

Communicative Power, Inequality and Representation

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Abstract

How can we evaluate political inequality and representation if voter preferences, priorities and beliefs are partly shaped by elite political communication? I argue that prevailing approaches to the study of political inequality and representation are incomplete if public opinion both influences and is influenced by elite behavior. I introduce a new measurable criterion for political inequality in such contexts: ‘communicative representation’, or the degree to which speech by elite actors reflects, as well as responds to, the entire distribution of voter preferences. Low (high) communicative representation implies that elite actors with certain opinions have disproportionate (proportionate) presence and influence in public debate, and so disproportionate (proportionate) political power. I illustrate the value and feasibility of this approach by analyzing communicative representation on redistribution and immigration in the United Kingdom between 2010 and 2019, alongside the relative communicative presence of various sub-electoralates on this issue.

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1 Introduction

Empirical political scientists have amassed considerable evidence that public opinion both influences and is influenced by elite speech.¹ In this paper, I argue that, consequently, existing approaches used to evaluate the degree of political inequality and the quality of electoral representation in a polity are incomplete. Rather, additional criteria are needed if we are to measure how effective political power is distributed in contexts with preference endogeneity. I propose that what is required is a measure of ‘communicative representation’, or the extent to which speech by elite actors represents, as well as responds to changes in, the entire distribution of voter preferences. I argue that, if public opinion is partly endogenous to elite communication, a high degree of communicative representation is a precondition for political equality. This is because low communicative representation implies that elite actors with certain opinions have disproportionate presence and influence in public debate, and so disproportionate political power over public opinion. Conversely, if communicative representation is high, the preferences of voters must be more proportionately represented within elite discourse, implying greater political equality.

I suggest an empirical strategy to measure the degree of communicative representation in a polity which is concrete, replicable and scaleable to a large number of countries, issues and years. My proposed measure of communicative representation has two components: communicative congruence – the proportionate representation of the entire distribution of voter preferences, across issues, in elite speech – and communicative responsiveness – that changes in the distribution of voter preferences are associated with corresponding changes in the preferences expressed in elite speech. As a proof of concept, I analyze communicative representation on two key issues, redistribution and immigration, in the United Kingdom (UK) between May 2010 and July 2019 – a time frame which includes

¹A small selection of relevant studies include Lenz (2009), Tesler (2015), Tesler (2018), Barber and Pope (2019), and Slothuus and Bisgaard (2021). More evidence is discussed and listed in Section 2.1.

three general elections, four governments, and one fateful referendum on Britain's membership of the European Union.

In the first instance, I use legislative speech as a proxy for elite speech, although my approach can potentially be extended to study communication by legislators and other elite actors in other domains, such as press statements by political parties, social media output, or mass media content. Prior research suggests that legislative speech is best understood as a form of 'public communication', an effort to either reveal or justify one's political positions to the electorate (Proksch and Slapin 2015, 21; see also Bäck and Debus 2016). Insofar as legislators as individuals are considered to have some influence on public opinion,² I contend that the extent of communicative representation evident in legislative speech provides us with substantial insight into the distribution of political power over public opinion, an important component of political inequality in contemporary societies.

As well as estimating the degree of communicative congruence between British legislators and voters on these two issues in this period, I propose several additional statistics to summarize the degree of 'communicative malapportionment' that exists on this issue, as well as the relative communicative presence of different opinion groups and constituencies within the British electorate. I find that, across years, communicative representation consistently falls short of the ideal, with 15-35% of legislative speech on redistribution and immigration coded as malapportioned – or speech delivered by legislators who would not have received any floor time under perfect communicative congruence. Communicative malapportionment is somewhat higher on immigration than on redistribution, and, in both cases, diminishes during this period.

Further, I find that center-right opinions on redistribution, and center-left and left-wing views on immigration are consistently over-represented in parliamentary speech. On redistribution, it is the (more left-wing) opinions of working-class voters, especially those

²That legislators may have such an influence on public opinion is widely assumed in many standard accounts of the representative relationship (e.g. Mansbridge (2003); Saward (2010)).

of ethnic minority origin, which are under-represented in parliamentary speech, though by a smaller margin after the election of Jeremy Corbyn as Labour leader in 2015. There are greater inequalities of relative communicative presence on immigration than on redistribution, with the (more left-wing) views of 18-29 year olds, graduates, and ethnic minority voters on immigration being substantially over-represented in parliamentary speech. Meanwhile, the (more right-wing) views of non-graduates, pensioners, the white British working class, and Leave voters are significantly *under*-represented throughout. However, the relative communicative presence of all four socially conservative sub-electoralates improves during this period, in part reflecting the improved representation of their views on immigration, but also due to a leftward shift in the immigration preferences of these groups after the referendum result.

Finally, I find little evidence that legislative speech consistently responds to lagged changes in voter preferences, but do find statistically significant evidence that legislative speech responds to ‘gaps’ in opinion representation, producing improvements in communicative malapportionment on both issues over this period. In sum, these results suggest that while there are significant inequalities of communicative presence, as well as significant communicative malapportionment – particularly on immigration – elite speech in the UK *does* respond to changes in voter opinion to some degree.

The empirical findings in this paper – highlighting the under-representation of anti-immigrant views in elite political speech – alert us to the potential costs of improving communicative representation. A high degree of communicative representation would ask that we award equal power over public opinion to holders of liberal and illiberal opinions, and holders of democratic and anti-democratic opinions. As such, it may demand that we increase the political representation of opinions which would be inadmissible in an ideal deliberative setting (for not being based in fact or being exclusionary). It would also demand that we do not over-represent the views of experts within political debate,

even at the cost of the public interest. In many contemporary democracies, it would likely mean increasing the prominence of vaccine skeptics, nativists and authoritarians in public debate. By potentially empowering those with illiberal and anti-democratic views, a high degree of communicative representation could even threaten democratic cohesion and stability.

However, rather than an argument against the value of communicative representation as a useful indicator, I see this critique as highlighting trade offs between the pursuit of political equality and other normative ideals, including liberal and deliberative norms. I argue here that communicative power is an important component of political power, and thus that a high degree of communicative representation is essential for genuine political equality, a core component of the democratic ideal. Absent system-wide ideal deliberative conditions, we cannot hope that actual public opinion will approach ‘considered public opinion’ in reality (Lafont, 2020). More likely, public opinion will continue to be disproportionately shaped by the speech of some influential actors, with several associated costs. These include lower cognitive diversity, entailing epistemic costs (Landemore, 2012); an increased likelihood that public opinion may be biased towards particular interests and perspectives, or even ‘captured’ by influential minority interests. Given the negative consequences associated with imbalances of power over public opinion, communicative representation remains a valuable objective. My proposed empirical strategy provides a means of detecting how far this objective is achieved, and the nature and extent of these imbalances of power. Nevertheless, the potential costs of improved communicative representation discussed above indicate a troubling trade off between the pursuit of improved political equality and other important normative objectives. The issue of how far the pursuit of political equality should be curtailed in the name of these other objectives is beyond the scope of this paper, and left to future work.

In sum, I contend that the degree of communicative representation in a polity pro-

vides a useful and important barometer of how and how far its political environment deviates from one crucial aspect of the democratic ideal of political equality at any given moment. Performance on this measure also provides us with a criterion which we can use to rank actually existing democracies, to compare their performance against a benchmark of ‘perfect’ communicative representation, and to explore the correlates of any variation in performance (so as to better understand the sources of variation in political inequality). As such, this enterprise adds to recent efforts to place democratic theory on more ‘realistic’ foundations (Williams, 2005; Galston, 2010; Knight and Johnson, 2011; Bagg, 2018b; Bächtiger and Parkinson, 2019). It also responds to calls for a more ‘comparative’ approach to normative political theory and institutional design (Sen, 2009; Ganghof, 2013; Blum and Zuber, 2016).

