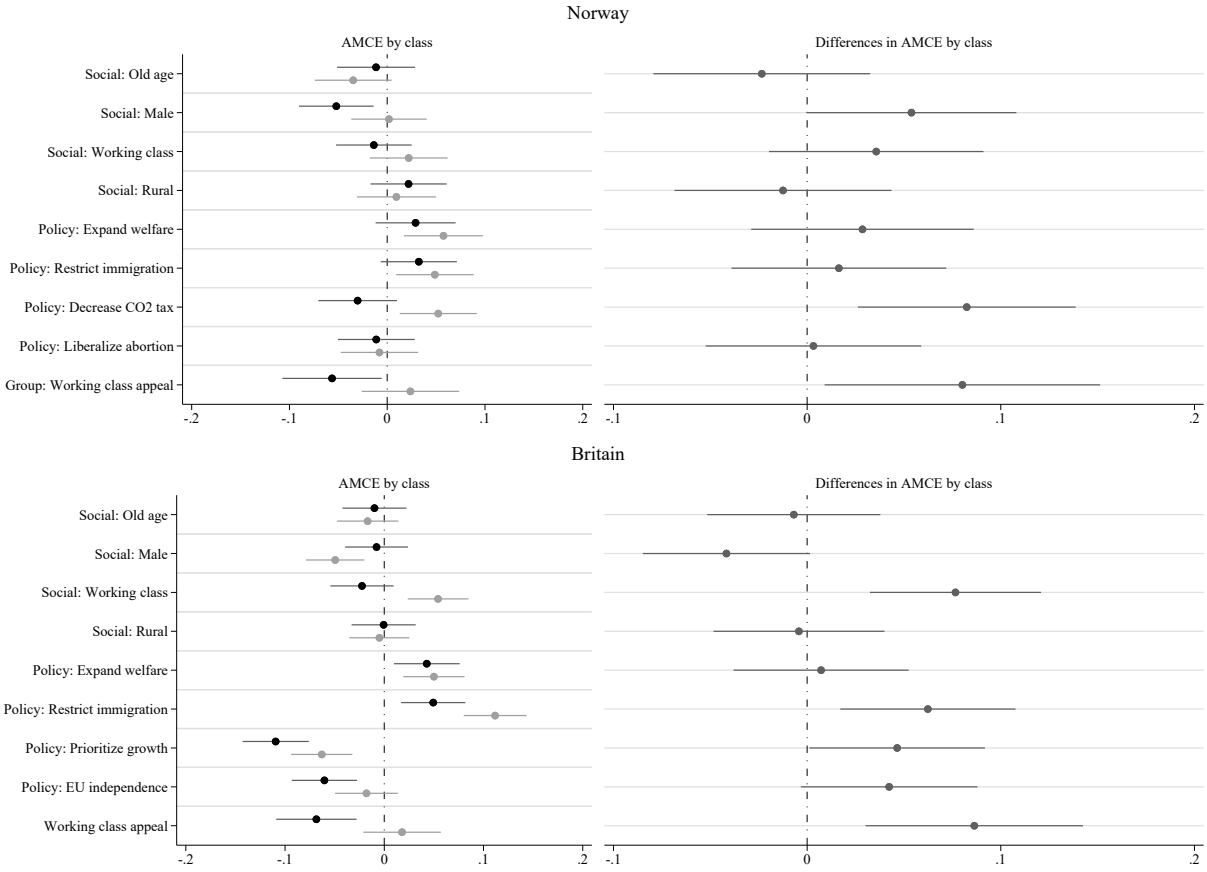


Note: Black dots are estimates for middle class respondents, light grey dots are estimates for working class respondents. The lines show the 95 percent confidence intervals. Outcomes are the rating of the candidate profile on a scale from 1 (left) to 7 (right) and the feeling of representation by the candidate profile on a scale from 1 (low) to 7 (high).

D Alternative codings of class appeals

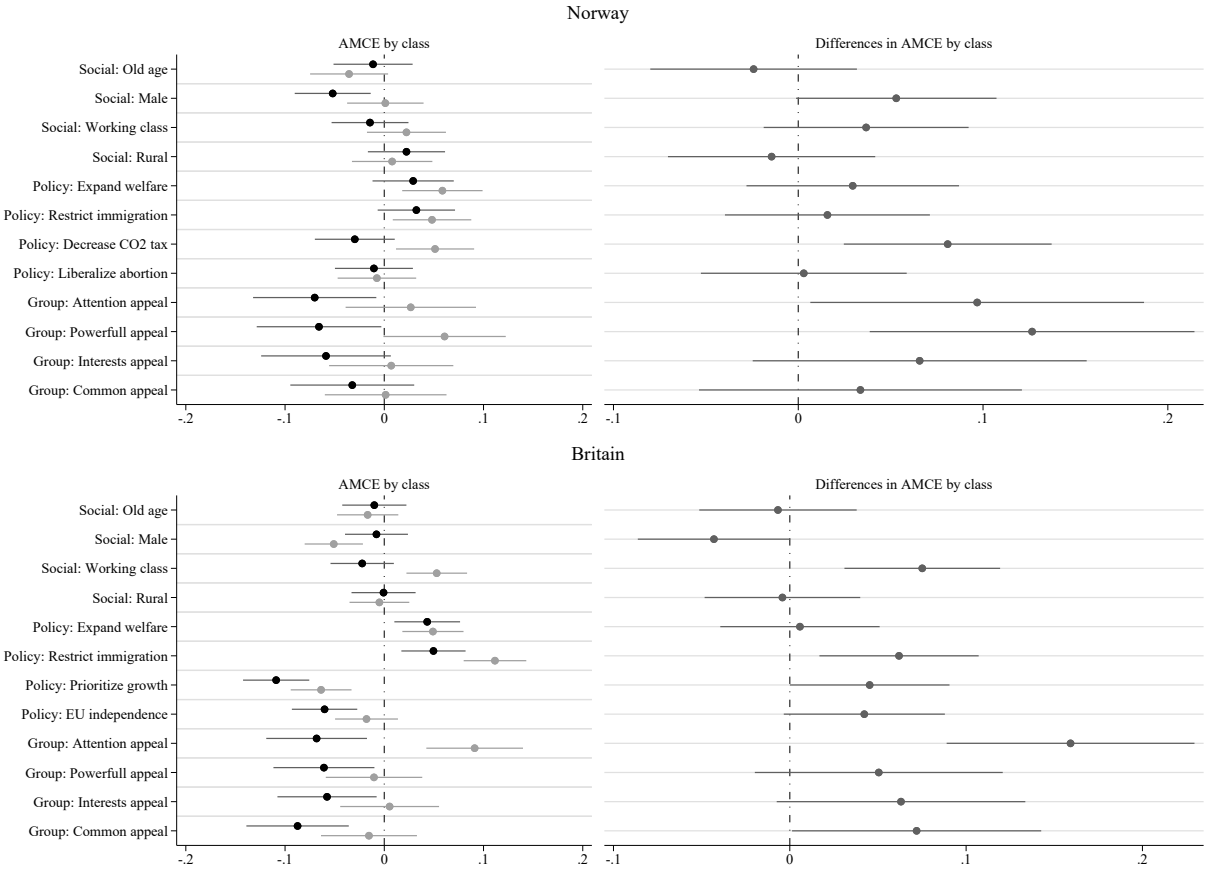
In the main text we present the pre-registered classifications of appeals into either conflict or solidarity appeals. In this section we present the estimates using the alternative codings we pre-registered: Collapsing all working class appeals into a binary indicator (Figure A6), and the full set of appeals (Figure A7). We find that all appeals create class polarization, but in UK the results in the main paper are driven by the attention appeal, while in Norway also the powerful appeal has a strong polarizing effect.

