

Competition and Communication

The development of campaigning in Britain
from the Second Reform Act to the First World War

by

Laura Bronner

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Declaration

I CERTIFY THAT the thesis I have presented for examination for the PhD degree of the London School of Economics and Political Science is solely my own work, with the exception of the data collection for Chapters 3 and 4, and Chapter 3 itself, both of which were a collaboration with Daniel Ziblatt. On the data collection, Daniel Ziblatt provided the funding for the digitization of the election addresses, while I managed and validated the process. On Chapter 3, I am solely responsible for the analysis and the writing, though Daniel Ziblatt did contribute to earlier iterations of this paper.

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I declare that my thesis consists of 37,551 words.

FOR MY LOVED ONES
THANK YOU FOR PUTTING UP WITH ME

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Abstract

This thesis traces the development of political competition in Britain by exploring the relationship between politicians and their constituents; in particular, it examines the decisions rank-and-file politicians made when choosing how to run election campaigns. Between the pre-Reform period and the First World War, three major developments changed campaigning. Firstly, campaigning shifted from clientelistic to programmatic. Secondly, competition became polarized along an economic left-right dimension. And thirdly, elections became a venue for holding incumbents accountable by means of retrospective voting. Together, these three changes transformed political competition in Britain.

Each of the three papers in this dissertation addresses one of these changes. The first paper shows how the Second Reform Act caused a shift in politicians' preferences away from clientelistic campaigning. It uses a difference-in-differences strategy to estimate the causal impact enfranchisement had on how MPs spoke in the House of Commons, finding that reform increased the extent to which MPs – particularly Liberals – discussed corruption. It argues that this increase raised the salience of corruption so much that previously abstaining or opposing Liberals came around and passed the Ballot Act in 1872.

The second and third papers get more directly at the relationship between politicians and constituents by introducing a new dataset of all 'election addresses' issued by all parliamentary candidates in the six elections between 1892 and 1910, which provide, for each candidate, a comparable text advertising their political positions and personal qualities. The second paper, joint work with Daniel Zi-

blatt, uses these manifestos to show how campaigning became concentrated on an economic left-right dimension, and increasingly polarized. It also addresses the long-running debate over whether the rise of Labour doomed the Liberal Party into third place, showing that while Labour did initially stake out a unique programmatic identity, by 1910 the Liberals moved to occupy the same ideological space, positioning themselves as the natural party of progressivism going into World War I.

Finally, the third paper shows the rise of retrospective accountability in campaigning. It uses a regression discontinuity design to show that the way candidates appealed to their constituents depended on their position: incumbent candidates' campaign addresses are more positive than those of challengers, indicating that politicians appeal to their constituents on the basis of their record in government. I show that this effect developed around the turn of the century, and is particularly strong in those constituencies in which the Third Reform Act of 1884 enfranchised more people.

Together, the papers capture these three distinct facets of the transformation of campaigning. By using quantitative text analysis to explore parliamentary speeches and campaign manifestos, I am able to examine how rank-and-file politicians spoke about – and to – their constituents, and how this changed. Focusing on rank-and-file politicians rather than party leaders, the thesis shows the importance of the decisions made by backbench politicians in changing how they related to their voters.

Contents

DECLARATION	2
ACKNOWLEDGMENTS	5
ABSTRACT	7
LIST OF FIGURES	14
LIST OF TABLES	15
1 INTRODUCTION	16
1.1 British political development	20
1.2 Capturing political preferences	24
1.3 Methods	29
1.3.1 Text analysis	29
1.3.2 Causal and descriptive inference	32
1.4 The papers	34
1.5 Data contribution	37
1.5.1 Election addresses	37
1.5.2 The six elections.	42
1.5.3 Our dataset	44
1.6 Structure	50
2 FRANCHISE EXTENSION AND THE BALLOT: THE EFFECTS OF THE SECOND REFORM ACT ON PARLIAMENTARY DEBATE	51

2.1	Background	53
2.1.1	The Second Reform Act	54
2.1.2	The Ballot bill	57
2.2	Data and Method	62
2.2.1	Data	62
2.2.2	Getting at corruption	64
2.2.3	Identification strategy	67
2.3	Results	72
2.3.1	Findings	72
2.3.2	Mechanism: changing party dynamics	73
2.3.3	Alternative explanations	79
2.4	Conclusion	87
3	THE RISE OF THE MODERN ELECTION CAMPAIGN: THE PEERS, THE PEOPLE, AND THE POLARIZATION OF THE BRITISH PARTY SYSTEM	90
3.1	The decline of the Liberals; the rise of Labour	95
3.2	Data	100
3.2.1	Campaign election addresses	100
3.2.2	Other datasources	101
3.3	Method	102
3.4	Results	104
3.4.1	Campaign dimensionality	104
3.4.2	Validating the dimensions	106
3.4.3	Polarization	114
3.4.4	Replacement	117
3.4.5	Robustness checks	121

3.5	Conclusion	124
4	CANDIDATES' USE OF EMOTIVE LANGUAGE IN CAMPAIGNING	127
4.1	Strategic campaigning	129
4.2	Data and Method	141
4.2.1	Data	141
4.2.2	Method	142
4.3	Results	150
4.3.1	The effect of winning on sentiment	150
4.3.2	Change over time	155
4.3.3	Government and opposition	157
4.3.4	Agricultural labourers	160
4.4	Conclusion	162
5	CONCLUSION	163
5.1	The contribution	164
5.1.1	Reading the papers together	168
5.2	Limitations and future work	173
	APPENDIX A	183
A.1	Appendix: Ballot in context	183
A.2	Appendix: Topics	183
A.3	Other samples	184
A.4	More topics	186
A.5	Placebo test	188
A.6	Opening up the corruption topic	189
A.7	Voting on the bill by enfranchisement	192

APPENDIX B	194
B.1 Validating the dimensions	194
B.1.1 Dimension 1: Imperial vs domestic	194
B.1.2 Dimension 2: Economic right-left	203
APPENDIX C	209
C.1 Coding examples	209
C.2 Robustness checks for the RD	215
C.3 Validating the sentiment score	219
C.4 Additional analyses	221
REFERENCES	224

List of figures

1.1	The democratization of the British Parliament	21
1.2	An election address	41
1.3	Party breakdown	44
1.4	Missing data	45
1.5	Speech length	47
1.6	Speech complexity	47
2.1	Voting on the ballot, 1867 and 1872	59
2.2	Examining the distribution of the change in electors	62
2.3	Distribution of the corruption topic proportion	68
2.4	Parallel trends in corruption proportion	71
2.5	Treatment effect by party	74
2.6	Treatment effect by borough size	80
2.7	Voting by borough size	81
2.8	Treatment effect by replacement status	82
2.9	Treatment effects for each topic	84
3.1	Election results, 1906 and 1924	92
3.2	PCA on doc2vec	105
3.3	Dimension 1 validation	109
3.4	Position change over time	110
3.5	Connecting speeches within constituency	114
3.6	Divergence between party groups	115
3.7	Overlap between party groups	116

3.8	Change over time, by dimension	118
3.9	Party classification accuracy	121
3.10	Wordfish, aggregated	122
3.11	Wordfish, disaggregated	123
3.12	Wordfish, overlap between party groups	124
4.1	Trump pre-election	130
4.2	Trump post-election	130
4.3	Coding sentence sentiment	145
4.4	Comparing the distribution of sentiment scores	148
4.5	Sentiment effect	151
4.6	Effect size with varying bandwidths	154
4.7	Sentiment effect over time	155
4.8	Sentiment over time, by governing status	157
4.9	Incumbency and governing status	159
4.10	Sentiment effect by agricultural labourers	161

List of tables

2.1	Predicting discussion about corruption	73
3.1	Validating doc2vec	103
3.2	Is there a replacement effect?	119
4.1	Most predictive positive and negative words	146
4.2	10-fold cross-validated confusion matrix	147
4.3	Number of constituencies	150
4.4	Regression discontinuity results	152
4.5	Number of candidates	158

1

Introduction

THE RELATIONSHIP BETWEEN POLITICIANS AND VOTERS is at the heart of how an election-based political system works. In particular, how politicians appeal to their voters – the strategies they employ in order to get elected – is a crucial part of the political process, and one which is prior to any actions they might take once in office. In a sense, the voters are the first, and in some cases the most important, hurdle politicians have to cross in order to enact policy.

However, this relationship is necessarily asymmetrical: politicians are primarily the ones who choose how they want to engage with their voters, while voters have far fewer options available to alter the relationship. In a generalized sense, politicians provide the supply of options in an election, while voters are limited to choosing among them. This dissertation examines decisions politicians make about how to engage with their voters at two different levels: firstly, the decisions elected politicians make when considering how elections ought to be run in general (Chapter 2), and secondly, and more specifically, the decisions individual candidates make when choosing how to design their own election campaigns (Chapters 3 and 4).

While different types of relationships between politicians and voters exist in

different countries (e.g. Kitschelt, 2000), the changing nature of this linkage in Britain has not received as much attention as it deserves. Instead, much of the debate in the UK has focused on when politics shifted from being candidate- to being party-centered (e.g. Cox, 1986, 1987; Dewan, Meriläinen and Tukiainen, 2018), such that, in the oft-quoted words of an anonymous Englishman in 1951, he would “vote for a pig if the party put one up” (Butler, 1952, p. 173).

However, the change from candidate- to party-centered was only one facet in the relationship between voters and politicians. And indeed, it does not explain how party competition became as it was in the interwar period: party-centered, yes, but also fully programmatic, polarized along an economic left-right dimension, and a vehicle for retrospective electoral accountability (e.g. Hanham, 1959; O’Leary, 1962; Pulzer, 1967; Butler and Stokes, 1971; Wald, 1983; Jarvis, 1996; Rix, 2008; van Heerde-Hudson, 2011). In other words, aside from becoming party-centered, how did campaigning modernize?

This is the puzzle at the heart of this dissertation. How did the relationship between politicians and voters change, and how and why did politicians change it? Going from the pre-Reform period to the First World War, this thesis argues that campaigning transformed in three key ways:

1. Campaigning shifted from partially clientelistic to almost entirely programmatic
2. Competition became polarized along an economic left-right (class) dimension
3. Elections became a venue for holding incumbents accountable by means of retrospective voting

Each of the chapters in this dissertation addresses one of these developments in the British political system. Chapter 2 shows how the Reform Act caused a shift in politicians' preferences towards non-clientelistic campaigning.¹ Chapter 3 shows how campaigning collapsed into one dimension, and increasingly polarized. And finally, Chapter 4 shows the rise of retrospective accountability in campaigning.

Thus far in the study of British political development, each of these changes has been treated somewhat separately, leading to separate literatures. The decline of clientelistic politics has received some attention, both by historians (e.g. Hanham, 1959; O'Leary, 1962; Kinzer, 1982; Rix, 2008) and, more recently, by political scientists largely treating the British case comparatively (Kuo, 2011; Camp, Dixit and Stokes, 2014). The changing ideological landscape of British politics has largely been considered as a distinct issue (e.g. Cornford, 1963; Pelling, 1967; Wald, 1983; Lawrence and Elliott, 1997; Dewan, Meriläinen and Tukiainen, 2018). And both have been studied separately from the development of accountability (e.g. Cox, 1987; Eggers and Spirling, 2014*a,c*, 2016*b*; Spirling, 2016).²

By linking all three of these changes, this thesis shows how comprehensively the relationship between politicians and voters changed during the course of this period. All three of these changes impacted how politicians related to their constituents, and how they approached the task of appealing to them. Political competition in Britain went from being clientelistic, multidimensional and not focused on holding incumbents accountable at the beginning of the period under

¹While the secret ballot arguably did not actually end clientelistic campaigning – other reforms, such as the Election Petitions Act of 1868 (Eggers and Spirling, 2014*b*; Rix, 2017) and the Corrupt Practices Act of 1883 (O'Leary, 1962; Rix, 2008) were probably more effective – it was *aimed* at doing so, making it worth studying as an instance of attempted corruption curtailment even if it was relatively unsuccessful (Capoccia and Ziblatt, 2010).

²The one notable exception is Cox (1987; 1992), whose work has touched on all three of these subjects.

study to, by the First World War, programmatic, unidimensional, polarized and increasingly focused on accountability. Bringing together these three literatures is what allows us to grasp the full extent of how much campaigning changed in this period.

Moreover, all three papers in this dissertation focus on the decisions made by rank-and-file politicians. While previous work has largely focused either on strategic decisions made by the party elites (e.g. Smith, 1966; Kinzer, 1982; McLean, 2001) or on the electorate's vote choices (e.g. Ostrogorski, 1902; Cornford, 1963; Wald, 1983; Cox, 1986; Blaxill and Saleh, 2016; Dewan, Meriläinen and Tukiainen, 2018), rank-and-file politicians have received comparatively little attention. However, the decisions they make are crucial in structuring their relationship with their constituents, and estimating and explaining their preferences – and how they change as a result of institutional reform – is a key aspect of understanding the transformation of campaigning.

This focus on rank-and-file politicians is possible because I turn to political speech in order to shed new light on these questions of institutional development, focusing on examining preferences as expressed in candidates' electoral speeches and, once elected, representatives' speeches in parliamentary debates. By using quantitative text analysis, we can get at politicians' preferences in a systematic, large-scale way. In contrast to roll call votes, which are highly coordinated and subject to party discipline, speeches in campaigns and in debates are freer and less disciplined, making them media for politicians to highlight their personal stances.

To be able to address the question of how campaigning changed directly, one of the major contributions of this dissertation is the dataset of 'election addresses'. Daniel Ziblatt and I have digitized the universe of addresses published by British House of Commons candidates between 1892 and 1914. These election addresses,

written statements or flyers, were released by all parliamentary candidates prior to general elections, and distributed to all registered voters in the district by the Royal Mail. All candidates up for election across British constituencies - incumbents and challengers, winners and losers - thus produced a comparable text advertising their political positions and personal qualities to their constituents. The ubiquity and importance of these election addresses, which can be considered personal candidate manifestos, make them an ideal source of information on this nexus between politicians and voters.

This introduction proceeds by giving some background about the British case in Section 1.1, and about the measurement of political preferences in Section 1.2. Section 1.3 outlines the methodological approaches in the dissertation, and Section 1.4 describes each of the chapters in some more detail. Finally, Section 1.5 introduces the data contribution of the dissertation, providing some background and descriptive statistics.

1.1 BRITISH POLITICAL DEVELOPMENT

It is widely accepted that political institutions, both formal and informal, shape how politicians – and voters – choose to behave (e.g. Linz, 1990; Shugart and Carey, 1992; Helmke and Levitsky, 2004; Persson and Tabellini, 2005; Catalinac, 2018). The historical British case is useful for understanding the impact of political institutions because of the various changes the institutions underwent over the course of the 19th and 20th centuries (Butler, 1963; Cox, 1987; Cunningham, 2001; Eggers and Spirling, 2014a; Spirling, 2014, p. 594).

Figure 1.1 shows the evolution of the formal rules governing the workings of democracy over the course of this whole period, highlighting the four Reform Acts

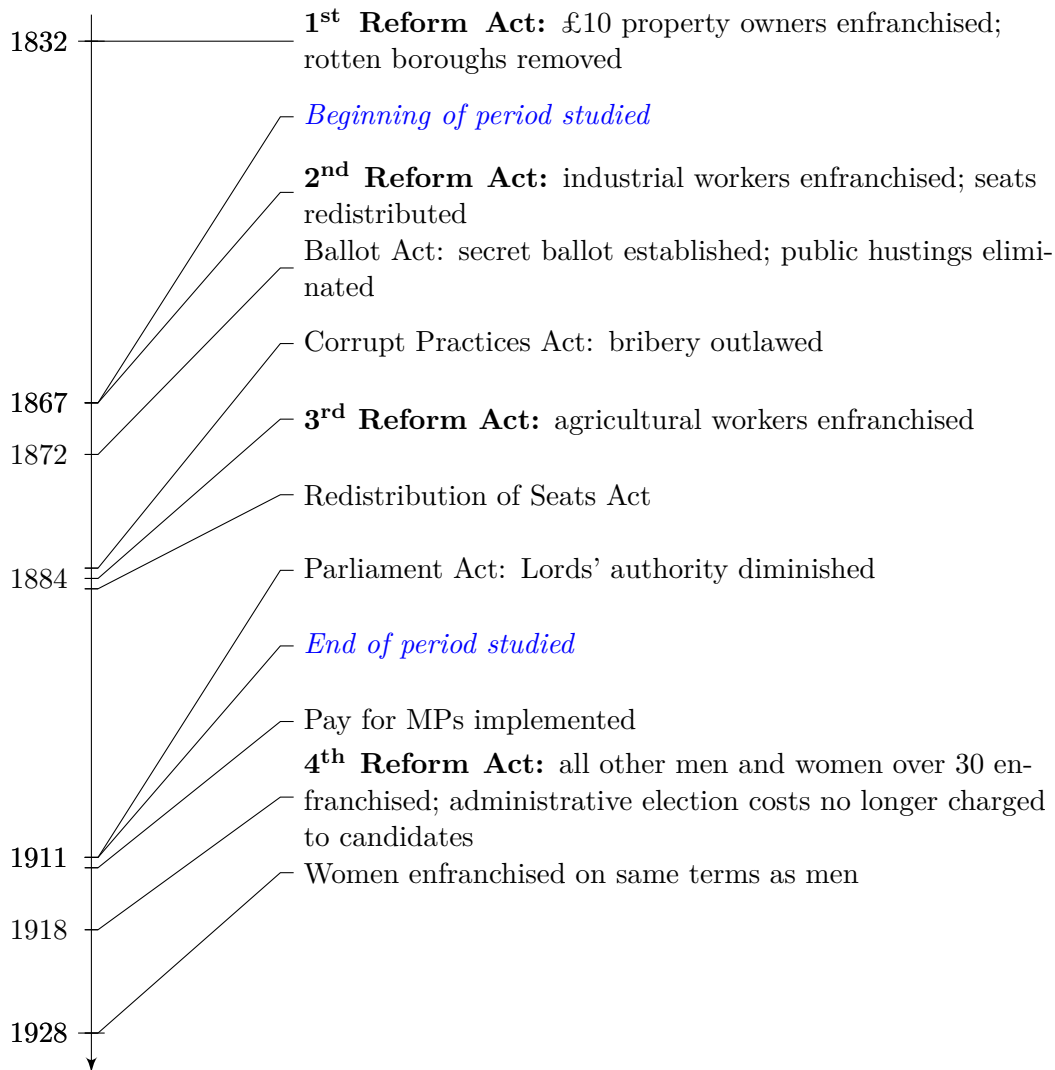


Figure 1.1: The democratization of the British Parliament

which successively expanded the franchise (1832, 1867, 1884 and 1918) but also including various other important legislative reforms. These formal rule changes are only part of the story; informal rules and norms, such as party cohesion and programmatic campaigning, are the other side of the coin (Helmke and Levitsky, 2004), and they, too, changed dramatically across this period (e.g. Cox, 1987;

Eggers and Spirling, 2016*a*; Dewan, Meriläinen and Tukiainen, 2018).

Despite these changes, the political system as a whole was remarkably stable leading up to World War I (Butler, 1963); electoral landslides remained rare and were largely driven by quirks in the electoral system rather than large shifts in voting patterns (McLean, 2001, p. 91), and indeed, the political class – the actors on the political stage – remained largely unchanged in terms of its social composition (Laski, 1928; Charle, 2008; Berlinski, Dewan and Van Coppenolle, 2014). This juxtaposition between a changing institutional context and a stable set of actors provides fertile ground for digging deeper into how actors respond when their structural incentives change. As Eggers and Spirling (2016*a*) write, “Precisely because the extent of change was of such magnitude, there is an obvious interest in documenting, at a micro level, how MPs adjusted their activity in terms of division voting, or speech-making, in response to new incentives.” Among other findings, my work provides evidence that politicians can, and do, adapt to new institutions, rather than simply being replaced by new, better-suited candidates.

British democratization, which proceeded by the successive passage of enfranchising and other democratic reforms, is often viewed as ideal-typical for elite-driven democratization, and contrasted with democratic transitions that result from pressure from below (e.g. Collier, 1999; Lizzeri and Persico, 2004; Iversen and Soskice, 2010). Indeed, the relative peace with which reforms were passed has led traditional historiography to cast Britain’s democratization as the forward march of progress (e.g. Seymour, 1915; Ensor, 1936; Trevelyan, 1937; Woodward, 1938), though this teleological view has long since been questioned substantially (e.g. Blewett, 1965; McCord, 1967; Clarke, 1972; Cunningham, 2001; Smith, 2008). This thesis builds on a view articulated most prominently in Capoccia and Ziblatt (2010) which argues that democratization in Europe often took the form of

sequential episodes of institutional change, each of which must be understood in their own right.

Britain is an excellent example of democracy emerging as a “collage” not a “canvas”; a collection of component parts, rather than a single entity (Bermeo, 2010). The development of democracy was a long and piecemeal process, and one which encompassed the sequential development of a multitude of institutions which together combine to form a democratic system - one with free, fair and competitive elections, an unrestricted franchise and an elected legislative chamber which dominates the legislative process (Cunningham, 2001). This required the development of both formal rules, such as franchise regulations and corruption restrictions (see Figure 1.1), and informal institutions, such as cohesive, competitive parties. Both of these sets of institutions were crucial to the development of accountability over the course the the 19th and early 20th centuries. Both contribute to whether politicians campaign for office on the strength of local importance and the promise of pork, or appeal to their constituents on a programmatic level, advocating specific partisan policies and being held accountable based on their implementation. In turn, this programmatic competition fundamentally changes the type and quality of voters’ representation in political institutions.

The three papers in this dissertation thus add to the literature on the ‘historical turn’ in studies of democratization (Capoccia and Ziblatt, 2010) by elaborating how three aspects of Britain’s democratization – specifically, the democratization of campaigning – came about through politicians reacting to a changing institutional environment. But the British case is not just relevant for understanding other European democracies; its institutions, sometimes referred to as the Westminster system, have also been influential in many other countries (Rhodes and Weller, 2005; Rhodes, Wanna and Weller, 2009). While generalizing from one

case is always questionable – this is discussed in greater depth in the Conclusion – commonalities in the organizational principles have made comparison across Westminster democracies a fruitful endeavor (Spirling, 2014).

1.2 CAPTURING POLITICAL PREFERENCES

ROLL CALL VOTES. Capturing the preferences of politicians has been a challenging enterprise in Britain. While the party leadership’s preferences are generally well-publicized in speeches and letters, it has been harder to identify the preferences of rank-and-file party members, or other backbenchers. In part, this is due to peculiarly British circumstances: the fact that MPs were unpaid until 1912, for instance, meant that many had primary professions and were not always present in Parliament, such that fewer records of their position-taking exist. However, another key aspect is the strong party cohesion in roll call voting that developed during the course of the 19th century (Cox, 1987; Kam, 2009; Eggers and Spirling, 2016*a*). This cohesion makes it very hard to identify the ideological position of MPs from their votes on legislative bills (McLean, 2001; Laver, 2006; Spirling and McLean, 2007; Bronner, 2014); the vast majority of roll calls were whipped, meaning that MPs were pressured into voting with their party leadership and, in fact, risked withdrawal of the whip – expulsion from the party – if they rebelled. Moreover, not all legislative debates end in roll calls; indeed, there is substantial evidence of selection bias in which issues advance to a roll call, as party leaders have incentives to prevent divisive issues from reaching the floor (Carrubba et al., 2006; Hug, 2010).

Despite the fact that we have centuries of data on British roll calls (Eggers and Spirling, 2014*a*), which would lend itself to the same kind of ideological scaling

that has been so fruitful in the studies of the US Congress (Poole and Rosenthal, 1997; Poole, 2005; Caughey and Schickler, 2016), politicians' preferences in the UK have been more elusive. One method that has shown some promise in estimating MPs' ideal points is the use of Early Day Motion co-sponsorship (Kellermann, 2012), which is somewhat freer from the issue of party discipline, but Early Day Motions also reflect a non-random set of topics debated in parliament, making them vulnerable to similar selection issues (John, 2017). Another method is surveying candidates and/or MPs about their self-identified position on a left-right scale (Norris and Lovenduski, 1995), but this is also subject to caveats, as well as obviously being impossible for historical periods. In sum, attempts to scale British MPs' ideal points using their voting behaviour have thus far been unsuccessful.

EXISTING MEASURES OF SPEECH. This thesis turns to the analysis of political speech as a solution to this problem.³ The previous years have seen important advances and a proliferation of different methods in quantitative text analysis, which have been used to great effect in political science (Grimmer and Stewart, 2013; Wilkerson and Casas, 2017). Political speech is useful because it reflects a much broader set of issues than do roll calls, and MPs are far less constrained in how they speak than in how they vote.⁴ Moreover, MPs' speeches are less important for the passage of bills than roll call votes and thus less closely monitored by party leaders (Schwarz, Traber and Benoit, 2017); when constrained to vote a certain way by their party, for instance, legislators can use speeches to provide

³This follows a rich tradition in British political science, which has based much of its analysis on the *qualitative* examination of politicians' speech, whether in Parliament, in public, or in private correspondence (e.g. Smith, 1966; Himmelfarb, 1966; Kinzer, 1982; McLean, 2001).

⁴While the government still exerts control over the parliamentary timetable (Cox, 1987; Döring, 2001), which they can use to prevent especially controversial issues from coming up on the floor at all, there is much less selection bias for debates than there is for roll calls.

the reasoning behind their vote (Slapin and Proksch, 2010). Speeches can also be a way to gain insight into how an issue was framed and discussed before roll call votes took place, which can provide additional information above and beyond that contained in votes (Schonhardt-Bailey, 2008).

Indeed, recent years have seen a proliferation of methods for scaling legislator ideal-points by their legislative speeches, all of which demonstrate that this is, in parliamentary systems, a useful way of obtaining preference measures in the absence of meaningful roll call votes (Laver and Benoit, 2002; Slapin and Proksch, 2010; Lauderdale and Herzog, 2016). The British case, however, has been particularly challenging, and off-the-shelf tools such as Wordfish, Wordshoal and Wordscores do not do a good job in recovering legislator ideal points (Goet, 2017).⁵

TEXT IN THIS DISSERTATION. Instead, this dissertation uses text in two ways. In Chapter 2, it uses parliamentary speeches and focuses on one topic of debate: corruption. Rather than trying to recover some latent underlying dimension of ideology from all parliamentary debates, I focus only on speeches about this single topic. I use keywords to find speeches about corruption, and a topic model to recover the ‘corruption’ topic in a more coherent way. I show how MPs from constituencies which saw large increases in enfranchisement talk more about corruption, however it is measured, in the post-reform Parliament.

In the third and fourth chapters, I introduce a new source of obtaining politi-

⁵One option is to use machine learning to classify speeches - or speakers - into parties (Peterson and Spirling, 2018), which allows for the scaling of individuals according to how well they fit into each party category (Goet, 2017). However, this measures partisanship rather than ideology, meaning that party rebels - even if they are extremist rebels - tend to be scaled as centrist as a result of rebelling, while party leaders tend to be scaled as extremist as they always vote with their party. The question of scaling British MPs’ parliamentary speeches, which I have also tried to do, is as yet unresolved.

cians' ideologies: their campaign manifestos. These manifestos, known as election addresses, exist for every candidate running for parliamentary office, and provide a useful summary of their positions on the important issues of the day (see Section 1.5 for more detail). Chapter 3 shows that these campaign manifestos provide a useful way of scaling candidates' positions in a two-dimensional ideological space; Conservatives and Liberals are clearly discernible, and the paper traces how the parties move over time. It does so using *doc2vec*, a deep learning technique which learns dense embeddings for words and documents. Using these manifestos and this method, Chapter 3 then provides descriptive information about how politicians' ideological positions evolve in the period between 1892 and World War I.

Chapter 4 also makes use of these manifestos. This time, the focus is not on identifying which positions candidates express, but rather *how* they express them – their sentiment, or how positive or negative they were. The paper tackles the question of whether incumbency affects campaign sentiment, and shows that incumbent party candidates are indeed more positive than challenging party candidates.

THE POLITICIAN-AS-INDIVIDUAL. As outlined above, this dissertation uses political speech to provide a more illuminating sense of politicians' preferences than roll call votes can provide. This allows us to understand British politicians in a new way – as candidates running for election, and as rank-and-file MPs once they are elected. Each politician faces unique incentives and constraints that differ from those of the party leadership. Beneath the uninformative uniformity of party-line voting, parties contain disagreements about which policies to adopt, which to emphasize, and how to sell them; examining political speech lets us get

at heterogeneity which does not make it to the voting lobby.

To zoom out a little, the tripartite distinction between the party-in-government, the party-as-organization, and the party-in-the-electorate was first proposed by Key (1964), and adapted for the British case by Cox (1987). This is a useful classification scheme, allowing scholars to distinguish between the party elite, the organizations involved in registering and mobilizing voters, and the party's voters, respectively. However, this distinction has sidelined British politicians who did not belong to their party's leadership; analyses of elections have been largely focused on the electorate (and, perhaps, the party organization) (e.g. Ostrogorski, 1902; Cornford, 1963; Wald, 1983; Cox, 1986; Blaxill and Saleh, 2016; Dewan, Meriläinen and Tukiainen, 2018), while analyses of parliament have necessarily privileged the party elite (e.g. Smith, 1966; Kinzer, 1982; McLean, 2001). While this does reflect the fact that the party leadership is very powerful relative to rank-and-file members, owing to its strong control over patronage and positions, as well as the parliamentary agenda (e.g. Sieberer, 2006), this has also been something of a methodological issue: as outlined above, owing to party discipline, it has been very hard to identify the extent to which rank-and-file members' preferences even differed from their leaders', unless they were outspoken rebels who left an extraparliamentary paper trail. This has made the analysis of rank-and-file politicians as actors in their own right very difficult. By analysing parliamentary debates, this dissertation contributes to the scholarship which examines the preferences of non-elite MPs (Cox, 1987; Eggers and Spirling, 2016*a*; Peterson and Spirling, 2018). This also builds on my own previous work, which examined the importance of rank-and-file MPs' personal assets in their roll call votes on the Second Reform Act (Bronner, 2014). Moreover, by digitising and analysing campaign manifestos, it goes even further, examining not just the preferences of

rank-and-file members, but even unsuccessful candidates, fleshing out our understanding of the preferences of those actors who vied for – and obtained – political office. It thus contributes to filling the gap between parliament and constituency that has remained in British political scholarship.

This dissertation focuses broadly on the shifting nature of the relationship between politicians and voters, dealing specifically with the decisions made by politicians about how to interact with voters. The voters themselves, having been the focus of much previous work (e.g. Ostrogorski, 1902; Cornford, 1963; Wald, 1983; Cox, 1986; Blaxill and Saleh, 2016; Dewan, Meriläinen and Tukiainen, 2018), primarily feature in this thesis as part of the incentive structure that affects politicians’ decision-making. In Chapters 2 and 4, for example, we consider how the number of newly enfranchised voters impacts politicians’ choices.

1.3 METHODS

This dissertation combines two relatively new, but increasingly widespread innovations in political science: quantitative text analysis and a causal inference framework.

1.3.1 TEXT ANALYSIS

Each of the chapters in this dissertation uses a different quantitative text analysis method, suited to the particular research questions posed in the respective chapter. Chapter 2 uses both a keyword-based approach and a topic model to detect speech about corruption, which is then used as the dependent variable in the analyses. Chapter 3 uses *doc2vec*, a new advance in computational linguistics, to estimate word and document embeddings for each candidate’s manifesto; this method,

which is not yet widely used in political science, allows us to obtain a high-dimensional representation of the texts which we then dimension-reduce to a two-dimensional ideological space. By adapting this powerful tool to political science, and using it to estimate political actors' ideal points, we hope to show that it holds promise for other contexts beyond the historical British one. This method is especially suited to the descriptive analysis in this chapter. Finally, Chapter 4 uses sentiment analysis to measure the emotional tone of each candidate's campaign manifesto.

Both Chapters 3 and 4 employ methods generally used on modern texts, and each comes up with a way to adapt the method to the period-specific vocabulary we encounter in the election addresses. Doc2vec, which is used in Chapter 3, requires a large training corpus, for which most contemporary applications have used corpora such as Google News or Wikipedia. Instead, we supplement our relatively small election address corpus with the entire corpus of parliamentary debate from the same period, allowing us to use contemporary text to learn the meanings of words. In Chapter 4, instead of using off-the-shelf dictionaries generated from movie reviews or other current texts, we hand-code 800 sentences as positive, negative or neutral, which then allows us to use an elastic net model to predict the sentiment of the corpus of election manifestos.

Each of the three chapters uses relatively sophisticated text-based methodologies in service of the substantive questions they ask, but in each case, care is taken to make sure the methods are not applied blindly. Indeed, each chapter also involved a great deal of reading of the texts used (Grimmer and Stewart, 2013). In Chapter 2, the use of both keywords and the topic model was checked by sampling the set of speeches which each method flagged as being about corruption, to ensure that they were picking up the right concept, and the argument advanced in

the chapter was corroborated by the reading of key parliamentary speeches in the ballot debates. In Chapter 3, the manifestos were scaled in a relatively hands-off way, but the interpretation of each of the two dimensions was only possible by diving into the texts themselves. Reading them was crucial for understanding what it meant for a candidate’s speech to fall at different points in the ideological space. And in Chapter 4, the coding of sentences necessitated not only reading 800 randomly selected sentences from the manifestos, but also understanding the context of these sentences in order to accurately classify their sentiment.

SOFTWARE PACKAGES

In order to apply these methods, this dissertation makes substantial use of software packages, mostly in R, designed to facilitate the manipulation and analysis of data, both numeric and textual. The three packages that formed the backbone of the data work done in this thesis are dplyr, for data manipulation (Wickham and Francois, 2016), ggplot2, for making graphs (Wickham, 2009) and quanteda, for dealing with textual data (Benoit, 2018). Each paper additionally uses packages specific to the methods it uses; thus, Chapter 2 uses STM to estimate structural topic models (Roberts, Stewart and Tingley, 2017), Chapter 3 uses the gensim library in Python to estimate doc2vec (Řehůřek and Sojka, 2010), and Chapter 4 uses glmnet to create the elastic net model (Friedman, Hastie and Tibshirani, 2010) and rdrobust, rddensity and rdlocrand to estimate the regression discontinuity (Calonico et al., 2018; Cattaneo, Jansson and Ma, 2017*a*; Cattaneo, Titiunik and Vazquez-Bare, 2017).

1.3.2 CAUSAL AND DESCRIPTIVE INFERENCE

This dissertation also borrows from a lot of recent work which takes a more rigorous approach to understanding causality (e.g. Imbens and Rubin, 2015). The ‘credibility revolution’ has spread to political science, where it has driven a trend towards using research design to identify causal effects more rigorously, usually in trying to isolate the effect of some plausibly exogenous variation in a quantity of interest (Angrist and Pischke, 2010). It has moved the discipline away from complicated estimation strategies and toward using thoughtful design to ensure that estimated parameters accord with the causal effect of interest (Leamer, 1983). This thesis – or at least, two of its chapters – fall squarely into what Samii calls ‘causal empiricism’: they use in-depth knowledge of a specific case to uncover sources of plausibly exogenous variation, the effects of which are then carefully, and hopefully realistically, examined (Samii, 2016).