2 Theory

2.1 Political Equality and Preference Endogeneity

Political equality, or an equal distribution of political power, is a widely held commitment among theorists and proponents of liberal democracy. For many, the democratic ideal is synonymous with political equality, and the intrinsic value and moral authority of democracy follows from its egalitarian character.³ If political power is understood as the “the opportunity to influence political decisions, which usually take the form of laws and other directives that are regularly enforced against, or widely considered binding for, [a] group’s members” (Viehoff 2019, 5), equal political power in turn requires that all citizens

³As discussed in Viehoff (2014), the claim that democracy is intrinsically valuable *because* it grants all citizens an equal say in lawmaking, is held by (among others) Charles Beitz (Beitz, 1989), Jane Mansbridge (Mansbridge, 1980), Joshua Cohen (Cohen, 1997) and Jeremy Waldron (Waldron, 1999), while Thomas Christiano is a prominent recent advocate of the claim that the moral authority of (at least some) democratically made laws follows from the egalitarian nature of democratic procedures (Christiano, 2004, 2008).

have an equal opportunity to influence political decisions.⁴

This egalitarian commitment is also shared by many, if not most, scholars of political representation. For instance, Mansbridge (2003) discusses the normative criteria implied by various ‘models’ of political representation in terms of their implications for political equality⁵, while Urbinati (2019) cites equality as her ‘guide’ in analysing and evaluating current ‘interpretations’ of political representation. The same impulse has motivated much empirical research on representation, producing a vast literature that documents significant inequalities in political representation by income and social class (Gilens, 2012; O’Grady, 2019; Elsässer, Hense and Schäfer, 2021; Lupu and Warner, 2022), educational background (Hakhverdian, 2015; Schakel and van der Pas, 2021), gender (Paxton, Hughes and Painter, 2010; Krook and O’Brien, 2012) and ethnicity (Griffin and Newman, 2007; Butler and Broockman, 2011; McClendon, 2016).

At the same time, decades of empirical research by political scientists has established that citizens’ policy opinions, priorities and beliefs are, at least to some degree, influenced by elite political communication, with potential consequences for electoral behavior and outcomes. One prominent line of research has documented the tendency of citizens to adapt their policy opinions based on partisan cues and framing, in experimental settings (Levendusky, 2010; Bolsen, Druckman and Cook, 2014; Broockman and Butler, 2017; Barber and Pope, 2019) as well as in real-world contexts (Lenz, 2009, 2012; Slothuus and Bisgaard, 2021). A second line of research has considered the evidence for ‘priming’, whereby campaign and media messages, through their issue emphases or framing, can alter the issues that voters prioritise when evaluating parties and politicians. Again, numerous studies have found evidence of this tendency in both experimental (Druckman and Holmes, 2004) and real-world settings (Matthews, 2019), especially on issues

⁴But not necessarily actual influence over political decisions – which may, for instance, be disproportionately held by those citizens who are also legislators (Viehoff 2019).

⁵To be more precise, she describes and evaluates these models in terms of their implications for the exercise of roughly equal coercive power (the aggregative ideal), and the absence of (coercive) power (the deliberative ideal).

where individual preferences are more rooted in strongly held predispositions (like ethnic identity or religiosity) and thus more crystallized (Tesler, 2015, 807). A final line of inquiry has explored the susceptibility of citizens' factual beliefs and interpretation to elite communication, including from partisan sources, finding an effect of elite cues on beliefs regarding seemingly objective conditions like the existence of climate change (Tesler, 2018), the prevalence of electoral fraud (Clayton et al., 2021), and the state of the economy (Bisgaard and Slothuus, 2018).⁶

Aware of the pervasiveness and inevitability of preference endogeneity, many contemporary theorists of representation have previously recognised and even lauded the role of 'discursive processes' within representative processes.⁷ For example, Mansbridge (2003) sees an important positive role for 'mutually educative communication' in electoral representation, with the preferences of the represented being reshaped by their representatives but only in a direction that, given more information and time for reflection, the represented would approve.

However, preference endogeneity also introduces the potential for additional sources of political inequality that would not exist if citizen preferences were fully exogenous. In particular, it introduces new asymmetries of power into the principal-agent relationship that links representatives with their constituents: given that there is asymmetric and incomplete information, although the citizen can choose who to elect, once elected, the representative can use their position to reshape citizens' preferences in a direction more consistent with their own (perhaps newly acquired) interests or values. As Mansbridge and others have argued above, this may often be normatively justified and desirable.

⁶There is also a vast literature on media persuasion and framing effects – for example, see Ladd and Lenz (2009), Barnes and Hicks (2018), and Grossman, Margalit and Mitts (2022). Although the endogeneity of public opinion to media frames and attention is outside the immediate scope of this study, it also has implications for the study of political inequality.

⁷Theorists belonging to the 'constructivist turn' have especially embraced the more 'discursive, interpretative and conflictual aspects' of political representation, emphasizing the ways in which the 'representative relationship' is fundamental to the 'construction of the democratic political space', of 'political subjectivity' and 'the self-understanding of the represented' (Castiglione and Pollak, 2019a,b; Saward, 2010; Disch, 2015).

Naturally, given constraints of time, information and expertise, many citizens will want to defer to the expertise of more informed and engaged citizens (including elected representatives). They then award those citizens more influence over their own opinions than they wield over the opinions of others. In many cases, given more information and time for reflection, they would even approve of how their preferences have been reshaped through this fundamentally unequal relationship.

However, these same power asymmetries mean that voters do not subsequently receive either the time or the information to determine whether their new preferences are more aligned with their underlying interests and values than previously. It is also not possible for a citizen to determine *ex ante* if, in a counterfactual universe where she had received different information and arguments from her representatives, she would arrive at the same judgment regarding her newly acquired preferences. These concerns are not fully addressed by the selection and treatment mechanisms of representative democracy (Landa and Pevnick, 2020). In a ‘well-designed’ representative democracy, elected representatives will be motivated to exercise their power with due care and consideration for the interests of ordinary citizens, being aware of their pivotality in policy-making and also disciplined by electoral incentives. Additionally, repeated elections allow voters to filter out biased or incompetent representatives. But, these mechanisms will not necessarily motivate elected politicians to provide citizens with the time or information they would need to assess which policies are consistent with their underlying interests and values.

2.2 Measuring Political Power Under Preference Endogeneity

This produces two distinct problems when it comes to measuring the distribution of effective political power in the presence of preference endogeneity. The first is conceptual: what does it even mean for individuals to have (un)equal political power when their opinions are formed endogenously? If, in a deliberative setting, individuals’ preferences

are being reshaped through discussion and argument, who in the room has more or less power? This problem is distinct from the usual (measurement) problem of obtaining unbiased estimates of causal effects when endogeneity is a concern. At the same time, the usual measurement problem also applies: if individuals' opinions are endogenous to political outcomes, it is hard to obtain unbiased estimates of individuals' influence on those political outcomes. In this paper, my focus is on resolving the conceptual problem, but to make progress, I address the measurement problem as well to some degree (as elaborated in Section 3).

I contend that if the policy preferences, issue priorities and factual beliefs of citizens are indeed endogenous to elite political communication, then any measure of the political power exerted by an individual citizen must also seek to measure their presence and influence within public political debate. This is because the presence and influence that any individual citizen has within public debate – even if only indirectly, via their representative(s) – materially affects the opportunities they have to influence political outcomes, via their influence on the opinions of others. As the political power possessed by each citizen is constituted by their opportunities to influence political decisions, it follows that their presence and influence within public debate (or communicative power) is a core component of any measure of their effective political power over their representatives. Empirical research on representation – more focused on evaluating policy responsiveness (Powell, 2000; Gilens, 2012; Sabl, 2015), pledge fulfillment (Stokes, 2001; Matthieß, 2020), retrospective voting (Powell Jr and Whitten, 1993; Hobolt, Tilley and Banducci, 2013; Healy and Malhotra, 2009) or descriptive representation (Chauchard, 2014; Carnes and Lupu, 2015) – does not typically seek to measure this quantity.

I propose that, in the presence of preference endogeneity, a relevant and useful measure of the distribution of effective political power is the degree of 'communicative representation' that exists in a polity: the extent to which speech by elite actors proportionately

represents *and* responds to the entire distribution of voter preferences on a large number of issues. I argue that, if public opinion is partly endogenous to elite communication, a high degree of communicative representation is required for genuine political equality. If communicative representation is low, it must by definition be the case that elite actors with certain preferences and priorities have disproportionate presence in public debate, which provides them and those they represent with greater opportunity than others to influence public opinion, and ultimately, political outcomes. On the other hand, high communicative representation would imply that elite opinions have a presence and influence in public debate largely in proportion to the number of citizens who share these views, implying a more equal distribution of effective political power.

It is important to stress that a high degree of communicative representation constitutes a necessary but not sufficient condition for equality of political power, as the opportunities citizens have to influence political decisions are not only determined by their opportunities to influence public opinion, but also other parameters governing the processes that link public opinion and policy outcomes – for example, the institutions that influence how bills become law in a given setting, or the preferences of bureaucrats delegated with implementing the law. Moreover, the criteria that have been the focus of much empirical research on representation – such as policy responsiveness, the strength of the economic vote, or improved descriptive representation – present complementary conditions which are also necessary but not sufficient conditions for political equality.