Figure A6: AMCEs using binary classification of appeals.



Note: Black dots are estimates for middle class respondents, light grey dots are estimates for working class respondents, dark gray dots are estimates for the differences in AMCEs by class. The lines show the 95 percent confidence intervals.

Figure A7: AMCEs for full set of appeals.



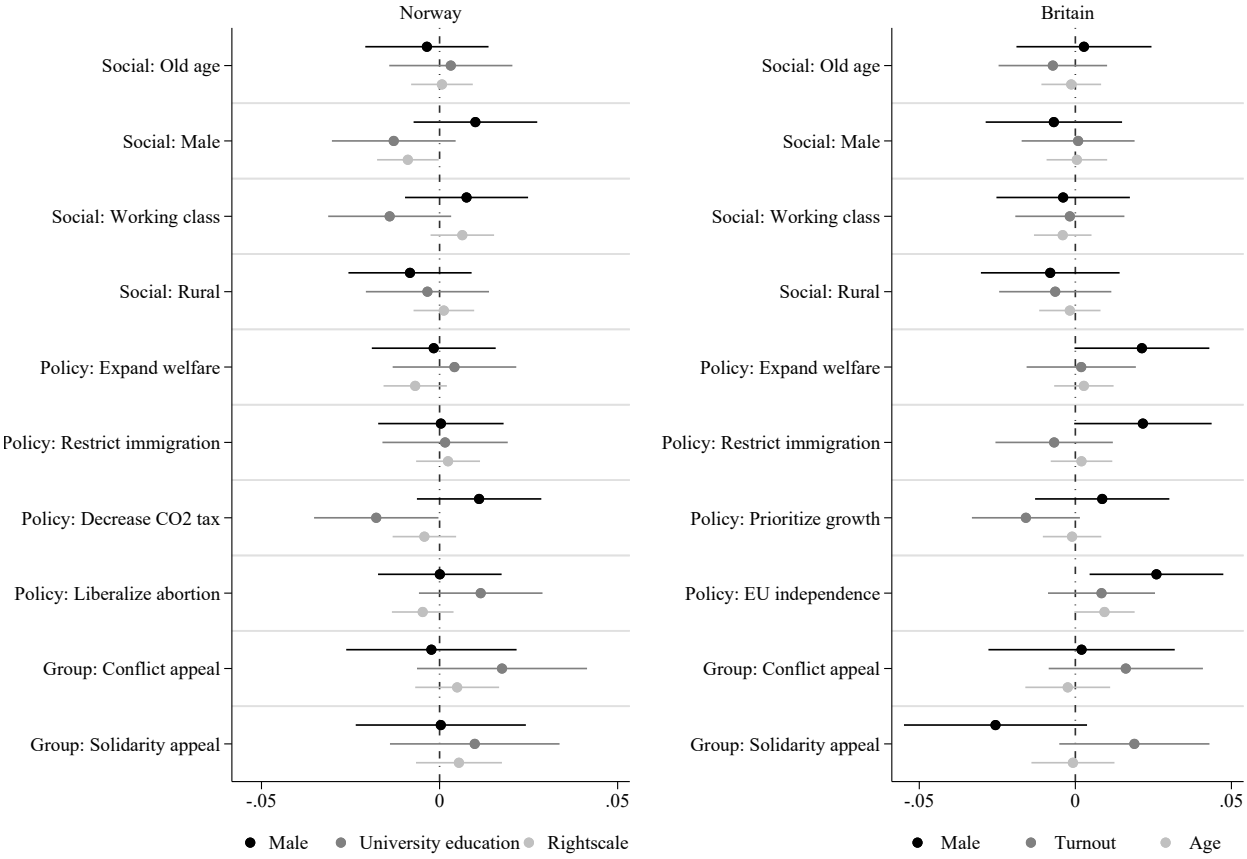
Note: Black dots are estimates for middle class respondents, light grey dots are estimates for working class respondents, dark gray dots are estimates for the differences in AMCEs by class. The lines show the 95 percent confidence intervals.

E Balance tests

Conjoint experiments are more difficult to program than simpler factoral experiments, leaving more possibilities for mistakes in the randomization to levels of the attributes. To examine if we find indications of randomization failure we run a set of balance tests where we use pre-determined characteristics of the respondents as dependent variables and estimate the correlations between the respondent characteristics and the attribute levels. Successful randomization should produce small coefficients and insignificant F-tests of their joint effect.

In Figure A8 we present the estimates for three outcomes in each country.[7] Reassuringly, we find small correlations and all F-tests of joint significance produce large p-values.

Figure A8: Balance tests. AMCE using social background characteristics as outcomes.



Note: Placement on the left-right scale and age are scaled from 0 to 1 to ease comparisons across outcomes.

[7] We deviate from the pre-analysis plan for the UK since our data did not include respondents' level of education. We therefore examine balance on previous turnout and age as replacements.

F Benchmark analyses: Class and other social groups

The class cleavage is by far the most studied in Western politics. While very important in the early post-war years, there is little doubt that class voting has decreased since then (see, e.g., Evans and Langsæther 2021 for an overview). Politics has also more generally moved from high salience on economic left-right issues to "second dimension" or GAL-TAN issues such as immigration and climate politics. This in turn suggests that other group divisions more closely connected to these issues, as well as their group identities, may have become more politically salient. Examples may include gender, age, or urban-rural residence. Indeed, Curtice, Ratti, and Montagu (2023, p.3) state that "age has become the biggest demographic divide in British politics."

To the extent that it is the case that class divisions have declined and other social divisions have risen, we may expect that our findings generalize to other social groups and even that our study of class provides a particularly challenging case – effects may be even more important for other groups.