While identifying true causal effects is very challenging without running a randomized controlled trial, there are ways to try to approximate the ability to draw causal inferences using observational data. Chapters 2 and 4 each employ a different method to identify causal effects; Chapter 2 uses a difference-in-differences design to isolate the causal effect of franchise extension on how much MPs speak about corruption, while Chapter 4 relies on a regression discontinuity design to estimate the causal effect of having won the last election on the sentiment of one’s campaign manifesto. In Chapter 2, rather than having treated and control units, the ‘treatment’ – enfranchisement – is considered as a dosage, with some constituencies receiving more of it than others, with the dosage locally varying exogenously due to the confusion surrounding the anticipated effects of the Reform Act. Both methods make key assumptions. Most importantly for Chapter 2 is the

parallel trends assumption, which implies that in the absence of the treatment (in this case, the increase in voters as a result of the Reform Act) MPs from treated and control constituencies would have spoken similarly). This is not directly testable, but I show evidence in its support. For Chapter 4, the key assumptions are more demonstrable – firstly, that the running variable – election results – is continuous around the threshold which brings about the treatment, winning, and secondly, that no other important variables change at the threshold.

In contrast, Chapter 3 is explicitly descriptive, depicting how candidates' election appeals change over time (and showing that the move to two-dimensional party competition is not due to candidate replacement). Despite the growth of causal empiricism, descriptive inference remains a vital component of political science. In fact, an increased emphasis on careful causal identification has, if anything, made it more important for social scientists to get an accurate sense of the quantities of interest before they embark on causal analysis (Grimmer, 2015). We need to understand the *what*, the *when*, and the *where* before we can begin to get at the *why* (Gerring, 2012). Having digitized the election address dataset, we first need to be able to understand what this resource tells us before we can hope to estimate causal effects on it. This is one reason Chapter 3, which deploys new techniques to understand the content of the manifestos, comes before Chapter 4. And particularly when it comes to measuring politicians' ideal points in ideological space, which has been largely unsuccessful in the UK, scaling campaign manifestos provides valuable insight into the development of ideology over time.

Chapter 2

Franchise extension and the Ballot: The effects of the Second Reform Act on parliamentary debate

The first paper in the dissertation, “Franchise extension and the Ballot”, studies the implications of the 1867 Second Reform Act, which almost doubled the enfranchised population, for how MPs talked about corruption and bribery. The Second Reform Act is one of the most studied bills in British history: it was passed by a Conservative government using Liberal votes, against the widespread protest of much of the Conservative party, and without calling divisions on many of the most important amendments (e.g. Himmelfarb, 1966; McLean, 2001; Bronner, 2014). However, despite the Act’s importance – it more than doubled the electorate in the boroughs (Lawrence, 2009) – previous research has found that it did not change voters’ party attachments (Cox, 1987), parties’ electoral outcomes (Berlinski and Dewan, 2011) or the social composition of parliament (Berlinski, Dewan and Van Coppenolle, 2014). At the same time, others have long held that the Reform Act was a key cause of the Ballot Act of 1872, which passed in the very next parliament and instituted the use of the secret ballot in elections (Hanham, 1959; Cox, 1987; Kam, 2014; Aidt and Jensen, 2017). This paper squares these seemingly contradictory findings: while the Reform Act may not have impacted elections, it shows that it *did* drive discussion of the Ballot Act, directly leading to its passage.

The paper does so by leveraging a difference-in-differences strategy to estimate the causal impact enfranchisement had on how MPs spoke, using the number

of newly enfranchised voters in each constituency as the treatment. It finds that reform increased the extent to which MPs discussed corruption, particularly Liberals. I show that contrary to previous claims that the change in Liberals' attitudes was due to anti-ballot MPs being replaced (Kam, 2014), the increase in discussion was actually stronger among MPs who were present in both the 1865-68 and the 1868-74 Parliaments. The paper argues that enfranchisement increased the urgency of electoral secrecy among MPs who had witnessed the conditions of the 1868 election, thereby increasing the salience of the issue such that MPs who had opposed or abstained on previous attempts came around to supporting it in 1872.

Chapter 3

The Rise of the Modern Election Campaign: The Peers, the People, and the Polarization of the British Party System (with Daniel Ziblatt)

The second paper, joint work with Daniel Ziblatt, is the first to use the dataset of election addresses discussed above. We use it to address a longstanding debate in British political development: the 'strange death of Liberal England'. The rapid decline of the Liberals from one of the two governing parties before World War I to the status of the third party in a two-party system has been one of the most studied mysteries of British politics. While one side has argued that the replacement of Liberalism by Labour was an inevitable result of the rise of class politics in the pre-World War I period, the other has claimed that it was an accident of history, and that it is just as conceivable for the Liberals to have remained the natural alternative to the Conservatives.

We use our election manifesto dataset to speak to this debate. We use *doc2vec*, a neural network technique, to learn the embeddings of words and documents in

high-dimensional space, then reduce this to two dimensions to show the positions of all candidates over time. We demonstrate that while Labour did initially stake out a unique programmatic identity, by 1910 the Liberals moved to occupy the same ideological space, positioning themselves as the natural party of progressivism going into World War I. We show that this Liberal move, which occurred when they called two elections over the ‘People’s Budget’ of 1909, decisively altered the party system, reducing party competition from two dimensions to one, an economic left-right dimension, and increasing polarization. In this way, the change in 1910 set the stage for party competition after the war. Finally, we provide evidence that this process was not driven by replacement, but rather that existing candidates changed their appeals over time.

Chapter 4

Candidates’ use of emotive language in campaigning

In Chapter 4, rather than examining the ideology of the candidates as expressed in their manifestos, we turn to the emotive content of the texts. Scholars of campaign sentiment have consistently found that incumbent candidates’ campaigns are more positive than those of challengers. However, comparing incumbents and challengers is difficult; incumbents may be better candidates, have more resources and run in safer seats than challengers, making any comparison unequal. This paper addresses these concerns by using a regression discontinuity design to estimate the causal effect of incumbency on campaign sentiment. We compare addresses issued by candidates whose party had just won in the previous election to those whose party had just lost, allowing us to isolate the effect of winning on manifesto sentiment.

The paper confirms the finding that winning the prior election makes candidates campaign more positively, and shows that this effect developed around the turn of the century. It argues that this demonstrates that elections were increasingly used as instruments of retrospective electoral accountability, as it indicates that the incumbent party campaigned on its record in office while the challenging party criticized that record. The paper further shows that the incumbency effect is particularly strong in areas which saw a large increase in enfranchisement in 1884, suggesting that retrospective accountability was an electoral tool candidates used in areas in which they could not build clientelistic or personalistic links with their voters.

1.5 DATA CONTRIBUTION

One of the major contributions of this thesis is the dataset of “election addresses” digitized together with Daniel Ziblatt, which is used in Chapters 3 and 4. As this is a core part of the thesis, this section explains their relevance and utility in some detail, providing background about the period they cover and descriptive statistics about the dataset itself.

1.5.1 ELECTION ADDRESSES

Election addresses are written statements which all parliamentary candidates issue before an election, and which are set out their proposed policies and personal qualities. Their importance is noted by contemporary political observers: in his 1908 book *The Working Constitution of the United Kingdom*, Lord Courtney writes that “Every candidate for the election issues an address to his own constituency containing, with more or less amplification, the grounds on which he makes his

appeal” (1908, p. 164). Three years later, George Fox describes them as “in essence the political creed of the aspiring candidate, and the pledge of his future action to the constituents with regard to the burning questions of the hour”; further, they are “a customary and direct method of explaining his political beliefs to the men whose votes he desires, [such that] they have a definite standard by which they can test his future political action” (Fox, 1911, p. 399, 416). They are issued by almost all candidates,⁶ and cover the candidates’ stances on the issues dominating the election, as well as outlining what makes them good candidates and, usually, declaring their approval of and loyalty to the party leader (Courtney, 1908, p. 164).

This dissemination of election campaign addresses to potential voters has been a customary practice since at least 1832 (Cox (1987, p. 57) though Fox notes that there exist election addresses dating back to 1780 (1911, p. 398)). The most well-known is likely the Tamworth Manifesto, issued by Sir Robert Peel to his own constituency of Tamworth in 1834, which was reprinted and read around the country as a mission statement for the party; most addresses, issued by rank-and-file party members, did not attract attention outside of their constituencies (Courtney, 1908). After the extension of the suffrage in 1867, when it became more arduous for candidates to canvass all voters personally, the addresses became more important.⁷ This became even truer after, as a result of the Ballot Act and amid worries about rowdiness and unrest at election meetings, public hustings (the big meeting at which the candidates had traditionally declared their candidacy) were abolished in 1872 (Lawrence, 2009, p. 45). They were crucial in informing voters about their choices; in 1908, Courtney wrote that “Up to a comparatively recent

⁶There are very few exceptions, mostly consisting of candidates so marginal that they barely stood a chance, or longstanding MPs in safe seats who did not bother issuing one.

⁷Though see Lawrence (2009, 2011) for the argument that public meetings remained important aspects of campaigning.

time, the questions at issue were rarely expressed in a definite manner except in these addresses.”

In 1918, the practice of election addresses was formalized by the Representation of the People Act, which also extended the franchise to all men and most women over 30, which including the line,

“Any candidate at a parliamentary election shall, subject to regulations of the Postmaster-General, be entitled to send, free of charge for postage, to each registered elector for the constituency, one postal communication containing matter relating to the election only, and not exceeding two ounces in weight.”

In addition to being mailed, the addresses were customarily reprinted in local newspapers, “and the largest publicity is given it” (Fox, 1911, p. 400), to ensure that it was widely seen. While it is impossible to know how widely read these manifestos really were, they would have been the primary way for interested voters to make up their mind in the absence of other media. Starting in 1892, all candidates’ addresses were collected by the National Liberal Club, which continued the collection until it moved to the University of Bristol in the 1970s.⁸

While the party leaders provided the general party line – “the main subjects of contention, with some indication of the order of their importance” (Courtney, 1908, p. 164) – the content of the manifesto was ultimately up to the candidate. It was not enough for candidates to declare themselves beholden to the party platform (Fox, 1911); indeed, party platforms in the modern sense did not exist, and it was only in this period that ‘party manifestos’ began to be issued (and the first

⁸More detail on the addresses can be found at <https://www.bris.ac.uk/library/resources/specialcollections/archives/election>.

party manifestos were, like the Tamworth manifesto, simply the leaders' manifestos distributed more widely). Voters, especially those who were not canvassed in person, thus relied on election manifestos to be informed about the respective positions of the candidates vying for the seat.

In 1950, Nicholas and Butler wrote that “[The election address] is pervasive in that, more nearly than any other device, it reaches every voter; at the same time it is a product of the constituency organisation, and as such it is one of the few reliable indices as to what is distinctive about the local campaigns” (Nicholas and Butler, 1950, p. 211). This was even truer in the period we examine, which predated radio or television campaigning.

Figure 1.2 shows an example of an election address; this one was issued by William Edward Thompson Sharpe, a Conservative candidate from Kensington North, in 1895. Thompson Sharpe's fortunes followed his party's – he ran unsuccessfully in 1892, an election which the Liberals won, before winning his races in the Conservative victories of 1895 and 1900. His address is notable for its colourful language – he describes the contest as being “between the party of destruction on the one hand – a heterogenous group of discordant factions, bent each on some work of destruction to gratify some racial or sectional jealousies – and the great Unionist Party on the other” – but is otherwise quite typical in its content. He espouses his support for the Conservative policies abroad, mentioning India, the far East, Egypt and South Africa, and at home, with particular reference to social reforms and the Poor Law. He also declares his views on Ireland, London, female suffrage and factory workers, and expresses his support for the party leaders, before ending by promising to support the constituency's interests if elected.

Figure 1.2: The election address of W. E. Thompson Sharpe,
Kensington North, 1895

TO THE ELECTORS OF THE Northern Division of Kensington.

GENTLEMEN.

The work of destruction in Church and State on which the late Government has been engaged for the last three years—happily without effect—has been brought to an abrupt conclusion, Lord Rosebery's administration has collapsed, and Lord Salisbury has been again called to direct the Councils of the Queen.

An immediate dissolution is necessary to enable the Nation to make choice between the two parties, between the party of destruction on the one hand—a heterogeneous group of discordant factions, bent each on some work of destruction to gratify some racial or sectional jealousies—and the great Unionist Party on the other, who seek on the lines of our ancient Constitution to aim at political progress.

Our party, under the leadership of Lord Salisbury and the Duke of Devonshire, of Mr. Arthur Balfour and Mr. Joseph Chamberlain, are prepared to deal firmly with the grave questions pressing for settlement abroad, on our Indian frontier, in the far East, in Egypt and South Africa, and to devote their energies at home, not to organic changes, but to the advancement and development of those social reforms to which Mr. Chamberlain has devoted so much patient study, and to the amendment of our Poor Law administration so ably advocated by Mr. Balfour. Such a combination of reforms, on the basis of helping those who help themselves, of promoting thrift through the medium of our Friendly Societies, and of the promotion, without injustice to anyone, of temperance, instead of trying to coerce the daily life of men and women, promises a rich harvest of social progress.

As an Irishman I would like to see local government extended to Ireland under such safeguards as its circumstances may require, and one uniform system of legislation, without any exceptional measures, adopted for the whole of the United Kingdom. As a Londoner I desire to see the historic 'City' retained in its grand pre-eminence and a network of local municipalities woven around it. The Parliamentary franchise might be I think safely extended to women who are ratepayers. The Registration of Electors should be made to follow as a matter of course upon residence for a prescribed term without the intervention of party managers. The Factories Bill will be I hope carried on the lines suggested by Mr. Matthews protecting the health of masses of workers in mills, without interfering with individual freedom in industries such as small laundries and bakeries.

It will be for you, as Electors of the Northern Division of this Royal Borough, to claim a share in such wise and beneficent legislation, and if honoured with your confidence I shall be proud to take a part in it, and to devote my best energies to the advancement, without distinction of creed or class or party, of the local and personal interests of North Kensington.

I have the honour to be, Gentlemen,
Your faithful Servant,

W. E. THOMPSON SHARPE.

1.5.2 THE SIX ELECTIONS.

The six elections in this dataset span 1892 to 1910, most of the pre-war period shaped by the electoral reforms of 1883-5 and the party system transformation of 1885-6 (Blewett, 1972). After the Liberals won the 1885 election, Gladstone, who had long been conscious of the problem of Ireland, had become convinced of the necessity of Home Rule (a devolved Irish parliament). He brought a corresponding bill to the floor of the House despite major opposition from within his own party (as well as, of course, from the Conservatives). When it failed, he dissolved Parliament and called a General Election in 1886 intending to show public support for the measure. This decision tore his party apart; while members of the Whig faction of the Liberal party had been trickling towards the Conservatives since 1880, this was the final straw for the remaining Whigs and some Radical supporters of Joseph Chamberlain – 93 members in total – who broke with the Liberals to create the Liberal Unionist party (Cunningham, 2001; Pugh, 2002). The Liberal Unionists, under Chamberlain’s leadership, formed an electoral pact with the Conservatives, leading to a Unionist victory in the 1886 election against a diminished Liberal party.

The six elections in our dataset immediately follow this upheaval, making the campaign manifestos a great source for studying this interesting time. The common narrative of this period has been that the relative Conservative dominance that followed was largely a result of Liberal weakness (Cornford, 1963; Blewett, 1972), and indeed the Liberals were ill-served electorally by leaving many seats uncontested (Cunningham, 2001; Blaxill and Saleh, 2016). Our period includes three elections during this so-called ‘Conservative ascendancy’ of 1885-1905, but the other three took place after Liberal electoral fortunes changed in 1906, all of

which they won.

While the 1892 and 1895 elections are largely considered ‘normal’ elections in which the parties campaigned on a number of issues, including both Ireland and social reform (Readman, 1999; Byrne and Shepley, 2015), the following four elections are sometimes considered single-issue elections. The 1900 ‘Khaki’ election, fought against the backdrop of what was thought to be the winding-down Boer War, saw increased nationalism and imperialism, as well as a Liberal party divided on how the war should be fought (Readman, 2001). In the 1906 election, Chamberlain’s turn towards protectionism caused a rift in the Unionist camp, and both the Liberals and Labour benefited from the Lib-Lab pact, in which the Liberals agreed not to contest certain working-class constituencies (Irwin, 1994; Bealey and Pelling, 1958)

Figure 1.3 shows some descriptive statistics about the candidates (left) and MPs elected (right) in these elections.⁹ As the left panel shows, the overall balance of candidates was around 50:50, though the Liberals did field fewer candidates in 1900 in particular. We can also see the rising number of Labour candidates¹⁰ and the shrinking number of Liberal Unionists.

The right panel shows election outcomes; the most striking thing is the Liberal landslide of 1906, though it also shows the Conservative victories in 1895 and 1900 and the Liberal ones in 1910.¹¹ In 1892, once the 81 Irish Nationalist MPs are included, neither side had a majority, and the Liberals formed a minor-

⁹Like the analyses in Chapters 3 and 4, the figure excludes Irish constituencies.

¹⁰This number dropped slightly in December 1910 relative to January, as Labour funds had been depleted by the recent election and a court ruling, the Osborne Judgement of 1909, preventing trade union dues from going to political causes (Pelling, 1979, p. 114).

¹¹It is worth noting that, as McLean (2001) shows, these changes in parliamentary representation were not based on anywhere near as large of a change in vote share, including the 1906 landslide.

ity government dependent on Irish support (Byrne and Shepley, 2015). Election results show that while Labour (and independent Socialist) candidates were relatively unsuccessful in the first three elections, they had a marked, and growing, parliamentary presence after the Lib-Lab pact of 1903.

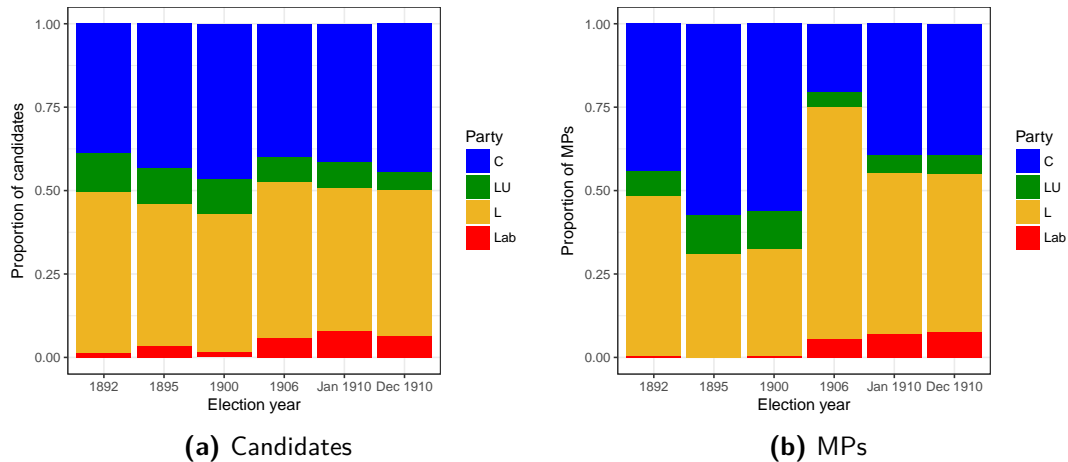


Figure 1.3: Party breakdown

1.5.3 OUR DATASET

MISSINGNESS. By digitizing these addresses, we have created what will soon be an accessible dataset of campaign texts produced by all candidates between 1892 and 1910.¹² To be precise, our dataset comprises 6,020 speeches given by candidates in the six elections between 1892 and 1910. We thus have speeches for the vast majority of the 6437 candidates that ran in these races.

¹²We have texts for all parts of then-Britain, though our coverage of Ireland, particularly of the Nationalist candidates (both Parnellites and anti-Parnellites) is patchy. In fact, many Irish constituencies, particularly the Catholic ones, were uncontested (McLean, 2001, p. 89). We thus exclude Ireland from this analysis (as do other scholars of the period, such as Pelling (1967)). We also exclude 5 manifestos written in Welsh.

Figure 1.4: Missing data

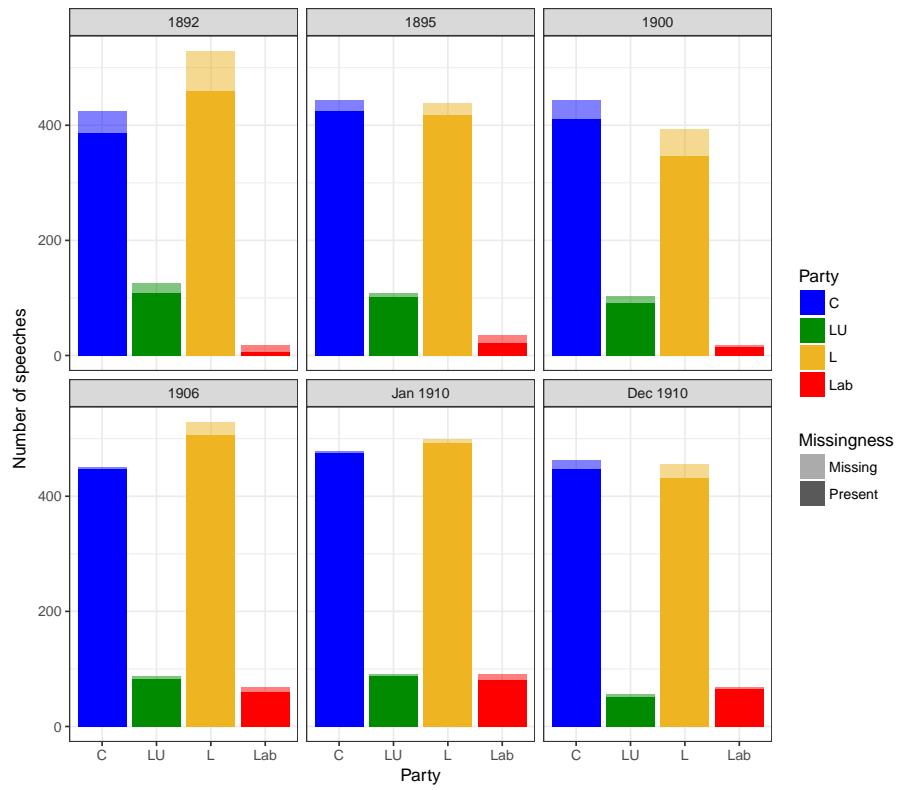


Figure 1.4 shows how missingness differs by party and election year. We can see that the most speeches are missing from the 1892 and 1900 elections, and that slightly more Liberal speeches are missing than Conservative ones (the rate for proto-Labour candidates in the first two years is also high). While this is not ideal, this is a common problem with historical data.

We did not digitize by-election manifestos, as they differ substantially from General Elections. The biggest category of by-elections were those that took place when an MP was given a Cabinet or other position (Hawkins, 2013); this was customary until 1919, and these contests were often a mere formality. Others were held after deaths or wrong-doing by an MP, such as a successful bribery charge. Yet others, particularly later in a Parliament's term, were treated as indicators of the political environment, a pre-polling form of gauging public opinion (Butler, 1973; Rix, 2013). They occurred very unevenly, compounding the challenge of analysing them systematically. For all of these reasons, election addresses issued at by-elections are hard to interpret substantively.

DESCRIPTIVES. Figures 1.5 and 1.6 show some descriptive statistics for our dataset. First, Figure 1.5 shows how manifesto length differed by party and year. Median speech length rose over time, going from 671 words in 1892 to 1012 in January 1910, before dropping slightly, to 794 words, in December.¹³ The figure shows that this increase was common to all parties, though Labour manifestos were consistently on the long side. The plot does not show outliers, in order to better visualize the main trends, but some candidates used up to 4000 words, with the longest manifesto reaching almost 8000 words in January 1910.

Figure 1.5: Speech length
 Number of candidates represented by box width

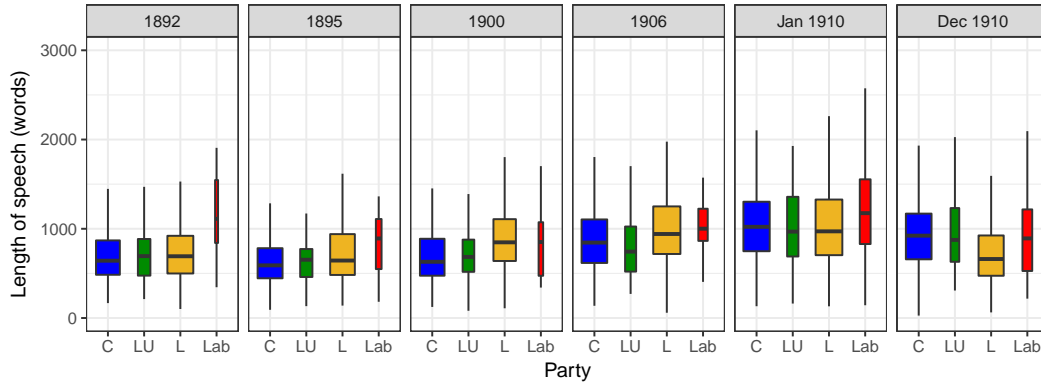


Figure 1.6: Speech reading difficulty (Flesch-Kincaid score)
 Number of candidates represented by box width

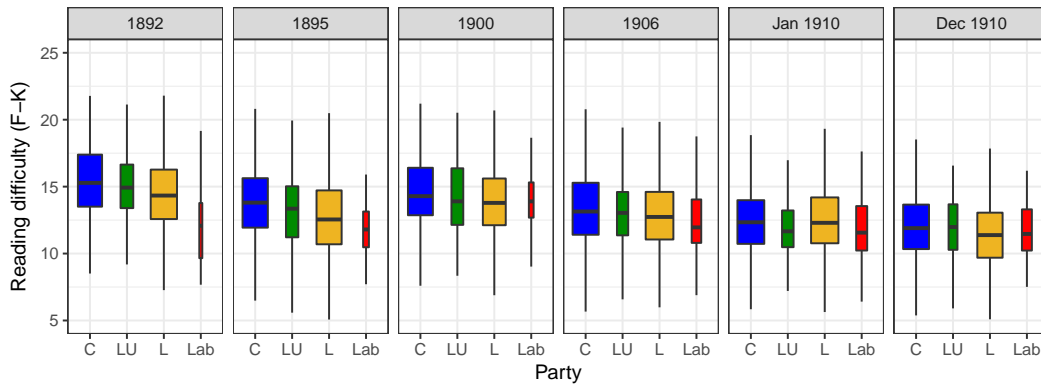


Figure 1.6 shows speech readability using Flesch-Kincaid scores, a rough measure which uses word and sentence length to compute how difficult the texts are to read (Kincaid et al., 1975).¹⁴ We can see that as manifestos became longer, they also became somewhat easier to read. Again, the four parties are reasonably similar to each other in each year; on the whole, the Liberals and especially Labour tend to have simpler manifestos than the Conservatives and Liberal Unionists.

These two developments – the growing length and readability of the manifestos – make sense in an increasingly competitive electoral environment. This also indicates that candidates did expect voters to read their addresses, as they both included more material while still making increasingly sure it was easy for their target audience to read. Altogether, this supports the notion that the manifestos were, in fact, used as outlined by contemporaries above.

UTILITY. In a narrow sense, these election manifestos are important primary sources for understanding elections and campaigning in the prewar period in Britain. However, it is worth noting that in a wider sense, these texts provide a rare opportunity to study campaigns using a comprehensive and comparable source across six elections. Most studies of contemporary campaigns must rely on some combination of party manifestos (Budge et al., 2001; Slapin and Proksch, 2008, e.g.), campaign ads (e.g. Geer, 2006; Brader, 2006; Franz and Ridout, 2007), media coverage (e.g. Haynes and Rhine, 1998), televised debates (e.g. Ridout and Franz, 2008) or, more recently, social media posts (e.g. Evans, Cordova and Sipole,

¹³Since the December 1910 election was held so soon after the previous one, and on almost the same issue, many candidates felt that they could be briefer in their screeds.

¹⁴While this is an imperfect measure in this context, it does give us a rough indication of how readable these texts are. When using other measures of speech complexity, such as lexical diversity computed as the ‘type-to-token-ratio’, the ratio between the number of unique words relative to the number of words used altogether, results look extremely similar.

2014; Auter and Fine, 2016) to understand campaigns.

However, all of these methods have drawbacks. First, as exemplified by the range of sources mentioned, modern campaigns are multipronged and take place across many channels. Not only does this mean that each channel represents only a small fraction of candidates' campaign materials, but candidates will calibrate their message differently across channels (Ridout and Franz, 2008; Walter and Vliegthart, 2010; Elmelund-Præstekar, 2010), aiming different messages at their own electorate as well as donors, the party, the media and the population at large. Moreover, candidates' access to some of these channels differs depending on whether they are an incumbent or a challenger, a major or minor party candidate or an independent, young or old, rich or poor, and a variety of other variables.

In contrast, the election addresses digitized here provide a datasource which is comprehensive, both in that it covers (almost) all candidates in all general elections between 1892 and 1910 and in that it is the only organized channel candidates had to advertise to their constituents,¹⁵ and comparable, in that all official candidates had equal access to the channel, and in fact made use of it in very similar ways. They provide much more information about each candidate than a party manifesto, and they are targeted directly at each candidate's constituents. Moreover, in contrast to parliamentary speeches, which are highly complex and often laden with procedural language, these campaign manifestos are comprehensible, as they are pitched at voters, many of whom were uneducated, and content-heavy, focusing on the issues at hand. The dataset thus helps us shed light on how politicians choose to campaign in the context of a developing

¹⁵Candidates and the local party organization did also distribute party materials, such as pamphlets and fliers (Lawrence, 2009; Rix, 2016), but they were less formalized and also much less standardized than election addresses.

political system; to my knowledge, the only comparable campaign resource is the set of Japanese campaign manifestos used by Catalinac (2015; 2016; 2018), which has provided invaluable insights about campaigning in a mature democracy.

1.6 STRUCTURE

The addresses provide a crucial source for exploring just how campaigning changed in the period before World War I. While Chapter 2 shows how legislators' preferences changed as a result of the Second Reform Act – as a key group of Liberals became vocally pro-ballot in an effort to eradicate the corrupt practices that they saw in the 1868 – the election addresses provide direct information about how candidates went about campaigning twenty years later, after anti-corruption legislation, including the Ballot Act, the Election Petitions Act and the Corrupt Practices Act, had gone into effect. They show how campaigning, now largely programmatic, became unidimensional and polarized along the economic left-right dimension, and how candidates increasingly used their manifestos to encourage voters to decide based on the incumbents' performance. Together, the papers demonstrate how campaigning in Britain transformed in this period, leading to recognizably modern competition once elections resumed after the war.

The dissertation proceeds with three self-contained papers: Chapter 2 demonstrates the effect of the 2nd Reform Act on parliamentary discussion of corruption; Chapter 3 uses campaign manifestos to show how the parties moved across a two-dimensional ideological space between 1892 and 1910; and Chapter 4 uses those same manifestos to show that incumbent candidates are more positive than challengers. Finally, the conclusion ties the papers together, and discusses some of their implications and limitations.

2

Franchise extension and the Ballot: The effects of the Second Reform Act on parliamentary debate

Abstract

While many have linked the passage of the Ballot Act in 1872 to the Second Reform Act five years earlier, scholars have disagreed about the nature of the relationship between the two legislative achievements. The puzzle hinges on why Liberals, who had long been divided on the secret ballot, came together in support in 1872. This paper shows that the Second Reform Act was crucial because it increased the urgency of the ballot issue for MPs from constituencies which were particularly affected by the Reform. Using a difference-in-differences design, we show that MPs representing constituencies which saw large increases in enfranchisement greatly increased the extent to which they talked about corruption. This, in turn, raised the salience of the issue to the point that previously opposed or apathetic Liberals switched their votes.

ACCORDING TO THE THEORETICAL LITERATURE on democratization and redistribution, extending the franchise to new groups of voters ought to change political outcomes (e.g. Meltzer and Richard, 1981; Boix, 2003; Acemoglu and Robinson, 2005; Lizzeri and Persico, 2004). Empirically, some studies have shown that franchise expansions have impacted certain parties' electoral performance (e.g. Larcinese, 2011; Morgan-Collins, 2013; Morgan-Collins and Teele, 2016); there is no evidence of this in the case of the Second Reform Act, one of the largest franchise expansions in British history (Berlinski and Dewan, 2011), though it may have affected politicians' legislative behaviour, such as the number of bills they introduce (Cox and Ingram, 1992) and their style of speech (Spirling, 2016).

This paper builds on this work on parliamentary behavior and provides causal evidence that the enfranchisement of the Second Reform Act in 1867 caused the passage of the Ballot Act. It did this by increasing the salience of the issue for the Liberals in high-enfranchisement boroughs as measured by their speech in Parliament. Several previous accounts have tied the Second Reform Act to the Ballot Act's passage (e.g. O'Leary, 1962; Kinzer, 1982; Cox, 1987; Kam, 2014), but they disagree on how the two are connected. The key puzzle surrounds two parliamentary votes on the ballot, only five years apart; the Liberals went from being divided on the ballot as late as 1867, when a motion to add it to the Reform Bill failed, to full-scale support in 1872.

Why did they decide to back this bill, which the Annual Register (1873) called "a great constitutional change [...] completed, after a controversy of forty years, in spite of the all but unanimous hostility of the House of Lords, the secret disapproval of the House of Commons, and the indifference of the general community"? This paper shows that the Liberals who took up this cause were those who had seen large increases in enfranchisement in their own constituencies. In short, fran-

chise extension caused Liberals to care more about the issue of corruption.

Many have argued that the Reform Act mattered, but the limits of roll call analysis have made it hard to distinguish between several competing explanations regarding how the Reform Act changed Liberal votes. This paper contributes to this debate by delving into a previously underexamined datasource: MPs' House of Commons speeches. Using quantitative text analysis and a difference-in-differences design, we show that the Second Reform Act had a noteworthy effect on parliamentary speech-making, causing a large increase in discussion of corruption – specifically, vote-buying and how to curtail it – in the House of Commons. This increase, which happened primarily among MPs from constituencies which saw particularly large increases in enfranchisement, in turn caused Liberals across the board to vote in favour of secrecy. We thus show that these parliamentary speeches were the key intervening variable linking the Reform Act to the passage of the Ballot Act five years later.

The paper proceeds as follows. Section 2.1 introduces both the Second Reform Act and the subsequent Ballot Act, and outlines the argument made in the paper. Section 2.2 discusses the data and methods used, including, in 2.2.3, elaborating on the identification strategy. Section 2.3 presents the results, as well as considering alternative explanations. Finally, Section 2.4 concludes.

2.1 BACKGROUND

Large-scale enfranchisements are rarely exogenous to political development within countries, and so despite their theoretical importance (Meltzer and Richard, 1981; Boix, 2003; Acemoglu and Robinson, 2005; Lizzeri and Persico, 2004), determining their tangible effects on behavior and institutions has been difficult. While

scholars have found in some contexts that franchise extensions affects electoral outcomes (e.g. Larcinese, 2011; Morgan-Collins, 2013; Morgan-Collins and Teele, 2016), this is not uncontested, and the Second Reform Act in particular does not seem to have had this effect (Berlinski and Dewan, 2011). This paper goes beyond electoral outcomes, focusing on the effects of the Second Reform Act in creating the conditions for the passage of the Ballot Act in the following parliament. The identification strategy used, a difference-in-differences design, allows us to make causal claims about the reform’s effect on parliamentary debate, highlighting a previously overlooked mechanism by which the Liberal party embraced the secret ballot.

2.1.1 THE SECOND REFORM ACT

The Second Reform Act of 1867, called the “act that transformed England into a democracy” (Himmelfarb, 1966, p. 107), was vastly consequential to the Victorian electoral landscape. While it lowered the property threshold required for eligibility across the country, nearly doubling the enfranchised population overall,¹ its greatest effect was in the boroughs. Here, the electorate more than doubled as the franchise was given to all householders, including home-owners, renters, and even lodgers paying at least £10 a year (Berlinski and Dewan, 2011; Lawrence, 2009). Overall, the electorate in England and Wales increased from 1.3 to over 2 million (Smith, 2008). The magnitude of the effect of the 1867 expansion on the increase in electors is illustrated in Figure 2.2a in the next section; in short, the median constituency expanded by 138% in 1868, compared to 2% in 1865 and 12% in 1874

¹The original act dealt only with England and Wales, but the following year saw similar Acts passed for both Scotland and Ireland, which was part of the United Kingdom at the time. While these had slightly different regulations, particularly the Irish act (Hoppen, 1985), they all greatly lowered the property thresholds required to be able to vote.