Nonetheless, I contend that the degree of communicative representation in a polity still provides a useful and important barometer of how far the political environment of that polity fails to satisfy one important aspect of political equality at any given moment. Serious deficiencies in communicative representation would imply an unequal distribution of political power over public opinion, and so significant deviations from the ideal of political equality.

2.3 The Value of Communicative Representation

Even if we accept that the degree of communicative representation in a polity is informative regarding the distribution of political power over public opinion, and therefore the nature and extent of political inequality, there are undoubtedly costs associated with improving communicative representation as well. Improving communicative representation may require that we increase, for instance, the presence and influence of nativists or authoritarians in public debate, or the representation of opinions which would not be admissible in an ideal deliberative setting (for not being based in fact or being exclusionary). It would also demand that we do not over-represent the views of experts within public debate – such as economists, climate scientists or medical doctors – even at the cost of the public interest. By increasing the communicative power of those with illiberal and anti-democratic views, it may even threaten democratic stability and cohesion. Moreover, research suggests that there are substantial differences between the preferences citizens would have if they were ‘fully informed’ and those they express in surveys (Althaus, 1998) – compounding doubts as to whether focusing on the representation of citizens’ *actual* (uninformed) preferences is wise.

For these and other reasons, most if not all democratic theorists reject a ‘simple responsiveness criterion for democratic quality’ (Sabl, 2015, 349). Sabl (2015) proposes, for instance, ‘damped responsiveness’ instead – where ‘policy typically adapts, to a large degree, to public preferences – but not always, and usually with a lag’. Responding to some of these concerns, theorists of deliberative democracy have instead stressed the need for institutions and practices that might, through ‘the force of the better argument’ (Habermas, 1984), might reduce the prevalence of the least informed and moral opinions in the electorate (Mansbridge, 2003, 524). Knowing themselves and others to be less than fully informed or moral, voters might also not even *demand* perfect communicative representation from their representatives. Indeed, recent research finds that ‘technocratic

attitudes' are pervasive among European electorates (Bertsou and Caramani, 2022). A theory of representation attentive to how voters *want* to be represented – as Rehfeld (2009) argues is important, for instance – might want to incorporate and respond to these concerns.

However, aside from a commitment to the intrinsic value of political equality, there are important instrumental reasons for valuing communicative representation, or a more equal distribution of political power over public opinion. So long as system-wide ideal deliberation eludes us, it seems likely that public opinion will continue to be disproportionately shaped by the speech of some influential actors.⁸ I argue that this is not only intrinsically undesirable but also instrumentally costly. One reason is epistemic. Although there are undoubtedly epistemic costs associated with reducing the communicative power of experts, improving communicative representation entails increasing the cognitive diversity of elite political actors, which also has epistemic advantages (Lan-demore, 2012). A second reason is that a high level of communicative representation provides us with an additional line of defense against biased policy-making, or political capture by minority interests. Increased representation of under-represented views can alert us to biases in apparently impartial elite norms, discourses and perspectives (Young, 2002). Moreover, while key democratic institutions like competitive elections, universal suffrage and discretionary state power go a long way towards preventing elite entrenchment within electoral democracies (Bagg, 2018b; Landa and Pevnick, 2020), improving imbalances of power over public opinion mitigates these risks even further, by reducing the opportunities available to elites to manipulate public opinion in their favour order to preserve their material interests or political positions.

One potential counter-argument to the value of communicative representation in general might be that policymakers should only respond to 'considered public opinion' (La-

⁸Note that if system-wide ideal deliberative conditions do obtain, then we should also observe high levels of communicative representation (of citizens' fully considered and informed preferences).

font, 2020), as revealed by deliberative assemblies, rather than responding to actual public opinion, much of which is poorly informed and inconsistent. However, in the absence of system-wide ideal deliberative conditions, the argument that we should only respond to ‘considered public opinion’ is problematic. Deliberative opinion polls, citizens’ assemblies and other mini-publics may help us to identify what ‘considered public opinion’ might look like in many cases (Luskin, Fishkin and Jowell, 2002; Fishkin and Luskin, 2005; Gerber et al., 2018), but research suggests that citizens are unlikely to view policy responsiveness to ‘considered’ rather than actual public opinion as equally legitimate (Goldberg and Bächtiger 2023; see also Lafont 2020). Moreover, as argued by Landa and Pevnick (2021), it is plausible that, if pivotal, decision-making bodies relying on random selection will be more vulnerable to capture by minority interests than those disciplined by electoral incentives.

Finally, the measure of communicative representation developed in this paper introduces a strategy to evaluate which groups currently have disproportionately little influence over public opinion, and by how much. This can also help us evaluate the effectiveness of various strategies which have been proposed to reduce political inequality, or to identify new ones, such as deliberative innovations or improvements in descriptive representation. Deliberative bodies have been found to be contaminated by pre-existing inequalities to some degree (Young, 2001; Bagg, 2018a; Gerber et al., 2018). For example, a recent analysis of ‘real-world deliberation’ in South Indian village assemblies found that women remained at a disadvantage relative to men – being less likely to speak, set the agenda, or receive a response from elected officials (Parthasarathy, Rao and Palaniswamy, 2019). Analyses of communicative representation within deliberative assemblies, and of the relative communicative presence of different groups in these assemblies, can help us identify inequalities over public opinion within these fora. The same applies to policies and institutions directed at improving descriptive representation, such as quotas. An

assessment of imbalances of power over public opinion may help identify circumstances under which improved legislative representation (for example) has not translated into improved representation within legislative debate. It may also reveal constituencies which are particularly marginalized in terms of their communicative power, and which may then benefit from increased descriptive representation.

3 Empirical Strategy

My proposed measure of communicative representation has two components: communicative congruence – the proportionate representation of the entire distribution of voter preferences, across issues, in elite speech – and communicative responsiveness – that changes in the distribution of voter preferences produce corresponding changes in the preferences expressed in elite speech.

In this paper, as proof of concept, I analyze communicative representation on redistribution and immigration in the UK between 2010 and 2019 – a time frame which includes three general elections, four governments, and one fateful referendum on Britain’s membership of the European Union (culminating in a narrow vote for Leave). I split the years between 2010 and 2019 into four distinct sub-periods, punctuated by changes of government: May 2010 to May 2015 (Conservative-Liberal Democrat coalition government); May 2015 to June 2016 (Conservative majority government led by David Cameron); June 2016 to June 2017 (Conservative majority government led by Theresa May); June 2017 to July 2019 (Conservative minority government led by Theresa May). This tumultuous period in British politics also witnessed the election of Jeremy Corbyn as leader of the Labour party, a longstanding rebel on the left of the party.

Measuring communicative representation on an issue involves six distinct steps: (1) identifying the distribution of voter preferences on that issue; (2) identifying elite speech on that issue in a particular domain; (3) estimating elite preferences on that issue using

text scaling methods; (4) rescaling elite and voter preferences so that they are on the same, comparable, scale; (5) comparing the distribution of voter preferences and of elite *speech* on the issue; (6) measuring the correlation between (lagged) changes in the distribution of voter preferences and changes in elite speech.

Step 1

To first measure the preferences of British voters on redistribution and immigration in this period, I use data from the British Election Study (waves 1, 7, 11 and 14, fielded in February–March 2014, April–May 2016, April–May 2017 and May 2018 respectively). Specifically, I analyse responses to the following two questions:

- Some people feel that government should make much greater efforts to make people's incomes more equal. Other people feel that government should be much less concerned about how equal people's incomes are. Where would you place yourself and the political parties on this scale? (0 = extreme left)
- Some people think that the UK should allow *many more* immigrants to come to the UK to live and others think that the UK should allow *many fewer* immigrants. Where would you place yourself and the parties on this scale? (0 = extreme right)

The question on immigration is only available from wave 7 (2016) onwards. In both cases, respondents were presented with an 11 point scale (0 to 10). I use the sampling weights provided to ensure that the distribution of preferences I obtain is representative of the British electorate. An advantage of these questions, and of similarly worded questions, is that we can use voter placements of parties to anchor legislators and voters on the same scale.