However, most evidence points to enduring class divisions in political attitudes, which longitudinal studies demonstrate are about as important today as 50 years ago (Evans and Tilley 2017; Rennwald 2020) and identities (Evans, Stubager, and Langsæther 2022). The most common argument in the literature is therefore that the decline of class voting is not primarily due to convergence among classes, but among political parties. As parties have become more similar in class-related policy (Evans and De Graaf 2013), issue salience (**?**Langsæther 2019), personnel (such as class background of their candidates, see Heath 2015), and rhetoric (e.g. group appeals, see Thau 2019), people have less reason to vote based on their social class. Similarly, the rise of so-called second dimension or GAL-TAN issues have created cross-pressures for people in different classes. And so, for instance, while the working class tends to be pro-redistribution, workers also tend to be anti-immigration (Lindh and McCall 2020), a combination of positions that few parties supply (Hillen and Steiner 2017). Many workers therefore have to chose between their redistribution and immigration preferences, potentially leading to a further weakening of class voting (Spies 2013).

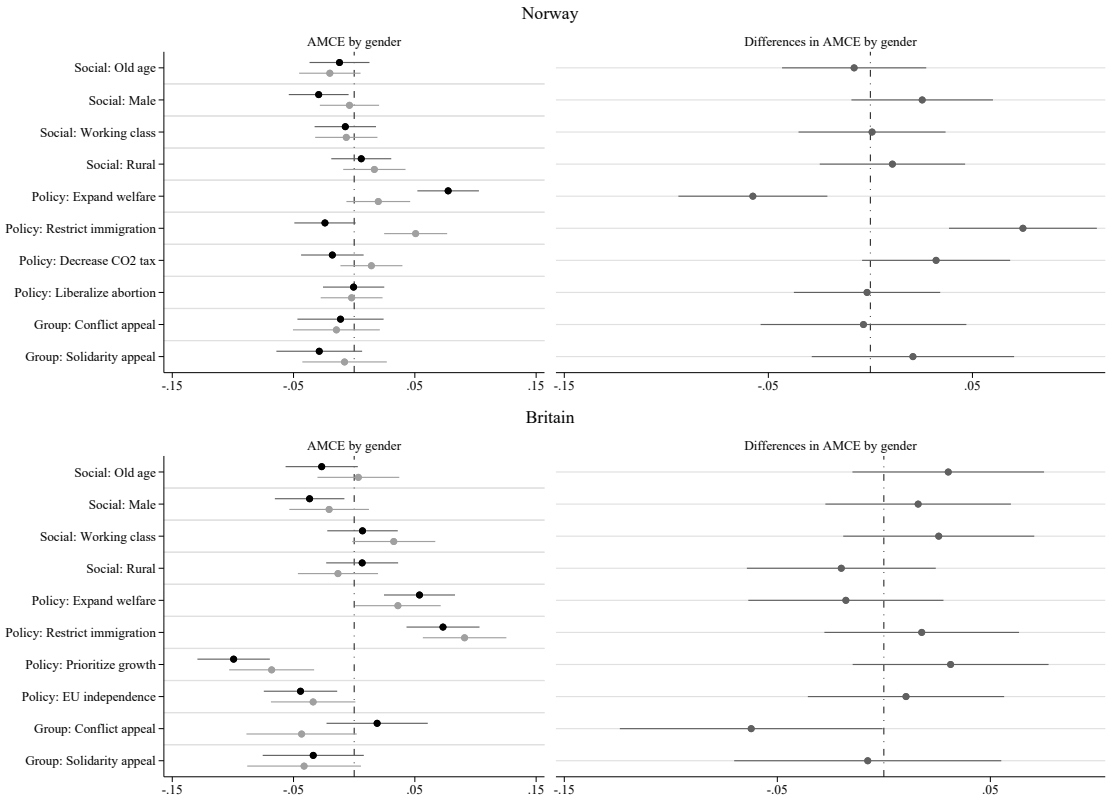
Thus the decline in class voting is primarily related to the supply side, while people in different classes are still divided in their political attitudes and identities. By design, our fictional candidates can differ on the exact dimensions where real-world parties have converged, allowing respondents to express their class-based preferences. What we find is substantial class polarization based on policy appeals, social appeals, and group appeals.

However, both to further probe this issue and to contextualize the magnitude of our effects, we compare them to the effects related to other social groups. We first consider gender. Figure A9 shows appeals and candidate choice by gender instead of by social class as in Figure 1 in the manuscript. In the UK, both male and female respondents have a slight preference for female candidates, but this effect is somewhat larger – and only statistically significant – for female respondents. The result of this is that candidate gender does have a tiny gender polarizing effect among respondents of around 1.6 percentage points, but this difference is far from statistically significant. In comparison, candidate class led to a class polarization of around 7.7 percentage points in Britain, and this difference was significant at the 5% level. That is, the magnitude of the class polarizing effect of candidate class is almost five times larger than the gender-polarizing effect of candidate gender.

In Norway, female respondents are also more likely to prefer a female candidate than

a male candidate, while male respondents do not have a preference for either gender. The result is that candidate gender has a small gender polarizing effect among respondents, by about 2.5 percentage points, but just as in Britain this effect is not statistically significant. By comparison, candidate class led to a class polarization among respondents of about 3.7 percentage points, about 50% more than for gender, although this difference was, as for gender, also not statistically significant. The abortion policy treatment, only present in the Norwegian sample, does not lead to gender polarization among respondents.