(both of which constituted natural population shifts under unchanging franchise rules).

Despite its enormous enfranchising impact, contemporary politicians did not have a clear idea of how exactly they expected the Second Reform Act to affect the number of enfranchised electors; famously, Viscount Cranborne (later Prime Minister, Lord Salisbury), characterized it as Disraeli's 'leap in the dark' (Smith, 1966; Himmelfarb, 1966; McCord, 1967; Clarke, 1972; Pugh, 2002; Smith, 2008; Moser and Reeves, 2014, p. 32). Indeed, Disraeli's acceptance, often late at night and without calling a division (roll call), of a variety of (partially contradictory) amendments to the bill (McLean, 2001, p. 67-70) is so at odds with the notion of a carefully considered strategic expansion of the franchise that some have suggested that his primary aim in passing the bill was to insult Gladstone, who had been unable to pass electoral reform the previous year (Adelman, 1970, p. 11). This is exemplified by the Hodgkinson amendment, which, by prohibiting the hitherto common practice of compounding rates (previously a barrier to the franchise),² effectively enfranchised 400,000 voters in the boroughs overnight – more than half the total number of voters enfranchised by the entire Act. The amendment, which did not itself refer to voting at all, was accepted by Disraeli without a division and after Gladstone had left the House of Commons for dinner, and was so ill-considered that it made a mess of the existing system of local government finance and required subsequent legislation to sort out (McLean, 2001, p. 68).

Moreover, even with the benefit of hindsight, the Second Reform Act's consequences have been subject to debate. It was long held to have brought about the Conservatives' defeat at the 1868 election (summarized in Acemoglu and Robin-

²Compounding was the practice of paying rent to a landlord, who then paid the Council, rather than paying the Council directly.

son, 2000). However, closer examination shows this not to have been true (Berlinski and Dewan, 2011). Once the effects of franchise extension are traced on a constituency level, there is no evidence that the Liberals did better in areas with more new voters; though the Liberals did triumph at the 1868 election, the Second Reform Act was not the reason why. Studies have also found similarly lackluster effects on other important political outcomes. Berlinski, Dewan and Van Coppenolle (2014) find that the Reform Act did not change the social composition of MPs, and Cox (1987) shows that it did not make parliamentary divisions more numerous or complex.

However, some aspects of MPs' behaviour *were* affected by the Reform Act, particularly how they spoke in House of Commons debates. The Reform Act appears to have led to an increase in backbench activity, particularly how much backbenchers spoke (Cox, 1987, p. 53) and the number of bills they introduced (Cox and Ingram, 1992), and recent work has shown that the Reform Act led to a reduction in the complexity of parliamentary speech among Cabinet members (Spirling, 2016). This is consistent with evidence from Norway and Japan showing that electoral system change impacted how legislators spoke, as it restructured their incentives (Høyland and Søyland, 2015; Catalinac, 2015, 2018). Collectively, these findings have shown that electoral reform can affect parliamentary speech, highlighting an outcome that had been hard to parse systematically before the advent of quantitative text analysis. However, thus far, these findings have treated speech as important largely as a way of signalling to voters. MPs' increased activity was a signal to their voters that they were engaged on their behalf (Cox and Ingram, 1992), while Cabinet members' simpler speeches were intended to appeal to the new, less educated median voter (Spirling, 2016). Neither approach has tied changes in speaking behavior to policy changes.

2.1.2 THE BALLOT BILL

On the other hand, historians have long held that the Second Reform Act did have at least one major policy consequence: the passage of the Ballot Act in the very next parliament. While vote-buying³ was rampant during much of the 19th century (Hanham, 1959), it had been practically eradicated by 1906. This has been variously attributed to the passage of important pieces of legislation, particularly the Election Petitions Act in 1868, which delegated responsibility for election petitions to the courts (Eggers and Spirling, 2014*b*; Rix, 2017), the Ballot Act in 1872 (Kam, 2017), and the Corrupt Practices Act in 1883 (O’Leary, 1962; Rix, 2008). Others have drawn attention to decisions that simply eliminated especially corrupt boroughs, passed as part of the Second Reform Act (Kam, 2014), and separately in the form of the free-standing Redistribution of Seats Act of 1885 (Hanham, 1959, p. 281) and various ad hoc disenfranchisements decided over the years in response to particularly corrupt elections (Gwyn, 1962, p. 82). However, while these reforms mattered in curtailing bribery, it is unclear why MPs, who had often come to power using these same nefarious tactics, decided to pass them at all.

The passage of the Ballot Act in 1872 is a particular puzzle. The secret ballot had been on the agenda regularly since the 1830s; after 1848, the Radical Henry Berkeley brought ballot motions every year, most of which were barely discussed before being voted down (Seymour, 1915; Hawkins, 2015, p. 280). Indeed, as Kam (2014) has shown, (a) there was absolutely no evidence of gradual growth in

³The main corrupt practice that marred elections during this period, particularly before the passage of the Ballot Act, was vote-buying, which entailed the promise of money or patronage in return for the casting of votes for a certain candidate (Kam, 2017). This paper will use the words corruption, bribery, and vote-buying somewhat interchangeably to refer to this practice, as was common among contemporaries.

support for the ballot before 1868, and (b) this structural minority was a result of the Conservatives being united in opposition while the Liberals were divided on the issue. Nor was the ballot a particularly important issue in the 1868 election (Kinzer, 1982, p. 93). However, by the first post-reform Parliament (1868-74), the ballot had become a Liberal partisan issue (Hawkins, 2015).

Figure 2.1 compares MP voting behavior on two ballot divisions - an amendment to the Second Reform Act brought by Berkeley on July 12th 1867, the last time MPs voted on the ballot before the franchise extension,⁴ and the third reading of the ballot bill on May 30th 1872, the final vote on the bill before it was sent to the House of Lords (Kinzer, 1982). While the 1867 attempt to institute the secret ballot failed, 112 to 158 votes, the 1872 bill passed, 274 to 216.⁵ As the graphs show, even in 1867, the vote was largely held on party lines, with only one Conservative in support and only 27 Liberals in outright opposition - though among these 27 were important figures such as William Gladstone, the party leader, and several other members who went on to serve in Gladstone's Cabinet after 1874, such as Robert Lowe and the Marquess of Hartington.

By 1872, this opposition had been stamped out, and Liberals fell in line with the whip. However, the figure also shows a second important change - the declining rate of abstentions, which fell from almost 50% in 1867 to around 15% in 1872. Indeed, since the Liberals were in the majority in both Parliaments, they could have passed the ballot in 1867 had they ensured a higher turnout among their

⁴The Reform Act was passed by a Conservative minority government, and Berkeley - who proposed the ballot amendment - was a Liberal, raising the question of whether the amendment ever had a chance of passing in the first place. However, many of the amendments to the Reform Act were brought - and passed - by Liberals, as they had a majority in the House of Commons and could, when voting together, defeat the Conservative minority (Bronner, 2014). The fact that the amendment didn't pass is due to Liberal disunity - not due to their opposition status.

⁵The differing vote totals are related to the huge number of abstentions in 1867.

members. There were thus two differences between the two votes - for one, the few Liberals that had opposed the ballot no longer did, but more crucially, the bill had become sufficiently important that the Liberals used their parliamentary majority to ensure its passage.

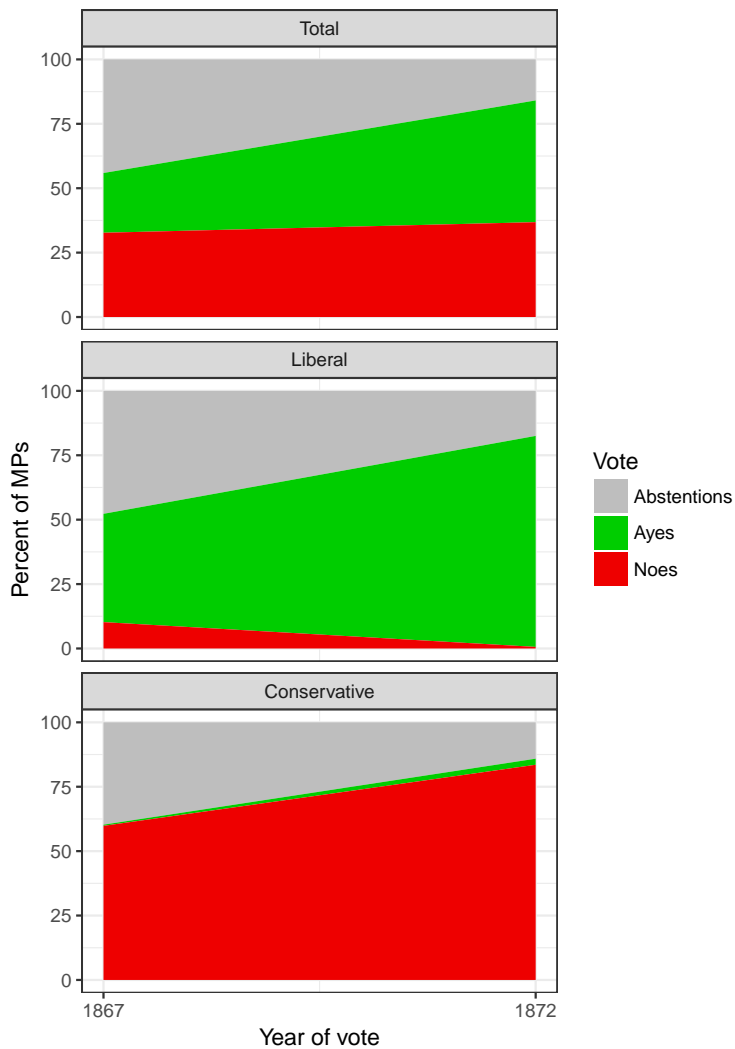


Figure 2.1: Voting on the ballot, 1867 and 1872

Why did the ballot go from an issue that divided the Liberal party to one that

united it in support? This paper is not the first to suggest that the Reform Act might have played a role; the fact that the ballot was instated by the first reformed Parliament has not escaped scholarly attention (Seymour, 1915; Hanham, 1959; Cox, 1987; Aidt and Jensen, 2017; Kam, 2014). While Aidt and Jensen (2017) do not appear to find a causal relationship between franchise extensions and electoral secrecy in a larger cross-national study, scholars of the British case have argued that there is, in fact, a link - though they disagree about the mechanism behind it. Seymour (1915) and O'Leary (1962) argue that the 1868 election, the first to be fought in an expanded electorate, was so rowdy and had so many instances of intimidation and vote-buying (Ostrogorski, 1902) that Radical MPs became convinced that passing ballot reform was of the greatest urgency and shepherded the bill through the House.

In contrast, Kinzer (1982) focuses on William Gladstone's personal conversion to supporting secret voting as key to its passage, either out of genuine ideological persuasion or due to the necessity of retaining the Radical John Bright in his Cabinet, and argues that this was due to the franchise expansion. In Cox (1987)'s telling, the extension of the franchise mattered because it meant that there were more votes for an MP to buy; while MPs may have accepted the cost of purchasing pre-reform votes, the added cost of new voters was too much to bear. Finally, Kam (2014) argues that it was not the franchise extension of the Second Reform Act that was important, but rather the fact that it led to the widespread retirement of anti-ballot MPs in the 1868 election, in large part because the bill reduced the representation of less populous constituencies.

One factor explaining this lack of agreement is the fact that roll call analysis is very difficult in Westminster systems due to the dual challenges of strong party discipline, which leaves little intra-party variation to explain, and strategic voting,

which further confounds estimates of latent ideal points (Spirling and McLean, 2007; Bronner, 2014). Roll call votes also suffer from grave selection issues as party leaders don't tend to call divisions if they anticipate embarrassment (Carubba et al., 2006). This paper turns to parliamentary speech as a solution. As parliamentary debates contain more content and nuance than the stark choice between acquiescence and dissent that characterize roll call votes, legislators are freer to express their views in speeches than in voting records. While historians' accounts have relied heavily on House of Commons debates, they necessarily use them anecdotally, explaining how the same debates can be used in support of various different viewpoints (e.g. O'Leary, 1962; Kinzer, 1982; Hawkins, 2015).

Quantitative text analysis provides a way to examine House of Commons debates systematically, allowing us to examine how franchise expansion affected how MPs talked about corruption. Moreover, it allows us to get around the problem of ceiling effects in the voting behaviour; given that some Liberals were already pro-ballot beforehand, roll call votes cannot reveal any potential increase in the intensity of their attitude, as only opponents can be observed to change their mind; debates, on the other hand, are not subject to this constraint. Compared to the pre-reform period, discussion of vote-buying increased significantly in those constituencies in which the most new voters were enfranchised. This increase in debate raised the salience of the issue such that despite the indifference or even opposition of large sections of the Liberal party (Annual Register, 1873; O'Leary, 1962; Kinzer, 1982; Hawkins, 2015) it became a party matter, and many Liberals switched from opposing or abstaining on the ballot to supporting it in 1872. Taken together, this is consistent with O'Leary's (1962) argument that the Reform Act mattered in making the ballot issue more urgent for Radical MPs, who took the lead in pushing the bill through the House.

2.2 DATA AND METHOD

2.2.1 DATA

This paper uses data compiled by Eggers and Spirling (2014a), most notably the total number of registered electors in each election between 1847 and 1874. Our key variable of interest is the *percentage change in electors* in constituencies between 1865, the last pre-reform election, and 1868, the first post-reform election. The distribution of this independent variable is shown in green in Figure 2.2a.

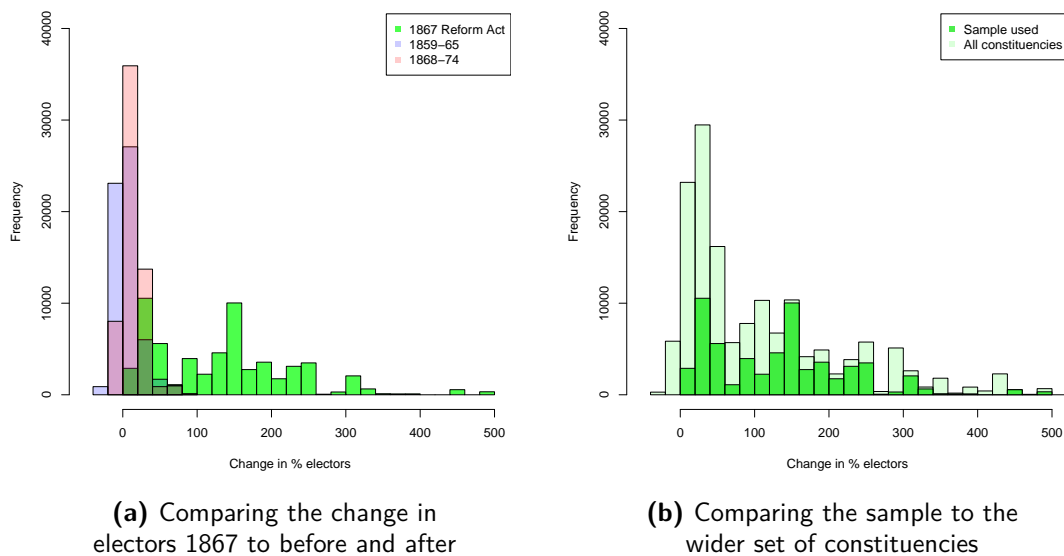


Figure 2.2: Examining the distribution of the change in electors

Figure 2.2a shows how important the 1867 reform was by comparing its effects on the change in electors to the changes between other elections. These were *natural* changes in electors that occurred as a result of population shifts between non-reform elections (between 1859 and 1865, and between 1868 and 1874, re-

spectively).⁶ As the Figure shows, the expansion of 1867 had an enormous effect compared to ‘natural’ changes; while normal fluctuations are generally small and approximately normally distributed tightly around 0 (that is, some constituencies grew slightly, while others shrunk), 1867 saw a massive expansion, in which some constituencies grew by up to 500%. (To be clear, the metric here is *percentage change* of post-reform total compared to the pre-reform total, rather than expressing the post-reform total as a percentage of the pre-reform total. That is, a constituency that did not change at all registered 0% change, not 100%; a constituency that doubled in size registered a 100% change, not 200%.)

The 1867 Reform Act also included a substantial redistribution of seats. For the most part, this involved changing the number of MPs that represented a constituency, but in some cases constituency boundaries were also affected. In order to compare like with like, this study restricts the sample to constituencies which did not undergo such a boundary change. As the reform was primarily targeted at boroughs, we look just at those.⁷ Figure 2.2b compares the constituencies used in the main models in this paper to the full set of constituencies, showing that the constituencies used in the model are largely representative of the full set on this dimension.⁸

Our dependent variable is the entire corpus of parliamentary debates between 1847 and 1874, which compares ample time pre-reform (5 different parliaments, 1847-68) with the post-reform session (1868-74).

⁶This figure shows the difference for boroughs that did not undergo a boundary change - the sample mainly used in this paper - but the equivalent figure using the full set of constituencies looks almost exactly the same.

⁷Boroughs were also much less likely to be the subject of boundary changes than counties, meaning that the set of boroughs is less skewed by excluding constituencies in which boundaries changed than the set of counties would be.

⁸However, the results do not depend on this restricted sample. See Appendix A.3 for models with different samples.

2.2.2 GETTING AT CORRUPTION

KEYWORDS In order to identify speeches dealing with corruption among the enormous corpus of parliamentary debate between 1847 and 1874, we use two different approaches. The first approach uses keywords to distinguish corruption speeches. In the first instance, we simply identify sentences that use the word “ballot”, and compute the proportion of sentences within each House of Commons speech which uses this word.⁹ This is a rather simplistic measure that clearly has a high rate of false negatives (i.e. speeches which *are* about corruption but are not being picked up because they don’t use the word “ballot”), but has the advantage that there are very few false positives (speeches that are *not* about corruption but get picked up anyway), as the word ballot is only ever used in the context we are interested in. This flags 1,584 speeches (out of a total of 230,443 made across the entire 27-year period) which contain explicit discussion of the ballot. (Appendix A.1 provides a random sample of 60 mentions of “ballot’ in context, showing that it is only used in the context of instating the secret ballot.)

In the second instance, we broaden our set of keywords to include not just “ballot”, but also “brib*”, “corrupt*” and “elections”. This likely picks up a few false negatives (such as discussions of elections which weren’t about corruption) but reduces the false positives, giving us a complementary measure to the first. Again, we compute the proportion of sentences within a parliamentary speech that contain any of these words. These two metrics are useful in letting us get at speeches that discuss corruption relatively narrowly, and provide a good first

⁹Speeches in the House of Commons are often rather long and can deal with multiple topics. Measuring the “ballot proportion” as a proportion of the total speech is thus a reasonable way of ensuring that we are only modelling the parts of the speech that are actually about corruption. However, the results are unchanged if we classify a speech in which any sentence contains the keyword as being entirely about corruption.

approximation of our quantity of interest.

However, we may well think that there are sentences that are about corruption, but don't contain the keywords above. After an election, the loser could bring a petition alleging corruption on the part of the winner, which was then assessed regarding whether it had merit. The word "petition" is therefore used when discussing corrupt elections - but it is also used in many other contexts. Including it in the set of keywords is likely to give us many false positives, but leaving it out means that we have to take false negatives into account. The same is true for words like "vote" or "candidate". As corruption is a very narrow topic which occupied a very small proportion of MPs' time overall, even a word that is often used in corruption discussions is likely to be used more often in other contexts, so false negatives quickly overwhelm true positives.

TOPIC MODELLING A solution here is to use a structural topic model, which categorizes the speeches into topics (Lucas et al., 2015).¹⁰ Topic modelling is an *unsupervised* method of text classification in which topics are estimated via the co-occurrence of words in the documents; in each topic, certain words have higher probabilities of appearing, and the researcher subsequently uses this distinct distribution of words across topics to assign meaning to each topic (Grimmer and Stewart, 2013; Lucas et al., 2015, p. 7-8). Latent dirichlet allocation (LDA), the framework used here, is a mixed-membership model; it models each document as being made up of a combination of topics (as opposed to being assigned to a single topic). This is useful for us as it makes sense to assume that each document - a single parliamentary speech - can be about multiple things.

We use a 35-topic model, meaning that we estimate the distribution of the

¹⁰I use the STM package in R.

speeches in 35 different topics, of which one can be interpreted as a distinct ‘corruption’ topic (see Appendix A.2 for an overview of all the topics’ top words). We chose 35 as the number of topics because this was the lowest topic number for which a distinct corruption topic emerged. However, above 35, the results do not depend on the number of topics estimated; Appendix A.4 shows results using different numbers of topics.

The corruption topic can be identified by the top words associated with it, which are “elect”, “vote”, “corrupt”, “candid[ate]”, “ballot”, “briber[y]”, “seat”, and “voter”. These overlap to a great extent with the keywords used initially, though they also contain some words, such as “vote” and “candidate”, that could not be included in the keywords as they are not exclusive to the corruption topic. Using the topic model thus lets us identify more true positives than the keyword approach, making it superior for our purposes. While we show results for the keyword approach in Section 2.3, we then turn to the topic model as our main model.

Examining the speeches themselves show us that the speeches with a particularly high proportion belonging to this topic are, indeed, about corruption; one of the highest-scoring speeches, for example, is the following:

“[The MP] moved, in line 2, to leave out ‘some other,’ in order to insert ‘any,’ so that it might be provided that, where a candidate on the trial of an Election Petition, claiming the seat for any person, is proved to have been guilty, by himself or by any person on his behalf, of bribery, treating, or undue influence in respect of any person who voted at such Election, there shall, on a scrutiny, be struck off from the number of votes appearing to have been given to such candidate,

one vote for every person who voted at such Election and is proved to have been bribed, treated, or unduly influenced by such candidate or by any person on his behalf.”

Henry James, H. C. Deb, 25th April 1872

This speech was held by Henry James, MP for Taunton, in a debate on the Ballot Act in 1872. James’ amendment was spurred by his personal experience; he had initially lost the 1868 Taunton contest and entered the House of Commons only after unseating his opponent on bribery charges.

The distribution of this corruption topic is shown in Figure 2.3. The vast majority of speeches made in parliament were, perhaps unsurprisingly, *not* about corruption; however, we can see that there is a long tail to the right of speeches that dealt with it to a greater extent.

2.2.3 IDENTIFICATION STRATEGY

DIFFERENCE-IN-DIFFERENCES

This paper estimates the causal effect of enfranchisement by exploiting the fact that while the 1867 reform applied uniformly across boroughs, its enfranchising effect varied by constituency based on the characteristics of the local population. By shifting the qualification threshold downwards from 1832, the reform created a group of new electors which had been below the previous threshold but now qualified. The size of this group, and more particularly its size relative to the previous electorate, differed in each constituency – and given the general uncertainty about the projected effects of reform (see section 2.1), legislators did not have clear expectations regarding how many new electors each constituency would actually

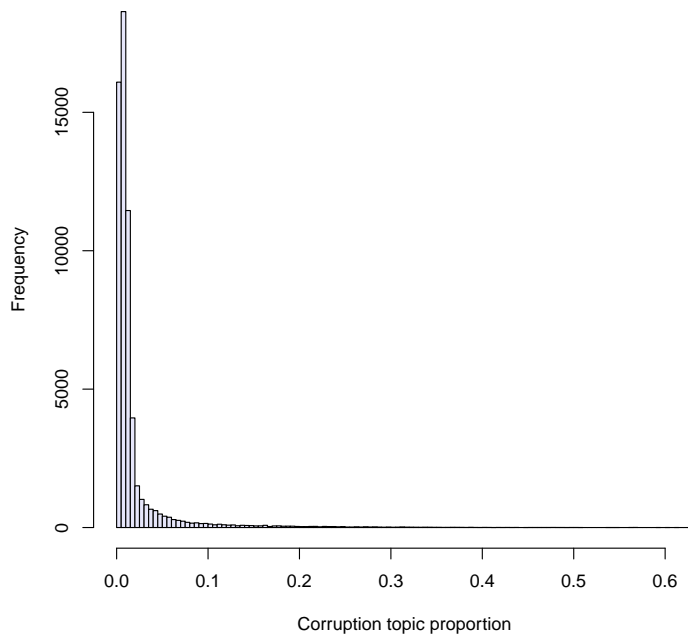


Figure 2.3: Distribution of the corruption topic proportion in the data (the dependent variable)

have. In fact, there is evidence that the Act actually had unexpected and sometimes inconsistent effects, with some boroughs admitting groups like miners to the franchise, for example, while others did not (McCord, 1967, p.386). I leverage this variation to use a difference-in-differences approach in order to estimate the causal effect of the enfranchisement ‘treatment’ on the extent to which MPs discussed corruption (like that used in Berlinski and Dewan (2011) and Morgan-Collins and Teele (2016), among others).

The units of the study are speeches, $i = \{1, 2, \dots, I\}$, which were delivered by MPs representing 153 different constituencies (indexed as $c[i]$) in six different

parliamentary periods,

$$t = \{1847 - 52, 1852 - 57, 1857 - 59, 1859 - 65, 1865 - 68, 1868 - 74\} \quad (2.1)$$

Since franchise reform passed in 1867, the last of these periods is the only one in which MPs were elected by a broader franchise; in the other five, the franchise was narrower.

The ‘treatment’ here is the percentage increase in the electorate in the 1868 election. Since this is a continuous variable (in green in Figure 2.2a), we can conceptualize the treatment as being administered in different ‘doses’, ranging from 0 (where there was no increase in the electorate) to 500 (where the electorate sextupled).

In order to determine the effect of extending the franchise on discussing corruption, we estimate the following equation:

$$Y_i = \alpha + \beta_1 TreatedPeriod_{t[i]} + \beta_2 \Delta Electorate_{c[i]} + \beta_3 TreatedPeriod_{t[i]} * \Delta Electorate_{c[i]} + \gamma_{c[i]} + \lambda_t + \epsilon_{it} \quad (2.2)$$

Where Y_{it} is the proportion of each speech that was about corruption (measured by keywords or topic modelling), $TreatedPeriod$ is a dummy variable which is 1 for the 1868-74 Parliament and 0 otherwise, and $\Delta Electorate$ is the percentage change in the electorate in each constituency. Our coefficient of interest is β_3 , which tells us the effect of increases in the electorate in the treated period. Also included in the equation are fixed effects for each constituency ($\gamma_{c[i]}$) and each period (λ_t) to account for time-invariant constituency factors and common shocks.

Importantly, as the equation is estimated at the individual speech level while

the ‘treatment’ is administered by constituency, we cluster standard errors at the constituency level as this is the level at which the treatment is administered (Abadie et al., 2017). This ensures that our standard errors are not rendered miniscule by the number of our observations alone (about 60,000 speeches between 1847 and 1874).

PARALLEL TRENDS

A differences-in-differences estimation depends on the assumption that in the *absence* of (each extra unit of) the treatment, the more treated boroughs would have behaved just like the less treated boroughs did (Angrist and Pischke, 2008, p. 230). While this assumption cannot be tested directly, we can examine the trends in the dependent variable prior to reform, with the idea that similar trends pre-reform make it likelier that similar trends would have prevailed in the absence of reform.

Figure 2.4 shows the trends in our main dependent variable, the proportion of MPs’ speeches devoted to corruption. As our treatment is continuous, the constituencies have here been divided into terciles for ease of presentation; the green line shows the extent to which MPs from the most heavily treated constituencies discussed corruption across the period, while the orange and red lines show the same trend for medium and low dosages of the treatment, respectively. As the Figure shows, the trends were remarkably similar prior to reform, and diverged only in the last period (grey background). A similar graph for the proportion of speeches mentioning the word “ballot” is in Appendix A.6; it follows the same trajectory, with matching trajectories for the groups before reforms and an increase in more-affected constituencies after reform. Appendix A.5 estimates the

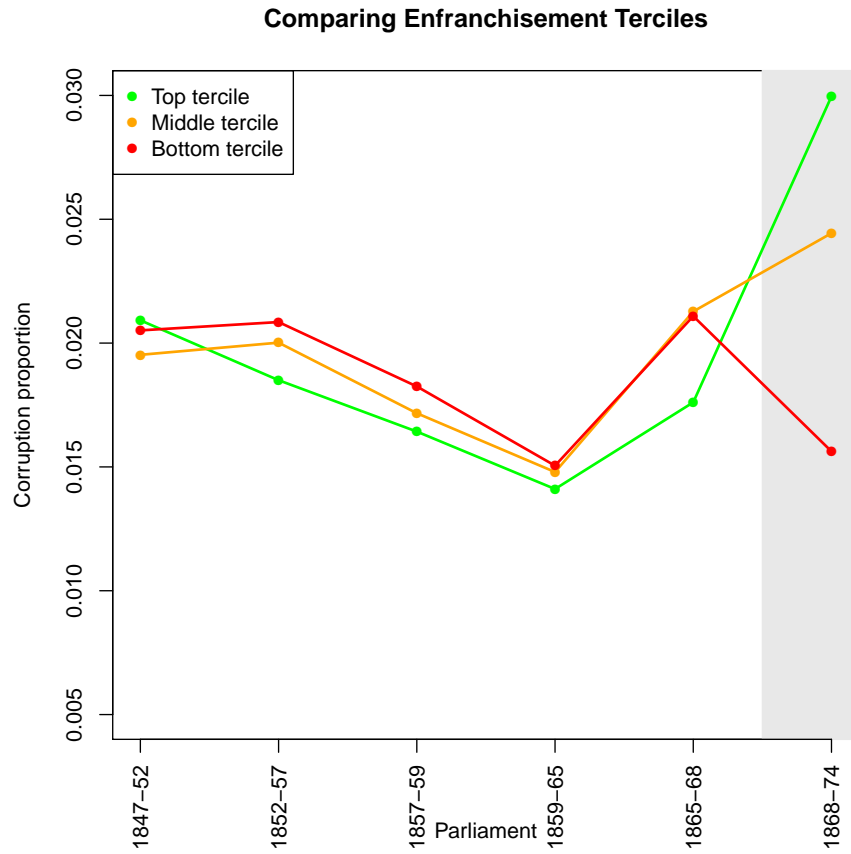


Figure 2.4: The dependent variable in each period, by tercile of the independent variable

a placebo treatment effect treating the immediate pre-reform parliament as the treated period, showing that there is no effect of franchise extension on discussion of corruption pre-reform.

2.3 RESULTS

2.3.1 FINDINGS

Table 2.1 shows the results. Model 1 estimates the effect of franchise expansion for mentions of the word “ballot”; we find that the change in electors in 1868 significantly increases discussion of corruption in the House of Commons.¹¹ Model 2 uses multiple keywords to measure discussion of the ballot, while models 3 and 4 use the corruption topic identified by the topic model. The coefficients in all of the models are small, reflecting the fact that most speeches in parliament were not about corruption (as evidenced by Figure 2.3); however, the effects are sizeable.

While discussion of corruption actually *decreases* in the post-reform period for the least enfranchised constituencies, MPs from the most enfranchised constituencies spoke much more about corruption after reform than before, corresponding to an increase of more than half a standard deviation in the dependent variable. To put this in more concrete terms, this means that an MP from a constituency which saw the median increase in electorate – 138% – would, on average, give around one more speech about the ballot than if he had experienced no increase (0.94, to be precise). If his constituency sextupled, he would give 3.5 extra speeches about the ballot.

Table 2.1 also shows the results of some robustness tests using the corruption topic from the topic model as the dependent variable. Model 4 interacts the change in electors with a linear time trend, to make sure that the effect is not driven by pre-existing trends in the dependent variable. As we can see, while this

¹¹The table shows only the interaction effect – the main coefficient of interest – but the full model also contains the main effects, as well as constituency and parliament fixed effects.

Table 2.1: Predicting discussion about corruption

	“Ballot” keyword (1)	Multiple keywords (2)	Topic model (3)	Topic model (4)	Binary DV (5)
Δ Electors * Post-Reform	0.002* (0.001)	0.006* (0.002)	0.00005** (0.00002)	0.00005** (0.00002)	0.00011** (0.00004)
Δ Electors * Time Trend				-0.000001 (0.74256)	
No. of Speeches	59,842	59,842	59,842	59,842	59,842
No. of Constituencies	153	153	153	153	153
Constituency FEs	✓	✓	✓	✓	✓
Parliament FEs	✓	✓	✓	✓	✓

Standard errors clustered at the constituency level, shown in parentheses. The model also contains the main effects for the change in electors and the post-reform period dummy.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

interaction is insignificant, including it does not change the size or significance of the effect of the change in electors post-reform.

Model 5 uses a different dependent variable. While every speech is modeled as a mixture of topic proportions, meaning that the proportion of each speech that is about corruption is a continuous variable (bounded by 0 and 1), we can also assign each speech to the topic which has the highest proportion. This process gives us a set of 1153 speeches in which corruption was the single most important topic. Model 5 shows that post-reform, the change in electors also has a significant positive effect on whether a speech was mostly about corruption.

2.3.2 MECHANISM: CHANGING PARTY DYNAMICS

Digging deeper into the results shows that they are driven entirely by the Liberal party. Figure 2.5 shows that enfranchisement increases only increased discussion of corruption among Liberals - among Conservatives, there was no effect at all. This tracks with our knowledge that the Conservatives remained steadfastly anti-

ballot, in their votes (see section 2.1.2) and in their speeches, even after reform (O’Leary, 1962; Kinzer, 1982; Kam, 2014). Liberals, however, were much likelier to talk about vote-buying if their constituency grew substantially.

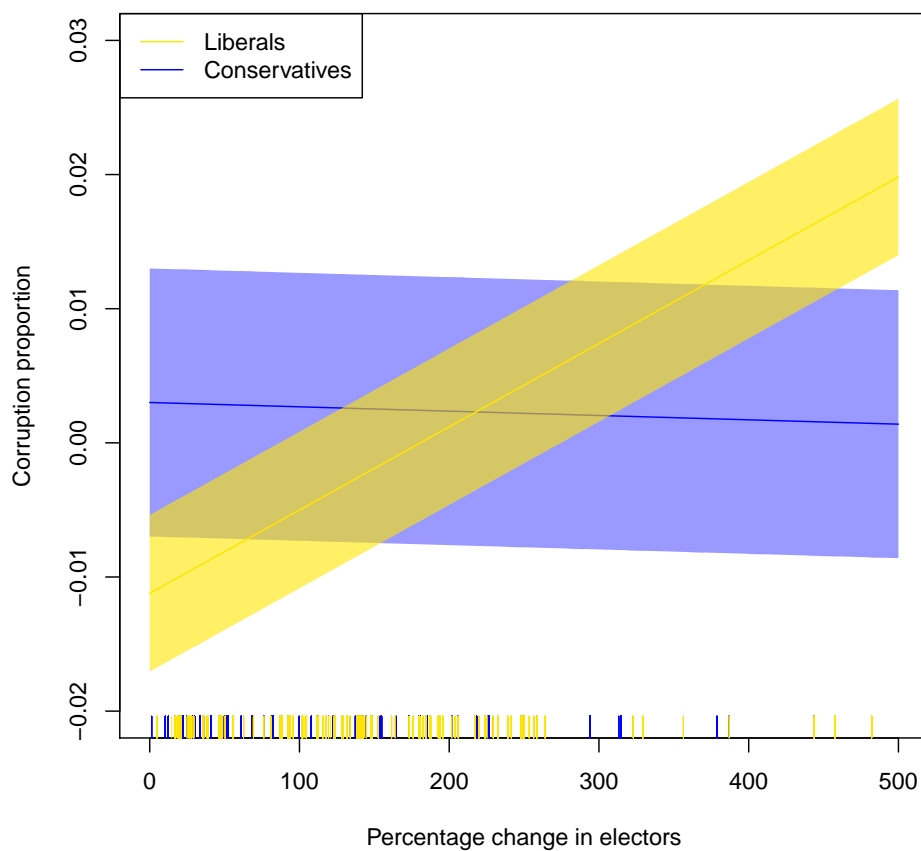


Figure 2.5: Comparing the treatment effect for Liberal and Conservative MPs

Our results are consistent with O’Leary’s (1962) argument, which is that the Second Reform Act made corrupt electoral practices both more extreme and more obvious. The 1868 election was particularly rowdy, and accusations of intimidation

and vote-buying were rife (Ostrogorski, 1902; Byrne and Shepley, 2015); a Select Committee was convened in response to initial reports, and the evidence presented to the Committee by almost 80 witnesses laid out many of these stories in detail (Lawrence, 2009, p. 45). It fell to a reasonably small group of MPs, many of them belonging to the Radical faction of the Liberal party, to do the work pushing the bill through the House; both the Conservatives and the Whig faction of the Liberals were unconvinced by the Select Committee report, and the bill had to be proposed a second time in 1872 after the House of Lords killed the 1871 attempt without enough time left for the Commons to reintroduce it before the end of the session (O’Leary, 1962; Kinzer, 1982). Indeed, much of the Liberal party remained somewhat unenthusiastic (Kinzer, 1982, p. 114), including much of the Cabinet, the Whigs, and the Irish MPs, who worried that Irish Nationalist candidates would benefit from electoral secrecy (Annual Register, 1873; O’Leary, 1962, p. 73-6). It only passed due to the insistence of a small group of Liberals, who used their parliamentary speeches to increase the salience of the bill to the extent that the rest of the party fell in line.