Step 2

In order to study elite speech on these issues in the same time frame, I rely on legislative speech as a proxy for elite speech. Unlike political communication through various media outlets, legislative speech is not ‘public-facing’ and so ostensibly intended to communicate one’s policy positions to other legislators and not to the public at large. Then, it might appear an odd forum in which to evaluate the presence and influence of opinions within public debate. However, most previous research on the politics of parliamentary debate has argued that legislators principally use legislative speech as a means of ‘public communication’, to ‘send policy signals when competing for votes’ (Proksch and Slapin 2015, 21; see also Bäck and Debus 2016), and so speak with the intention of having key extracts from their speeches disseminated to the broader public by their parties, by journalists, as well as through their own social media accounts.⁹ Researchers have also identified various correlates of parliamentary speech which are hard to understand except if legislative speech is understood as a form of public communication, an effort to either reveal or justify one’s political positions to the electorate (Martin and Vanberg, 2008; Herzog and Benoit, 2015). Thus, while legislative speech is far from the only important domain through which social and political elites may have an influence on public opinion, it still constitutes an important domain through which influential members of the political elite (legislators) communicate with the general public. Insofar as legislators as individuals have some influence on public opinion, the extent of communicative representation evident in legislative speech provides us with considerable insight into the distribution of political power over public opinion, an important component of political inequality in contemporary societies.

⁹A cursory review of UK legislator Twitter accounts reveals that many tweets, perhaps even the majority, seek to highlight extracts from (typically their own) parliamentary speeches, while Proksch and Slapin (2015, 22) note that the *Frankfurter Allgemeine Zeitung*, a leading German newspaper, has published on average more than one article on each parliamentary session since 1950 (73 articles per year).

I source the relevant speeches from the ParIEE Plenary Speeches dataset (Sylvester, Greene and Ebing, 2022). The ParIEE dataset contains all speeches which were delivered in the UK House of Commons in this period, already classified by topic at the sentence-level according to the Comparative Agendas Project coding scheme (Froio, Bevan and Jennings, 2017). To identify relevant speeches, I first extract sentences classified as relating to immigration, macroeconomics and social welfare. As the CAP scheme does not specifically identify speech on redistribution, to reduce measurement error, I ultimately base my estimates of legislator preferences on this issue to references to redistribution within these extracts.¹⁰ This approach is easily scaled to other issues, countries and periods for which labelled and digitized legislative speech data exists.

Step 3

In order to estimate legislator preferences on immigration and redistribution based on their parliamentary speech, I use Wordscores (Laver, Benoit and Garry, 2003; Lowe, 2008). Wordscores compares a set of texts whose positions are unknown (“virgin texts”) with texts whose positions on a scale are assumed to be known to the analyst *a priori* (reference texts). Virgin documents are then scored by the procedure based on their similarity to the reference texts in terms of their word usage – in particular, the frequency with which they use words also used in the reference texts. Wordscores has previously been successfully applied to a variety of political text corpora (Klemmensen, Hobolt and Hansen, 2007; Bernauer and Bräuning, 2009; Klüver, 2009; Hjorth et al., 2015), including parliamentary speech on welfare spending in the UK (O’Grady, 2019).¹¹

To represent the extreme pro-redistribution position, I constructed a reference doc-

¹⁰Specifically, I extract ten word windows surrounding mentions of “tax*”, “*fair*”, “benefit*”, “poverty”, “*justice”, “unjust”, “inequality”, “unequal”, “taxpayer”, “rich*”, “redistribut*”, “austerity”, “cuts”, “universal credit”.

¹¹An alternative might be an unsupervised text scaling procedure, like Wordfish (Slapin and Proksch, 2008) or Wordshoal (Lauderdale and Herzog, 2016). While these procedures have performed well in a number of contexts, I found that they performed poorly in my case, with Wordscores producing a more plausible ordering of legislators on both issues.

ument containing all speeches made by members of the “Socialist Campaign Group” (SCG) of Labour MPs between 2010 and 2019.¹² The SCG is an organized faction within the Labour party, generally considered to include legislators espousing views on the far left of the party, including on redistribution (Cowley, 2002). In this period, it included Jeremy Corbyn, leader of the Labour party between 2015 and 2019, and other prominent figures on the Labour left, such as Diane Abbott, John McDonnell, and Dennis Skinner. A total of 34 Labour MPs were part of the SCG at some point during this period. To anchor the other end of the spectrum on redistribution, I use speeches made by members of the ‘Free Enterprise Group’ (FEG), an organized faction of Thatcherite MPs within the Conservative party, founded in 2011. 65 Conservative MPs were linked to the FEG at some point during this period, including prominent right-wing MPs such as Liz Truss, Kwasi Kwarteng, Nadhim Zahawi and Priti Patel.

To represent the extreme left position on immigration, I use speeches by legislators who voted against the 2014 Immigration Act, which enshrined in law various policies intended to help identify and deport illegal immigrants residing in the UK. Only 18 legislators voted against (of whom two lost their seats in 2015), as the official Labour party position on the vote was to abstain on the third reading of the bill.¹³ Meanwhile, to represent the extreme right position on immigration, I use speeches by the 60 still-serving legislators who supported Nigel Mill’s 2014 amendment to extend transitional controls on Romanian and Bulgarian migrants to Britain – an amendment mainly supported by the Conservative party’s *right* flank (along with assorted representatives from the Democratic Unionist Party) – legislators who thought that the Conservative party’s proposed restrictions on future immigration did not go far enough. Prominent members of this group included Philip Hollobone, formerly member of a group which supported the voluntary

¹²Pooling all speeches into a single document maximizes the length and linguistic diversity of the reference document, which improves the performance of Wordscores (Lowe, 2008; O’Grady, 2019).

¹³Their number included some prominent members of the SCG, like Jeremy Corbyn and Diane Abbott, as well as some MPs from the Scottish National Party and Plaid Cymru.

repatriation of ethnic minorities, as well as Douglas Carswell, who defected to the radical right party UKIP in 2014.

Step 4

In order to be able to compare the distributions of legislator and voter preference on an issue, it is essential to place them on a common scale. I do this by creating six hypothetical anchor legislators who are assigned a score on both the Wordscores scale (of legislator speech) and on the 11 point BES scale (of voter opinions) on each issue and for each period. I then use these six anchor legislators to map all other legislators to a position on the BES scale, based on the position of their speech on the Wordscores scale. Four of these anchor legislators correspond to ‘typical’ members of the four major British parties – Labour, the Conservatives, the Liberal Democrats and the Scottish National Party. I assign positions on the BES scale for these four anchor legislators based on how attentive BES survey respondents placed these four parties, on average, on the BES scale for that issue and in the relevant survey wave.¹⁴ Specifically, I assign these four anchor legislators a score on the Wordscores scale equal to the weighted average of all Wordscore scores received by legislators from the same party in that period (weighted by number of words spoken).

For each issue and period, I also create two additional anchor legislators representing hypothetical extreme left and right legislators. I assign these two legislators BES positions equal to the extreme of the BES survey scales, and Wordscores positions equal to the weighted average of scores received by extreme left and right legislators on those issues (again weighted by words spoken).¹⁵ Finally, for each period and issue, I run a bivariate linear OLS regression regressing the BES positions of these six anchor legislators on

¹⁴For this analysis, I only included ‘attentive individuals’ – specifically, those who were among the top 25% of respondents in terms of self-reported political attention in each wave.

¹⁵For example, in each period, I construct a hypothetical extreme left legislator on redistribution by taking the weighted average of scores received by SCG MPs in that period. This legislator is assigned a score of 0 on the BES scale, representing the most extreme left survey response on redistribution.

their Wordscores positions. The resulting estimates provide a linear mapping from the Wordscores scale to the BES scale, for each period and issue, which I then use to place all legislators on the BES scale, based on their estimated positions on the Wordscores scale.

This approach assumes, first, that the rank ordering of legislators on the Wordscores scale reflects their ideological location on the BES survey scale, as revealed in their parliamentary speech. This assumption seems reasonable in my case, based on the estimated location of known MPs on each issue, as well as formal statistical comparisons between different groups of MPs with known divergent views on these issues. Second, this approach also assumes that the loss of cardinal information from a linear mapping between the two scales is minimal. This also seems a reasonable assumption in my case, as I consistently find that the proportion of variance in MP BES locations explained by a linear mapping from their Wordscores locations is above 0.9, and in most cases above 0.95. Moreover – and in part, as a consequence — using a non-linear (quadratic or cubic) mapping does not qualitatively change the results.

My approach differs from earlier efforts to ‘bridge’ or jointly scale legislators and voters developed by scholars of American politics and subsequently applied to other contexts like Europe (Bakker et al., 2014; Lo, Proksch and Gschwend, 2014) and Latin America (Saiegh, 2015) – whereby two disjoint sets of roll call or survey data are connected using common survey items. However, these approaches all require joint surveys of elites and voters, limiting our attention to cases where such surveys have already been fielded, or requiring new and costly data collection efforts. Although less precise, an advantage of my approach over these earlier approaches is that it only requires that there are surveys where voters are asked to place parties *and* themselves on the same issue, allowing us to use historical survey data to locate legislators and voters on a common scale across a much larger number of countries, years and issues, including backwards in time.