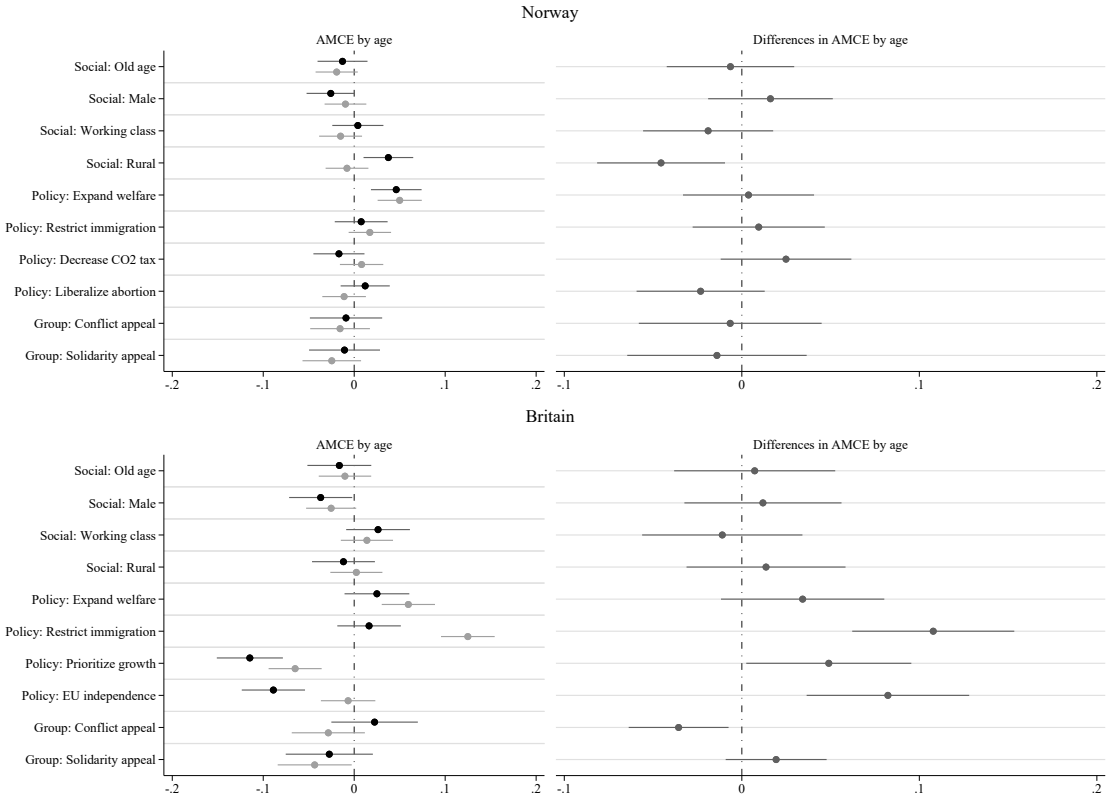
Figure A9: Appeals and candidate choice, by gender.



Having considered gender, we now move on to age, also a marker of newer group conflicts and – at least in Britain – a very powerful predictor of political attitudes and behaviour in recent years. Indeed, Curtice, Ratti, and Montagu (2023, p.3) state that "age has become the biggest demographic divide in British politics".

Figure A10 replicates the analysis in figure A9 but now split by age group rather than by gender. We split into two groups: Those younger than 45 versus those 45 and older. This is chosen because it is the midpoint between the candidate age alternatives, which are either 30 or 60.

Figure A10: Appeals and candidate choice, by age group.



As we can see, candidate age does not create substantial age polarization among respondents. For instance, in Britain, both younger and older respondents have a very slight preference for a 30-year-old candidate, leading to a difference in AMCE of a mere 0.6 percentage points, which is of course not statistically significant. By comparison, again, the class polarization of candidate class in Britain was about 7.7 percentage points, that is, more than ten times more important. This result is not due to our age-splitting of the sample not working, as we can see important policy treatment differences according to age group following what one would expect: Older respondents much prefer a candidate who is restrictive on immigration, while younger candidates much prefer a candidate who is in favour of cooperation with the EU. So our results corroborate recent findings that there has been an important political age divide in the British public in recent years. However, this does not seem to extend to identity concerns but rather is policy-related.

In Norway, just as in Britain, candidate age does not create age polarization among respondents. The (statistically insignificant) difference in AMCEs is 0.6 percentage points here, too. By comparison, the same (also statistically insignificant) difference between social classes in terms of support for a working class candidate was about 3.7 percentage points, about six times larger. In Norway we also find much less policy treatment effects by age, as age has not emerged as an important cleavage there in the same way as it has in post-Brexit Britain.

G Mediation analysis

In this section we present estimates from a Baron and Kenny (1986) type of mediation analysis.

First we propose that the total effect of the different appeals can be decomposed into an indirect effect that runs through feelings of representation and a direct effect from the appeal to candidate choice. We do not consider our third outcome in the experiment, perceived ideology, as a mediator for candidate choice, as the appropriate measure of ideology as a mediator would be perceived ideological closeness to the candidate. We did not plan or pre-register the mediation analysis so we did not include this measure in the experiments. To simplify the presentation we exclude the estimates for the solidarity appeals (the conclusions for the mediation analyses are the same as for the conflict appeals).

Tables A3 and A4 present the estimates for Norway and UK, respectively. We find that most estimates for feelings of representation are small and insignificant, with the main exception that it does mediate the effects of social appeals in the UK.

Table A3: Estimates from mediation analysis using representation as the mediator. Norway.

	Group appeals		
	Total effect	Direct effect	Indirect effect
Working class	0.040	0.038	0.002
	(0.028)	(0.028)	(0.005)
Middle class	-0.071	-0.060	-0.011
	(0.028)	(0.027)	(0.006)
	Social appeals		
	Total effect	Direct effect	Indirect effect
Working class	0.020	0.020	0.000
	(0.020)	(0.020)	(0.000)
Middle class	-0.014	-0.004	-0.011
	(0.020)	(0.019)	(0.004)
	Policy appeals		
	Total effect	Direct effect	Indirect effect
Working class	0.057	0.045	0.012
	(0.021)	(0.020)	(0.005)
Middle class	0.029	0.006	0.022
	(0.021)	(0.020)	(0.005)

Note: Standard errors in parentheses are adjusted for clustering at the respondent level.

Table A4: Estimates from mediation analysis using representation as the mediator. UK.

	Group appeals		
	Total effect	Direct effect	Indirect effect
Working class	0.041	0.033	0.008
	(0.022)	(0.020)	(0.008)
Middle class	-0.064	-0.059	-0.005
	(0.023)	(0.021)	(0.007)
	Social appeals		
	Total effect	Direct effect	Indirect effect
Working class	0.055	0.031	0.024
	(0.016)	(0.014)	(0.006)
Middle class	-0.022	-0.011	-0.012
	(0.016)	(0.015)	(0.005)
	Policy appeals		
	Total effect	Direct effect	Indirect effect
Working class	0.051	0.037	0.014
	(0.016)	(0.015)	(0.006)
Middle class	0.043	0.025	0.018
	(0.017)	(0.016)	(0.006)

Note: Standard errors in parentheses are adjusted for clustering at the respondent level.

Second, we follow a suggestion from a reviewer and explore whether perceived ideology is a mediator for the relationship between class appeals and feelings of representation. As above we present the estimates for the conflict appeals. We find that in Norway (Table A5), perceived ideology is not a mediator for any of the appeals. The same is true for the working class in the UK (Table A5), while for the middle class, perceived ideology mediates the group appeals, partly mediates the social appeal, and reduces the policy appeal on representation.

Table A5: Estimates from mediation analysis using perceived ideology as the mediator and representation as the outcome. Norway.