Our analysis adds further support to this argument by indicating *why* this group of MPs were willing to go to such lengths. We show that increased speaking on corruption was due to the number of new voters in an MP’s constituency; many of the speakers, both within and outside the Radical faction, had seen huge increases in enfranchisement in their own constituencies, had witnessed these problems first-hand in their own elections in 1868, and thus became anxious to curtail them.

For most of the Liberals from constituencies with the biggest franchise extensions, reform didn’t change their mind on the ballot – it just made them more eager to pass it. Most of them had already supported the secret ballot beforehand (see section 2.3.3 and Appendix A.7); the impact of the franchise extension was

not on their votes – as they were largely already in favor – but on their speaking behaviour, as they used their speeches to consistently advocate for the issue. This increased salience, in turn, led Liberals from less affected constituencies to switch their votes from abstention or opposition to support.

This increased salience is in part reflected in the greater formal role Radical Liberals played within the party after 1868. The Radical John Bright became the President of the Board of Trade in Gladstone's Cabinet, and is said to have convinced Gladstone of the ballot's merits (Kinzer, 1982; Hawkins, 2015, p. 280-1). Bright, already a ballot supporter pre-reform, represented Birmingham, which almost tripled in size as a result of the Reform Act - going from around 15,000 to 42,000 electors.¹² W. E. Forster, another Radical, became the Vice-President of the Privy Council following the election and was put in charge of getting the ballot bill through the House. Forster, whose constituency, Bradford, had more than quadrupled as a result of the reform (growing from 5,189 in 1865 to 21,518 in 1868), had been a long-standing supporter of the ballot, having voted for it in previous parliaments. His vote did not change; however, he was key in continually raising the issue and responding to objections in the House of Commons, increasing the salience of the issue for the Liberal Party as a whole.

Moreover, this was not just true for Cabinet members; backbench ballot-supporters, too, became more vocal following reform. The backbench Radical Edward Leatham was so anxious to pass a ballot bill that he proposed one even before the Select Committee reported in 1870 (O'Leary, 1962, p. 67), and remained one of its greatest advocates in the House during its passage through Parliament. Huddersfield, the constituency he sat for, increased by 426% in 1868, going from 2,138 electors to

¹²He was, however, sick for much of the 1868-74 Parliament and absent from the House; he therefore does not contribute personally to the results in this paper.

11,242. Sir Edward Baines, MP for Leeds, which almost quintupled in 1868, had voted in favor of the ballot in 1867 but had never spoken on it; in 1872, however, he did, specifically invoking his working-class constituency to argue that “when the Ballot came into operation there would be but comparatively little excitement at elections” (H. C. Deb, 8th April 1872). Sir John Tomlinson Hibbot, who sat for Oldham, a borough which had almost sextupled, followed a similar trajectory, voting for the ballot both times but only speaking in favor post-reform.

This increased speech activity, in turn, raised the salience of the ballot for those Liberals who had abstained or opposed it earlier. William Gladstone, most famously, went from opposing secret voting to supporting it. Many of the MPs who changed their votes were themselves personally affected by franchise extension, too. Henry Bruce, the Home Secretary, had been opposed to the ballot pre-reform, and consistently abstained on bills introducing it. He had been the MP for Merthyr Tydfil, a constituency which grew by 951% as a result of the franchise extension, and lost his re-election bid in 1868.¹³ After he won a by-election in Renfrewshire the following year, he changed his mind on the ballot, saying “I am satisfied that to permit of our having orderly elections, in order to protect the more quiet and peaceable of our population [...] it is necessary that we should have a system of secret voting” (Kinzer, 1982, p. 105). James Stansfeld, who became the President of the Local Government Board after 1868, had abstained on the 1867 division, but supported it in 1872; he sat for Halifax, which more than quintupled in size (going from 1,771 electors to 9,328). Robert Lowe sat for Calne in the 1865-68 Parliament, which had 174 electors; after the reform, he moved to the newly created London University constituency, which had 1160 electors (a

¹³Merthyr’s boundaries changed in 1868, so it has been dropped from the analysis in this paper, but Bruce’s example is nonetheless instructive.

567% increase over his previous electorate); he went from opposing the ballot in 1867 to supporting it in 1872.

Other Liberals who were not directly affected by the Reform Act changed their votes as a result of the ballot's increased salience, such as the Marquess of Hartington, who went from opposing to supporting the bill (he sat for a county constituency, Lancashire Northern, which the Reform Act didn't touch). The Whig faction, who had initially opposed the bill, eventually largely reluctantly came around to supporting it, but did not speak in its favor (O'Leary, 1962, p. 81). And because it had become a party issue, those who disagreed with it so strongly that they could not find their way to an 'aye' ultimately stayed away, such as Sir George Grey, the former Home Secretary, who went from opposing the ballot in 1867 to abstaining in 1872.

Quantitative analysis of the parliamentary debates thus shows that the argument put forth by O'Leary (1962) is correct: the Reform Act mattered because it made the ballot issue more urgent for Radical Liberals, who in turn raised its salience for the rest of the party. The difference-in-differences further fleshes out the story: these Liberals were, in fact, frequently the very same MPs who were most affected by franchise extension themselves; their newfound urgency was a result of their own experience of attempts at vote-buying and intimidation at play in the 1868 election.

We do not find evidence to support Kinzer's 1982 assertion that the passage of the ballot bill was only down to Gladstone's conversion; the parliamentary debates show that both frontbench and backbench Liberals from boroughs with many new voters spoke more after reform, not just the party leader. Indeed, Gladstone himself remained somewhat ambivalent about secret voting in private, despite supporting it in public (O'Leary, 1962, p. 73), and did not insist on party

discipline or make the survival of the government dependent on the bill's passage (Kam, 2014, p. 527). The passage of the bill required the speaking efforts of those who saw the effects of the reform in their own constituencies.

2.3.3 ALTERNATIVE EXPLANATIONS

INCREASING COSTS OF VOTE-BUYING

Three other alternative explanations present themselves. The first focuses on the costs of vote-buying. In this story, outlined by Cox (1987, p. 57), MPs from larger constituencies engaged in more parliamentary activity because they had to rely on programmatic rather than clientelistic strategies for re-election - and programmatic campaigning required policy-related activity in the House. The increase in size of the electorates in 1867 thus made corrupt practices less attractive, leading Liberals to pass the secret ballot to curtail a strategy which had ceased to be viable to them. Cox also notes that this logic underlay the contemporary practice of disbanding corrupt boroughs and merging their electorate in with the surrounding county.¹⁴

However, this is not quite the case. Figure 2.6 shows that the effect of franchise extension on discussion of corruption is much stronger for MPs representing boroughs that were large even *before* reform.¹⁵ If Cox's mechanism were at work, we would expect the opposite; given that vote-buying is a more viable strategy in smaller boroughs, we would expect the effect of increases in enfranchisement on

¹⁴A similar logic - that corruption is abolished by MPs for whom electoral intimidation is no longer a viable strategy - undergirds Mares (2015)'s study of the adoption of the secret ballot in Germany.

¹⁵'Large' here means bigger than the median, 1215 electors, but this holds for a range of thresholds.

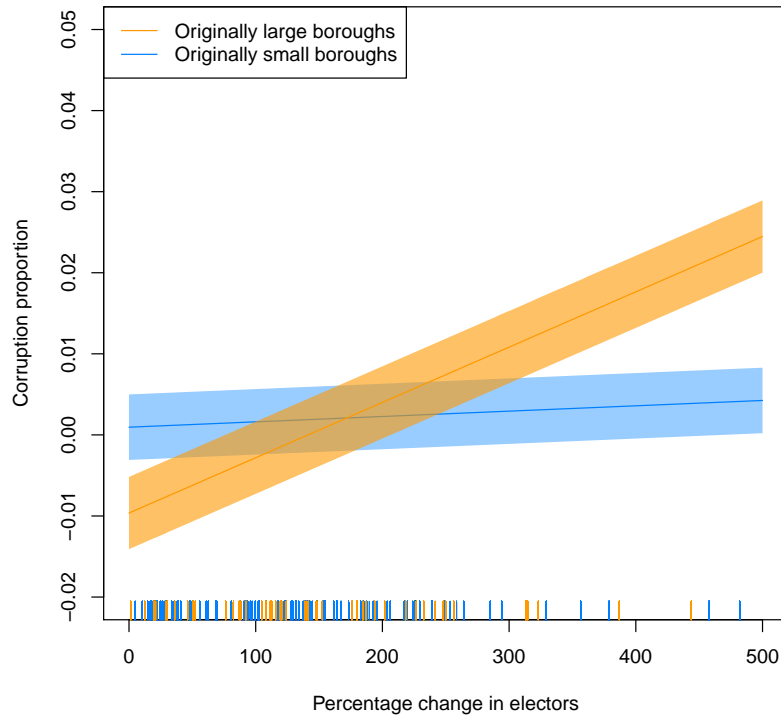


Figure 2.6: Comparing the treatment effect for MPs in larger and smaller boroughs

discussion of corruption to be strongest among smaller boroughs. These smaller boroughs were the ones in which MPs may have engaged in vote-buying before the reform, but would now have undergone a change of heart due to the increased expense. The increase in electors also meant that each individual vote became cheaper (Ostrogorski, 1902; Seymour, 1915; Kam, 2017); thus, it is possible that the franchise expansion did not actually deter corrupt MPs from buying votes at all. (Indeed, Kam argues that vote-buying was simply replaced by turnout-buying, which did not require the verification provided by open voting.)

As Figure 2.7 shows, Liberals from large boroughs were more likely to support

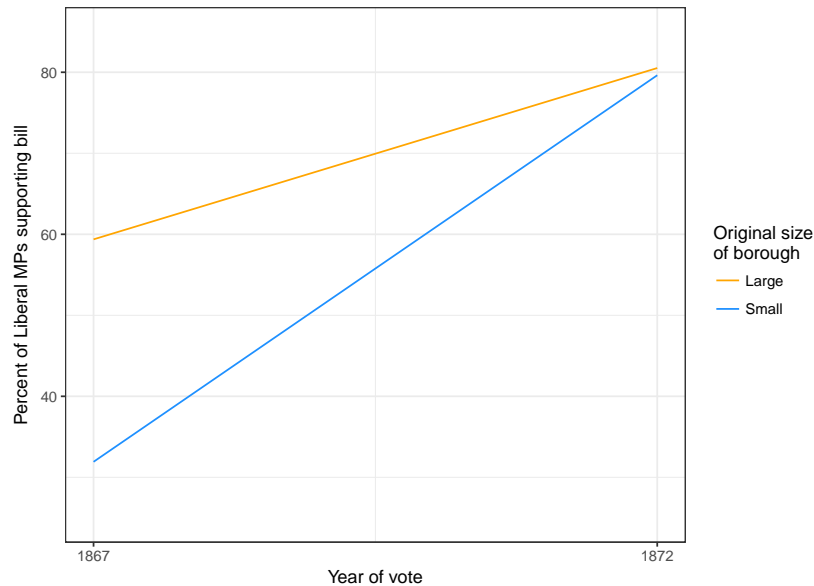


Figure 2.7: Voting for the bill

the ballot to begin with; around 60% of Liberals representing large boroughs were in favour before reform, compared to just over 30% of those from smaller boroughs. After reform, the two groups converged at around 80% support (those not in support include both opponents and abstentions). This further supports the argument made in section 2.3.2 above, that the increased discussion of corruption stemmed not from MPs who had changed their minds, but from those who had already been pro-ballot before the reform - and were now taking a more active role in Parliament in support of this goal.

REPLACEMENT

An objection mounted by Kam (2014) is that the impact of the Second Reform Act was not about changing incentives at all - instead, the passage of the ballot in 1872 was driven by the fact that anti-ballot MPs disproportionately retired in the

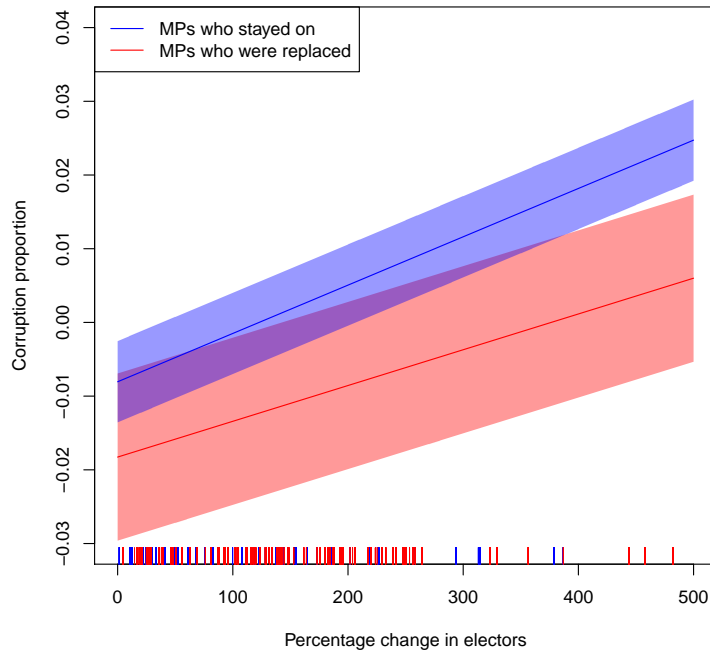


Figure 2.8: Comparing the treatment effect for MPs who stayed on and those who were replaced

1868 election, in part because many of their seats were removed in the reform.¹⁶ The MPs elected in their place were likelier to be pro-ballot types, keen to reform the corrupt practices known to mar elections.

However, as Figure 2.8 shows, the effect holds for MPs who stayed on *as well as* MPs who were replaced. Indeed, the effect is slightly stronger for the former group (blue). This refutes the replacement story; instead, MPs that were re-elected in 1868 were actually *more* affected by the growth in the franchise than new representatives.

¹⁶The Second Reform Act contained provisions redistributing seats, including abolishing some small constituencies entirely and reducing others from two seats to one.

CHANGING VOTER PREFERENCES

A final alternative explanation for the effect found in the section 2.3.1 is that MPs simply changed their views on the ballot to represent their new constituents. After all, an increase in the size of the electorate also shifts the position of the median voter (Meltzer and Richard, 1981). According to this story, the new voters were particularly troubled by the rampant vote-buying, particularly if this was accompanied by intimidation and other methods, and their MPs were merely a conduit for their voters' concerns, duly representing them by speaking in the House of Commons.

However, this is somewhat undermined by the fact that historical accounts agree that the ballot was not a particularly salient issue during the 1868 election campaign (Hanham, 1959; O'Leary, 1962; Kinzer, 1982, p. 93): instead, the question of the disestablishment of the Anglican Church in Ireland dominated both parties' campaigns (Hanham, 1959; Fox, 1911, p. 401).¹⁷ The Ballot Society did not do much campaigning in the 1868 election, spending less than £250 all year to raise the salience of the issue; they did start holding events to drum up popular support once the Radicals started their parliamentary campaign in 1869, but even then, there was not much public support (Kinzer, 1982, p. 106-8). MPs thus did not have much of a sense that their constituents were particularly interested in secret voting.

Moreover, even if constituents *did* care about the ballot, it seems that likely

¹⁷Indeed, when the Liberal government was defeated on the Irish University bill in 1873, this was such a big deal that the Conservatives could have taken over as a minority government, as they did in 1866 (Hanham, 1959, p. 220); in contrast, Gladstone made clear that he did not see the ballot bill as a question on which he would stake the government's survival confidence (Kam, 2014, p. 527).

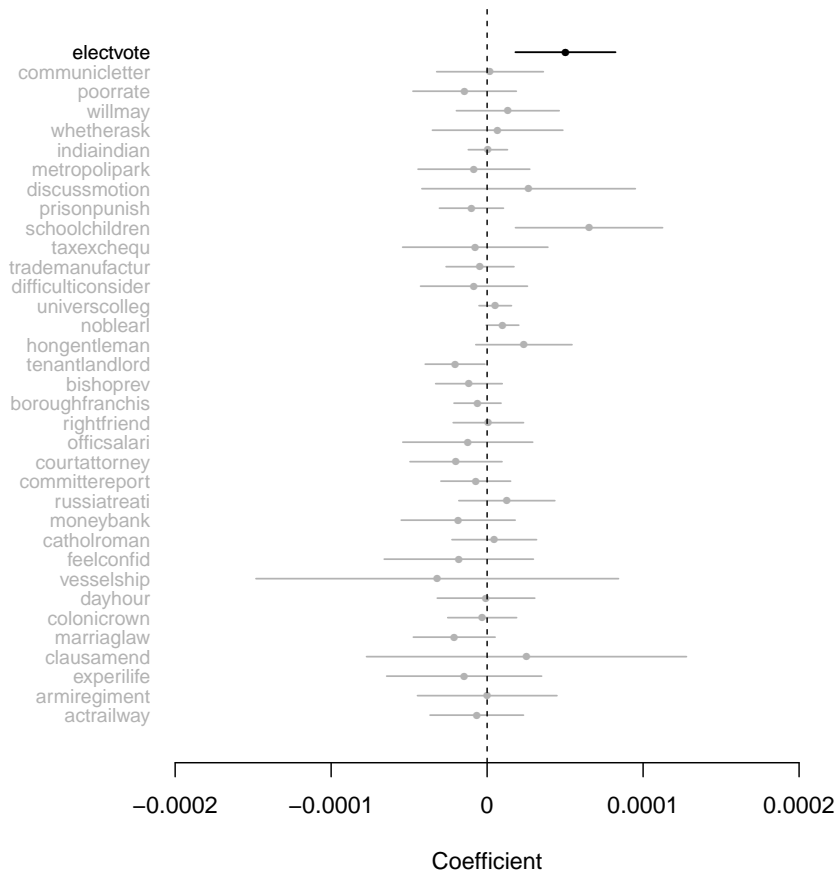


Figure 2.9: Treatment effects for each topic

that it would be only one of many issues they prioritized. If the expansion of the franchise is associated with a general preference shift, then the treatment effect ought not only to affect the corruption topic; instead, it should affect all topics which concern the new voters differently than the old. While these new workers - mostly industrial workers - might care about corruption, they would likely also care about all sorts of other things - issues related to manufacturing, perhaps, or the regulation of poor rates or crime.

Figure 2.9 addresses this by estimating the same treatment effect as before, but on all 35 topics estimated in the topic model. The black topic at the top of the figure - called ‘electvote’ here after the concatenated top two words in the topic - is the corruption topic we have been working with; we can see the significant positive effect of the treatment on its prevalence. However, we can also see that almost none of the other topics seem to be significantly affected by the post-reform change in electors. In particular, none of the topics that we might think would be affected - on manufacturing, poor rates or the franchise (12th, 3rd and 19th from the top, respectively) show a significant association with the treatment, in either direction.¹⁸ Indeed, the only other statistically significant effect is on the topic on education, unlikely to be the most pressing concern of the newly enfranchised.

We might have several concerns about these results. One worry might be that (for whatever reason) there simply weren’t any manufacturing bills on the agenda (or about other topics we might assume are more directly linked to industrial workers’ interests). However, the same House of Commons that debated and passed the Ballot Act also passed the 1871 Trade Union Act, giving MPs ample opportunity to talk about manufacturing concerns, the 1871 Local Government Board Act, which covered issues such as public health, the Poor Law, infrastructure, and the 1871 Criminal Law Amendment Act, which also dealt with an issue that disproportionately affected the working class (Byrne and Shepley, 2015). However, none of these topics were spoken about more by MPs from boroughs that had increased in size, and the government as a whole otherwise passed few reforms specifically crafted to help their new voters.¹⁹

¹⁸See Appendix A.2 for more details on the topics themselves.

¹⁹In fact, this first Gladstone ministry did so little for the working class that Disraeli mocked the Liberals for not doing more in his Crystal Palace speech in 1872, criticizing them for prioritizing the ballot, which few cared about, over social reforms.

Other concerns relate to the number of topics specified; we might worry that 35 topics is too few, and that franchise extension could be causing changes in how much MPs talk about narrower sub-topics which pertain more directly to the newly enfranchised constituency, industrial workers. Appendix A.4 shows the same results as in Figure 2.9 for up to 110 topics; the results are stable regardless of how many topics are specified, and even once many more topics exist, none (besides, in some specifications, the education topic) show comparable increases as a function of enfranchisement.

EDUCATION. Besides the ballot, the other topic consistently shown to have been discussed more as a result of enfranchisement increases is education. This is true in the 35-topic model used in the paper, and also in various other models (see Appendix A.4). This discussion was due to the Elementary Education Act of 1870, which contributed to the establishment of comprehensive elementary education for children between 5 and 12, and which some have argued was also passed as a result of the Reform Act (e.g. Byrne and Shepley, 2015).²⁰ The Education Act may have been passed then because newly enfranchised voters had a strong preference for educational provision. Another explanation is that Liberals thought education was necessary for the new voters to exercise the franchise properly (Pugh, 2002, p. 4).²¹ A third potential explanation is that the direction of causality is reversed,

²⁰As the ballot was discussed in three consecutive years before being passed - 1870, 1871 and 1872 - there was some overlap between debates on the two bills even though the Education Act passed two years earlier.

²¹Indeed, after the passage of the Second Reform Act, the Liberal Robert Lowe - who had opposed reform - argued that “it appears to me that before we had intrusted the masses – the great bulk of whom are uneducated – with the whole power of this country we should have taught them a little more how to use it, and not having done so, this rash and abrupt measure having been forced upon them, the only thing we can do is as far as possible to remedy the evil by the most universal measures of education that can be devised. I believe it will be absolutely necessary that you should prevail on our future masters to learn their letters” (H. C. Deb, 15th

and elites actually passed the franchise expansion in order to create a voting coalition in support of social policies they already preferred but found impossible to pass on a narrow franchise (Iversen and Soskice, 2010).

However, there is also another, more prosaic explanation: W. E. Forster, one of the key Liberal Cabinet members responsible for the Ballot Act's passage, had previously shepherded the Education Act through the House - including a provision for the use of the secret ballot when electing metropolitan school boards (O'Leary, 1962, p. 70). In fact, as school board elections used the secret ballot after 1870, they became part of the debate around using the ballot in general elections, and two Cabinet ministers, Forster and Hartington, actually visited a school board election to ensure that the ballot didn't make voting too difficult for working class electors (Seymour, 1915, p. 430).

2.4 CONCLUSION

The paradox of the Second Reform Act is that while scholars agree on its wide-reaching mechanical effects in expanding the franchise, they have found very little evidence that it had any effect on political outcomes. This study has used parliamentary debates to substantiate the link many have drawn between the Reform Act and the Ballot Act that passed the following parliament, showing that MPs from constituencies which saw a greater expansion of the franchise in 1867 were more likely, post-reform, to try and tackle the widespread corruption which marred electoral practice at the time. Our evidence is broadly consistent with O'Leary's 1962 account of the bill's passage, which focuses on the parliamentary efforts of a group of pro-ballot MPs, led by W. E. Forster, in pushing the bill July 1867, the last part of which is often misquoted as "We must educate our masters."

through the House. This paper goes further, showing that these MPs did not just do so because they were convinced by the evidence brought to the Select Committee regarding the bribery and disorderly conduct at the 1868 elections, but because they themselves were from constituencies which had seen some of the biggest increases in the voter rolls, and had witnessed this behavior firsthand. By raising the salience of the issue, they were able to convince most of the ballot's opponents to change their votes, and reduce the abstention rate such that the bill passed.

The ironic aftermath of this grand Liberal shift towards the ballot is that it was followed, in the next election in 1874, by a devastating electoral defeat. Having held parliamentary majorities, initially as Whigs, since 1857 (the result of the Tory split over the Corn Laws),²² the Liberals lost a total of 139 seats in the first election held under the secret ballot and were promptly kicked out of office. Why did they lose out? One crucial reason is that the ballot was more effective in curtailing corruption in Ireland, where the dominant method was intimidation (Partridge, 2004, p. 118), than in England, where vote-buying was replaced by turnout-buying (Kam, 2017). Freeing Irish voters from the threat of violence or economic repercussions allowed them to turn to Irish Nationalists led by Isaac Butt, who won 59 seats (and were to shape British politics until Ireland's eventual independence in 1922) (Pugh, 2002). The newfound electoral expression of this nationalist cleavage was thus an unintended consequence of the Liberals' increased support for secrecy in voting.

This work shows that enfranchisement has consequences beyond its direct impact on electoral outcomes. Rather, it can change the internal considerations of

²²Though their rule was interrupted by the Conservative minority government which passed the Second Reform Act in 1866-8.

parties such that previously divisive policies become generally supported. We have also shown how using text as data can illuminate mechanisms in parliamentary behaviour that were not visible in roll call analysis. This paper has also spoken to the question of how politicians who may have engaged in (and directly benefited from) corrupt practices may be swayed from this position. By changing the institutional environment such that they have incentives to engage in programmatic rather than clientelistic competition, legislators may be more likely to speak – and act – against corruption.

3

The Rise of the Modern Election Campaign: The Peers, the People, and the Polarization of the British Party System

Abstract

The rapid decline of the Liberals from one of the two governing parties before World War I to the status of the third party in a two-party system has been one of the most studied mysteries of British politics. While one side has argued that the replacement of Liberalism by Labour was an inevitable result of the rise of class politics in the pre-World War I period, the other has claimed that it was an accident of history, and that it is just as conceivable for the Liberals to have remained the natural alternative to the Conservatives. We contribute to the debate by introducing a new dataset comprising all election addresses for all 6,038 candidates - both winners and losers - in the six UK elections between 1892 and World War I. We show that while Labour did initially stake out a unique programmatic identity, by 1910 the Liberals moved to occupy the same ideological space, positioning themselves as the natural party of progressivism going into World War I. We show that this Liberal move, which occurred when they called two elections over the ‘People’s Budget’ of 1909, decisively altered the party system, reducing party competition from two dimensions to one and increasing polarization. Finally, we provide evidence that this process was not

driven by replacement, but rather that existing candidates changed their appeals over time.

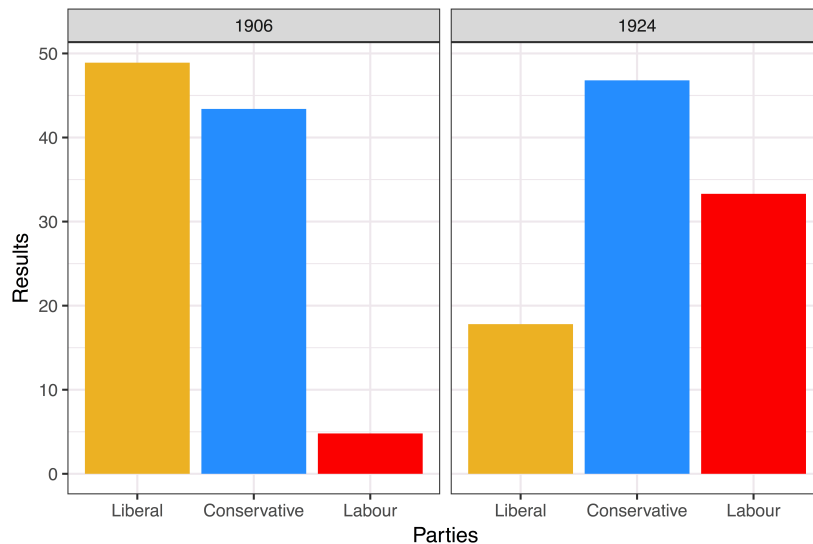


Figure 3.1: Election results, 1906 and 1924

THE LIBERAL PARTY OBTAINED 49% OF THE VOTE - and 59% of the parliamentary seats - in 1906; 18 years later, in 1924, they were down to 18% of the vote, while the Labour Party, at 33%, had definitively overtaken them as one of the two governing parties (Laybourn (1995), see Figure 3.1). This wholesale replacement of the Liberals by Labour as the natural alternative to Conservatism has drawn a fair amount of attention by scholars of British history, but the debate is unresolved. We contribute to this debate by bringing to bear a new source of data - the complete universe of candidate election manifestos in the pre-war period. We find support for the view that the Liberal decline was anything but inevitable. At the eve of the First World War, they had positioned themselves so firmly in the progressive space that they were ideologically indistinguishable from their Labour rivals. This lends credence to the notion that their post-war troubles were caused by contingent events, rather than by the rise of class as the most salient cleavage.

Unlike the study of voting behavior (e.g. Stephens, 1982; Wald, 1983; Cox, 1987; Eggers and Spirling, 2017) or voting in parliament (Schonhardt-Bailey, 2003; Bronner, 2014; Eggers and Spirling, 2016*a*) or even the study of election disputes (Ziblatt, 2009; Teorell, 2010), the study of election campaigns in historical context, by its very nature, has tended to be anecdotal. Historians have recounted with rich detail the ceremonial and often confrontational practice of the hustings in pre-secret ballot elections (e.g. Vernon, 1993). We have equally full accounts of the mass platform speeches of William Gladstone’s Midlothian Campaign of 1880 and the electioneering of other politicians in the post-1872 secret ballot era in selected constituencies and years (Lawrence, 2011; Readman, 1999, 2001; Hanham, 1959; Blaxill, 2011). However, accounts of the evolution of the character and content of MP candidate appeals to voters during election campaigns have remained, thus far, beyond the reach of systematic data.

Recent advances in text analysis and our discovery of a remarkably comprehensive collection of every official “election address” made during the campaign by winning and losing candidates for every constituency in the British House of Commons between 1892 and 1910 opened new opportunities to study the evolution of parliamentary candidates’ electoral appeals. Campaign manifestos are a distinctly different datasource for evaluating ideology than either roll-call votes or parliamentary debates, perhaps the two most commonly occurring data sources used for the estimation of politician ideology. Particularly in Westminster systems, roll call votes tend to be highly whipped and thus almost uninformative of within-party heterogeneity. Parliamentary debates, on the other hand, are characterized by a high degree of selection (unless an MP is a minister, he tends to speak quite rarely and only on certain topics).¹ Instead, when running for elec-

¹Indeed, legislators may be silent because they are absent (especially in the 19th century,

tion, all candidates had to lay out their views, and they were largely compelled to opine, at least to some extent, on most of the issues at play in the campaign as a whole. Manifestos, despite their relative brevity, provide one of the most thorough accountings of politicians' ideological views.²

Our contribution is fourfold. Firstly, we introduce a new dataset comprising all election addresses for all candidates in the six elections between 1892 and World War I. Secondly, we show that while Labour did initially stake out a unique programmatic identity, by 1910 the Liberals moved to occupy the same ideological space, positioning themselves as the natural party of progressivism going into World War I. Thirdly, we show that this Liberal move, which occurred when they called two elections over the 'People's Budget' of 1909, decisively altered the party system, reducing party competition from two dimensions to one, and polarizing the party blocs. And finally, we provide evidence that this process was not driven by replacement, but rather that existing candidates changed their appeals over time.

We first outline the historical debate regarding the decline of the Liberals in Section 3.1 and introduce our data in Section 3.2. We next describe the method we use to analyze candidate election appeals in Section 3.3. We then go on to detail our results in Section 3.4, before concluding in Section 3.5.

many MPs had other jobs and were often away), because they are not knowledgeable about the topic of debate, or for strategic reasons, if their view did not accord with the party line but they wanted to avoid the leadership's disapproval.

²A caveat here is that we can only measure these views if they come up in an election campaign. Thus, even though the MPs elected in the final election in this dataset (December 1910) went on to make up the parliament that dealt with World War I, we have no information about their views on the war, as it was not an issue in the campaign.

3.1 THE DECLINE OF THE LIBERALS; THE RISE OF LABOUR

The Liberal Party, which had emerged out of the Whigs around the mid-19th century, was a fixture of the Victorian political landscape; it traded power with the Conservatives until World War 1, despite the electoral costs imposed by the 1886 split over Home Rule.³ In 1900, the joint vote share of the Liberals and the Conservatives was 95%; by 1924, however, the joint vote share of the Conservatives and Labour was 80%, and rising. This huge shift in the party system - in an electoral system generally hostile to the rise of third parties - has largely been explained in two different ways.

According to one view, which we might call the ‘inevitability’ thesis, the arrival of class politics heralded the end of Liberalism (Trevelyan, 1953; Pelling, 1979; Wald, 1983). By this logic, Liberalism was inherently unable to take a stand on class issues, which had arisen due to the enfranchisement of parts of the working class in 1867 and 1885.⁴ Even as they tried to appeal to the working class by means of their New Liberal program, their Whiggish, aristocratic origins and continuing ties to capital made it impossible to develop a vision radical enough to rival Labour’s socialism (Powell, 1986; Bernstein, 1986). Further, inevitability proponents argue, Labour was making important gains, gradually rallying first trade union members, and then, in 1908, the Mining Federation to their side.

³The Liberal Unionists – the faction of Liberals which left the party in 1886 – soon formed an electoral alliance with the Conservatives; by 1900, these two parties had effectively merged into one, though they did not officially become the Unionist Party until 1912 (Byrne and Shepley, 2015).

⁴The institutional environment had changed rapidly; after the Reform Act of 1867, another trio of reforms in the mid-1880s fundamentally reshaped British politics, outlawing corrupt practices (1883) removing the last class-based voting exclusion (1884), and refashioning outdated constituencies into modern, largely single-member districts (1885) (Rix, 2008). This was followed by the proliferation of local elections with the establishment of councils in counties (1888) and, then, parishes and districts (1894) (Rix, 2016).

They won increasing numbers of seats in parliament - going from 2 in 1900 to 29 in 1906 and 40 in January 1910 - and made even larger inroads in local elections (Laybourn, 1995). On top of that, the Liberals' electoral base was being squeezed. The Conservatives were doing well in wealthier and more rural areas, while Labour made gains in larger, more urban and more working-class constituencies, leaving the Liberals caught in between (Wald, 1978; Stephens, 1982). There were only two reasons Liberalism survived until World War I, in the inevitability view. For one, class had not yet become the dominant cleavage along which voting occurred (Wald, 1978, 1983). And second, the Labour vote was being artificially quashed; franchise restrictions kept many working-class men off the electoral registers until 1918 (Matthew, McKibbin and Kay, 1976), and their funds were limited by the Osborne judgement of 1908-9, which prevented trade unions from donating to political parties, meaning that they were unable to hire as many electoral agents or run as many candidates as they would have liked (Laybourn, 1995, p.212-3).