Step 5

Last but not least, as my interest is in the representation of voter preferences in political *speech*, I compare the distribution of voter preferences on immigration to the estimated distribution of legislative *discourse* on this issue. I do this by reporting the proportion of legislative speech delivered by MPs assigned to different bins on the BES scale, and not only the proportion of MPs assigned to each bin. This gives greater weight to the preferences of legislators who had more floor time – for instance, party leaders and frontbenchers (Proksch and Slapin, 2012, 2015) – and consequently, more presence and influence in public debate.

Additional statistics

I produce three further statistics to summarize the degree of communicative representation on this issue, as well as the relative communicative presence of different groups within the British electorate. First, I produce a measure of ‘communicative malapportionment’ that is based on the measure of electoral malapportionment proposed by Samuels and Snyder (2001). It is calculated using the following formula:

$$M_{jt} = \frac{1}{2} \sum_{i=1}^N |D_{ijt} - v_{ijt}|$$

where M_t denotes the degree of communicative malapportionment that exists in country j at time t , i denotes the bins on the survey response scale, D_{ijt} the proportion of legislative discourse in each bin i at time t , and v_{ijt} the proportion of voters placing themselves in each bin i at time t . This quantity captures the proportion of legislative speech on an issue that is delivered by legislators who would not have received any floor time if there were perfect communicative congruence on that issue.

Next, as a measure of relative communicative presence, I calculate the extent to which

different opinions and social groups are over-represented in legislative speech relative to their numbers in the electorate as a whole. The relative communicative presence p_i of opinion group i (where an opinion group is e.g. voters who place themselves at ‘2’ on immigration) is given by:

$$p_i = \frac{\text{fraction of legislators with opinion } i}{\text{fraction of voters with opinion } i}$$

The relative communicative presence P_j of a social group j is then:

$$P_j = \sum_i p_i \times \text{fraction of social group } j \text{ with opinion } i$$

When the relative communicative presence a group has is below 1, it is under-represented in legislative speech relative to its numbers. Conversely, when it is above 1, the group is over-represented in speech relative to its numbers.¹⁶

Finally, to measure the degree of communicative representation on each issue – or, the extent to which changes in the distribution of voter preferences (appear to) produce corresponding changes in the distribution of legislative speech – I compute two statistics. First, I report the correlation between the change in proportion of legislative speech corresponding to each response category between periods t_1 and t_2 , and the lagged change in the proportion of voters in each response category between periods t_0 and t_1 (where perfect responsiveness would imply a correlation coefficient of 1). I term this measure ‘change responsiveness’. Second, I also compute a weaker measure of responsiveness – ‘gap responsiveness’ — or, the correlation between the gap in proportion of legislative speech and voters in each bin in period t_0 and the change in legislative speech in that bin between periods t_0 and t_1 . This captures whether legislator speech in subsequent

¹⁶As an example, if we calculate that graduates have a relative communicative presence of 1.48, this means that the preferences of graduates receive 48% more representation in legislative speech than would be warranted by their numbers within the electorate.

periods moves towards the preferences of voters who were especially under-represented in the previous period, diminishing the overall level of communicative malapportionment.

4 Results

Figures 1 and 2 plot the estimated distribution of citizen preferences, the preferences of speaking legislators, and of legislative discourse on redistribution and immigration, respectively, calculated according to the strategy discussed in Section 3. For each bin on the survey response scale, the proportion of Labour voters and MPs is given in red; Conservative voters and MPs in blue, and abstainers or those linked to other parties are given in gray. In both cases, the patterns we observe provide considerable face validity to the overall approach. Meanwhile, Figures 3 and 4 report the (logged) relative communicative presence of opinions on redistribution and immigration, respectively, in parliamentary speech in this period.

First, consider Figure 1. We observe a clear partisan divide in the preferences of speaking legislators and in legislative discourse, with Labour MPs taking a consistently more pro-redistribution line than Conservative MPs – as may be expected on what is typically considered to be the primary dimension of political conflict in the UK. The partisan divide in redistributive preferences among voters is less clear cut, particularly after the 2016 EU referendum, in line with evidence of growing partisan realignment along Leave/Remain lines during this period (Fieldhouse et al., 2021; Ford et al., 2021). Particularly during the 2010-2015 coalition government, center-right redistributive preferences appear over-represented in parliamentary speech. Notably, we observe an increase in improvement in the representation of the most pro-redistribution voters after the election of left-wing stalwart Jeremy Corbyn as leader of the Labour party in 2015. Although 17.5% of voters selected the most left-wing position on redistribution in 2014, this position was represented by less than 5% of legislators and legislative discourse in the 2010-15 parlia-

Figure 1: Communicative Congruence on Redistribution in the UK, 2010-2019

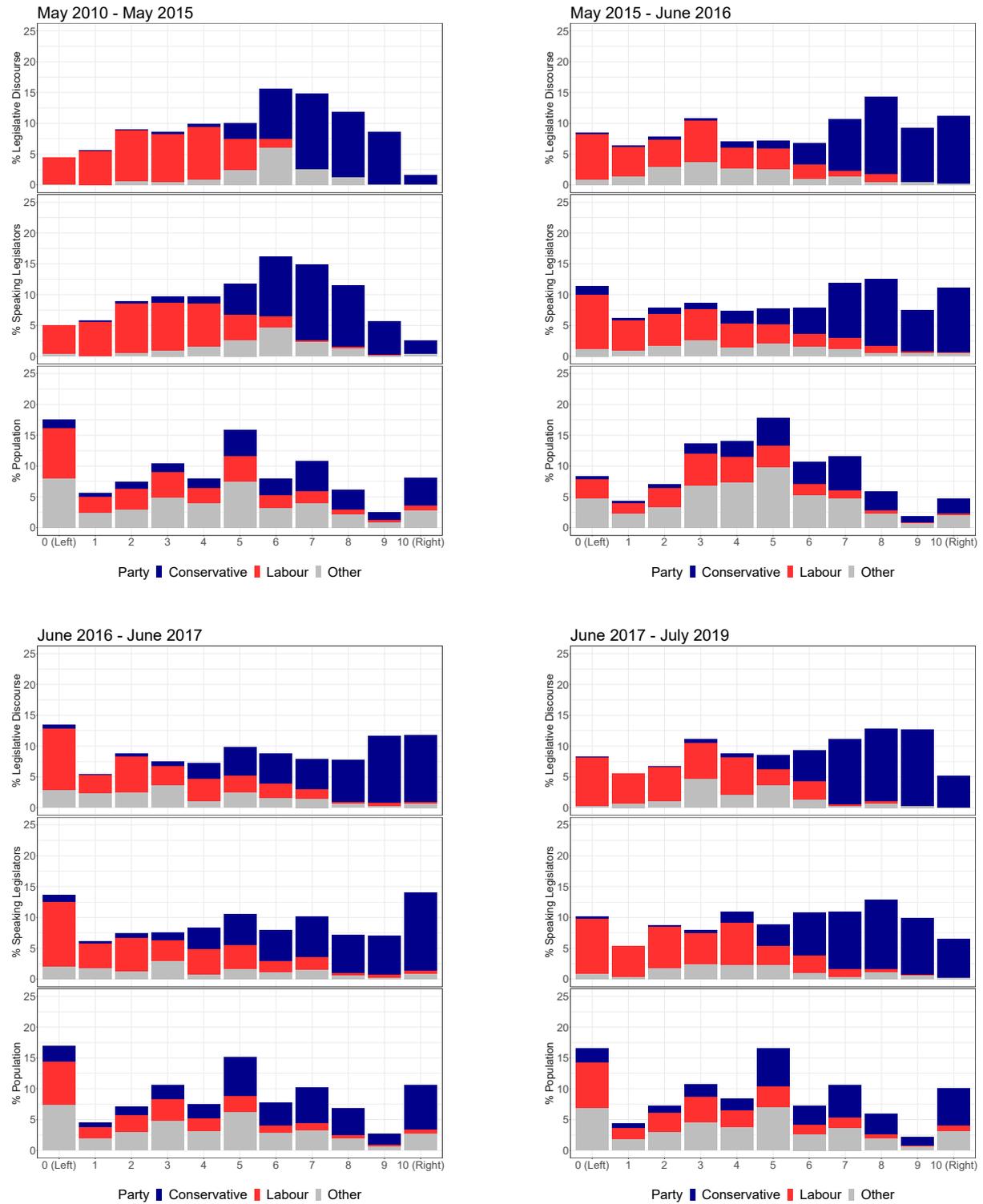
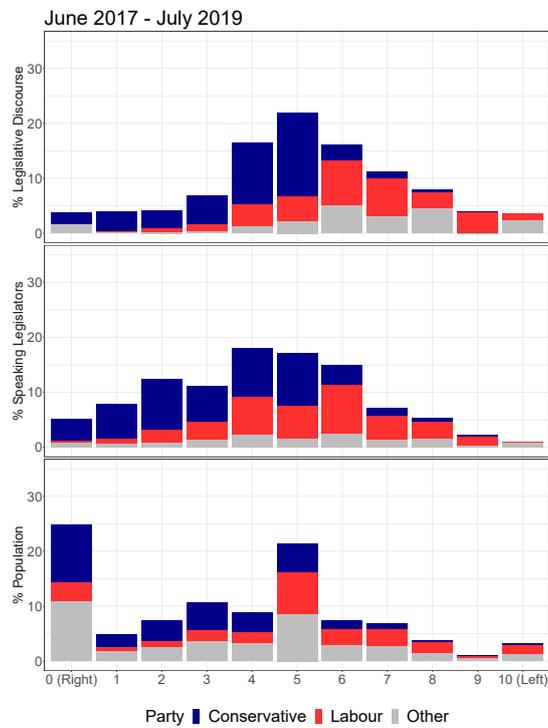
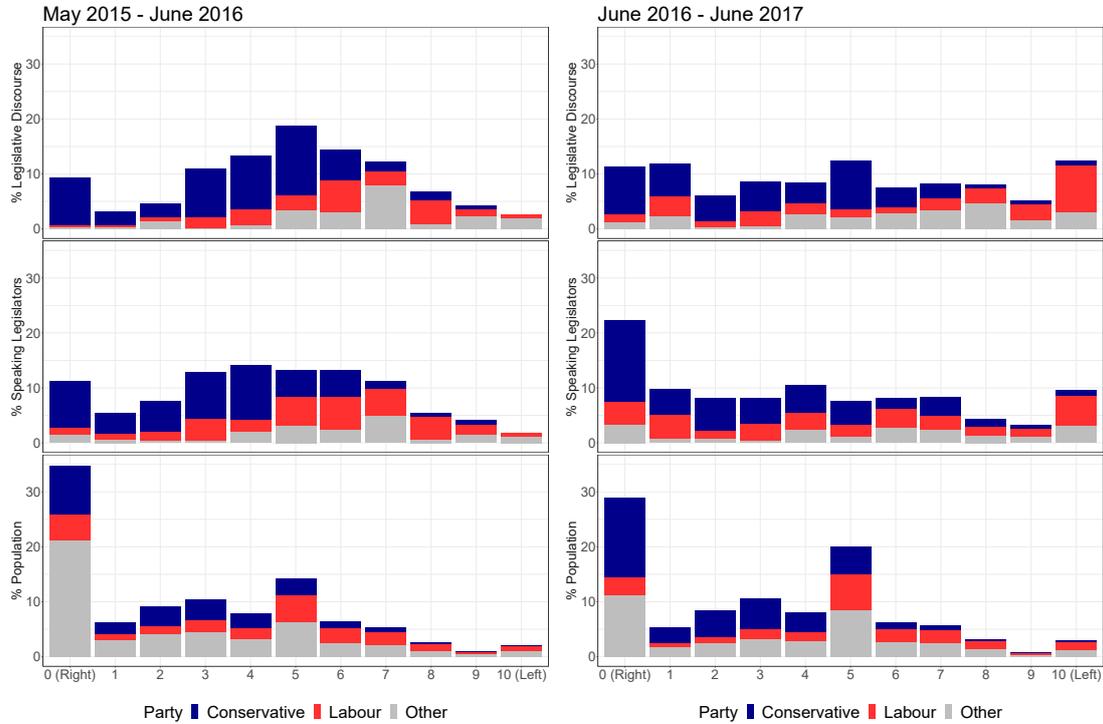