	Group appeals		
	Total effect	Direct effect	Indirect effect
Working class	0.029	0.029	0.000
	(0.082)	(0.082)	(0.011)
Middle class	-0.166	-0.163	-0.003
	(0.077)	(0.077)	(0.011)
	Social appeals		
	Total effect	Direct effect	Indirect effect
Working class	-0.004	-0.004	-0.000
	(0.058)	(0.058)	(0.005)
Middle class	-0.130	-0.129	-0.001
	(0.053)	(0.053)	(0.003)
	Policy appeals		
	Total effect	Direct effect	Indirect effect
Working class	0.167	0.167	-0.000
	(0.065)	(0.064)	(0.018)
Middle class	0.277	0.285	-0.008
	(0.062)	(0.062)	(0.030)

Note: Standard errors in parentheses are adjusted for clustering at the respondent level.

Table A6: Estimates from mediation analysis using perceived ideology as the mediator and representation as the outcome. UK.

	Group appeals		
	Total effect	Direct effect	Indirect effect
Working class	0.066	0.078	-0.012
	(0.068)	(0.068)	(0.009)
Middle class	-0.052	-0.005	-0.047
	(0.070)	(0.069)	(0.014)
	Social appeals		
	Total effect	Direct effect	Indirect effect
Working class	0.200	0.209	-0.009
	(0.048)	(0.048)	(0.006)
Middle class	-0.114	-0.086	-0.029
	(0.048)	(0.047)	(0.009)
	Policy appeals		
	Total effect	Direct effect	Indirect effect
Working class	0.114	0.128	-0.014
	(0.052)	(0.052)	(0.009)
Middle class	0.174	0.241	-0.067
	(0.053)	(0.054)	(0.015)

Note: Standard errors in parentheses are adjusted for clustering at the respondent level.

H Exploring partisanship

We deliberately chose not to include party labels in the experiment. In doing so we follow a number of other candidate choice conjoint experiments which have adopted a similar approach (see e.g. Hainmueller, Hopkins, and Yamamoto 2014; Franchino and Zucchini 2015; Arnesen, Duell, and Johannesson 2019). A common reason for not including party labels in such set-ups is the threat that doing so may pose to internal validity as it can lead to some very unlikely real-world combinations, such as a Radical Right politician who is pro-immigration or a Radical Left one who is opposed to the welfare state. Existing appeals may therefore confound the appeals we supply. Given that the main aim of our study is to examine the effect of social and group appeals while controlling for policy appeals, adding party as an attribute would potentially undermine this goal. As Hainmueller et al. (2014: 4) put it – the impact of partisanship to voter decision making is already amply documented; but we know much less about the impact of candidate traits. We thus focus on the latter. However, this decision does come with trade-offs, notably between internal and external validity. However since observational studies (with higher external but lower internal validity) have already shown that social (Heath 2018) and group (Thau 2019) appeals matter in real-world settings, we prioritize internal validity in this experimental set-up.

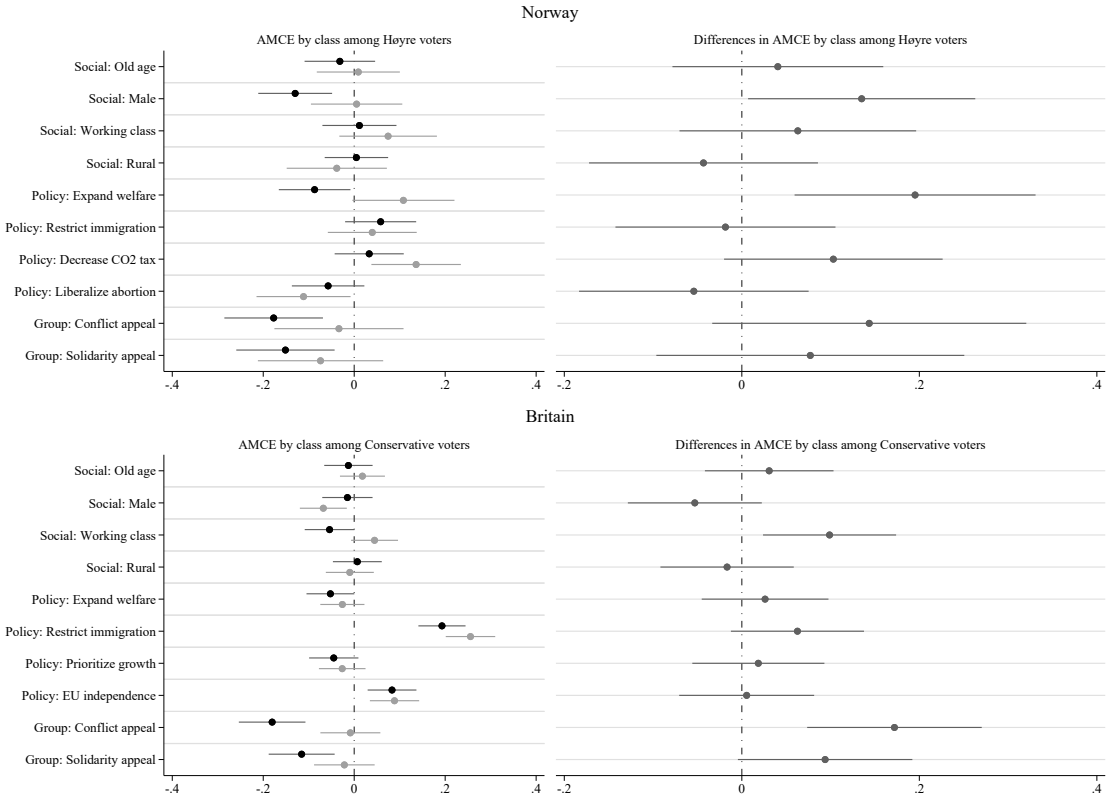
One potential disadvantage of our set-up is that respondents may infer the partisanship of the candidate from the appeals they make and act on the basis of this information. Thus one alternative explanation for our findings is that they relate to partisanship rather than to the appeals. For example, one could imagine that, say, respondents who are Labour partisans take working class appeals (whether social, policy-based, or group appeals) as a cue that the politician is from Labour, and then support that candidate not because of the appeal itself but because the candidate is from their party. If working class respondents are more likely to be Labour partisans than middle class respondents, this could produce a similar set of results as those we report in the main manuscript.

One way to test this alternative explanation is to re-run the analyses only for Conservative supporters. Working class respondents who support the Conservatives should not be more likely to support a candidate they infer is from Labour. Thus, if we still find class polarizing effects of the social and group appeals among Conservative supporters, this indicates that it is indeed the appeals rather than perceived/implied partisanship that drives the results.