The other major view is that the decline of the Liberals was essentially accidental. In this view, which we might call the 'fluke' thesis, the Liberals' decline was due to a series of mistakes the Liberal leadership made in the early 20th century, some of which were exacerbated by World War I (Sked, 1978; Blewett, 1972; Clarke, 1972, 2007). These mistakes started with the electoral pact the Liberals and Labour made in 1903, which sacrificed seats to Labour without recompense; continued with the Trade Union Act of 1913, which increased the amount of money trade unions gave the Labour Party; and culminated with the split between Herbert Henry Asquith and David Lloyd George in 1916 (Sked, 1978, p. 194-5). In the mean time, scholars from the fluke school claim, Labour was not doing terribly well in elections; most of their gains came from existing MPs switching parties (particularly when the Mining Federation affiliated to Labour in 1908), rather

than a growing electorate (Clarke, 1972; Douglas, 1974, p. 51).

Proponents of the fluke view also argue that far from being ideologically unable to cope with class politics, Liberals had a robust response to the mobilization of the working class in New Liberalism (Clarke, 1972, 2007). This strand of Liberal thought, which held that the state had a key role in providing taxation-funded welfare to those people who were not able to provide for themselves, increasingly dominated the party, taking over by the first decade of the 20th century (Byrne and Shepley, 2015; Pugh, 2002, p. 108-11). Once in power, from 1906, Liberal governments indeed committed to significant changes in taxation, implementing income differentiation in order to provide school lunches and a pension scheme. The 1909 budget went even further, instating a ‘super-tax’ on incomes over £5000, as well as modest charges on unearned income and land (Pugh, 2002, p. 113).

Moreover, 1910 in particular has been identified as the key critical juncture for the rise of class-based politics. Blewett (1972) argues that both 1886 and 1906 were important elections, but points to 1910 as the key moment of change in British politics.⁵ McLean (2001) also focuses on 1910. In his account, it was Chancellor of the Exchequer David Lloyd George, the “Supreme Tactician” (McLean, 2001, p. 153), who essentially single-handedly changed British politics by calling two elections over the House of Lords’ veto of his ‘People’s Budget’ of 1909. The 1909 budget was not the first time that a Liberal government had been stymied by the unelected and predominantly Conservative House of Lords. Gladstone’s 1892-5 administration had suffered many defeats, including over Irish Home Rule in 1893 (Pugh, 2002, p. 92). The Liberals had won control of the House of Commons in a

⁵Indeed, Wald (1983, p. 209-210) does find that both of the 1910 elections had particularly high levels of turnout relative to the rate one would expect based on the age of the electoral register at the time of the election, and Lawrence (2009, p. 73) characterizes the 1910 elections as “the high point of partisan mobilization in modern British politics”.

landslide victory in 1906, but the House of Lords blocked a host of their policies, ranging from the disestablishment of the Anglican Church in Wales to education and temperance (McLean 2001, p. 157; Stephens 1982, p. 48). They also, however, vetoed the 1909 budget, which would have raised property taxes to pay for social reforms and naval expansion. Lloyd George seized on this issue, the budget, to mount an electoral attack on the House of Lords, calling an election for January 1910 which was dominated by the question of whether the Lords should be able to veto the Government's budget. (A second election, in December 1910, was fought on essentially the same grounds; by this point, the offending budget had been passed, but the issue at stake was passing legislation in order to curtail the Lords' veto power going forward.) (McLean, 2001; Pugh, 2002). As such, Lloyd George pulled off the heresthetic trick of reducing a two-dimensional space to a single class dimension, thereby positioning the Liberals to take over as the major left-wing force going forward (McLean, 2001, p. 154).

One reason for the stalemate between the inevitability and the fluke theses, representatives of which minutely dissect the implications of franchise restrictions (e.g. Matthew, McKibbin and Kay, 1976; Tanner, 1983) and parliamentary and local election results (e.g. Wald, 1978, 1983; Stephens, 1982; Pelling, 1967), is that existing work has largely focused on electoral support for each party in the constituencies, which is plagued by issues of ecological inference - since no survey data from this period exists,⁶ scholars have been limited to trying to identify which types of constituencies tended to support which party. However, British census data is not collected within the same geographic boundaries as parliamen-

⁶One should note that Butler and Stokes (1971) have tried to recreate it by interviewing over-75-year-olds in 1963, but there is some doubt as to their methodology (Clarke, 1972; Wald, 1978).

tary constituencies, leading scholars to variously aggregate constituencies up to regions (Pelling, 1967) or other super-constituencies (Wald, 1983), construct extremely crude measures of ‘class’, limited to population and density (Stephens, 1982) or give up on parliamentary results entirely in order to examine local elections (Wald, 1978). Moreover, even when this data hurdle is scaled, it is empirically complicated to compare the basis of Liberal and Labour electoral support; since the nascent Labour Party was financially constrained, candidates selected their constituencies extremely strategically, focusing on those with a large enough working-class presence that they thought they could win (Jusko, 2017). Due to the Lib-Lab electoral pact, most of the constituencies Labour ran in were, then, not contested by Liberals (Bealey, 1956; Bealey and Pelling, 1958), so any direct comparison of the two parties’ bases of support is necessarily skewed due to this self-selection (Douglas, 1974, p. 107).

Instead of looking at parties’ performance, we turn to a different source of evidence: their electoral campaigns. The question of whether the Liberals’ doom was inevitable ultimately comes down to whether they were successfully able to appeal to the working class – or whether Labour staked out an ideological position that the Liberals were unable, or unwilling, to embrace. While scholars have examined Liberal campaigns in their effort to establish the extent to which New Liberalism represented a truly working-class program, they have largely considered only the central party apparatus (Pugh, 2002) or individual regions, such as Lancashire (Clarke, 2007) or Wales (Morgan, 1974). None have undertaken a systematic study of Liberal campaign manifestos across the country; and moreover, none have compared these to the manifestos issued by Labour candidates.

By collecting and analysing the full universe of candidate manifestos, we are able, for the first time, to compare candidates’ electoral appeals across all three

parties, for the whole country, in the entire period leading up to World War I. By systematically comparing manifestos, we substantially corroborate the fluke view – that the Liberals’ decline was by no means inevitable. By 1910, the Liberals had situated themselves very well to be the party of the working class in a party system dominated by class politics. While Labour did initially break new ideological ground with their appeals in the elections of 1895 and 1900, by 1906 and, especially, 1910 the Liberals were ideologically indistinguishable from them.

Indeed, this supports the view that New Liberalism, and Lloyd George’s choice to challenge the House of Lords over the budget, in particular, was a way to proactively center the election around class politics – and ensure that the Liberals were solidly on the side of the working class. As McLean (2001, p. 157) writes, “when the attack on the Lords came, it was not on education, nor licensing, nor Welsh disestablishment. It was on Lloyd George’s ‘People’s Budget’ of 1909. Lloyd George and Asquith had chosen on which ground to fight and on which ground not to.” The ground they picked, as we show, was the very ground Labour had broken.

3.2 DATA

3.2.1 CAMPAIGN ELECTION ADDRESSES

We have compiled and digitized a new dataset based on a comprehensive collection of every “election address” of every MP candidate in all general elections and by-elections in Britain between 1892 and 1910.⁷ These addresses are written statements that all parliamentary candidates release to voters in their constituencies

⁷The next election after December 1910 was not until December 1918, and was held with different constituency boundaries under a different franchise, making it very hard to compare (Stephens, 1982).

prior to general elections and by-elections, and were described by a contemporary as being “in essence the political creed of the aspiring candidate, and the pledge of his future action to the constituents with regard to the burning questions of the hour”, “a customary and direct method of explaining his political beliefs to the men whose votes he desires, [such that] they have a definite standard by which they can test his future political action” (Fox, 1911, p. 399, 416).

This dissemination of election campaign addresses was customary since at least 1832 (Cox, 1987, p. 57), though likely even longer (Fox, 1911, p. 398), and achieved particular importance after the abolition of public hustings in 1872 (Lawrence, 2009, p. 45). In short, in the UK, since at least the mid-19th century, one leaflet per candidate was distributed by the Royal Mail, in order to ensure that voters were informed about their options in the upcoming election; this address was reprinted in local papers to further increase circulation (Fox, 1911, p. 400). As Nicholas and Butler write, “[The election address] is pervasive in that, more nearly than any other device, it reaches every voter; at the same time it is a product of the constituency organisation, and as such it is one of the few reliable indices as to what is distinctive about the local campaigns” (Nicholas and Butler, 1950, p. 211). All candidates up for election across all constituencies in Britain – both winners and losers – produced a comparable text advertising their political positions and personal qualities, in order to appeal to their constituents. (See Section 1.5 for more information about the dataset.)

3.2.2 OTHER DATASOURCES

We combine this election address data with a dataset from Eggers and Spirling (2014*a*) covering all detailed election returns in each of the six general elections;

this allows us to match the addresses with the candidate’s party and the outcome of his race. We group the Conservatives and the Liberal Unionists together as a Unionist bloc (in accordance with the “Unionist Compact” they formed electorally to avoid running against each other (McLean, 2001)).

3.3 METHOD

We use *doc2vec*, a deep learning technique, to place words and documents in a 50-dimensional metric space. This is based on *word2vec*, a word embedding method, which learn the meaning and usage of words by using skip-grams to understand the context in which they appear in text; it is an autoencoder which models a given word based on the embeddings of nearby words in a shallow neural network (Mikolov et al., 2013). This retains information about word ordering which is discarded in bag-of-words approaches, resulting in a relatively nuanced understanding of what words mean and how they are used (e.g. Bolukbasi et al., 2016; Mikolov, Yih and Zweig, 2013). Doc2vec extends the word2vec method by including a document vector alongside the context word vectors when modelling each word, thus jointly learning document and word embeddings (Le and Mikolov, 2014). We obtain a vector for each document that represents its position in 50-dimensional metric space.⁸

Word2vec requires a large training corpus; previous applications have, for example, used the Google News corpus to train their word embeddings (e.g. Bolukbasi et al., 2016; Mikolov, Yih and Zweig, 2013). However, we know that the meaning of words can change over time (Hamilton, Leskovec and Jurafsky, 2016), rendering

⁸Since the model takes a long time to train, it makes sense to select an arbitrary but fairly high number of dimensions to represent the latent ideological space, and then do any necessary dimension reduction afterwards.

this inappropriate for use with our historical data. Instead, we supplemented our corpus of election addresses, which comprises 6,038 speeches, with the parliamentary debates corpus from the same period (Eggers and Spirling, 2014a). These speeches, held by (a subset of) the same men at the same time, allows us to learn the meanings of words *as they were used at the time*.

We can see how well doc2vec does at understanding words by looking at four words, ‘queen’, ‘taxes’, ‘protect’ and ‘lords’. Table 3.1 shows the ten words with the highest cosine similarity to each of the four, as well as how similar they are (on a scale of -1 to 1). We can see that there is not only high face validity, but also that the contextual meaning of the words is understood (i.e. ‘lords’ is understood to mean a house of parliament, rather than just a category of aristocracy).

Table 3.1: Validating doc2vec

	queen	sim	taxes	sim	protect	sim	lords	sim
1	king	0.67	taxation	0.76	safeguard	0.78	commons	0.80
2	reign	0.51	tax	0.70	preserve	0.68	peers	0.51
3	majesty	0.50	rates	0.62	guard	0.64	house	0.47
4	henry	0.49	charges	0.58	secure	0.64	parliament	0.47
5	praying	0.41	burdens	0.56	substitution	0.63	reject	0.41
6	fathers	0.40	incometax	0.54	ensure	0.63	tribunals	0.40
7	trinity	0.39	fines	0.54	protecting	0.62	mutilated	0.39
8	denmark	0.38	assessments	0.54	prevent	0.62	senate	0.38
9	sovereign	0.38	duty	0.54	deprive	0.62	legislature	0.38
10	jubilee	0.37	duties	0.52	maintain	0.59	upstairs	0.38

By analysing the universe of campaign manifestos and scaling them altogether, we can examine the ideological space in which the parties competed. While politics encompasses a wide range of issues, partisan competition and voting commonly takes place within a low-dimensional space, as the space is constrained (Poole, 2005) such that issue positions tend to be aggregated into ‘bundles’ represented by

political actors (Craig, Martinez and Kane, 1999; Benoit and Laver, 2012). While voting and speaking in parliament tends to be extremely low-dimensional, often just one or two dimensions (e.g. Poole, 2005; Hix, Noury and Roland, 2006; Lauderdale and Herzog, 2016), examining political speech can, in some cases, elucidate additional dimensions which are relevant to the political discourse (Schonhardt-Bailey, 2008). In this paper, we use principal components analysis to reduce the 50-dimensional speech vectors to two more easily interpretable dimensions.⁹ In the language of Poole’s 2005 framework, doc2vec provides a flexible means of estimating a high-dimensional issue space, which we then dimension-reduce to a basic space which is able to accurately classify nearly 90% of candidates by party (see section 3.4.5).

3.4 RESULTS

3.4.1 CAMPAIGN DIMENSIONALITY

Scaling the campaign manifestos using principal components analysis lets us explore how the ideological space of the parties changed over time. Figure 3.2 shows every candidate’s position in each of the six elections between 1892 and 1910; every point on the graph represents a single candidate’s manifesto, coloured by party.¹⁰

Figure 3.2 lets us fully trace the rise of Labour candidates - not just those who were actually elected, but also including those who ran unsuccessfully.¹¹ We find

⁹As Lowe (2016) shows, PCA is a good approximation to many scaling methods when document length has already been normalized out of the data matrix, as is done by doc2vec.

¹⁰As noted above, Conservatives and Liberal Unionists were formally separate parties until 1912, which is why they are shown with separate colours; however, in the entire post-1886 period, they ran in an electoral alliance and effectively behaved as a single party, and are treated as such in the analysis (Byrne and Shepley, 2015).

¹¹Though a few proto-Labour candidates ran in 1892, the Independent Labour Party - the

substantial evidence that while (proto-)Labour candidates had unique positions in 1895 and 1900, near but clearly distinct from the Liberal Party, this changed over time. By 1906, while the (increasing number of) Labour candidates had retained the same positions, the Liberals had largely followed them. In the two 1910 elections in particular, New Liberalism had fully inhabited the space that Labour had staked out earlier, and the two progressive parties were indistinguishable in terms of the ideology of their electoral appeals.

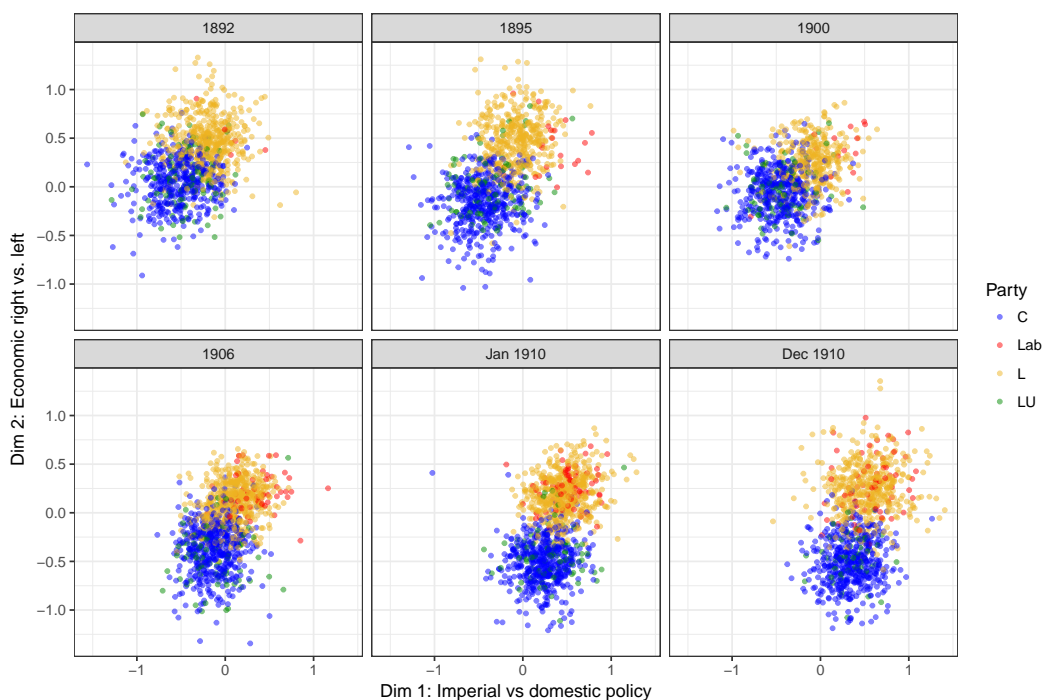


Figure 3.2: PCA on doc2vec - first two dimensions

Moreover, Figure 3.2 shows that there is partisan variation on both dimensions; for the most part, Liberals and Labour candidates place higher on both dimensions. The Liberal Unionist Party, a precursor to the Labour Representation Committee, which was in turn the precursor to the Labour Party - was founded in 1893.

sions than do Conservatives and Liberal Unionists. We also see, however, that this changes over time. The first four elections appear to have a largely diagonal axis of competition, indicating that both dimensions are at play; this is particularly pronounced in the 1900 election, in which the first dimension is especially important. The 1910 elections, on the other hand, are fought almost exclusively along the second dimension.

As we go on to show in section 3.4.2, this second dimension, which emerges as the primary axis of competition in 1910, is the class dimension, while the declining first dimension is about whether policy should be focused on the empire (towards the negative side) or domestic issues (the positive side). Our findings thus precisely corroborate the account McLean (2001) sets out; Lloyd George's decision to call the 1910 elections to challenge the House of Lords over the budget set the scene for the class politics that were to characterize Britain after the war. An often-overlooked implication of this decision is that he forced the Conservatives onto that same plane; while they had previously been using imperial policy to appeal to the electorate, in the 1910 elections all parties competed on domestic issues.

3.4.2 VALIDATING THE DIMENSIONS

While PCA can show us the two most salient orthogonal dimensions underlying party competition, it is up to us to interpret what these dimensions actually mean in terms of issues. In order to do that, we can do two things - first, we can read the speeches, and second, we can use machine learning to predict which words are most highly associated with each category (Grimmer and Stewart, 2013).

DIMENSION 1: IMPERIAL VS DOMESTIC POLICY

Examining speeches that score in the extreme values of the first dimension shows that this dimension is primarily about whether Britain ought to prioritize imperial (colonial) or domestic (primarily economic) issues. Joseph Alfred Bradney, the Conservative candidate from Radnorshire, argued in 1892 that the most important issue was Home Rule specifically and the Empire more broadly, claiming that “This Government has carried on the affairs of our Great Empire in a manner worthy of its best traditions. They have avoided all Foreign complications and kept out of war, at the same time maintaining the position and interests of England among the nations of the world.”¹² Arthur Strauss, a Liberal Unionist from Camborne whose speech was also on the ‘imperial’ end of the spectrum, advocated for “peace, reform, and the maintenance of the integrity of our empire”. On ‘domestic’ side, one of the most highly-scoring addresses was by Richard Reiss, the Liberal candidate in Chichester in 1911. His focus was primarily on domestic policy, arguing that the Conservative-dominated House of Lords “want to make the poor people pay for the pensions themselves”, want to “shift the taxes from their land on to your food”, and “insist on their claim to trample on the wishes of the people”. He mentions the Empire only in passing, and only to say that he believes in “a big Imperial System of Federal Home Rule, and in not insulting the colonies”.

Identifying the lower end of this dimension with the Empire is also consistent with the historical literature, which has pinpointed the Conservatives as owning this issue area in electoral terms after about the 1870s. As Pugh (2002, p. 81) writes, after the 1880s “Conservatives ceaselessly propagated their claim to be the

¹²All speeches described here are quoted at more length in Appendix B.1.

party of national interests, and cast aspersions on their opponents' patriotism". This was particularly acute in 1900, the year in which first dimension shows the strongest party distinction, when Conservatives "pinned the label 'pro-Boer' indiscriminately on their rivals" (Pugh (2002, p. 81), see also Readman (2001); McLean (2001)). Notably, the candidates running under the various Labour banners, in red in Figure 3.2, are noticeably on the 'domestic' side of the party system.¹³ This is entirely consistent with historians' accounts of socialist candidates' focus on economic issues such as the eight-hour working day and other labour rights (Bealey and Pelling, 1958).

The impression that this dimension is about whether to prioritize imperial or domestic policy can further be corroborated using a more systematic approach. Using a Naive Bayes classifier to predict position on this axis shows that the words that best predict a particularly 'imperial' speech include 'territories', 'immigration', 'australian' and 'egypt', while the words that best predict a 'domestic policy' speech include 'socialism', 'budget', 'nationalisation' and 'luxuries'.

Another way to validate the dimension is using a keyword approach. As Blaxill (2017) shows, the topic of imperialism can be picked up fairly well using just a few keywords. We used the keywords "imperial", "empire" and "colon*" to measure what percentage of sentences in a candidate's speech contained any of these words, a crude metric of the extent to which they discussed the Empire. As Figure 3.3 shows, this metric is correlated with Dimension 1 in every year.

Looking at how speeches change over time, we can see that in this first dimension

¹³The 'Labour' label refers, in this period, to a variety of different organisations representing the industrial workers' interest, including the Scottish Workers' Representation Committee, the Social Democratic Federation and the Independent Labour Party. These groups coalesced into the Labour Representation Committee for the 1900 election, but it was not until right after the 1906 election that they became the Labour Party.

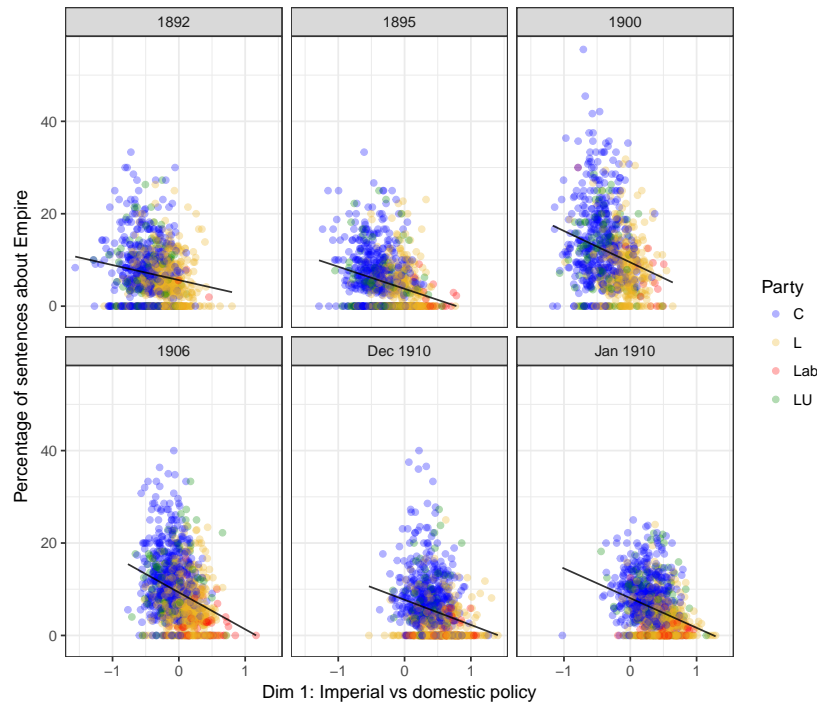


Figure 3.3: Correlations between Dim 1 and a keyword measure of imperialism

there is an almost monotonic positive shift among *both* parties over the course of the six elections. Figure 3.4, in which the manifestos are coloured by their election year rather than their party, shows this clearly - while both parties start out on one side in 1892 (red), they have both moved to the other side by December 1910 (pink). This makes sense given that the issue of Irish Home Rule, crucial in 1892 (which was, as Bradney argued, in many ways a relitigation of the 1885 and 1886 elections), faded in importance to British MPs over time,¹⁴ garnering fewer and fewer mentions, while domestic issues, particularly social reforms and the power of the House of Lords over the budget, increased.

This movement over time may introduce concern that this dimension simply

¹⁴It is worth noting that Home Rule did not become less salient in Ireland.

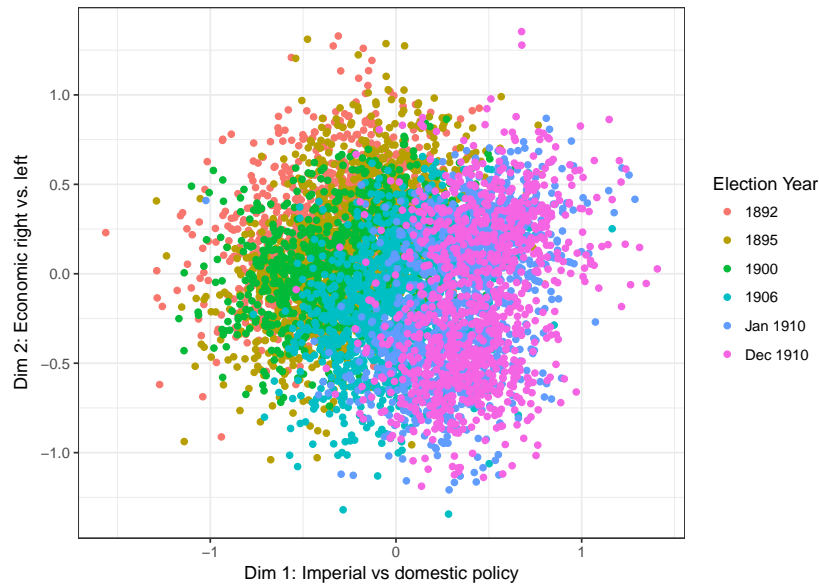


Figure 3.4: How positions changed over time

reflects time, rather than any real change in issue. However, this concern is alleviated when we examined the speeches which rank high and low on this dimension within years. Even in the January 1910 election, which as Figure 3.4 shows was fairly far towards the ‘domestic policy’ side as a whole, speeches towards the ‘imperial’ side focused as much or more on imperial policy than on the domestic issues of the day. Thus, T. M’Micking, a Conservative from Inverness, highlighted “Imperial Defence” as his most important issue, proclaiming that “I believe an overpowering Navy, and a small but highly trained Army, backed by adequate reserve forces, to be indispensable to our National safety. The cost of these is as nothing compared to the cost of a war that should find us unprepared. The vital question of the adequacy of the Navy is not appreciated by the Liberal Party. The existence of the British Empire must not be sacrificed to what the Radicals call retrenchment.” In his statement on “General Policy”, he returned forcefully

to this theme: “I am no ‘Little Englander,’ but one who is proud to be a citizen of the greatest empire the world has yet seen, and as such it will always be my endeavour to promote in every possible way the prosperity, not only of the United Kingdom, but also of every portion of the Empire which owns allegiance to the British Crown.” For an election held on the single issue of whether the House of Lords ought to have the authority to reject a budget bill, this was indeed a lot of emphasis on the Empire.

Similarly, highly ‘domestic’ speeches from 1900, a year in which the election was dominated by the Boer War, show an intense focus on domestic policy. J. H. Yoxall from Nottingham West discusses economic and other domestic matters much more than the war or the Empire as a whole, and touches on the latter just to say that “I believe in a brave and honourable foreign policy, but not the Jingo raiding game. Condemning the blunders that let us in for war, I voted steadily for men, munitions, money, to end it as soon as possible.”

DIMENSION 2: CLASS POLITICS

The speeches that ranked at the extremes of the second dimension largely focused on class issues. The highest-ranking speech overall was held by Walter Francis Roch, a Liberal candidate in December 1910, who proclaims that “This is the most important Election in which any man now living has taken part. During the last 20 years the powers of the unrepresentative House of Lords have steadily increased and the powers of the direct representatives of the people correspondingly diminished. ... The issue – important, critical and vital – is nevertheless simple, direct and clear: The House of Commons, elected, controlled and guided by the People, against the House of Lords permanently Tory, unchanged, unchangeable,

responsible to no one, controlled only by themselves; The rights of 50 million Citizens against the privileges of 600 Peers.” Another extremely left-wing speech was held by Bertram S. Straus in 1895. Straus also demanded the end of the House of Lords’ veto - 15 years ahead of the 1910 elections on this topic - but the bulk of his speech was about social and economic issues, particularly for “All measures having for their object the amelioration of the conditions under which the toiling masses of the action labour”, land reform, better housing, and the taxation of land. Overall, high scores on this second dimension reveal a pro-labour, pro-social reform, anti-House of Lords position, across elections.

On the other end of the spectrum, speeches that ranked particularly low on the second dimension were what we would characterize as economically right-wing - opposed to redistribution and concerned about the existing balance of power. “I am opposed to many of the proposals of the Budget”, Keith Fraser, a Conservative from Leicestershire Bosworth, argued in January 1910. “I think many of these proposals are financially unsound and unjust to individuals. If passed into law, they will undoubtedly increase that feeling of insecurity amongst those having property of any description in this country.” Harry S. Samuel, from Lambeth Norwood, warned that “Without a Second Chamber there would be no barrier to the passing of Socialistic legislation which a Government, supported by Socialists, could not, of necessity, refuse to sanction.”

Using a Naive Bayes classifier corroborates these dimensions. The top words predicting membership among the highest- and lowest-ranked speeches on the second dimension are characterized by class conflict; thus using words such as “socialistic”, “vindictive”, and “ownerships” predicts a low (right-wing) score, while words like “primogeniture”, “royalties” and “evicted” predict a high (left-wing) score.

The historical literature also supports the notion that this second dimension is a class dimension. For one, it is important throughout the period, as one would expect in a society in which class mattered greatly, and is more predictive for party classification than the imperial dimension (see section 3.4.5). Secondly, class became the dominant axis of competition in the 1910 elections in particular, which accords with the shift we see in our analysis (Blewett, 1972; McLean, 2001; Pugh, 2002).

In sum, then, we can see from a combination of textual evidence, machine learning classification and historical support that British politics was, in the pre-WWI period, characterized by two main dimensions - imperial vs. domestic policy, on the one hand, and class politics on the other. Over time, we can see a clear shift away from the imperial focus and towards the domestic policy agenda over time. Overall, this provides overarching support for the account by McLean (2001) of Lloyd George's heresthetic strategy of reducing electoral competition to a question in which he judged to have the people on his side, and away from a debate over Empire which he saw as disadvantaging Liberals.

This is further corroborated by Figure 3.5, which shows how party competition changed within each individual constituency. Here, the lines connect the positions of speeches given by candidates from the same constituency, with the positions of the speeches being at the end points of each line. Each line thus represents the axis of competition within a single constituency. We can see not only how the axis shifts from diagonal in 1892 through 1906 to essentially vertical in 1910, but also how there is much less variation across constituencies in 1910. This reflects how the axis of competition within constituencies increasingly aligns with party competition in the nation as a whole.

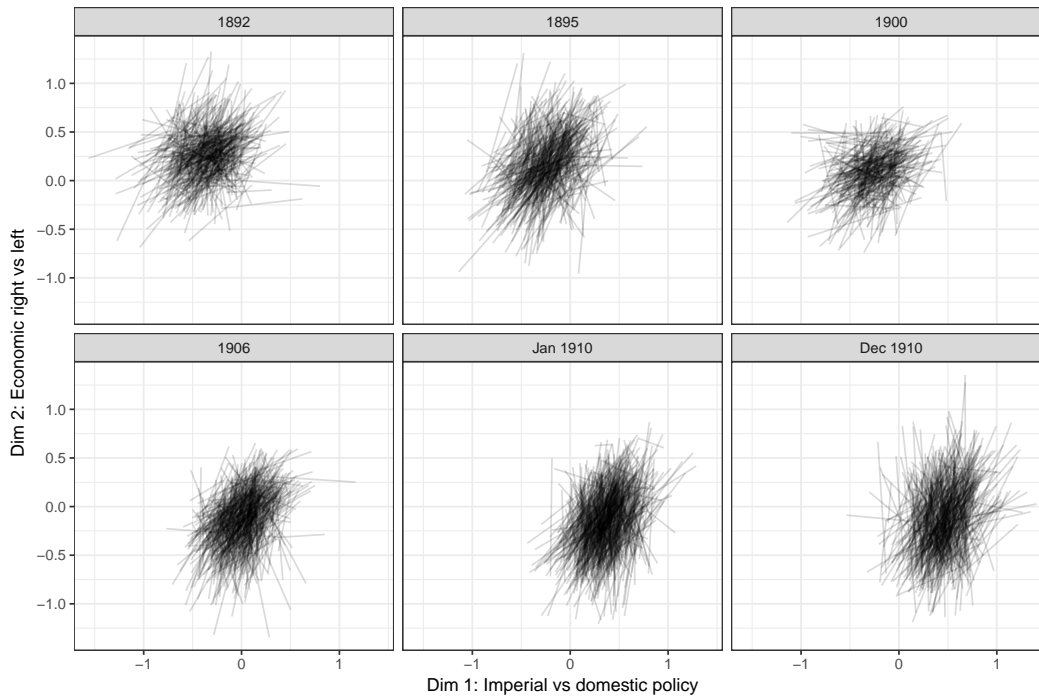


Figure 3.5: Connecting competing speeches from the same constituency

3.4.3 POLARIZATION

Lloyd George’s decision to shift electoral competition from two dimensions to one in 1910 also brought about, simultaneously, an increase in polarization, which we can observe as the two party blocs becoming more distinct from one another. We test how distinguishable the two party blocs were in two different ways.¹⁵ Our first approach is to measure the distinctiveness of the party distributions. We fit a multivariate (50-dimensional) normal distribution to each party bloc’s cloud of points in the doc2vec space, and then calculate the Kullback-Leibler divergence

¹⁵For this analysis, we group the Liberals and Labour together in a progressive alliance (as indeed they formed in most, though not all, constituencies before World War I (Bealey and Pelling, 1958)).

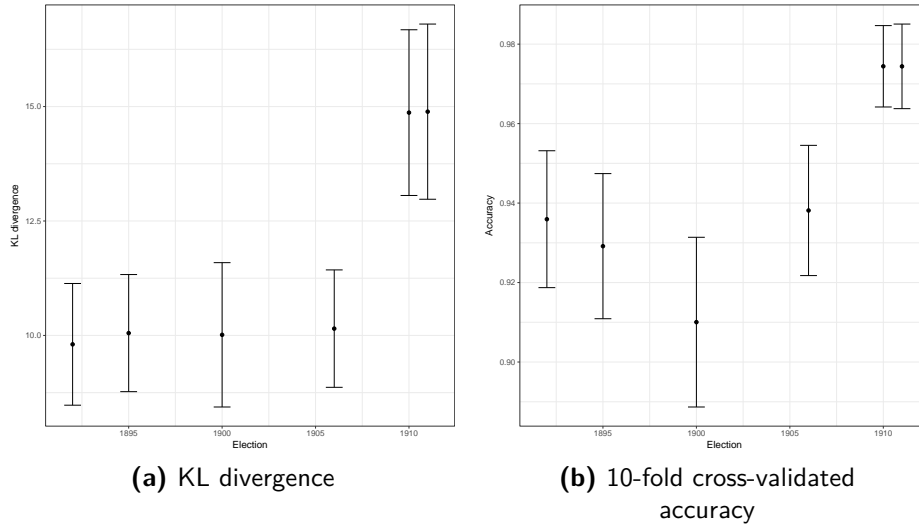


Figure 3.6: Measuring divergence between the two party groups

between the two distributions.¹⁶ This provides a measure of the difference between the two party blocs; if the distributions inhabited exactly the same space (common means and covariance structures), the KL divergence would be 0. Figure 3.6a shows how the party blocs diverged over time. While there is not much change in the first four elections, the party blocs become significantly more distinctive in the 1910 elections.