Figure 2: Communicative Congruence on Immigration in the UK, 2015-2019



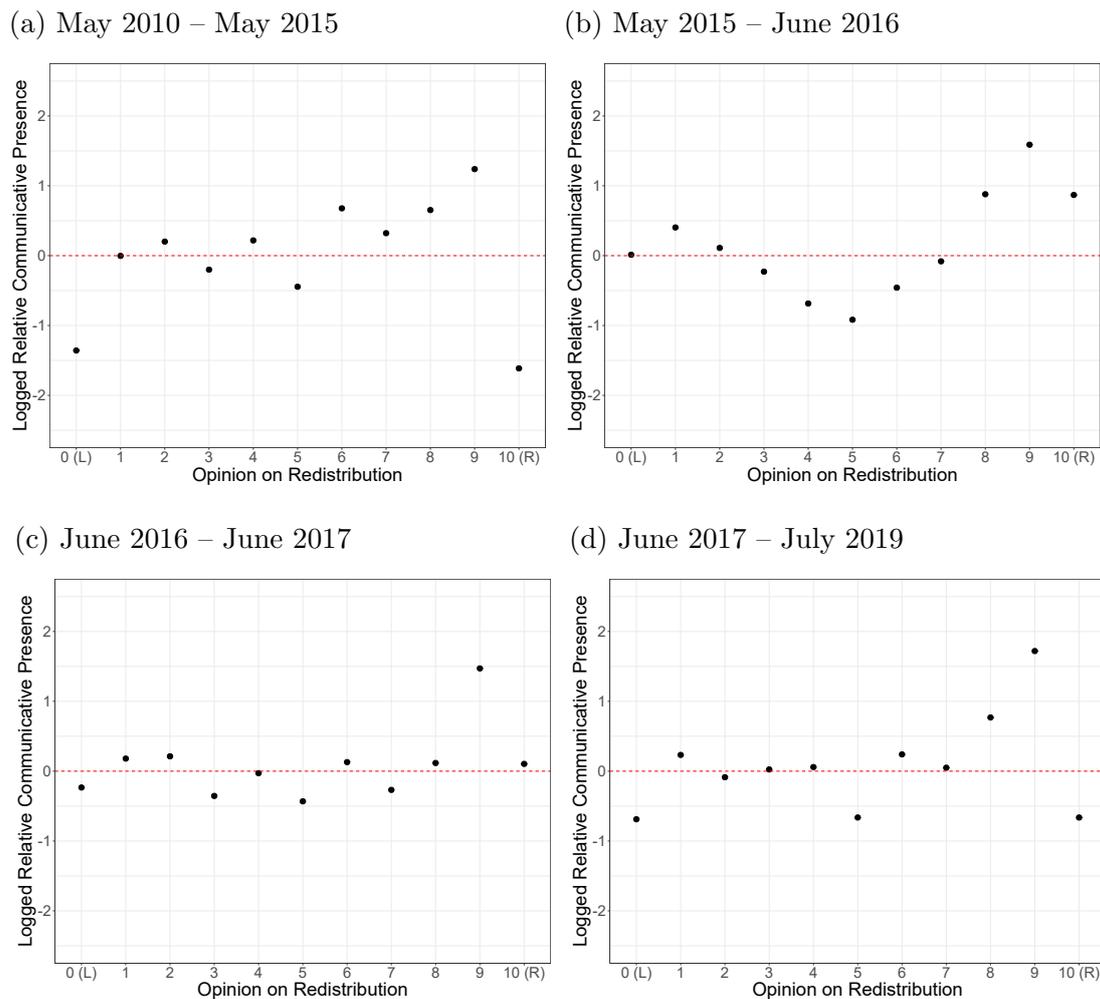
ment. Parliamentary representation of such views approximately doubles after 2015, and increases further after the 2016 EU referendum, when SCG members were elevated to the shadow cabinet in greater numbers.¹⁷ Consistent with these patterns, Figure 3 shows that center-right opinions on redistribution are over-represented throughout, while the representation of left-wing views improves after 2015. Moreover, I find that while 27.1% of legislative speech on redistribution can be attributed to malapportionment in 2010-15 – or speech delivered by legislators who would not have received any floor time if there was perfect communicative congruence on this issue. This decreases somewhat to 25.3% in 2015-16, and even further to 14.7% in 2016-2017 and 21.7% in 2017-19.