As is evident from Figure A11, there is a clear class difference in preferences over working class candidates also when considering only Conservative supporters. In Britain, the AMCEs show that working class respondents prefer working class candidates while middle class respondents prefer middle class candidates. The confidence intervals just overlap zero, but the difference between the two AMCEs is just below 10 percentage points and statistically significant. In Norway, working class respondents prefer working class candidates, while middle class respondents have no preference, yielding a difference in AMCE of about 6 percentage points, but this difference is not statistically significant. We note that the confidence intervals are of course larger here than in the main analyses as we are considering a limited subgroup of the sample. In any case, we find the same general pattern among Conservative partisans as in the full sample, and this pattern is not easily explained by respondents inferring that the candidate belongs to Labour, since Conservative partisans have no reason to support a Labour candidate.

For the left-wing policy appeal of welfare state expansion, Conservative partisans from

Figure A11: Appeals and candidate choice, estimated only on Conservative supporters.



both the working and middle classes are slightly negative, and so the difference between them in AMCE is just about 2.6 percentage points and this is not statistically significant. In Norway however, even among Conservative partisans, middle class respondents prefer cuts in welfare and taxes while working class respondents prefer welfare state expansion, yielding a much larger and statistically significant difference in their AMCEs. This suggests that the working class citizens in Norway who vote for the Conservatives do not do so primarily because of their right-wing views on the welfare state but rather for other reasons (e.g. related to perceived competence).

Finally, we turn to the group appeals. In Britain, none of the appeals move the working class much, while the middle class prefers the turnout appeal to the working class appeals - and especially to the conflict-related appeal. This yields rather large differences in AMCEs for both appeals, although much larger and only statistically significant for the conflict appeal (around 17 percentage points compared to around 9 points for the solidarity appeal). In Norway, the pattern is the same, with a difference in AMCEs of around 8pp for the solidarity appeal and around 14pp for the conflict appeal. The results point in the same direction as in the main analyses, although these do not reach statistical significance (since we are now estimating sub-group differences between the classes on a sub-sample of only Conservative supporters and separating between the two types of group appeals, confidence intervals are large due to the limited pool of data).

Overall, we find similar patterns for Conservative supporters as for the full sample, indicating that it is primarily the appeals rather than any perceived or implied partisanship

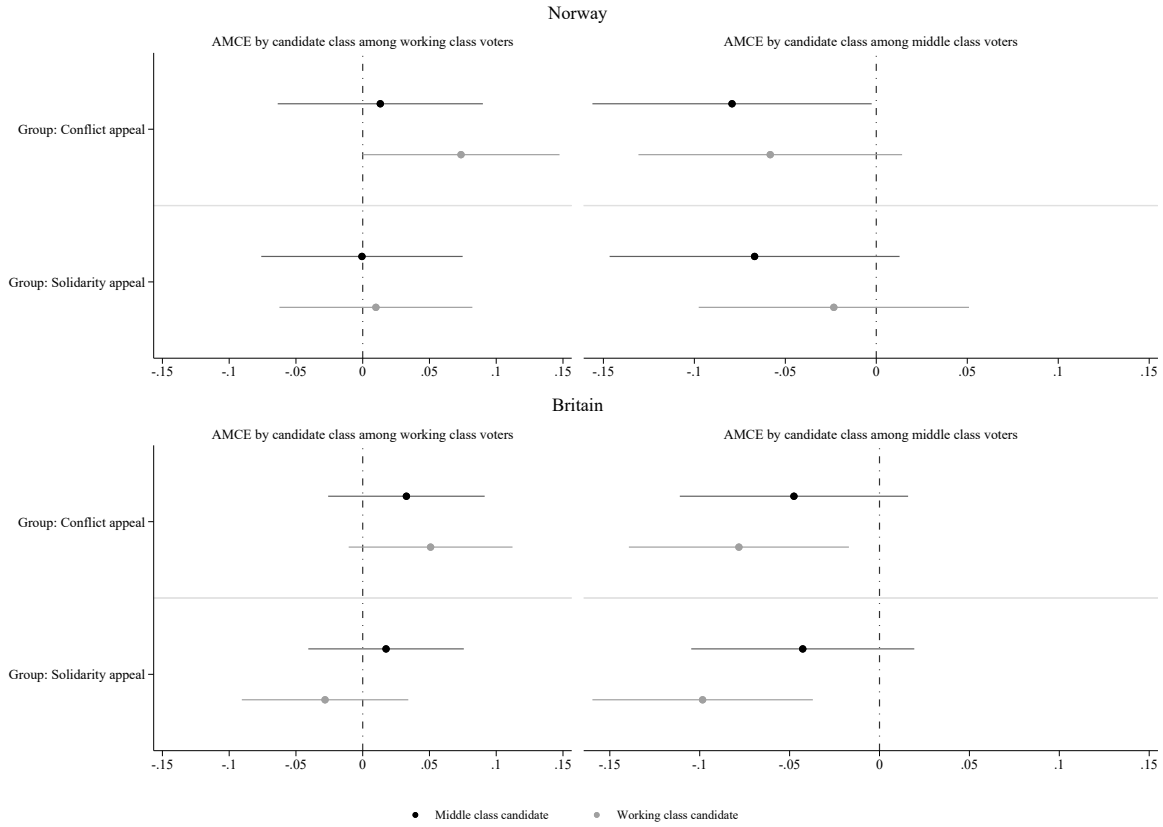
of the candidate that is behind the results in the main analyses.

I Attribute interaction

In this section we examine the pre-registered possibility that the effects of working class appeals depend on the class background of the candidate, e.g. whether the positive effect among working class voters is larger if the appeal is made by a working class candidate (and the reverse for middle class voters). To examine this we estimate AMCEs that are conditional on whether the respondent evaluates a working class candidate or not.[8]

We present the results in Figure A12. The figure shows the AMCEs for the group appeals conditional on whether the candidate is working class (light grey dots) or middle class (black dots). We split by respondent class. The analyses include all attributes in the conjoint, but for ease of presentation we leave out all attributes except the group appeals. Like before, all estimates are against the neutral/control condition where the candidate makes a turnout appeal.

Figure A12: Group appeals and candidate choice conditional on candidate class.



Note: Black dots are estimates conditional on the candidate being middle class, light grey dots are estimates conditional on the candidate being working class respondents. The lines show the 95 percent confidence intervals. All other attributes are excluded from the figure for ease of presentation.

[8]The difference between the two AMCEs are the Average Component Interaction Effect(Hainmueller, Hopkins, and Yamamoto 2014). The choice to focus on this estimand is a deviation from the pre-registration plan where we pre-specified to estimate the Average Marginal Interaction Effect (Egami and Imai 2019). We opt for the simpler analysis because it is more intuitive, directly targets the claim we are interested in, the attributes have only two levels, and the appeals have a natural neutral/control condition. The AMIE is more relevant when the latter is not the case.