Second, we use a machine learning approach to measuring party-bloc polarization (Peterson and Spirling, 2017). Here, we use the doc2vec vectors for each document to predict which party bloc each speech belongs to. A speech is classified correctly if the party bloc it belongs to is correctly predicted on the basis of its 50-dimensional vector; when accuracy (the proportion of speeches that were correctly predicted) is high, the speeches are more polarized. We run regularized

¹⁶I define the symmetric KL divergence as $\frac{1}{2}(D_{KL}(C||L) + D_{KL}(L||C))$, where C represents the distribution for Conservatives and L represents the distribution for Liberals.

logistic regression with ten-fold cross-validation and bootstrapped confidence intervals predicting membership in each of the two party blocs. Accuracy is very high overall - over 90%, which makes sense given the extremely partisan appeals made in every campaign speech - but the two 1910 elections nonetheless showed a significant increase over the previous ones (Figure 3.6b). The fact that these two different methods, which make different assumptions, give us almost identical results is reassuring - it is clear that the two party blocs are significantly more distinguishable from each other in 1910 than previously.

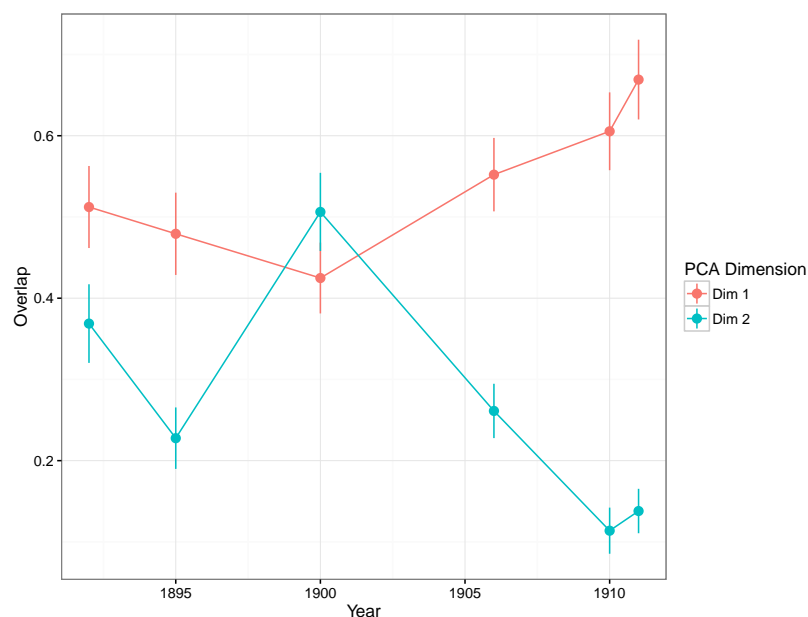


Figure 3.7: Overlap between the left and right parties' distributions

Moreover, by examining each of the two dimensions identified in section 3.4.1, we can see that this polarization occurred entirely on the second dimension. Figure 3.7 shows the overlap between the left and the right party blocs on each of the

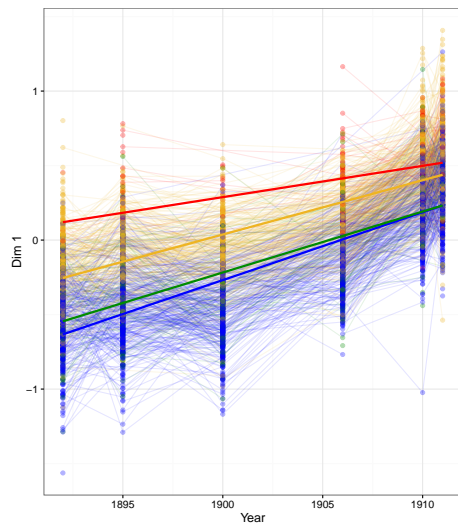
two dimensions.¹⁷ The y-axis here shows how much the two party blocs overlap on each dimension, where a high overlap means that they are less distinguishable from each other. By 1910 the two party blocs overlap substantially on the first dimension (red), while they have significantly separated out on the second (blue). The increase in polarization was thus driven by this shift to class politics, and the movement away from the imperial vs domestic dimension as an axis of competition. (The notable outlier here is 1900, when the two parties overlap more on the class dimension than on imperialism; this is likely because the dominant issue of the election was the ongoing Boer War, so the two parties were relatively more distinguishable on the imperial vs domestic dimension and talked less about economic issues.)

3.4.4 REPLACEMENT

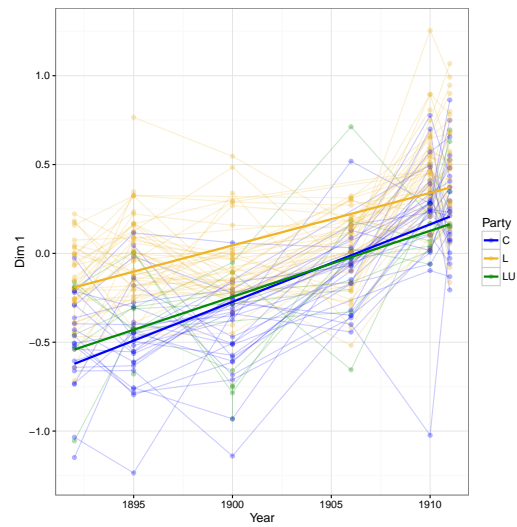
Going further, we can try to understand how these changes happened. In particular, we can assess the role that the replacement of parliamentary candidates played in the shifting dimensionality of campaign manifestos over time. It is plausible that over-time change is a result of ‘old-fashioned’ candidates gradually dropping out of races and being replaced by new candidates who have different priorities - ones that align more with the focus on class politics. New Liberalism, along with the increase in polarization and the shift towards competing exclusively on the class dimension, may thus be a story of new faces rather than changing minds.

Figure 3.8 shows how candidates moved on each of the two dimensions over time. In all panels, the vertically arranged dots denote elections, and the thin

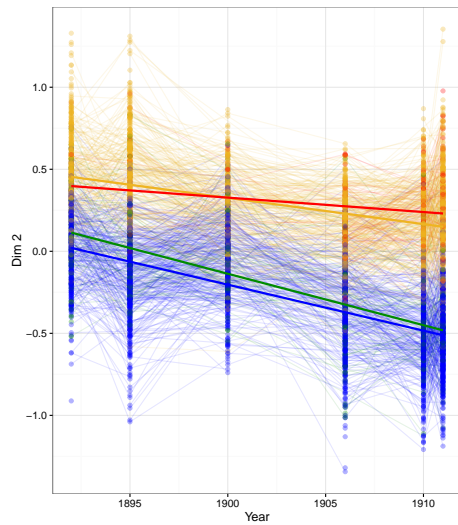
¹⁷We calculate the area of the overlap between the party bloc by taking the Riemann sum of the kernel density estimates.



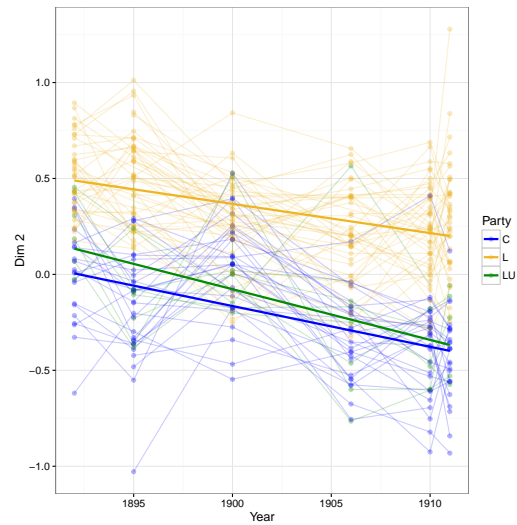
(a) Dimension 1:
All candidates



(b) Dimension 1:
Longstanding candidates



(c) Dimension 2:
All candidates



(d) Dimension 2:
Longstanding candidates

Figure 3.8: Tracing candidates' positions over time

lines connecting dots along each election illustrate a candidate's movement across time if he ran more than once. The thick lines are linear trends for each party.

The panels on the left show the movement for all candidates. For the first dimension (3.8a), we can see both the overall positive shift over time and the increasing overlap between the parties on this dimension. For the second dimension (3.8c), we can see an overall shift towards the right among all parties (but particularly the Conservatives and Liberal Unionists), and the widening gap between the party families. Remarkably, these trends look almost unchanged in the right-hand panels in the figure. Here, we plot the same path for particularly long-standing candidates, where long-standing is defined as running five or six times (out of the six elections). The linear trends look almost identical among those candidates who remained in the dataset over time, indicating that the changes were not a result of replacement, but rather that the candidates themselves changed their appeals.

Table 3.2: Is there a replacement effect?

	<i>Dependent variable:</i>					
	Extremism on Dim 1			Extremism on Dim 2		
	(1)	(2)	(3)	(4)	(5)	(6)
Joiner	-0.006 (0.005)		-0.002 (0.008)	-0.009 (0.006)		-0.006 (0.009)
Leaver		-0.001 (0.005)	0.005 (0.008)		-0.007 (0.006)	-0.013 (0.010)
Joiner x Leaver			-0.010 (0.011)			0.003 (0.013)
N	5,077	5,039	4,078	5,077	5,039	4,078

Notes: All models have party fixed effects, election fixed effects, and interactions.

*p<0.1; **p<0.05; ***p<0.01

Another way of testing the importance of replacement is by comparing new candidates (‘joiners’) and candidates running for the last time (‘leavers’) to the rest of the candidates in terms of how extreme their positions on each dimension are (Eggers and Spirling, 2016*a*). If the reduced polarization on the imperial dimension and the increased polarization on the class dimension are due to the replacement of old-fashioned candidates with more modern ones, joiners should be significantly less extreme (negative coefficients) on dimension 1 and more extreme (positive coefficients) on dimension 2 than candidates who have run before, whereas the opposite should hold true when comparing leavers to those who would go on to run again. We include fixed effects for parties, elections and interaction between them, such that joiners and leavers are compared to other candidates of the same party in the same year.

Table 3.2 shows the results of these regressions. We find no evidence that joiners *or* leavers are significantly different from other candidates, or that there is any significant interaction between the two. All of the effect sizes are extremely small, and none are anywhere near statistical significance. It does not appear that changes in extremism on either dimension were driven by replacement; rather, candidates moved over time.

3.4.5 ROBUSTNESS CHECKS

ARE TWO DIMENSIONS ENOUGH?

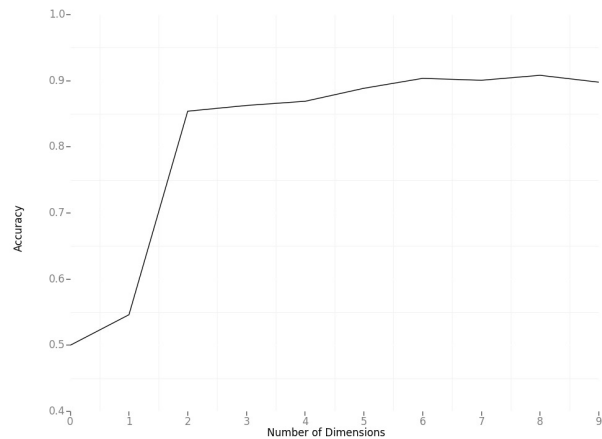


Figure 3.9: Predicting Conservative/Liberal membership based on PCA dimensions

We used principal components analysis to reduce the dimensionality of the doc2vec space in order to make it more interpretable. While it was not clear ex ante that two dimensions would be appropriate to understand the party system, Figure 3.9 shows that this was indeed the correct choice. We see that the first dimension, while explaining much of the over-time variation, does not actually help us predict party membership much better than guessing; it is the second dimension which really improves party classification. The first dimension only improves accuracy by about 5 percentage points over guessing, while the second boosts accuracy to 85%. Other dimensions do not add much more at all, clearly justifying our choice of two as the number of dimensions to interpret.

WORDFISH

As a robustness check, we use Wordfish to scale the speeches along a single latent ideological dimension based on the frequencies of words used (Slapin and Proksch, 2008). As the doc2vec scaling indicates, on the main dimension in the text data - the divergence between imperial and domestic policy issues - both parties move significantly towards the ‘domestic’ end over time. Using Wordfish to scale all the election years together, therefore, primarily highlights this over-time movement of all parties (Figure 3.10).

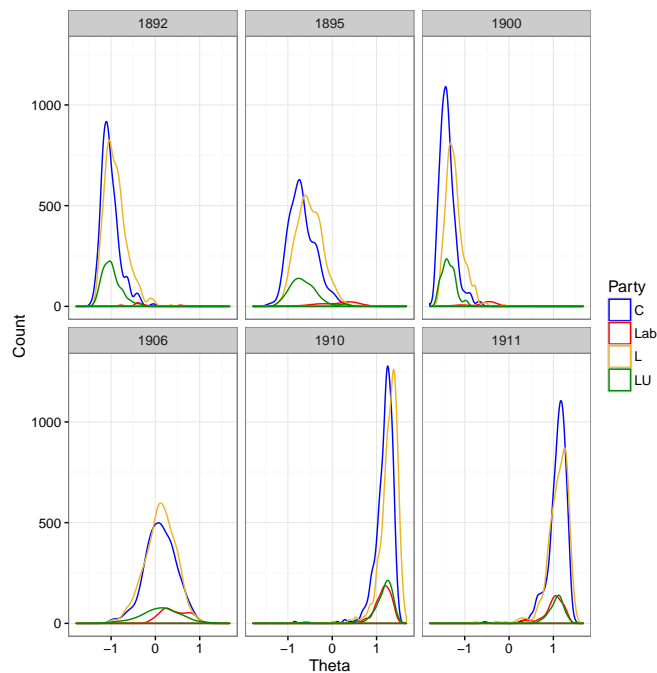


Figure 3.10: Wordfish - all speeches together

However, when scaling the speeches year-by-year (Figure 3.11) we see much the same patterns as when looking at the second dimension of the doc2vec PCA. Indeed, this score correlates with the second, economic dimension of the PCA at

0.69 across all years; for the last two elections, in which the primary axis of party competition has shifted almost entirely to this economic dimension, the correlation between that and the Wordfish score is 0.87.

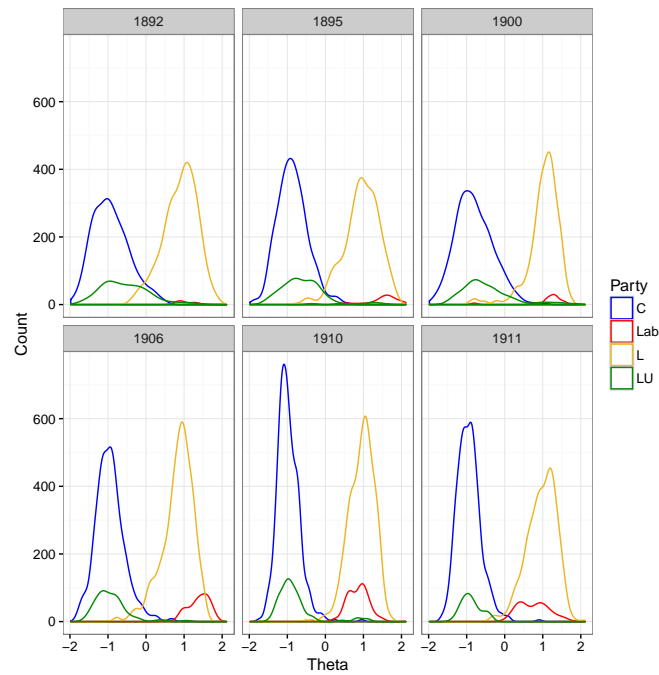


Figure 3.11: Wordfish - run on each year separately

Using Wordfish also further corroborates our findings on polarization in section 3.4.3. Measuring the overlap between the two party blocs, we see that it declines significantly in the 1910 elections compared to the earlier period (Figure 3.12).

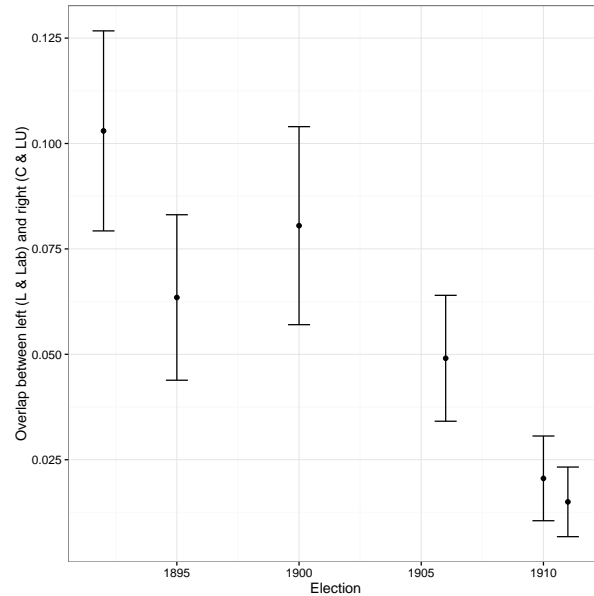


Figure 3.12: Overlap between the left and right parties' distributions

3.5 CONCLUSION

The Liberals' demise as a major party has been blamed on the rise of class politics in Britain, a cleavage which would come to dominate much of the post-World War I period. However, by introducing a comprehensive dataset of candidate election campaign addresses for the 1892-1910 period, we have been able to leverage the first systematic study of political campaigning in pre-war Britain to show that at the eve of the war, the Liberals were poised to remain the party of progressivism despite Labour's challenge.

We demonstrate that party competition was two-dimensional across the period, proceeding along both an imperial vs. domestic policy dimension and a class politics dimension. While competition was fully two-dimensional in the first four elections - Conservatives and Liberal Unionists were, on the whole, both more

Empire-oriented and more economically right-wing than Liberals and especially Labour candidates - the 1910 elections changed party competition, reducing the space to a single dimension: class. Moreover, we show that these changes were not due to replacement, but rather the movement of candidates over time.

This provides quantitative evidence in support of the argument proposed by McLean (2001), according to which David Lloyd George knowingly chose to fight the 1910 elections over the issue of the House of Lords' control over the budget in order to avoid Conservative dominance on the issues of Empire and nationalism. He thus did his best to position the Liberals as the major progressive force in the class politics he both foresaw and helped to bring about; Labour's eventual dominance was not a foregone conclusion. With the benefit of hindsight, we know that Lloyd George's efforts failed; but as McLean (2001, p. 154) argues, "it was an interesting failure, which came closer to success than most historians seem willing to concede."

We should add, however, that just because the Liberals were not declining before the war doesn't mean they wouldn't eventually have done so. As McKibbin (2010) argues, while the progressive alliance between the Liberals and Labour was solid before World War I, it was also based on two issues - defense of free trade against the protectionist turn among many Conservatives, and the primacy of the elected House of Commons over the unelected Lords - which were largely resolved by 1918. Their resolution may well have led the alliance to crumble, and for the real disagreements in economic policy to come to the fore, even in the absence of Liberal blunders.

In a wider sense, this paper also demonstrates the perils of focusing narrowly on either how politicians behave in parliament or how voters behave at elections. Politicians' choices regarding how to position themselves *to* voters is a crucial

element of their strategic behavior in election settings, as revealed by their choice to emphasize the class politics dimension over the imperial dimension in 1910, and polarize heavily along it. By acknowledging this strategic dimension and analyzing it using novel data, we show how and when the class realignment in campaigning set the scene for a similar realignment in the electorate after World War I.

4

Candidates' use of emotive language in campaigning

Abstract

Scholars of campaign sentiment have consistently found that incumbent candidates' campaigns are more positive than those of challengers. However, comparing incumbents and challengers is difficult; incumbents may be better candidates, have more resources and run in safer seats than challengers, making any comparison unequal. This paper addresses these concerns by using a regression discontinuity design to estimate the causal effect of incumbency on campaign sentiment, using an original dataset of all campaign manifestos issued by all British parliamentary candidates in the six elections between 1892 and 1910. It confirms the finding that winning the prior election makes candidates campaign more positively – an effect which developed during this period. The paper further shows that the incumbency effect is particularly strong in areas which saw a large increase in enfranchisement in 1884, and argues that this reflects the development of accountability in electoral campaigns in the UK.

THE CONTENT AND TONE OF ELECTION CAMPAIGNING has received much attention by scholars of contemporary American politics, and is increasingly studied in Europe as well. In particular, scholars have studied whether – and how – campaigns appeal to emotions, both positive and negative (e.g. Brader, 2006; Geer, 2006). One widespread finding has been that incumbent candidates’ campaigns are more positive than those of challengers (e.g. Brader, 2006; Druckman, Kifer and Parkin, 2009; Ridout and Searles, 2011; Crabtree et al., 2017). However, such studies have one major flaw: they compare the full set of incumbent candidates to the full set of challengers, disregarding the fact that these two groups may have major underlying differences. Average differences in sentiment between the two groups may thus be more reflective of these underlying distinctions – for example, that incumbents may be better candidates, have more resources, and run in safe seats – than a result of the effect of incumbency itself. This paper addresses these concerns by using a regression discontinuity design to test the causal impact of incumbency on campaign sentiment, using a dataset of candidate campaign manifestos spanning six elections during a formative period of British political development. It confirms prior findings that incumbency does indeed make candidates more positive, and shows that this effect developed in Britain during this pre-World War I period.

Many of these studies implicitly – and some explicitly (e.g. Ansolabehere et al., 1994) – suggest that emotive, particularly negative, language is a harmful development resulting from politicians’ decisions to attack their opponents, and which may lead to the corrosion of voters’ faith in politics. This paper provides evidence for an alternate logic, which presents campaign sentiment as an accountability mechanism. In this view, the fact that incumbents are more positive than challengers is evidence that politicians expect voters to hold incumbents accountable

for their actions in power, with incumbents portraying a positive view of the world while challengers do the opposite. I show that this effect is particularly strong for governing party incumbents and opposition party challengers, reinforcing the notion that proximity to power increases politicians' incentives to be positive. Moreover, I show that the incumbency effect is stronger in constituencies which had recently seen large increases in enfranchisement, suggesting that this is a strategy politicians use to appeal to new voters. In this view, the incumbency effect on sentiment is actually a positive sign in a developing democracy, which shows that politics is driven by accountability rather than patronage.

This paper proceeds as follows. Section 4.1 gives some background on the literature on emotion in campaigning, and on how this might apply to the prewar period in Britain. Section 4.2 sets out the data and methods used. Section 4.3 presents the results, and Section 4.4 concludes.

4.1 STRATEGIC CAMPAIGNING

When politicians design the campaign they will use to face voters in an election, they are strategic in making choices both about *what* they say, and *how* they say it. Much of the literature on political competition has focused on the first of these choices: what politicians talk about. In this realm, politicians can choose positions to take (e.g. Downs, 1957), they can choose to selectively emphasize certain issues over others (e.g. Riker, 1986; Petrocik, 1996; Druckman, Jacobs and Ostermeier, 2004; Hellwig, 2012; Williams, Seki and Whitten, 2016), and they can choose to focus on themselves or their opponents (e.g. Kaid and Johnston, 1991; Lau and Pomper, 2001; Geer, 2006; Elmelund-Præstekar, 2010; Evans, Cordova and Sipole, 2014; Walter, van der Brug and van Praag, 2014; Barton, Castillo

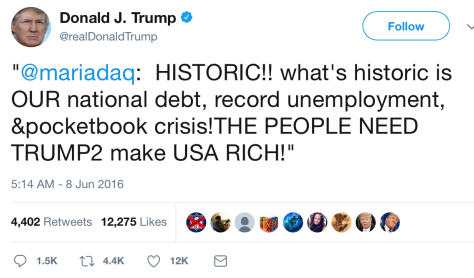
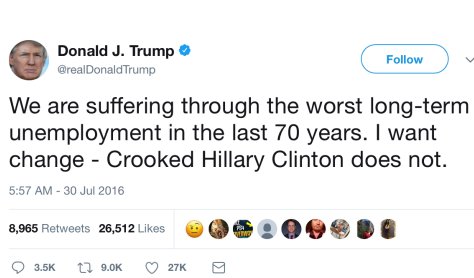


Figure 4.1: Donald Trump on the state of the economy BEFORE the election

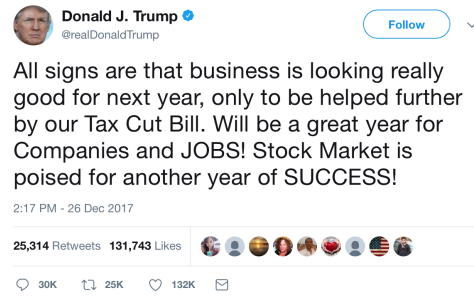
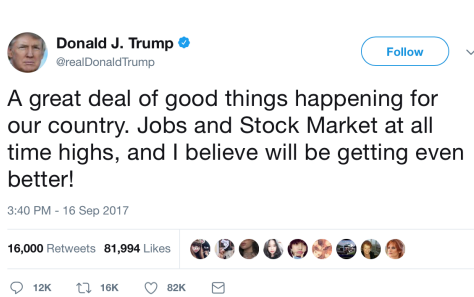


Figure 4.2: Donald Trump on the state of the economy AFTER the election

and Petrie, 2016). However, politicians also make a second set of choices: *how* to talk. This includes how they communicate nonverbally, using body language and facial expressions (e.g. Stewart, Bucy and Mehu, 2015; Dumitrescu, 2016; Schonhardt-Bailey, 2017), but also the verbal tone they choose to employ in their speech, and which emotions they choose to appeal to (e.g. Riker, 1991; Huddy and Gunthorsdottir, 2000; Hart, Childers and Lind, 2013; Jones, Hoffman and Young, 2013; Crabtree et al., 2017) Figures 4.1 and 4.2 illustrate choices made regarding tone; in all four tweets, Donald Trump is largely talking about the economy, but the tone he takes in the first two is drastically more negative than in the second two. While the first two tweets seem aimed at making voters angry about the state of the economy, the second two appeal to confidence, enthusiasm and pride.

RETROSPECTIVE VOTING. Studies of emotion in campaigning have fairly consistently found that incumbents are less likely to ‘go negative’ than challengers (e.g. Brader, 2006; Druckman, Kifer and Parkin, 2009; Ridout and Searles, 2011; Crabtree et al., 2017).¹ This finding makes sense within the framework of retrospective voting, according to which voters cast their ballots based on how elected politicians have performed in office (e.g. Key, 1966; Fiorina, 1981; Lewis-Beck, 1991; Clarke, 2009; Woon, 2012). Depending on how the incumbents have done, voters can choose to reward them with another term in office, or punish them by kicking them out. Using this logic, elections are voters’ chance to hold their elected representatives accountable for their performance. The campaign is one piece of information voters are supplied with in making that decision, and it is politicians’ chance to frame the terms of the debate: for incumbents, to make the pitch that they have done a good job, and for challengers, that incumbents have failed in their task.

While the retrospective voting literature has delved deep into whether, how and under what circumstances voters make these decisions to reward or punish incumbents (e.g. Shugart and Carey, 1992; Powell and Whitten, 1993; Anderson, 2007; Woon, 2012; de Vries and Giger, 2014), it is relatively scant on the extent to which politicians use their campaign strategically to shape the environment in

¹Indeed, this also holds true for negative campaigning, which, while related to - and correlated with - negative emotional appeals, falls into the camp of *what* the candidate talks about, rather than *how*. Negative campaigning is often defined as all campaigning that criticises the opponent, while positive campaigning is that which praises the candidate him or herself (e.g. Kaid and Johnston, 1991; Kahn, Fridkin and Kenney, 1999; Geer, 2006; Elmelund-Præstekar, 2010; Walter, 2014; Walter, van der Brug and van Praag, 2014; Barton, Castillo and Petrie, 2016; Auter and Fine, 2016; Evans et al., 2017). (In some studies, in fact, *any* mention of the opponent – even if it is not overtly negative – is classified as negative campaigning (e.g. Lau and Pomper, 2001; Blackwell, 2013).) These studies, too, overwhelmingly find that challenging candidates are likelier to resort to negative attacks on their opponents than incumbents are, likely for similar reasons (Elmelund-Præstekar, 2010; Evans, Cordova and Sipole, 2014; Walter, 2014; Walter, van der Brug and van Praag, 2014; Dolezal et al., 2016; Evans et al., 2017).

which voters decide. One element of this is examining *what* politicians choose to emphasize in their campaigns (e.g. Riker, 1986; Petrocik, 1996; Druckman, Kifer and Parkin, 2009), and some previous work has shown, for instance, that they are strategic in the extent to which they focus on certain issues, such as domestic issues more broadly (Druckman, Jacobs and Ostermeier, 2004), or on the economy more specifically (Hellwig, 2012; Williams, Seki and Whitten, 2016), basing these appeals on calculated efforts.

FRAMING AND EMOTIONS. However, campaigning is not just about what candidates say, but also how they say it – how they frame the issues they discuss. There is a large literature showing that humans evaluate the same outcome differently contingent on its framing – for instance, famously, whether a given risk is framed as positive (potential for gain) or negative (potential for loss) affects how likely respondents are to take it (e.g. Tversky and Kahneman, 1981; Kahneman and Tversky, 1984; Levin, Schneider and Gaeth, 1998). This is called ‘equivalence framing’, and is characterized by the strict equivalence of the outcome proposed; the only thing that varies is how that outcome is presented (Cacciatore, Scheufele and Iyengar, 2016).

In the political realm, choices are more complex, and outcomes are generally not equivalent (Druckman, 2011). Framing, in this realm, refers to the decisions politicians make by emphasising specific aspects or invoking associations that affect how the voter views the issue (e.g. Druckman, 2001*a,b*), a concept known as ‘emphasis framing’ (Druckman (2011), though see Cacciatore, Scheufele and Iyengar (2016) for an argument that this definition is too broad). Indeed, there is substantial evidence that framing matters greatly to how voters perceive issues (e.g. Druckman, 2001*b*; Chong and Druckman, 2007), and how they apportion responsibility

for outcomes (e.g. Iyengar, 1996), and ultimately how they behave (Quattrone and Tversky, 1988; Ansolabehere et al., 1994; Huddy and Gunthorsdottir, 2000; Chong and Druckman, 2007; Franz and Ridout, 2007; Kiss and Hobolt, 2011).

Emotional appeals are one type of framing. Rather than activating a topical frame (e.g. ‘human rights’ or ‘economic growth’) when discussing an issue, politicians can also frame an issue emotively (e.g. Rheault et al., 2016). Previous work has studied how politicians appeal to emotions visually, using images (e.g. Brader, 2006; Grabe and Bucy, 2009; Gadarian, 2014; Messing, Jabon and Plaut, 2016) or body language (e.g. Stewart, Bucy and Mehu, 2015; Schonhardt-Bailey, 2017).² Indeed there is some evidence that the use of emotion, too, is affected by strategic considerations; because voters make decisions based on how they perceive the country to be doing, politicians try to shape that perception by framing their appeals emotively.

Thus, incumbent politicians can use positive language in order to paint a rosy picture of the state of the world, while challengers can use negative language to encourage voters to be unhappy with the way the current government is handling things (Crabtree et al., 2017). Donald Trump’s tweets, before and after the 2016 presidential election, are a prime example of how a challenger discusses the state of the economy (Figure 4.1) compared to how an incumbent does (Figure 4.2).

We should note here that much of the literature on all kinds of framing has dealt with its effects on its targets - showing that these effects occur (e.g. Tversky and Kahneman, 1981; Kahneman and Tversky, 1984; Levin, Schneider and Gaeth, 1998), under which circumstances they are more or less powerful (e.g. Druckman, 2001*b*, 2004; Sniderman and Theriault, 2004; Brader, 2006; Franz and Ridout, 2007; Gadarian, 2014), and what mechanisms underlie them (e.g. Huddy

²For an overview of politicians’ nonverbal communication, see Dumitrescu (2016).

and Gunnthorsdottir, 2000; Druckman, 2011; Cacciatore, Scheufele and Iyengar, 2016). However, this paper focuses not on framing's effects, but on its causes: not whether and how voters are impacted, but rather on politicians' choices to use positive or negative emotional frames when making their campaign appeals. These 'frames in communication' that politicians choose do not always have their intended effect (Druckman, 2011) – but that is not the focus of this paper. While politicians presumably did think their choices were having certain effects on voters – or else they would not have made them – this was not studied in any way before World War II (Cacciatore, Scheufele and Iyengar, 2016, p. 17), and so any inferences would necessarily have been anecdotal and imprecise. By considering this in a context that predates opinion polling, this paper examines the effect of incumbency on candidates' rhetorical choices in the absence of candidate knowledge about their voters' actual preferences.

ENDOGENEITY CONCERNS. However, previous studies of how incumbency affects campaign sentiment have faced the problem that comparing incumbents to challengers means, in a way, comparing apples and oranges. Incumbents have been found to be more positive (e.g. Brader, 2006; Druckman, Kifer and Parkin, 2009; Ridout and Searles, 2011; Crabtree et al., 2017), but this may be endogenous; their positive campaign may be why they won in the first place. Moreover, many incumbents run in safe seats and are likely to have more resources, meaning that their campaigns are somewhat incomparable to those of their challengers, who are often inexperienced and underfunded and, in systems with strong party control such as the UK, 'proving their mettle' in tough ground before getting a chance in a more competitive seat. Finally, incumbents might simply be better candidates, which may have been why they won in the first place. This paper is

the first to address this major drawback. It does so by using a regression discontinuity (RD) design, which allows it to test the causal impact of incumbency on sentiment. An RD, which compares campaigns between candidates whose party barely won the previous election to those whose party lost, ensures that we are comparing like with like.

ACCOUNTABILITY IN PREWAR BRITAIN. Thus far, studies have indicated that incumbent positivity is a feature of modern democracies, in which campaigning is based around the notion of retrospective voting. However, since they have dealt with relatively recent time periods, all since World War II, none have considered when and how this pattern might have developed.³ While *accountability* can mean many things, including legislative oversight or media scrutiny, this paper focuses on one specific aspect: how elections are used to hold incumbent governments to account for their record (Fearon, 1999; Strøm, 2000; Eggers and Spirling, 2014a; Fourniaies and Hall, 2018). Specifically, this paper argues that incumbent positivity is an indicator that elections are being used as a means of holding governments to account, as it implies that governments are putting a positive spin on their achievements while challengers are criticizing them for their tenure.

Different facets of government accountability had been developing during the second half of the 19th century. After the Second Reform Act in 1867, several changes occurred which made electoral accountability possible: these include (a) increasingly cohesive party voting in the legislature, which meant that individual MPs could be held accountable for their party's record (Cox, 1987; Eggers and

³Contrary to most of the literature on contemporary campaigning, Riker (1991), who discusses sentiment in the campaigns surrounding the ratification of the US Constitution in 1787-8, finds that the Antifederalists - the status quo defenders - were more negative than the challenging Federalists, suggesting a logic of *prospective* campaigning (i.e. the challenging side paints a positive picture of the future, while the incumbent side proclaims disaster should they lose).

Spirling, 2016a)⁴, (b) an increase in the number of competitive elections, such that electoral punishment became a more credible threat (Eggers and Spirling, 2014a), (c) a change in legislator behaviour consistent with an attempt to appeal to their constituents, including speaking more frequently (Cox, 1987) and more comprehensibly (Spirling, 2016) and introducing more legislation (Cox and Ingram, 1992) and, from the 1870s onwards, (d) the emergence of a Shadow Cabinet as a government-in-waiting and a focal point for opposition (Eggers and Spirling, 2016b). Even before the Reform Act passed, voter behavior showed that voters increasingly evaluated parties rather than individual candidates (Cox, 1987; Dewan, Meriläinen and Tukiainen, 2018).