Turning to immigration (ref. Figure 2), we observe greater evidence of communicative malapportionment throughout. Across parliaments, we observe that a substantial section of the British electorate favored the view that the UK should admit ‘many fewer’ immigrants than currently (35% of the electorate in 2016, diminishing to 25% of the electorate by 2018). However, prior to the 2016 referendum, this view is consistently expressed by fewer than 10% of speaking legislators and by an even smaller proportion of legislative discourse. Meanwhile, center-left and left-wing opinions on immigration receive disproportionate attention in parliament, including after 2016 (also confirmed by Figure 4). However, parliamentary representation of extreme right views on immigration more than doubles between 2016 and 2017, possibly due to the increased political salience of immigration, and also greater elite awareness of the prevalence of anti-immigration views within the British electorate (though this is not matched by the same increase in anti-immigrant parliamentary discourse). At the same time, the proportion of voters supporting no change to levels of immigration to the UK – presumably, continued free movement from the EU – also increases during this period, from about 15% of the electorate in 2014 to more than 20% of the electorate in 2018. This coincides with improved

¹⁷Following a large number of resignations from the first Corbyn shadow cabinet after the 2016 referendum outcome, for which many Labour MPs blamed Corbyn to some degree.

representation of such views in the 2017-19 parliament. In line with these patterns, we find that communicative malapportionment was somewhat higher throughout on immigration than on redistribution, with 33.0% of legislative speech on immigration reflecting malapportionment in 2015-16, decreasing to 29.5% in 2016-17 and 29.0% in 2017-19.

Figure 3: Relative Communicative Presence of Opinions on Redistribution in the UK

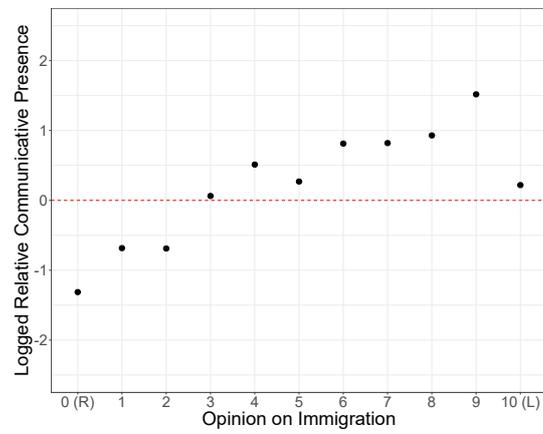


Next, Tables 1 and 2 report the relative communicative presence of various sub-electoralates on redistribution and immigration, respectively, alongside the interquartile range of their responses¹⁸. First, consider Table 1. It is immediate that there are no sig-

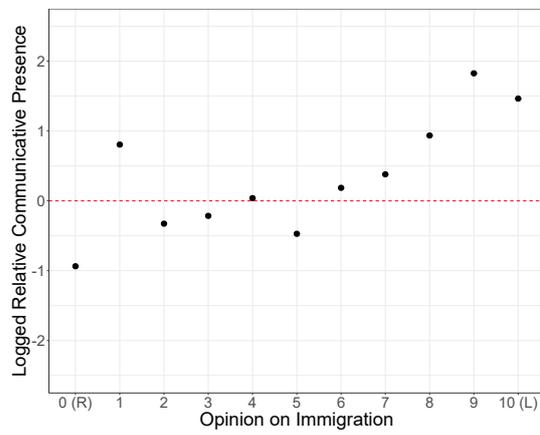
¹⁸Calculated after including sampling weights.

Figure 4: Relative Communicative Presence of Opinions on Immigration in the UK

(a) May 2015 – June 2016



(b) June 2016 – June 2017



(c) June 2017 – July 2019

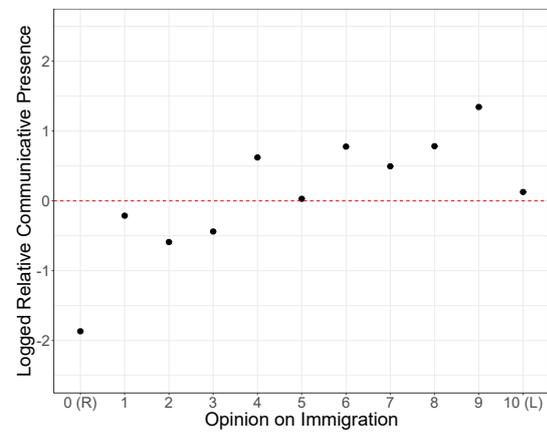


Table 1: Relative Communicative Presence of UK Sub-Electorates on Redistribution

Sub-Electorate	Timeframe	Rel. Comm. Presence	IQR [0.25,0.5,0.75]
Men	May 2010–May 2015	1.02	[2, 5, 7]
	May 2015–June 2016	1.03	[3, 5, 7]
	June 2016–June 2017	1.01	[2, 5, 7]
	June 2017–July 2019	1.02	[2, 5, 7]
Women	May 2010–May 2015	0.98	[2, 4, 6]
	May 2015–June 2016	0.97	[3, 5, 6]
	June 2016–June 2017	0.99	[2, 5, 7]
	June 2017–July 2019	0.98	[2, 4, 7]
No Higher Education	May 2010–May 2015	0.97	[1, 4, 6]
	May 2015–June 2016	0.98	[3, 5, 6]
	June 2016–June 2017	1.00	[2, 5, 7]
	June 2017–July 2019	0.98	[2, 5, 7]
Some Higher Education	May 2010–May 2015	1.05	[2, 5, 7]
	May 2015–June 2016	1.01	[3, 5, 7]
	June 2016–June 2017	1.00	[2, 5, 7]
	June 2017–July 2019	1.02	[2, 5, 7]
White British Working Class	May 2010–May 2015	0.92	[1, 4, 6]
	May 2015–June 2016	0.94	[2, 4, 6]
	June 2016–June 2017	0.97	[1, 4, 7]
	June 2017–July 2019	0.94	[1, 4, 6]
White British Middle Class	May 2010–May 2015	1.07	[3, 5, 7]
	May 2015–June 2016	1.05	[3, 5, 7]
	June 2016–June 2017	1.03	[3, 5, 7]
	June 2017–July 2019	1.05	[3, 5, 7]
Other Working Class	May 2010–May 2015	0.87	[0, 4, 6]
	May 2015–June 2016	0.94	[2, 4, 5]
	June 2016–June 2017	0.95	[0, 3, 5]
	June 2017–July 2019	0.90	[0, 3, 5]
Other Middle Class	May 2010–May 2015	1.06	[2, 5, 7]
	May 2015–June 2016	0.99	[3, 4, 6]
	June 2016–June 2017	0.99	[2, 4, 6]
	June 2017–July 2019	0.98	[2, 4, 7]
Ages 18–29	May 2010–May 2015	1.04	[2, 4, 7]
	May 2015–June 2016	0.97	[3, 4, 6]
	June 2016–June 2017	0.98	[2, 4, 6]
	June 2017–July 2019	0.94	[1, 4, 6]
Ages 30–49	May 2010–May 2015	1.02	[2, 5, 7]
	May 2015–June 2016	0.99	[3, 5, 6]
	June 2016–June 2017	0.98	[2, 5, 7]
	June 2017–July 2019	0.96	[2, 5, 7]
Ages 50–64	May 2010–May 2015	0.95	[1, 4, 7]
	May 2015–June 2016	1.00	[3, 5, 6]
	June 2016–June 2017	1.01	[2, 5, 7]
	June 2017–July 2019	1.01	[2, 5, 7]
Ages 65 +	May 2010–May 2015	1.02	[2, 5, 7]
	May 2015–June 2016	1.03	[3, 5, 7]
	June 2016–June 2017	1.04	[3, 5, 8]
	June 2017–July 2019	1.08	[3, 5, 7]