The figure shows that the effects of the effects of the conflict appeals are larger for working class voters when the appeals are presented by a working class candidate, which means that the appeals are complements and not substitutes, but the difference is not large enough to be statistically significant. If we compare the AMCEs for the working class voters to same for the middle class voters, we see that the appeals are more class polarizing when the sender is a working class candidate, particularly in the UK.

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Pre-Analysis Plan Norway:

Beyond Policy: How Identity Politics Shape Group-Party Linkages

Background and motivation

To attract voters, politicians might appeal to their interests and attitudes through policies. They may also appeal to their identities by supplying candidates that belong to their social group or by providing messages that symbolically appeal to the group. While there is an advanced literature on the role of policy appeals, much less is known about the effects of social and particularly symbolic appeals. Moreover, since politicians can jointly make several appeals, it is important to examine how voters weigh appeals against each other. In this project we conduct a conjoint experiment in Norway where we estimate the effects of all three types of appeals, with a specific emphasis on symbolic appeals to social class.

The project also involves a follow-up conjoint experiment conducted in the UK. The UK conjoint experiment and its relation to the Norwegian will be described in a separate pre-analysis plan. When submitting a paper on the results, both pre-plans will be submitted to the reviewers.

The conjoint experiment

The respondents are asked to evaluate two pairs of candidates. The social characteristics, policy positions and symbolic appeals of the candidates are randomized using a conjoint experiment. Table 1 is the conjoint table (English translation from Norwegian).

Table 1: Conjoint table

Social appeals	
Age	30; 60
Gender	Woman; man
Occupation	Factory worker; Electrician; Nurse; Professor; Engineer; CEO
Born and raised in	big city; countryside
Policy appeals	
Economic left-right	Candidate wants to… …expand the welfare state, even if it means increasing taxes …reduce taxes, even if means making welfare cuts to reduce taxes
Immigration	…make it easier for people to get asylum in Norway …make it harder for people to get asylum in Norway
Climate/environment	…increase the carbon tax …reduce the carbon tax
Moral issues	…expand the right to abortion to week 18 …keep the right to abortion at week 12
Symbolic appeals	
Appeals	It is important that everyone votes on election day!; Too much attention has been given to the upper middle class in recent political debates, it is time for politicians to prioritize people from the working class; The rich are getting more powerful while working class voices are not being heard, now it's the workers' turn!; All working class people have shared interests and need to unite in politics!; All working class people need to turn out to vote to improve their common situation!

Randomization

All characteristics of the candidates are randomized with the same probability of selection (within each characteristic). We implement no restrictions on possible combinations.

Outcomes

After seeing the candidate profiles, the respondents are asked three questions:

- Which of the two candidates do you prefer? (binary variable)
- On a scale from left to right, where would you place the two candidates? (scale 0-7)
- To what extent do you feel the two candidates represent people like you? (scale 0-7)

We will analyze the outcomes using their original scales.

Hypotheses

We have three main hypotheses:

- H1: Working class respondents will be more likely to support a candidate with a working class occupation.
- H2: Working class respondents will be more likely to support a candidate that wants to expand the welfare state, even if it means increasing taxes.
- H3: Working class respondents will be more likely to support a candidate that makes a symbolic appeal to the working class voters.

Key variable definitions

We use the Erikson–Goldthorpe–Portocarero (EGP) schema (Erikson et al. 1979) to classify respondents as working class. From the full version of the EGP we classify classes IIIb; V; VI; VIIa; and VIIb as working class. In the analysis we compare working class respondents to upper middle class respondents. We define EGP class I as upper middle class. We will include pensioners and respondents that are not currently in the labour market by using questions on previous occupation.

Sample and data collection

Our data is from wave 2 of the Weltrust survey. The data collection is conducted by Kantar and is a random sample from their panel of participants. When available we will use measures of pre-treatment variables from the first wave.

Identification of treatment effects

We estimate treatment effects using linear regressions. Since we are interested in comparing subgroups we will estimate marginal means (Leeper et al. 2020). We will present marginal means for working class and upper middle class respondents, as well as the estimated marginal differences in the marginal means (see e.g. Figure 2 in Clayton et al. 2021). Standard errors will be clustered on the individual since we have two observations per respondents. We will not apply survey weights (see Miratrix et al. 2018).

When testing H1 we will combine the attributes Factory worker, Electrician and Nurse into working class occupations and Professor, Engineer, and CEO into upper-middle class occupations. Thus, we average across occupations that represent the two classes instead of choosing one as representing the class. This improves statistical power and makes it more likely that we capture respondents' preferences related to the class of the candidate rather than preferences related to specific occupations. We present results for each occupation in the appendix.

Similarly, when testing H3 we combine all four appeals as they all make working class appeals, and we compare against the appeal to vote in the election. In the appendix we present results for all appeals separately.

No combining of levels will be done to test H2.

Balance checks

We will examine randomization failure by running the conjoint experiment on three pre-determined variables: An indicator for university level education (using a survey question with six education categories, two of which are university level educations), an indicator for gender,

and position on the left-right scale (0-10). We will test for significant imbalance using an omnibus F-test.

Robustness checks and additional analyses

We will examine if the appeals have effects on feelings of representation and perceptions of candidate ideology (secondary hypothesis):

- H4: Working class candidates will feel better represented when the candidate has a working class occupation/proposes to expand the welfare state/makes a symbolic appeal to the working class.
- H5: Candidates that make social or symbolic appeals to the working class will be perceived as being further to the left on the left-right scale.

We will examine if the effect of making a symbolic appeal to the working class is stronger if the candidate has a working class occupation. We will estimate the average marginal interaction effect using the approach of Egami and Imai (2019).

If any outcome has more than five percent missing answers we will examine if missing outcome is related to the attributes. We will do this by using an indicator for missing answer as the outcome and estimate AMCEs. If the joint F-test is statistically significant, we will present results (in the appendix) using extreme bounds analysis (see Gerber and Green 2012).

Multiple hypothesis adjustments

From the tests of H1-H3 we will have three corresponding p-values. We will present conventional as well as adjusted critical p-values using the false discovery rate (FDR) method of Benjamini and Hochberg (1995).

Power

We expect that about 3000 respondents will participate in the conjoint experiment. Each respondent will evaluate two pairs of candidates which means 6000 observations. We expect that about 25 percent of the respondents will be classified as working class respondents, which means that the number of working class respondents/observations is about 750/1500. Using https://mblukac.shinyapps.io/conjoints-power-shiny/ to calculate power (Lukac and

Stefanelli 2020), we find that we will have 80 percent power to detect an effect size of five percent when we pool attributes to that number of levels is 2. This estimate is too optimistic since the pooling of levels means that the reference group is only 1/5 of the sample, which reduces power somewhat.