In the mid-1880s, the passage of three key pieces of legislation – the 1883 Corrupt Practices Act, the 1884 Third Reform Act, and the 1885 Redistribution of Seats Act – further restructured the electoral landscape quite drastically (Seymour, 1915; Lawrence, 2009). The Third Reform Act enlarged the franchise from just over 3 million voters in 1883 to 5.7 million in 1885 (Pugh, 2002, p. 7), more than doubling the proportion of voters who could vote in the counties (Lawrence, 2009, p. 69) and adding a new class of voters – agricultural labourers – to the electorate, in addition to the industrial workers who had been enfranchised in 1867. The number of contested elections increased further (Cox (1987); Eggers and Spirling (2014a, 2017); Pugh (2002, p. 15) see also Table 4.3) and candidates had to appeal to many new voters, but at the same time they were deprived of many of their traditional vote-getting strategies by the Corrupt Practices Act of 1883, which prohibited vote-buying, limited campaign spending and required meticulous record-keeping (Seymour, 1915; O’Leary, 1962; Kinzer, 1982; Rix, 2008; Lawrence,

⁴Hence the literature examining how retrospective voting works under coalition government (e.g. Fisher and Hobolt, 2010).

2009, p. 70).⁵ The 1885 Redistribution of Seats Act further undercut the practice of bribery by reducing the representation of particularly corrupt constituencies, many of which were either entirely eradicated or lost their second seat (Hanham, 1959, p. 281). The reforms of the mid-1880s completed the changes which had been started in the Reform Acts of 1832 and 1867; while these earlier Acts had enfranchised groups of voters and eliminated the smallest constituencies, “after 1885, only mass constituencies remained” (Cox and Ingram, 1992, p. 541).

These reforms combined to change how candidates engaged with their constituents. The connection between politician and voter in the UK had long been based on patronage and local power structures, with local notables being returned for their constituencies on the basis of voters’ deference to their ‘natural’ position. However, this was changing: as the size of the electorate grew, patronage and local power became less useful in appealing to voters than programmatic policy competition (Adelman, 1970; Cox and Ingram, 1992; McLean, 2001, p. 101), and other types of particularistic politics became increasingly less of an option. Pork-barrelling, so common in the US Congress, was essentially unavailable to British MPs after the mid-19th century due to the dearth of tariff and local infrastructure bills, and the opportunities for patronage declined as a result of the professionalization of the Civil Service (Cox, 1987, p. 133-4).

Following the mid-1880s reforms, other institutions developed to increase the extent to which the opposition could hold the government accountable. This includes changes within the House of Commons, such as procedural reforms which

⁵It is worth noting that Camp, Dixit and Stokes (2014) argue that the 1883 Act was not the *cause* of the ensuing reduction in corrupt practices, but merely the catalyst to exit an equilibrium both parties disliked. According to this argument, the strategy of agent-centered vote-buying had already become unattractive for a variety of reasons, including that industrialization made voters wealthier, more numerous and harder to monitor, candidates bore the costs themselves, and the campaigning alternatives became increasingly attractive.

gave the government more power to curtail debate in the House, further widening the government's control over – and hence responsibility for – the parliamentary agenda (Eggers and Spirling, 2016*b*). In return, ministerial responsiveness to the opposition increased notably around 1885-1890 (Eggers and Spirling, 2014*c*). After the mid-1880s reforms, electoral accountability increasingly had a very specific impact on legislators' parliamentary behaviour, leading MPs from competitive constituencies to speak more frequently in the House but vote on fewer divisions, a sign that they spend more time in their constituency (hence skipping votes that colleagues from safer seats can attend) but speaking in the House to represent their constituents' interests (Eggers and Spirling, 2014*a*). By 1908, Lord Courtney could write in his book on *The Working Constitution of the United Kingdom* that “the verdict of the constituencies [in the General Election] may be relied upon as determining not merely the question whether Ministers should be retained or dismissed, but also whether some prime object of policy recommended by them should be approved or condemned” (Courtney, 1908, p. 164); in other words, he argued that elections were treated as referenda on government policy and personnel.

In sum, electoral reforms and both formal and informal procedural changes combined to alter the set of incentives legislators faced, leading to a general rise in both electoral and legislative accountability. However, measuring this development of accountability in the UK is challenging because the parliamentary timetable is so dominated by the governing party that opposition behaviour is hard to measure, as metrics such as roll rates or negative agenda control hardly exist at all (Eggers and Spirling, 2016*b*). Using campaign appeals is a way to obtain comparable data for governing and opposition politicians, allowing for a usually difficult direct comparison between the two groups.

ACCOUNTABILITY IN ELECTORAL CAMPAIGNS. After the mid-1880s reforms, candidates were faced with the challenge of appealing to an entirely new set of voters, many of whom were less educated than the previous electorate, in an environment that increasingly prized party loyalty and programmatic campaigning while strictly constraining electoral spending. As a result, their rhetorical appeals gained in importance, and were increasingly based on holding incumbents accountable for their performance.⁶

While candidates held speeches and meetings during the campaigns, the enlarged electorate meant that they could not rely on reaching all voters in person (Lawrence, 2009, p. 88). Instead, printed materials, and particularly electoral addresses, were one of the principal ways candidates reached out to voters; this was helped along by the reduction of newspaper prices, allowing politicians to reach voters even more efficiently (Camp, Dixit and Stokes, 2014). These addresses were texts issued by candidates in advance of the election, and distributed to all voters (see Section 4.2.1 for more information). As campaigning was professionalizing but had not yet become fully nationalized (Rix, 2016; Blaxill, 2011; Hanham, 1959, p. 191-2), individual candidates' election manifestos played a significant role in shaping the terms of debate within their constituency. While parties were in the process of developing national platforms – the first set of official Liberal and Conservative party manifestos were issued in 1900 – election manifestos provided one opportunity for candidates to make specifically local appeals (Lawrence (2002, 2009, p. 79-80) see also Nicholas and Butler (1950, p. 212)).

⁶Indeed, some Conservatives argued that the promises Liberals made in their more radical programmes, such as the 1885 'unauthorized programme' and the 1891 'Newcastle Programme', amounted to bribery by means of social benefits (O'Leary, 1962, p. 206), thereby illustrating how contemporaries saw classic corrupt electioneering as having been replaced by programmatic appeals; see also Lawrence (2011, p. 469) for discussion of the notion that growing welfare state policies were seen as replacing individual candidates' charitable donations to their constituencies.

To appeal to the less educated new county voters in particular, candidates turned to the use of emotive language in campaigning (Lawrence, 2009, p. 69). The increased use of emotional appeals is a common strategy politicians use when faced with voters with lower education (Freeden, 2006, p. 144), mirroring the widely held belief among campaign practitioners that appealing to emotions will work particularly well on uneducated and/or uninformed voters (Brader, 2006, p. 38-9).⁷ Indeed, historians have pointed out the increasing ‘vulgarity’ of election campaigns in this period, including the increasing use of shamelessly populist imagery to appeal to anger and fear and thereby rile up the public (Lawrence, 2009, p. 71-3). This has been pointed out for the Khaki election of 1900, which saw appeals to both patriotism and bitter personal attacks from both parties (O’Leary, 1962, p. 209), and for in the elections of 1906 and 1910 (Lawrence, 2009).⁸

Despite the fact that incumbent positivity has not previously been shown to exist in pre-World War II elections, the institutional environment had changed such that it made sense for candidates to campaign on the record of the incumbent party, using emotive language to either defend that record (in the case of incumbents) or to malign it (for challengers). We show this in the following sections.

⁷It is worth noting that this may be a misconception; Brader (2006) actually finds no evidence for this in the experiment he runs, and others have found similar results (Huddy and Gunthorsdottir, 2000; Jones, Hoffman and Young, 2013). However, such evidence would not have been able to our campaigners in the 19th century, who did think that emotive rhetoric was a useful tool to sway uneducated voters (Lawrence, 2009, p. 69).

⁸This is consistent with the argument that politicians are likely to use positive language, and particularly appeals to enthusiasm, when the electorate is fairly fixed into partisan camps - as the aim is to mobilize their base to turn out - while they will turn to negative language, appealing to fear and anxiety, when the electorate is fickle or unaffiliated (Brader, 2006, p. 197). The large group of yet-unaffiliated rural voters falls into the latter category.

4.2 DATA AND METHOD

4.2.1 DATA

We use a dataset of all election addresses issued by all candidates running for Parliament in the six elections between 1892 and 1910 (as in Chapter 3). As noted in Section 4.1, these addresses were written by candidates standing for election and distributed to all households by the Royal Mail, as well as often being printed in local newspapers (see Section 3.2 for full description). Importantly for this paper, these election addresses comprise a comprehensive set of comprehensible, comparable texts that are heavy on policy and campaign content and contain almost no procedural jargon. They use relatively simple language, as they are meant for all voters to be able to understand, and focus on convincing them of their merits as a candidate, using both policy arguments and personal characteristics.

Existing studies, even of modern campaigning, rely on ads (e.g. Kaid and Johnston, 1991; Geer, 2006; Brader, 2006; Franz and Ridout, 2007; Ridout and Searles, 2011), or media coverage of a campaign (e.g. Haynes and Rhine, 1998), or combine several channels, such as televised debates in addition to media coverage (e.g. Ridout and Franz, 2008; Benoit, 2004; Elmelund-Præstekær, 2010; Walter and Vliegenthart, 2010), or, more recently, examine candidate posts on social media (e.g. Evans, Cordova and Sipole, 2014; Evans et al., 2017; Auter and Fine, 2016). Regardless of which of these methods are used, they all have drawbacks: each only represents a portion of candidates' campaign materials; the more comprehensive the set of data collected, the more likely it is that the study only deals with one or maybe two elections; they are often not aimed just at the audience that will actually vote for them, but rather send messages to donors, the party,

the media and/or the wider population; and further, candidates' access to some of these channels can differ greatly depending on whether he or she is an incumbent or a challenger, a major or minor party candidate or an independent, and a variety of other variables. In comparison, the election addresses have a format that was standardized decades before this study commences, are available for almost every candidate who formally stood for election in six consecutive elections, and are targeted precisely at their electorate. This makes them a unique source in evaluating how politicians appeal to their voters.

In addition to our manifesto dataset, we use election returns data from Eggers and Spirling (2014*a*), which allows us to match each campaign speech with the party of the candidate, as well as the vote share he obtained. We also match each constituency to economic data procured from the 1881 census for England and Wales from Jusko (2017).⁹ In section 4.3.4, we use this census data to examine how the percentage of agricultural labourers mediates the effect of incumbency.

4.2.2 METHOD

SENTIMENT ANALYSIS

Sentiment analysis is usually done using off-the-shelf dictionaries of positive and negative words (e.g. Young and Soroka, 2012; Tausczik and Pennebaker, 2010). This is not a good strategy for our case; most sentiment dictionaries are created on the basis of contemporary American movie reviews or other media, while our texts come from not just from the political realm, but from a different country and a different century. We thus have some reasons to doubt that the words identified as carrying positive or negative connotations in off-the-shelf sentiment dictionaries

⁹We thank Karen Jusko for providing the parish-level geographic matches that let us match the electoral constituencies to the census units.

may be applied without issue to the campaign manifesto data (Grimmer and Stewart, 2013, p. 8-9).

Instead, this paper uses a supervised approach: 800 sentences¹⁰ taken from campaign manifestos were hand-coded¹¹ as displaying positive, negative or neutral sentiment.¹² Figure 4.3 illustrates how each sentence was coded. As in previous work, the emphasis was on coding which emotion the candidate was appealing to (i.e. intention), rather than which emotion the coder felt on reading it (Brader, 2006, p. 150).¹³ In contrast to dictionary approaches, which merely count whether the sentence contains words that have (in other contexts) been associated with positive or negative ratings, this method goes beyond the words used and allows us to measure whether the speaker is actually appealing to an emotion. This also avoids one of the most commonly noted problems of dictionary approaches, its insensitivity to negations and inability to pick up on tonal shifts like sarcasm.

A quick aside on how sentiment has been conceptualized. This paper, like some others (e.g. Crabtree et al., 2017), uses a dichotomous measure of sentiment, contrasting positive and negative appeals. Other scholars examine specific emotions, usually including fear, anger, enthusiasm and pride, sometimes including hope

¹⁰Breaking the text down into sentences was the most appropriate way to obtain short text units that nonetheless use natural delimiters (Däubler et al., 2012).

¹¹An alternative may have been to crowdsource the coding on an online platform. However, understanding the sentences – and their sentiment – often requires an understanding of the context they were used in, making expert coding the best option to avoid anachronistic or otherwise context-blind errors. See Appendix C.1 for more detail on how the sentences were coded.

¹²While other studies have used a more fine-grained approach involving several emotional categories, separating out fear, anger, pride and enthusiasm, for example (e.g. Ridout and Searles, 2011), using multiple categories requires a lot more training data and is therefore better suited to a case in which off-the-shelf dictionaries hold more promise.

¹³There was only one coder, making an intercoder reliability test moot, but in an *intracoder* reliability test in which 60 sentences were coded twice (several months apart), 93% were given the same label. For more information on how exactly sentences were coded, see Appendix C.1 for examples of each category, including examples of difficult decisions.

and compassion. This is done because the psychological theories these studies are based on expect different effects for these different emotions, though many note that empirically, it is often possible to group them into positive and negative camps (e.g. Brader, 2006; Ridout and Searles, 2011). As noted briefly in Section 4.1, the study of negative campaigning – sometimes also called ‘tone’ – focuses on the *target* of the campaign (e.g. Lau and Pomper, 2001; Geer, 2006; Walter, 2014; Walter, van der Brug and van Praag, 2014; Barton, Castillo and Petrie, 2016). These literatures have thus far been largely separate, and the two concepts are somewhat distinct analytically; one can imagine an ad which evokes fear by focusing on crime, but does not specifically mention the opponent (Brader, 2006, p.85), for instance, or an ad that factually criticises an opponent’s policy without making use of emotive language. However, the target-based measure of ‘negativity’ – the extent to which the campaign focuses on the opponent – is, in effect, often correlated with emotive tone (Ridout and Searles, 2011, p. 449).

The 800 hand-coded sentences were then used to model sentiment for the entire set of 6020 election addresses, using an elastic net model to predict the sentiment based on the words used in each address. Since this method uses a Lasso penalty, it uses only those words in the model that are actually predictive of sentiment in the labeled data. Table 4.1 shows the top ten words which the model uses to predict positive and negative sentiment. Words like “generous”, “deserving”, “rejoice” and “honour” are highly predictive for positive text, reflecting emotional appeals such as compassion, pride and enthusiasm, while words such as “danger”, “injustice” and “attacks” are predictive of negative text, appealing to emotions such as fear and anger.¹⁴

¹⁴There are some words which are a bit more puzzling. The word “yours” strongly predicts

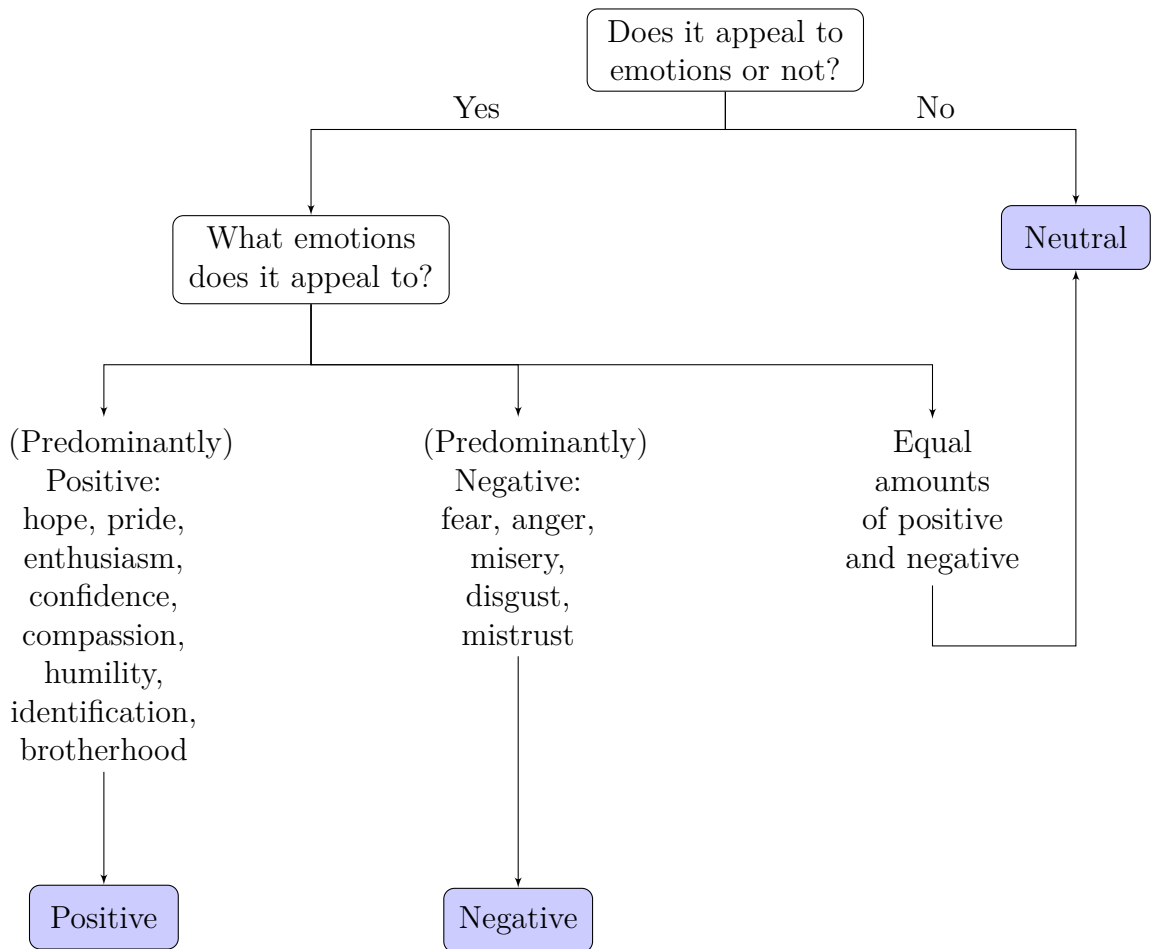


Figure 4.3: Coding sentence sentiment

Table 4.1: Most predictive positive and negative words

Positive		Negative		
Word	Coefficient	Word	Coefficient	
1	generous	0.55	danger	-0.35
2	yours	0.44	radical	-0.33
3	firm	0.34	injustice	-0.28
4	deserving	0.33	year	-0.26
5	rejoice	0.32	attacks	-0.26
6	closer	0.31	bad	-0.25
7	patriotic	0.3	democracy	-0.23
8	honour	0.28	unfair	-0.21
9	sympathetic	0.27	lords	-0.2
10	connection	0.23	out	-0.19

positive sentiment, because it was often used by candidates to end their addresses, such as “Yours faithfully” or “Yours obediently”, which I coded as displaying humility, a positive emotional appeal.

On the negative side, there are a few words that don’t seem obvious initially, such as “year”, which strongly predicts negative sentiment. This is linked to the constitutional crisis surrounding the ‘People’s Budget’ of 1909, which led to two General Elections within a year (January and December 1910, which were often discussed often using very negative language from both sides of the political spectrum. Interestingly, they apportioned the blame differently: The Liberal Arthur Brampton, running in Birmingham Central in January 1910, focused his ire on the House of Lords: “The action of the Lords in venturing FOR THE FIRST TIME IN HISTORY to withhold their assent from the Bill making provision for the Nation’s financial requirements for the **year** has brought about a crisis, in my opinion, more serious than any this Nation has for many generations been called upon to face.” On the other side, Almeric Hugh Paget, a Conservative candidate in Cambridge in December 1910, blamed the Liberals, beginning his manifesto by saying, “Gentlemen, In pursuance of their declared intention of subverting the ancient Constitution of this realm, the Liberal Government have, in spite of their unbeaten majority, advised the King to dissolve Parliament, and we are faced with an election on a worn-out Register and at the most inconvenient time of the **year**.”

This example also explains the fact that ‘lords’ is a negative word: the House of Lords was largely only invoked by its critics, such as Brampton, while Conservative supporters tended to blame the Liberal government for the crisis. Another example of this is from the manifesto of Alfred Henry Scott, Liberal from Ashton-under-Lyme, who writes in January 1910 that “Registration, Education, Licensing, and Land Reforms, great questions though they be, are not, we are told, for you to decide, but for those born in the purple, the pampered first born of **Lords**, who alone have intellects equal to the deciding of these important issues.” (Parenthetically, this sentence is also a great example of why hand-coding is superior to a dictionary approach; a dictionary approach, which wouldn’t pick up on the sarcasm, would classify the sentence as

Figure 4.4 shows, in pink, the distribution of predicted sentiment across all 6020 election addresses. We can see that the distribution is centered on 0, as we would expect, and that the vast majority of speeches fall between -3 and 3, though there are some outliers, particularly on the negative side. The blue bars show the distribution of predicted sentiment in our sample of close election speeches; they are largely similar to the wider distribution. Table 4.2 displays the confusion matrix of the predictions using 10-fold cross-validation.¹⁵ We can see that the model does fairly well, with 61% accuracy across the three categories – as the table shows, most of the sentences are on the diagonal, and very few of the errors are egregious (i.e. positive sentences being predicted as negative, or vice versa).¹⁶

Table 4.2: 10-fold cross-validated confusion matrix

	Negative	Neutral	Positive
Negative	125	81	25
Neutral	83	295	69
Positive	15	39	69

positive due to words such as 'great', 'equal' and 'important'.)

Finally, the word 'democracy' is largely used by Liberals who complain that the House of Lords was subverting it. Charles Duncan, Labour candidate in Barrow-in-Furness in December 1910, argues thusly: "Democracy in this Country is at this moment being reduced to an absolute farce, for of what use is it to have the vote, of what use to exercise it, of what use to hold Elections, of what use to send Representatives to Parliament, of what use to discuss Social and Political Problems, if, after all, the method, the effort and the activity thus displayed can all be set at naught, and the wishes of the millions of voters be insultingly disregarded and frustrated by a few titled incompetents, incompetent on their own admission, and all this without the slightest shred of justification or reason."

¹⁵As the label has three categories – positive, negative, and neutral - the predicted sentiment, which is continuous, was binned into three categories as well, with cutpoints at -0.15 and 0.15.

¹⁶While 61% is not a great improvement on blind guessing in a two-category measure, when using three categories with this distribution (0.28 : 0.52 : 0.2), the expected baseline rate if guessing is only 40%, so 61% is a definite improvement.

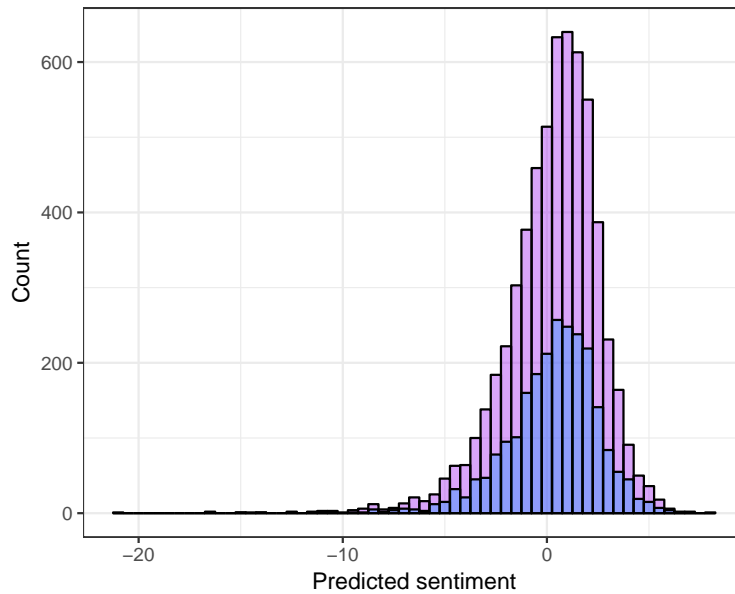


Figure 4.4: Comparing the distribution of sentiment scores across all speeches (pink) and close election speeches (blue)

REGRESSION DISCONTINUITY DESIGN

I leverage a regression discontinuity design to test the causal impact of winning an election on speech sentiment. More specifically, I examine how speech sentiment differs for candidates if their party narrowly won the previous election, compared to candidates of parties that narrowly lost (Lee, 2008; Eggers and Spirling, 2017). The idea behind the RD design is that treatment assignment – winning, in this case – is discontinuous around a threshold of vote share obtained; if a candidate gets just over 50% of the vote, he wins, while if he gets at all below 50%, he loses. At the same time, the distribution of vote shares, the running variable, is continuous. The running variable here is the win margin of the top candidate relative to the

runner-up¹⁷ (Meyersson, 2014); the causal identification comes from the notion that the running variable, and all other pre-treatment covariates, are continuous around the threshold, such that the only thing that varies discontinuously is the treatment assignment, thus any discontinuities in outcomes may be attributed solely to treatment (Lee, 2008; Eggers et al., 2015). RDs provide effect estimates which track those of randomized controlled trials, making them a useful method for drawing causal inferences when manipulation is not an option (Barnow et al., 2018).

Table 4.3 shows some descriptive statistics for the election races. We start with a total of 540 constituencies in England, Wales and Scotland, but if we consider only single-member districts, this drops to 515.¹⁸ Further, once we consider only constituencies in which there was actually a contest – that is, at least two candidates competing for the seat – this number drops further, though the extent to which it drops differs across the period. The next hurdle is that we need vote share data for the previous election, meaning that the previous election also can't have been uncontested; this further reduces our n . And finally, for estimating the regression discontinuity, we consider only close elections; that is, elections in which the difference between winner and loser was less than 10% (i.e. the winner won up to 55% of the vote, while the loser obtained at least 45%). Once we apply this limit, our universe of constituencies is limited to between 159 in 1892 and 243 in 1895 (see Table 4.3).

¹⁷The vast majority of contests in single-member districts in this period only had two candidates – 2490 out of 2641 – while 146 single-member constituencies had three candidates, and five had four. However, in most of these cases, the third (or fourth) candidates garnered a relatively insignificant share of the vote.

¹⁸While the 1885 Redistribution of Seats Act greatly increased the number of single-member districts, some large towns, such as Bath and Leicester, retained two members due to their population. Since calculating the difference between winners and losers in these double-member

Table 4.3: Number of constituencies

	1892	1895	1900	1906	Jan 1910	Dec 1910
All constituencies	540	540	540	540	540	540
Single-member	515	515	515	515	515	515
Single-member & opposed	477	393	355	484	508	424
With previous vote share data	351	466	370	345	483	476
Close elections (<10%)	159	243	218	179	192	216

4.3 RESULTS

4.3.1 THE EFFECT OF WINNING ON SENTIMENT

The RD shows that winning an election causes candidates to be more positive in the following election address. Figure 4.5 shows the results using our preferred specification of a nonparametric local linear regression with a triangular kernel, using the Imbens-Kalyanaraman optimal bandwidth, which is 10.2% (Imbens and Kalyanaraman, 2012). Winning party candidates' sentiment is 0.4 higher than losing parties. Substantively, this is a fairly small effect - about a sixth of a standard deviation of sentiment - but it is relevant, about the same size as the overall mean difference between candidates from the governing and the opposition parties across all elections. In accordance with previous findings which were not causally identified, it is clear that incumbent party candidates are, indeed, significantly more positive than challenging party candidates.

This shows how accountability works at the constituency level; incumbent party candidates, who are running on a record they have to defend, are more positive, while challenging party candidates, who are running from out of power, are more negative. This shows accountability in action, as candidates are held responsible

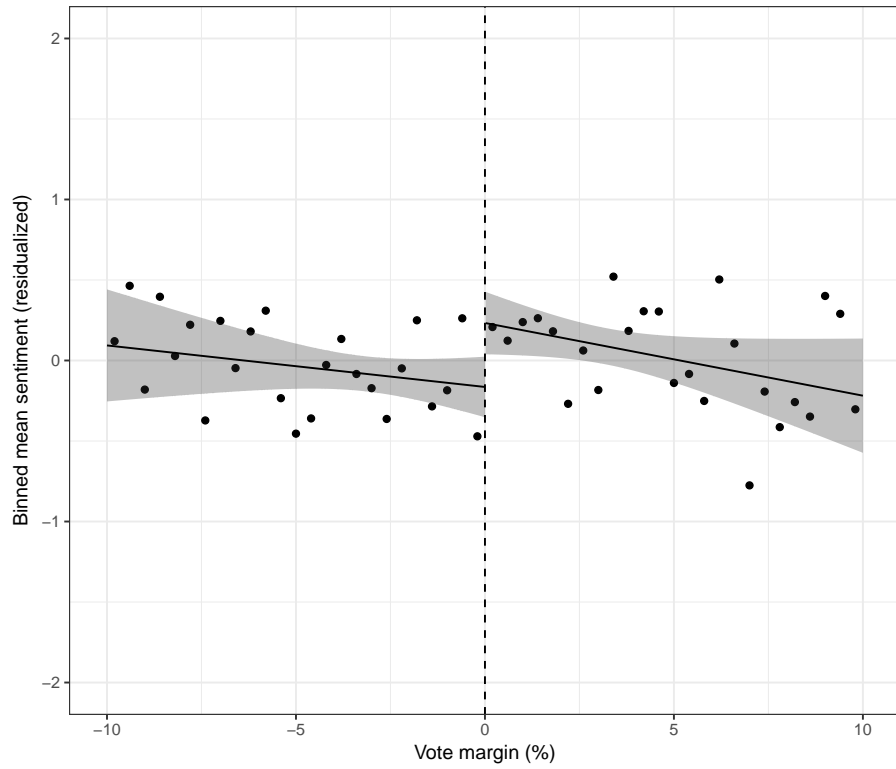


Figure 4.5: The effect of winning an election on the sentiment of the following speech

for their stay in power.

Further, the estimate of the effect size is remarkably constant. Figure 4.6 shows how the effect size varies as the bandwidth changes from 1 to 20. We see that the effect is larger for smaller bandwidths, as we might expect; those are the cases closest to the threshold, and thus the most similar to each other, though the estimate is not statistically significant due to the small sample size. After a bandwidth of around 8, the estimates are statistically significant and stay around 0.4 in magnitude, though they taper off at higher bandwidths. This makes sense, as widening the bandwidth means that the winners and losers being compared are less comparable. Appendix C.2 also goes through various other robustness checks, including showing that the running variable is continuous and covariates are balanced around the cut-point; it also shows that sentiment does not differ for winners and losers in the *current* election, addressing the critique of RD designs in Caughey and Sekhon (2011).

Table 4.4: Regression discontinuity results

	Model 1 No Covariates	Model 2 Covariates	Model 3 Multinomial DV	Randomization Inference
Estimate	0.35	0.40	1.35	1.57
Standard error	0.18	0.17	0.62	
p-value	0.05	0.02	0.03	0.03
Bandwidth	12.81	10.16	11.07	0.20
Observations	1,458	1,232	1,314	46
Covariates		✓	✓	

Table 4.4 presents a number of alternative specifications of the model. Model 1 is estimated without covariates, and shows almost the same effect size, but districts is somewhat ambiguous, they have been removed from the dataset.

with a slightly larger standard error; model 2, my preferred specification, includes covariates (party and election year fixed effects), which allows me to estimate the effect more precisely (Calonico et al., 2017). Model 3 presents an alternate specification for predicting sentiment. The approach used in the bulk of the paper to predict sentiment for our 6020 speeches is a linear elastic net model. While this has several desirable properties, not least the fact that it is the best linear approximation of the underlying conditional expectation function, we may worry that the results are driven by this choice of specification. To address this, I also employ an alternate specification, using a multinomial logistic model to predict sentiment across the three categories (positive, negative and neutral). Model 3 shows the results for the RD using this specification; like in model 2, winning makes candidates more positive in the next election, and (though on a different scale) the effect size is similar, about $1/6$ of a standard deviation (see Appendix C.3 for the graphical RD results for this specification).

RANDOMIZATION INFERENCE. We might be concerned that a bandwidth of around 10 percentage points is quite large; observations at 45% and 55% of vote-share may not be informative for estimating the size of an effect directly at the cut-point, as we do in an RD. (The model downweights observations as they grow further from the cut-point, but this may still be a concern.) However, the number of cases diminishes as we shrink the bandwidth, and while the estimates grow in size (see Figure 4.6), the standard errors grow as the n shrinks. One solution to here is to conduct a robustness test using randomization inference (Cattaneo, Frandsen and Titiunik, 2015).

Randomization inference uses a different interpretation of RD, assuming that

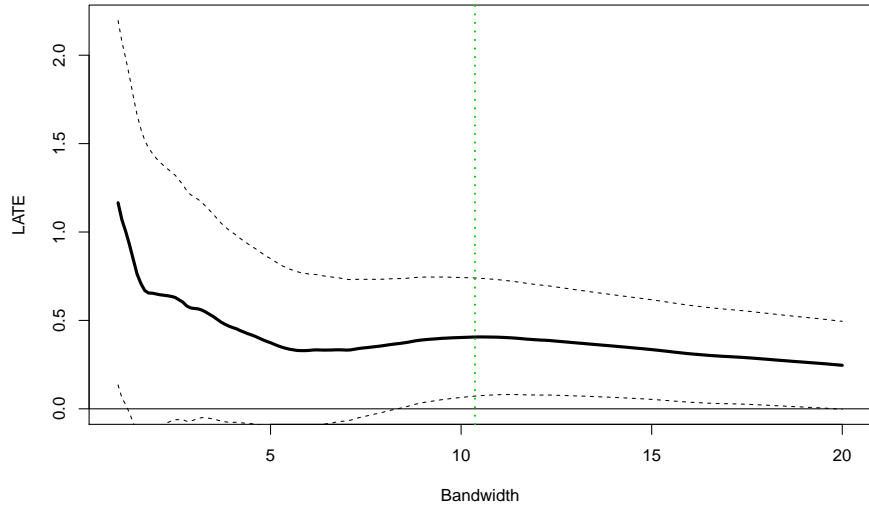


Figure 4.6: Effect size with varying bandwidths

for a small window around the cut-point, treatment is quasi-randomly assigned; in our case, this means that right around 50% of the two-party vote, exact outcomes are so hard to predict that close winners are identical in expectation to close losers. This is a tougher assumption than continuity of the running variable assumed in the RD; however, it is plausible for a narrow enough window. Within this window, the difference in means is calculated. Then, this observed difference is compared to a distribution of possible differences under all different permutations of treatment assignment to test the sharp null hypothesis of no effect for any unit (Cattaneo, Frandsen and Titiunik, 2015). Since we’re assuming that treatment was quasi-randomly assigned within the window, if the sharp null held, the observed difference ought to be indistinguishable from the computed difference if treatment assignment were different.

The fourth column in Table 4.4 shows the results of this test; within a window

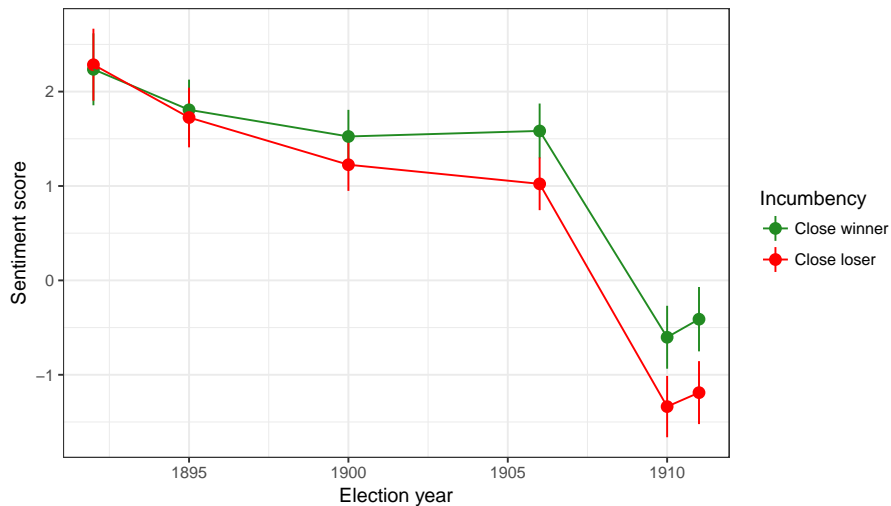


Figure 4.7: Sentiment effect over time

of 0.2, meaning that we’re only considering parties which obtained between 49.9 and 50.1% of the two-party vote, the difference in sentiment between incumbent and challenging candidates is 1.57, which is significant at conventional levels. This bolsters our confidence that incumbents are indeed significantly more positive than challengers.