Table 2: Relative Communicative Presence of UK Sub-Electorates on Immigration

Sub-Electorate	Timeframe	Rel. Comm. Presence	IQR [0.25,0.5,0.75]
Remainers	May 2015–June 2016	1.44	[3, 5, 6]
	June 2016–June 2017	1.25	[4, 5, 6]
	June 2017–July 2019	1.33	[4, 5, 7]
Leavers	May 2015–June 2016	0.66	[0, 0, 3]
	June 2016–June 2017	0.79	[0, 1, 3]
	June 2017–July 2019	0.70	[0, 1, 4]
Men	May 2015–June 2016	1.01	[0, 3, 5]
	June 2016–June 2017	1.03	[0, 3, 5]
	June 2017–July 2019	1.00	[1, 4, 5]
Women	May 2015–June 2016	0.99	[0, 2, 5]
	June 2016–June 2017	0.97	[0, 3, 5]
	June 2017–July 2019	1.00	[0, 4, 5]
No Higher Education	May 2015–June 2016	0.74	[0, 1, 3]
	June 2016–June 2017	0.85	[0, 2, 4]
	June 2017–July 2019	0.80	[0, 2, 5]
Some Higher Education	May 2015–June 2016	1.19	[1, 4, 5]
	June 2016–June 2017	1.10	[2, 4, 5]
	June 2017–July 2019	1.13	[2, 5, 6]
White British Working Class	May 2015–June 2016	0.78	[0, 1, 4]
	June 2016–June 2017	0.88	[0, 2, 5]
	June 2017–July 2019	0.82	[0, 2, 5]
White British Middle Class	May 2015–June 2016	1.08	[0, 3, 5]
	June 2016–June 2017	1.01	[1, 4, 5]
	June 2017–July 2019	1.07	[2, 4, 5]
Other Working Class	May 2015–June 2016	1.20	[0, 4, 6]
	June 2016–June 2017	1.33	[2, 5, 6]
	June 2017–July 2019	1.19	[3, 5, 7]
Other Middle Class	May 2015–June 2016	1.46	[3, 5, 6]
	June 2016–June 2017	1.35	[3, 5, 6]
	June 2017–July 2019	1.31	[3, 5, 7]
Ages 18–29	May 2015–June 2016	1.38	[2, 5, 6]
	June 2016–June 2017	1.28	[3, 5, 6]
	June 2017–July 2019	1.26	[3, 5, 7]
Ages 30–49	May 2015–June 2016	1.02	[0, 3, 5]
	June 2016–June 2017	1.04	[0, 4, 5]
	June 2017–July 2019	1.02	[1, 4, 5]
Ages 50–64	May 2015–June 2016	0.90	[0, 2, 5]
	June 2016–June 2017	0.90	[0, 2, 5]
	June 2017–July 2019	0.92	[0, 3, 5]
Ages 65 +	May 2015–June 2016	0.83	[0, 1, 4]
	June 2016–June 2017	0.86	[0, 2, 5]
	June 2017–July 2019	0.88	[0, 3, 5]

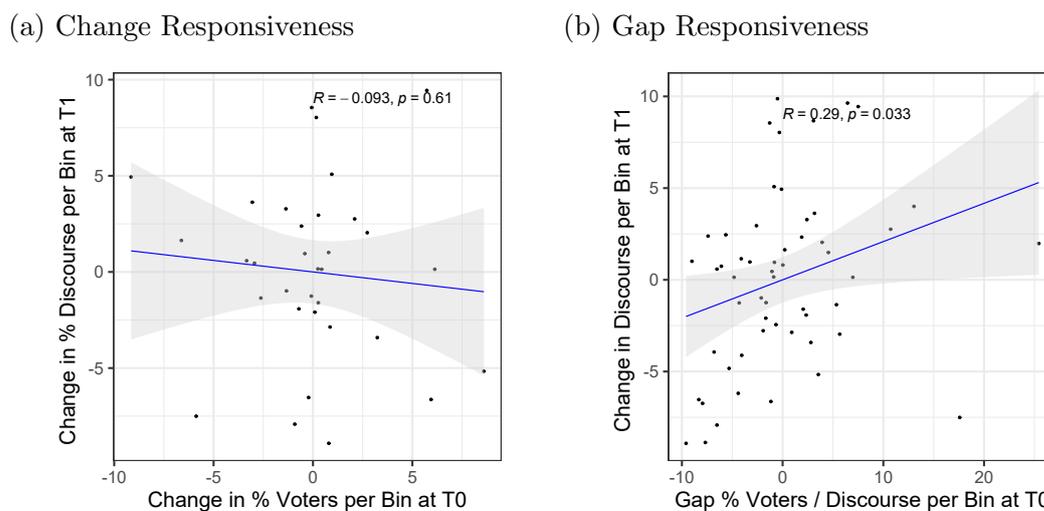
nificant inequalities of relative communicative presence by gender, age or education, but some evidence of class inequality. In particular, the (more left-wing) opinions of working class British voters are slightly under-represented in legislative speech throughout, though by a slightly smaller margin after 2015. This is especially the case for working class voters of ethnic minority origin, who report more left-wing preferences on redistribution than any other sub-electorate. Even after the election of Jeremy Corbyn as Labour leader, the opinions of ethnic minority working class voters receive 5-10% less representation in parliamentary speech than warranted by their numbers.

From Table 2, it is evident that there are more significant inequalities of relative communicative presence on immigration. In particular, the (more left-wing) views of 18-29 year olds, graduates, and ethnic minority voters are significantly over-represented in parliamentary speech, with, for instance, the views of ethnic minority middle class voters receiving almost 50% more representation in the 2015-2016 parliament than warranted by their numbers. Conversely, the (more right-wing) opinions of non-graduates, pensioners, the white British working class, and Leave voters are significantly *under*-represented in legislative speech throughout. For instance, we find that, in 2015-16, the views of non-graduates received 78% of the representation their numbers would warrant, and those of Leave voters only 64%. However, the relative communicative presence on this issue of all four under-represented sub-electorates improves significantly during this period, in part reflecting the improved representation of center-right and right-wing views on immigration, but also a leftward shift in the immigration preferences of these sub-electorates following the referendum result (ref. Table 2).

These patterns align well with previous research on inequalities in descriptive representation in European democracies, including in the UK. The disconnect between the socioeconomic background of most British parliamentarians – overwhelmingly degree-holders from middle- and upper-class backgrounds – and the backgrounds of their con-

stituents has previously been documented (O’Grady, 2019), and similar patterns have been observed in the Netherlands (Hakhverdian, 2015) and Germany (Elsässer, Hense and Schäfer, 2021) as well. As these voters typically hold more right-wing views on immigration and more left-wing views on redistribution (ref. Tables 1 and 2), their descriptive under-representation in parliament may be contributing to the under-representation of their views in parliamentary speech. However, in order to conclusively infer that these groups are under-represented in public political debate overall, it would be necessary to also explore the representation of these opinions and constituencies in other information environments, such as social and mass media, or election campaigns. This is feasible through the method outlined here, but is left to future work.

Figure 5: Overall Communicative Responsiveness in the United Kingdom, 2015–2019



Finally, Figure 5 presents estimates of two measures of the overall level of communicative representation in the UK in this period. The first measure, ‘change responsiveness’, is constituted by the correlation between the change in proportion of legislative speech in each bin (between t_1 and t_2) and the lagged change in proportion of voters in each bin (between t_0 and t_1). We observe little evidence that legislative speech responds to changes in voter preferences in this manner (ref. Figure 5a). However, we find a strong

and highly statistically significant positive correlation between the gap in proportion of legislative speech and voters in each bin at t_0 and the change in legislative speech in that bin between t_0 and t_1 ('gap responsiveness'). This suggests that, in this period, the representation of particularly under-represented views improved over time – in line with the finding of decreasing communicative malapportionment on both issues. These patterns are corroborated in regression analyses (ref. Tables A.1 and A.2 in Appendix A). This suggests that even as communicative representation falls short of the ideal in the UK in this time frame, legislative discourse does take account of and respond to changes in voter opinion to some degree.

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Appendices

A Additional Results

Table A.1: Change Responsiveness in the UK, 2010–2019

	Δ % Legislators $t_1 - t_2$			Δ % Discourse $t_1 - t_2$		
	(1) Both	(2) Redist.	(3) Immig.	(4) Both	(5) Redist.	(6) Immig.
Δ % Voters $t_0 - t_1$	0.087 (0.252)	-0.336* (0.148)	2.148** (0.657)	-0.120 (0.234)	-0.442* (0.159)	1.451+ (0.686)
Issue: Redist.	-0.068 (1.878)			0.000 (1.749)		
Constant	0.199 (1.533)	0.131 (0.582)	0.199 (1.653)	0.000 (1.428)	0.000 (0.623)	0.000 (1.727)
Observations	33	22	11	33	22	11
R ²	0.004	0.204	0.543	0.009	0.280	0.332
Adjusted R ²	-0.062	0.164	0.492	-0.057	0.244	0.257

+p<0.1; *p<0.05; **p<0.01; ***p<0.001

Table A.2: Gap Responsiveness in the UK, 2010–2019

	Δ % Legislators at t_1			Δ % Discourse at t_1		
	(1) Both	(2) Redist.	(3) Immig.	(4) Both	(5) Redist.	(6) Immig.
Rep Gap at t_0	0.365** (0.110)	0.304* (0.124)	0.410* (0.192)	0.208* (0.096)	0.252* (0.122)	0.181 (0.157)
Issue: Redist.	-0.044 (1.253)			0.000 (1.279)		
Constant	0.100 (0.970)	0.052 (0.577)	0.100 (1.290)	-0.000 (0.991)	-0.000 (0.637)	-0.000 (1.266)
Observations	55	33	22	55	33	22
R ²	0.175	0.163	0.186	0.083	0.121	0.062
Adjusted R ²	0.143	0.136	0.145	0.047	0.093	0.015

+p<0.1; *p<0.05; **p<0.01; ***p<0.001