Missing data

We will use listwise deletion of observations with missing answers.

Ethical considerations

The data collection was approved by the NSD (application no. 145618).

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Pre-Analysis Plan United Kingdom:

Varieties of Appeals

Background and motivation

To attract voters, politicians might appeal to their interests and attitudes through policies. They may also appeal to their identities by supplying candidates that belong to their social group or by providing messages that symbolically appeal to the group. While there is an advanced literature on the role of policy appeals, much less is known about the effects of social and particularly symbolic appeals. Moreover, since politicians can jointly make several appeals, it is important to examine how voters weigh appeals against each other. In this project we conduct a conjoint experiment in the UK where we estimate the effects of all three types of appeals, with a specific emphasis on symbolic appeals to social class.

This project is a follow-up to a conjoint experiment conducted in Norway (see https://doi.org/10.17605/OSF.IO/BZCMD). We are aiming to replicate the Norwegian design as closely as possible, while adjusting to the UK context by changing some of the policy positions to match salient issues in British politics. The Norwegian experiment has a separate preanalysis plan. When submitting a paper on the results, both pre-plans will be submitted to the reviewers.

The conjoint experiment

The respondents are asked to evaluate two pairs of candidates. The social characteristics, policy positions and symbolic appeals of the candidates are randomized using a conjoint experiment. Table 1 is the conjoint table.

Table 1: Conjoint table

Social appeals	
Age	30; 60
Gender	Woman; man
Occupation	Factory worker; bus driver; care worker; lawyer; journalist; banker
Born and raised in	big city; countryside
Policy appeals	
Economic left-right	Candidate wants to… …expand the welfare state, even if it means increasing taxes …reduce taxes, even if means making welfare cuts to reduce taxes
Immigration	…make it easier for people to get asylum in Britain …make it harder for people to get asylum in Britain
Climate/environment	…combat climate change, even if it causes slower economic growth …increase economic growth, even if causes climate change
Brexit	…ensure closer cooperation with EU …ensure greater independence from the EU
Symbolic appeals	
Appeals	It is important that everyone votes on election day!; Too much attention has been given to the upper middle class in recent political debates, it is time for politicians to prioritize people from the working class; The rich are getting more powerful while working class voices are not being heard, now it's the workers' turn!; All working class people have shared interests and need to unite in politics!; All working class people need to turn out to vote to improve their common situation!

Randomization

All characteristics of the candidates are randomized with the same probability of selection (within each characteristic). We implement no restrictions on possible combinations.

Outcomes

After seeing the candidate profiles, the respondents are asked three questions:

- Which of the two candidates do you prefer? (binary variable)
- On a scale from left to right, where would you place the two candidates? (scale 1-7)
- To what extent do you feel the two candidates represent people like you? (scale 1-7)

We will analyze the outcomes using their original scales.

Hypotheses

We have three main hypotheses:

- H1: Working class respondents will be more likely to support a candidate with a working class occupation.
- H2: Working class respondents will be more likely to support a candidate that wants to expand the welfare state, even if it means increasing taxes.
- H3: Working class respondents will be more likely to support a candidate that makes a symbolic appeal to the working class voters.

Key variable definitions

We use a question on class identity to measure class. This question directly identifies the working class respondents. We also use the YouGov profile variable on occupational class to classify respondents as working class. We classify respondents in occupational groups 4-7 in the YouGov profile variable as working class. We compare to the upper middle class, measured by class identification and as occupational groups 1-2 in the YouGov profile variable.

Sample and data collection

Data collection is collected by YouGov and is a random sample from their online panel. When available we use measures of pre-treatment variables from the respondent profile data.

Identification of treatment effects

We estimate treatment effects using linear regressions. Since we are interested in comparing subgroups we will estimate marginal means (Leeper et al. 2020). We will present marginal means for working class and upper middle class respondents, as well as the estimated marginal differences in the marginal means (see e.g. Figure 2 in Clayton et al. 2021). Standard errors will be clustered on the individual since we have two observations per respondents. We will not apply survey weights (see Miratrix et al. 2018).

When testing H1 we will combine the attributes factory worker, bus driver and care worker into working class occupations and lawyer, journalist, and banker into upper-middle class occupations. Thus, we average across occupations that represent the two classes instead of choosing one as representing the class. This improves statistical power and makes it more likely that we capture respondents' preferences related to the class of the candidate rather than preferences related to specific occupations. We present results for each occupation in the appendix.

Similarly, when testing H3 we combine all four appeals as they all make working class appeals, and we compare against the appeal to vote in the election. In the appendix we present results for all appeals separately and by combining the two conflict-related appeals and the two cooperation appeals.

No combining of levels will be done to test H2.

Balance checks

We will examine randomization failure by running the conjoint experiment on two pre-determined variables: An indicator for university level education and indicator for gender. We will test for significant imbalance using an omnibus F-test.

Robustness checks and additional analyses

We will examine if the appeals have effects on feelings of representation and perceptions of candidate ideology (secondary hypothesis):

- H4: Working class respondents will feel better represented when the candidate has a working class occupation/proposes to expand the welfare state/makes a symbolic appeal to the working class.
- H5: Candidates that make social or symbolic appeals to the working class will be perceived as being further to the left on the left-right scale.

We will examine if the effect of making a symbolic appeal to the working class is stronger if the candidate has a working class occupation. We will estimate the average marginal interaction effect using the approach of Egami and Imai (2019).

If any outcome has more than five percent missing answers we will examine if missing outcome is related to the attributes. We will do this by using an indicator for missing answer as the outcome and estimate AMCEs. If the joint F-test is statistically significant, we will present results (in the appendix) using extreme bounds analysis (see Gerber and Green 2012).

Multiple hypothesis adjustments

From the tests of H1-H3 we will have three corresponding p-values. We will present conventional as well as adjusted critical p-values using the false discovery rate (FDR) method of Benjamini and Hochberg (1995).

Power

We expect that about 3000 respondents will participate in the conjoint experiment. Each respondent will evaluate two pairs of candidates which means 6000 observations. We expect that about 25 percent of the respondents will be classified as working class respondents, which means that the number of working class respondents/observations is about 750/1500. Using https://mblukac.shinyapps.io/conjoints-power-shiny/ to calculate power (Lukac and Stefanelli 2020), we find that we will have 80 percent power to detect an effect size of five percent when we pool attributes to that number of levels is 2. This estimate is too optimistic since the pooling of levels means that the reference group is only 1/5 of the sample, which reduces power somewhat.

Missing data

We will use listwise deletion of observations with missing answers.

Ethical considerations

The data collection was approved by <UNIVERSITY NAME> (application no. 3690).

References

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