4.3.2 CHANGE OVER TIME

The results above demonstrate that if their party won the previous election, candidates were more positive in their election manifesto. Breaking this down by year in Figure 4.7, we can see two things changed over time. Firstly, both incumbent and challenger candidates became more negative over time, particularly in 1910; this makes sense, given that these two elections, held over the Lords’ veto of the 1909 budget, constituted a constitutional crisis (Blewett, 1972). This decline also

reflects the ‘vulgar tone’ Lawrence (2009) sees candidates as turning to increasingly. (This trend does not depend on the last two elections, though they were particularly negative in tone.)

Secondly, incumbent positivity – the difference between incumbents and challengers – also increases over time. As outlined in Section 4.1, both formal and informal reforms combined to make electoral accountability more likely after the mid-1880s (Cox, 1987; Cox and Ingram, 1992; Eggers and Spirling, 2014*a,c*, 2016*b*). And indeed, we see that candidates were increasingly using election manifestos to hold incumbents accountable. Figure 4.7 shows how the estimated effect of incumbency changed across the six elections in this period by incorporating a time trend into the model.¹⁹

This reflects that even though the overall tone of campaigning was getting rougher, the accountability mechanism was also increasing. Incumbent candidates increasingly felt the need to defend their record, while challengers increasingly attacked them for it. This is consistent with the finding that institutional changes (in this case, the three reforms in the mid-1880s) take some time to become fully reflected in the behaviour they affect (Eggers and Spirling, 2016*b*). Amidst the increase in overall negativity, particularly strong in the two elections dealing with constitutional crisis surrounding the power of the House of Lords, incumbent candidates staked out relatively positive territory in appealing to voters on the basis of what they had achieved.

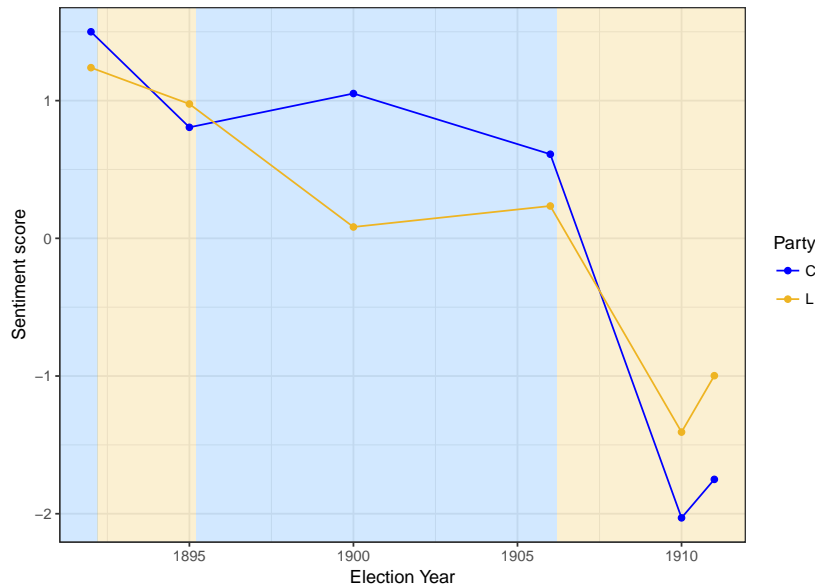


Figure 4.8: Sentiment over time, by governing status
 Blue background denotes Conservative/Unionist government;
 yellow background denotes Liberal government.

4.3.3 GOVERNMENT AND OPPOSITION

Why are incumbent candidates more positive than challengers? This paper argues that this demonstrates the advent of political accountability in Britain; for the first time, politicians saw campaigns as an arena in which incumbents had to defend their record, and challengers could attack them for it. It was in incumbents' interest to appeal to positive emotions in their speech - be it pride in the country's progress, enthusiasm for the party, hope in the future - while challengers appealed to voters' fear of unwelcome developments, anger at incompetent politicians, and disgust for outsiders, as well as conjuring up visions of misery and decrepitude.

¹⁹Figure 4.7 shows the predicted sentiment at the threshold for incumbents and challengers from the Conservative and Liberal Unionist Parties, incorporating a linear time trend into the model. Estimates look similar when using election year fixed effects - 1900 has a bigger incumbency gap - but this shrinks the effective sample size (see Figure 4.8).

This is bolstered by the fact that regardless of incumbency status within the constituency, governing party candidates were more positive than opposition party candidates in every election. Figure 4.8 shows the mean sentiment for the two major parties in each election, on a background corresponding to which party was in power. In each year, candidates from the governing party had more positive speeches than opposition speeches.

Table 4.5: Number of candidates

	Governing party	Opposition party
Incumbent	1374	1014
Nonincumbent	780	1548

In fact, the pressures of accountability might differ for candidates depending both on whether they are representing an incumbent party within a constituency, and whether they belong to the party in government at the national level. Things are straightforward for governing party incumbents, who bear responsibility at both the national and the local level and thus have reason to be wholeheartedly positive, and for opposition party challengers, who are out of power at both levels and thus benefit from being freely critical. However, the situation might be more complicated for candidates who represent the governing party, but lost the last constituency election, or for candidates from the opposition party who have been in power locally for the past term. These candidates are likely to be cross-pressured, incentivized to be positive on the one hand, when defending their own or their party's record, but negative on the other, when criticizing the other party. We would thus expect these candidates to be somewhere in between governing party incumbents and opposition party nonincumbents in terms of sentiment.

Indeed, this is exactly what we find when estimating local linear regressions

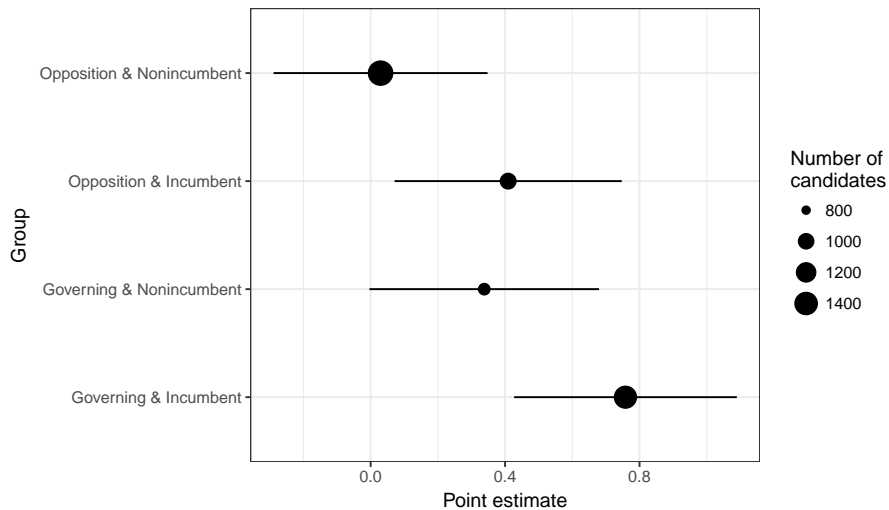


Figure 4.9: Broken down by constituency incumbency and governing status

for these four groups separately – incumbent governing party candidates, challenger governing party candidates, incumbent opposition party candidates, and challenger opposition party candidates. Mechanically, as Table 4.5 shows, the first and the last group are the largest, as a party needs to win more seats to form a government, but it is helpful to visualize the estimated sentiment for each of the groups.²⁰ Figure 4.9 shows that as expected, governing party incumbents are the most positive, opposition party nonincumbents are the most negative, and the two cross-pressured groups are in the middle. Indeed, the positive effect of winning on sentiment is driven entirely by governing incumbent candidates and opposition nonincumbent candidates; the difference between these two groups is almost 0.6, 50% larger than the overall difference between incumbent and nonincumbent candidates.

²⁰As in the main results above, I control for party and election year to reduce the variance; these estimates are for a reference year of 1906 and using the Liberals as the reference party.

4.3.4 AGRICULTURAL LABOURERS

We might expect that the pressures of accountability were particularly strong for candidates in constituencies facing a large increase in the enfranchised population. While the 1885 Redistribution of Seats Act changed constituency boundaries so much that we cannot directly isolate precisely how many newly enfranchised voters each constituency had in order to directly measure the impact of enfranchisement on sentiment (as, for example, in Chapter 2), we can compare constituencies with high numbers of agricultural labourers to those with low numbers. As noted in Section 4.1, the Third Reform Act of 1884 had the particular effect of enfranchising the agricultural working class, by expanding the household and £10 lodger franchise to the counties (Pugh, 2002, p. 7). Thus, we can assume that the number of agricultural labourers in a constituency can be a rough proxy for the number of newly enfranchised voters.²¹ If accountability is driven particularly by enfranchisement, we would expect the effect of incumbency to be particularly strong in constituencies with many agricultural workers.

In Figure 4.10, this is what we see. Figure 4.10 shows the results for estimating the RD separately for constituencies with high and low numbers of agricultural labourers, where low means below the median (2.9% of the population) and high means above the median. While the left panel shows that incumbency has no effect in low-agricultural constituencies, the right panel shows that in high-agricultural constituencies, the effect of incumbency on sentiment is large - incumbents' speech sentiment is 0.64 higher than that of challengers, which is 29% of a standard

²¹This is obviously not a perfect measure, as agricultural labourers with significant property holdings would already have been able to vote prior to 1884, and some new voters would have been employed in other kinds of professions, but it is a reasonable proxy for our quantity of interest.

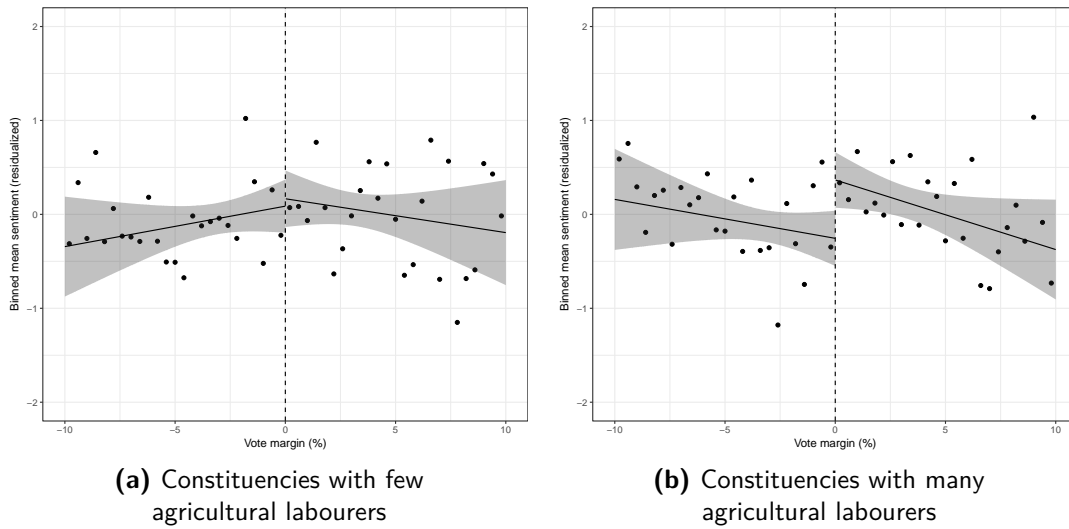


Figure 4.10: Effect of winning by number of agricultural labourers

deviation of sentiment.

The incumbency effect is thus particularly large in constituencies with a large number of newly enfranchised voters. Since the Corrupt Practices Act of 1883 banned candidates from many of the strategies they had previously used to entice voters, preventing vote-buying and enforcing strict record-keeping with respect to campaign expenditures, candidates in areas with large increases in enfranchisement were faced with a daunting task: forging connections with new voters without being able to spend excessively. This paper suggests that politicians in these areas turned to their campaign rhetoric as a way to appeal to the enlarged electorate on the basis of the incumbents' performance. Incumbents, who had a record to defend, did so enthusiastically, while challengers heavily criticized them for it. Candidates thus turned to accountability as a campaigning strategy: holding those in power accountable thus became a tool candidates used in lieu of more corrupt means.

4.4 CONCLUSION

This paper has, for the first time, shown evidence that there is actually a causal impact of incumbency on campaign sentiment. Incumbent candidates are more positive than challengers, which is consistent with a retrospective voting framework in which candidates run on incumbents' records, with the incumbents themselves painting a rosy picture of it while challengers do the opposite. This incumbency effect is particularly strong for governing party incumbents and opposition party challengers, further bolstering the notion that elections were viewed by politicians themselves as a tool to hold them accountable.

We find that this set of elections before World War I is, in fact, the very period in which this incumbency effect developed in the UK, indicating that it was one part of Britain's development into a mature democracy. And finally, we suggest that this development was driven in part by the reforms of the mid-1880s: the expansion of the franchise to agricultural labourers, and the concomitant banning of most corrupt practices, which created incentives for politicians to appeal to voters on the basis of the incumbents' record. This paper thus indicates a way in which the passage of democratic institutional reform – the expansion of the franchise and the curtailment of corrupt practices – changed politicians' competitive incentives on the individual level, thereby contributing to making elections a forum for retrospective accountability at the aggregate level.

5

Conclusion

THE THREE PAPERS IN THIS DISSERTATION collectively address the question of how electoral campaigns in Britain modernized. Before the Second Reform Act, corrupt and clientelistic campaigning was common, if not ubiquitous, and even later on, competition was two-dimensional and based on retrospective accountability. By the First World War, all these things had changed: corrupt practices had largely been eradicated, competition had become polarized along an economic left-right dimension, and candidates campaigned on the incumbents' performance in office. In other words, by the First World War, campaigning had become recognizably modern.

How and why did this modernization occur? Each of the three papers in this dissertation has examined one of the facets of this change: Chapter 2 tied MPs' desire to curtail clientelism – by passing the Ballot Act – directly to the franchise extension of the Second Reform Act; Chapter 3 showed how the programmatic appeals made by the parties shifted from two-dimensional and somewhat overlapping to unidimensional and polarized; and Chapter 4 brought evidence for the rise of retrospective accountability in this period, and linked this to the franchise extension of the Third Reform Act.

Together, the three papers have elucidated not only how these changes occurred, but also how important rank-and-file politicians were in bringing them about. By examining text – parliamentary speeches and campaign manifestos – the dissertation furthers our understanding of how and why politicians responded to changing institutional incentives by changing the way they appealed to voters. Each paper contributes individually to its respective literature, but they also cumulatively let us draw conclusions.

In this conclusion, I discuss the contributions of the three chapters to the vast literature on British political history. I first outline what we learn from each chapter individually – focusing in particular on what distinguishes them from previous work – before taking a step back to discuss what we learn by reading the three papers together. I then discuss some of the limitations of this work, and avenues for further research that stem from those limitations.

5.1 THE CONTRIBUTION

CHAPTER 2. Chapter 2 contributes to the ongoing debate about whether, and how, the Second Reform Act affected the passage of the Ballot Act. It does so by isolating the key element of the Reform Act – enfranchisement – and directly measuring the impact of increases in enfranchisement in MPs’ constituencies on how they spoke about corruption and the ballot in Parliament. It is the first paper to estimate the effect of franchise extension so narrowly, and which is able to show that the *degree* to which MPs were affected by this change mattered for how they responded to it.

Moreover, it goes beyond the traditional focus on the Liberal party’s frontbench (O’Leary, 1962; Kinzer, 1982) to show that the impact of franchise extension

mattered for all Liberal politicians, including backbenchers. In fact, to the extent that Cabinet politicians were more likely to represent safe seats and therefore be isolated from the deleterious effects of rowdy elections, backbench politicians may have been particularly susceptible to the increased pressure of enfranchisement.

It is able to consider the role of backbenchers because it takes a fresh look at an old source of data: parliamentary speech, which lets us learn about the preferences of traditionally less exposed legislators. By using a difference-in-differences design, we pick up changes in how MPs spoke from one parliamentary session to the next, capturing the effects of franchise extension both among Cabinet members and among backbenchers. By looking at parliamentary speech, we are able to get beyond the ceiling effect present in roll call votes; examining speech shows that the effect of enfranchisement was particularly prominent among Liberals who already supported the ballot to begin with. We thus provide a mechanism for how franchise extension changed Liberal party votes: by using their speeches to raise the salience of the issue, more-affected members made the ballot an issue which commanded a party line vote, despite not being a question of confidence.

The paper also shows that several previously-leveraged explanations are inconsistent with the speaking evidence. We show that it wasn't just a question of anti-ballot MPs being replaced by pro-ballot MPs, contradicting Kam (2014), or that MPs from small boroughs who had engaged in vote-buying were now faced with larger electorates and a correspondingly higher expense, as Cox (1987) writes. The paper thus shows the value of engaging with parliamentary debate in order to get at the mechanisms at play in moments of important institutional change.

CHAPTER 3. Chapter 3 contributes to our understanding of British political development in three ways. The first is the data contribution; the dataset of

election manifestos provides a valuable primary source for anyone interested in exploring how politicians appealed to their constituents in the six prewar elections (see Section 1.5 for more detail on the data).

The second contribution is the descriptive analysis of the manifestos. By using `doc2vec` and principal-components analysis, we are able to show how candidates positioned themselves in two-dimensional space across all six elections. Since it has been challenging to scale British legislators' ideal points using roll calls or parliamentary speeches, this paper is the first time their positions in latent space have ever been successfully estimated. And we have not only MPs' positions, but also those of unsuccessful candidates, a whole set of data points which are usually missing from ideal point analysis. This lets us understand how the policies espoused by candidates differed by party and how they changed over time, a vital addition to our understanding of the parties in this period.

And thirdly, the paper contributes to the debate about the decline of the Liberals and the rise of Labour. We show that Labour initially staked out a unique position in two-dimensional space – specifically, by making appeals rooted in left-wing, domestic policy – but that in the 1910 elections, the Liberals had moved to occupy that same space, positioning themselves as the major progressive party going into the First World War. While we cannot provide a definitive answer to the question surrounding the Liberals' decline – we cannot show whether their adoption of Labour-championed issues would have continued after the war, after the issues of the House of Lords and Free Trade, on which the two parties saw eye-to-eye, had been dealt with, or whether they would have been successful in convincing an enlarged working-class electorate that they were better advocates, we do show that 'new Liberalism' was essentially programmatically indistinguishable from Labour's platform before the war.

CHAPTER 4. Chapter 4 also contributes in multiple ways. The first contribution is to the (largely contemporary) literature on negative campaigning. While existing work has indicated that incumbent candidates campaign more positively than challengers, it has been unable to show that this is a causal effect of winning an election. By using a uniquely suited campaign data source and an appropriate identification strategy, this paper is the first to show that belonging to the winning party does indeed cause candidates to appeal to their voters more positively.

It also contributes to the British political development literature. Here, it adds another layer to our understanding of when and how accountability developed, building on work by Cox (1986; 1987; 1992) and Eggers and Spirling (2014*a,c*, 2016*a,b*) which has shown the successive establishment of (informal) institutions such as cohesive party voting, responsive ministers, and a Shadow Cabinet from the 1860s to the 1890s. This paper shows that retrospective electoral accountability – that is, politicians appealing to the electorate on the basis of the incumbents’ record, either defending or impugning it – was established after these other institutions, around the turn of the century. After changing their behaviour in Parliament, it was not until around 1900 that electoral accountability became something politicians explicitly invoked.

Moreover, the paper also suggests that the franchise extension of 1884 was at least part of the reason why electoral accountability developed. By showing that the incumbent positivity effect is strongest in constituencies with the most agricultural labourers, the demographic group which benefited from the 1884 Reform, we suggest that it was the necessity of appealing to these new voters without the ability to resort to clientelistic strategies that sparked candidates’ new campaigning strategy.

5.1.1 READING THE PAPERS TOGETHER

Aside from considering each paper's individual contribution, it also makes sense to take a step back and consider what we learn from reading the papers together. The papers in this dissertation collectively further our understanding of how campaigning, competition and accountability changed in Britain between 1867 and 1910. Dealing, as they do, with institutional change and its effects in a single country, they inevitably share more than just a subject matter.

THE CUMULATIVE CHANGE IN CAMPAIGNING

Considering the three chapters together, one of the most striking impressions is just how much campaigning changed in the roughly 50-year period between 1867 and 1914. As outlined in the introduction, this period saw the transformation of election campaigns from somewhat clientelistic to fully programmatic, the solidifying of competition along a single, polarized, economic left-right dimension, and the establishment of retrospective electoral accountability. While each paper deals with a single aspect of this transformation, taking the papers together shows just how momentous the change really was. While many candidates at the beginning of the period still campaigned in part by buying votes and 'treating' their constituents to drinks and other benefits, over time this clientelistic behaviour was replaced by substantive policy promises, which increasingly became economic in nature and focused on holding the incumbent accountable. At the end of our period, at the beginning of the First World War, campaigning thus looked recognizably 'modern', indicative of the patterns that were to characterize the interwar period. Indeed, this shows that the modernization of campaigning predated the modernization of the party system, which arguably did not occur until Labour

had replaced the Liberals on the left.

THE RANK-AND-FILE. The thesis has also shown that rank-and-file politicians were crucial to these changes. The extension of the franchise affected backbenchers as well as frontbenchers, causing them to speak more about the ballot in the House of Commons, which in turn raised the salience of the issue. Considering only frontbenchers would not have shown the extent to which enfranchising voters changed how Liberals spoke.

Similarly, the impact of ‘new Liberalism’ as an ideological current has been debated, with disagreement about how far-reaching it really was. By examining all candidates’ manifestos, Chapter 3 has shown that it completely permeated the Liberal party, such that by 1910 the Liberals and Labour were indistinguishable. Moreover, it changed the structure of competition, forcing the Conservatives to compete along an economic left-right dimension with the undeniably less popular position.

And finally, testing the impact of winning on campaign sentiment also could not have been possible without considering backbenchers as well as party leaders. While frontbenchers and especially party leaders are usually unrepresentative in that they tend to run in safe seats, backbenchers tend to be the ones running in competitive seats and therefore winning or losing closely. The regression discontinuity design thus lets us measure the impact of winning in the population where this was not a foregone conclusion.

ADDITIONAL INSIGHTS

ENFRANCHISEMENT AND CORRUPTION. Chapters 2 and 4 both discuss the effects on political speech of extending the franchise, though they do so differently,

as constituency boundaries remained more intact in 1867 than 1885. This allows Chapter 2 to directly measure the effect of franchise expansion, measured in the increase in the number of electors, while Chapter 4 uses the number of agricultural workers in each constituency as a rough proxy measure. Nonetheless, both indicate that franchise expansion changed how politicians speak, showing how expansion created the conditions for further institutional reform (the ballot, in Chapter 2, which allowed voters to express their true preferences without fear of retribution) and the development of accountability in politician behaviour (by appealing to incumbents' record in office in campaigns, in Chapter 4). While the two franchise expansions passed at different times and targeted different groups of voters, they both changed politicians' incentives such that making changes that furthered political accountability became a more attractive strategy. The juxtaposition of the two papers allows us to recognize this similarity across two different Reform Acts, even though the precise effects were different (legislative change in the first case, behavioural change in the second).

Further, Chapters 2 and 4 also deal, in different and somewhat complementary ways, with the issue of corruption in politics. While Chapter 2 looks at how franchise extension can create the conditions for MPs to try to curtail corrupt electioneering, Chapter 4 examines the other side of the coin - how eliminating corrupt practices in turn changed how candidates appeal to the population in elections. The development of retrospective accountability as a campaign appeal is, the paper argues, a result of the changed electoral environment candidates faced. Chapter 3, which traces how the content of their manifestos changed over the course of the same six elections, sheds further light on how candidates behaved in this new electoral environment.

THE 1910 ELECTIONS. Further, taken together, Chapters 3 and 4 paint a more comprehensive picture of how campaigning developed during the 1892-1910 period than does each individually. In particular, both chapters point to the two 1910 elections as being significantly different from the four previous ones. These two elections, which the Liberal governments called to settle the constitutional crisis that arose after the House of Lords vetoes the budget the House of Commons had passed in 1909, significantly changed the country going forward by establishing the primacy of the elected House.

Chapter 3 shows that 1910 is the year in which campaigning became one-dimensional, with the parties competing almost exclusively on the economic left-right dimension; this was a change from the four previous elections, in which they also competed – to a greater or lesser extent – on the imperial-domestic dimension. We tie this change to Lloyd George’s decision to call the elections on the constitutional question, which clarified competition around the economic issue as the Liberals successfully framed the elections as a choice between ‘the Peers’ and ‘the People’ (McLean, 2001). We also show that this shift corresponded with an increase in polarization, as the two party blocs became increasingly distinct from one another, which entrenched party competition in this state.

Chapter 4 also highlights the distinctiveness of the 1910 elections, in two ways; first, the paper shows that overall sentiment was significantly more negative in 1910 than earlier, and secondly – and more importantly – these elections also saw the largest incumbent positivity effect. We thus argue that retrospective accountability was particularly strong in these elections, with challenging candidates using their campaigns to hold incumbents to account for their record in power and incumbents defending it. This makes sense given the constitutional crisis the country was in, and the resulting need to assign (or deflect) blame.

The papers thus provide further evidence that 1910 was an inflection point for the country, both in terms of *what* candidates campaigned on (Chapter 3) and *how* they did so (Chapter 4). Taking the papers together allows us to see that this critical juncture was not just true in Parliament, where the 1910 elections led to the passage of the 1911 Parliament Act, but also reflected in how rank-and-file politicians chose to address their constituents.

THE IMPORTANCE OF CAMPAIGN MANIFESTOS. Considering the papers together also illustrates how decisions made as part of one reform can have (potentially unintended) knock-on effects on other changes. For example, the Ballot Act – the passage of which is studied in Chapter 2 – directly increased the importance of the election manifestos, used in Chapters 3 and 4. While they existed as early as the 1830s, they became more relevant as the electorate expanded and candidates found it harder to reach individual voters, and especially after public hustings were abolished as part of the Ballot Act. This meant that candidates submitted nomination papers instead of declaring their candidacies at public gatherings open to everyone (Hawkins, 2015, p. 285-6), which removed a forum in which all candidates appeared and were questioned by their constituents (Lawrence, 2011). The abolition of public hustings, like the institution of the secret ballot, was seen as a way to reduce the rowdiness and potential danger of elections in the new, post-Reform environment (Hawkins, 2015; Kinzer, 1982, p. 246). However, it also made election addresses more important, thereby potentially affecting how candidates used them in their campaigns.

5.2 LIMITATIONS AND FUTURE WORK

Of course, all three papers have limitations. Some of these concern the specifics of each paper. Chapter 2 finds that franchise expansion in 1867 increased the extent to which MPs talked about corruption, and argues that this increase was responsible for the passage of the Ballot Act by raising the salience of the issue such that previously opposed Liberals switched their votes. However, while the first half of this is empirically strongly supported – MPs from constituencies with particularly large franchise increases *did* speak more about corruption and the ballot – the second half is harder to prove causally. The paper tries to address this by attempting to rule out alternative explanations, such as that the Ballot Act passed due to the increased costs of vote-buying (Cox, 1987) or that the change was due to replacement (Kam, 2014), and supporting its claim with qualitative evidence from historical accounts and speeches.

However, one could imagine a world in which the Ballot Act passed even in the absence of this increased discussion by strongly-affected Liberal members, perhaps because John Bright was not sick and advocated forcefully for it both in Parliament and to Gladstone, or because Gladstone himself developed a strong conviction that it should pass (indeed, the latter argument is made by Kinzer (1982)). Alternatively, there could also be a counterfactual in which strongly-affected MPs do what they can but the Ballot Act fails anyway; perhaps the Conservatives were successful in running out the parliamentary clock, or because the House of Lords stood firm against it, both of which happened with the 1871 attempt at passing the bill (O’Leary, 1962). The paper is unable to address these counterfactuals, so the link between the increased in speaking about corruption and the passage of the Ballot Act is necessarily weaker than the first half of the

story.

Further, the Ballot Act arguably did not do all that much to end clientelism in Britain (e.g. Hanham, 1959; O’Leary, 1962; Kam, 2017); indeed, other reforms, such as the Election Petitions Act of 1868 (Eggers and Spirling, 2014*b*; Rix, 2017) and the Corrupt Practices Act of 1883 (O’Leary, 1962; Rix, 2008) were probably more important. One might ask, therefore, why the Ballot Act is worth studying if its effects were limited, and why Chapter 2 discusses its passage as an interesting piece of the replacement of clientelistic by programmatic linkages. One of the crucial aspects of ‘reading history forward’ – of attempting to understand the motivations of historical actors, rather than imputing them anachronistically – is treating failed attempts and ‘near misses’ as worthy subjects in their own right (Capoccia and Ziblatt, 2010). The Ballot Act was *aimed* at curtailing corruption, and contemporaries took it seriously as an act of legislation and expected it to work; examining how franchise extension affected their motivations is thus a valuable exercise, despite its ultimate ineffectiveness. However, a further avenue for research might be a closer quantitative look at the passage of the Election Petitions Act or the Corrupt Practices Act, which were more effective.

Chapter 3, whose contribution is the descriptive analysis of candidates’ ideological positions, relies on unsupervised scaling of the `doc2vec` vectors in the form of principal-components analysis. While this has advantages – it does not require the *ex ante* classification of candidates by the researcher – unsupervised methods potentially suffer from other issues, the most important of which is that the identified structure in the data (in this case, the two dimensions) is not inherently meaningful. The paper addresses this by validating the dimensions using both quantitative and qualitative means, but ultimately it is hard to know for sure that the PCA is truly picking up an imperial-domestic and an economic left-right

dimension.

Chapter 4 uses a regression discontinuity design to estimate the effect of winning the last election on a candidate’s election manifesto. However, while my quantity of interest is at the candidate level, the incumbency I measure is at the party level. This approach is somewhat common among electoral regression discontinuity applications (e.g. Lee, 2008; Eggers et al., 2015), but as Fowler and Hall (2014) note, it essentially combines both the *personal* and the *partisan* incumbency into one estimated effect.¹

Moreover, as in the first paper, one half of the argument is better-identified than the other. While the RD itself is solid – it seems clear that winning an election leads candidates to be more positive – the paper goes on to argue that this is evidence of retrospective campaigning, which shows the development of electoral accountability. This is a plausible account, but it is not the only possibility. It could be that electoral accountability had already developed earlier – after all, both Cox (1987) and Dewan, Meriläinen and Tukiainen (2018) show that party voting had largely developed even before the Second Reform Act, some 30 years prior – and the incumbent positivity found in the paper was a later change, perhaps related to the increasingly emotional nature of campaigns. (Perhaps challengers had already been criticizing the government earlier, but it was less *emotional* - and thus not picked up by the sentiment classifier.)

In future work, it would be interesting to explore different aspects of campaign negativity. One idea would be to additionally code sentences for the other type of ‘negative campaigning’ common in the literature – whether the subject of the

¹Fowler and Hall (2014) go on to use term limits in state legislatures to tease out the differences between these two different incumbency effects, a well-designed way of disentangling the two quantities of interest that is unfortunately not available in the UK context.

campaign is the candidate himself, or his opponent. This does not necessarily relate to sentiment, though of course one is likelier to be negative when referring to one's opponent than oneself, but tells us what the focus of the campaign is. Another idea would be to code whether a candidate is referring *negatively* to an opponent, or positively to himself, even if this is not particularly emotional. While these options would raise other questions, comparing how candidates score on each of these metrics would give us a fuller sense of how campaigning worked. In this way, further work could do more work in unpacking the nexus between incumbent positivity and electoral accountability.

REGISTRATION AND AGENTS. While the papers in this thesis have examined the effects of franchise rules, they leave aside entirely the question of registration. While the rules formally determined who could vote, in practice, election registration was vastly consequential for determining who *couldn't* (e.g. Hanham, 1959; Blewett, 1965; Clarke, 1972). Voters could fall off the register if they moved, or if they changed their residential category (such as going from lodgings to a house); a million voters were disenfranchised in this way every year in the period between the Third and Fourth Reform Acts (Blewett, 1965). Further, there was great variation in how these rules were enforced and how enterprising each party's agents were in chasing down their own side's voters and lodging complaints to those of the other side; as a result, the number of voters was determined not just by the rules, but also how they were interpreted by local polling officials and put into practice by agents (Rix, 2016). It is unlikely that agents were differentially positioned by parties given the amount of uncertainty surrounding how to exploit the new electorate, but understanding their mediating effects on enfranchisement would further flesh out the story.

Despite general agreement on their importance, electoral agents have thus far received relatively little scholarly attention (Rix's 2016 book is a notable exception). We know that there was extensive local variation in agent backgrounds, training, cost and effectiveness – while agents had traditionally been local lawyers or other professionals, they were increasingly, but unevenly, replaced by professionals trained by party organizations (Rix, 2016). However, there exists no quantitative work attempting to systematically measure their influence across constituencies and time – and whether and how this influence depended on the local variation. This is largely a data issue, as to my knowledge there exists no comprehensive dataset of agents across the country, the understanding of how elections worked in practice would be vastly improved if this crucial factor could be incorporated into the analysis.

NUMBER OF ELECTIONS. Another limitation shared by Chapters 3 and 4 is the fact that they rely on campaigns from only six elections. This is largely due to the amount of time and money it took to digitize each election; Daniel Ziblatt and I contracted the typing of the texts out to a digitizing service, which was expensive, but this still required the manual inspection of each entry and linkage to existing electoral returns records in the (Eggers and Spirling, 2014a) data. There is a natural break in the data after 1910; the First World War delayed the next election until 1918, when it took place under vastly different circumstances. The Representation of the People Act 1918 had extended the franchise to all men and women over 30, increasing the electorate from 7.7 million to 21.4 million, and had once again redrawn constituency boundaries and redistributed seats (Cook, 1975; Pugh, 2002; Cunningham, 2001, p. 239). To have a reasonable basis for comparing pre- and post-war campaigning would have required digitizing at least

three or four elections after 1918, which would have come at significant temporal and financial cost and ultimately proved unfeasible within the constraints of this PhD.

However, this leaves open the possibility that the findings in this thesis, at least those in Chapters 3 and 4, may be distorted by potential outlier elections among the six. After all, four of the six are generally considered ‘single-issue’ elections as they were greatly dominated by the Boer War (1900) (Readman, 2001), Free Trade (1906) (Irwin, 1994), and the constitutional crisis surrounding the House of Lords (both 1910 elections) (Blewett, 1972; McLean, 2001). The trends identified depend on these elections, which might be somewhat exceptional in British history. On the other hand, in both cases, the ‘end points’ arrived in both analyses at are consistent with what we know about post-war British politics. The eventual class basis of political competition is a well-established fact (e.g. Pulzer, 1967; Butler and Stokes, 1971; Wald, 1983; Jarvis, 1996), and the presence of incumbent positivity has also been established in the UK, though only for much more recent periods (e.g. van Heerde-Hudson, 2011; Walter, van der Brug and van Praag, 2014). And moreover, while the elections were indeed ‘about’ each of these single issues, they were by no means everything candidates talked about in their manifestos. Indeed, reading them shows that candidates took positions on many other issues, such as pensions, education, social improvement and the army (e.g. Lawrence (2011, p. 469); see also Section 3.4.2).

Tracing the development of campaigning after the war thus remains an avenue for further work, and one in which a lot of interesting questions might be asked. Is there a noticeable change in the way candidates campaigned – following up on Chapter 3, how did their policy platforms change? Following up on Chapter 4, how did the sentiment of their speeches change, and did the incumbent positivity effect

continue to grow? Did their speech become simpler (Spirling, 2016)? How did the enfranchisement of women affect campaigns – did candidates speak differently in constituencies in which there were a lot of newly enfranchised women?² In the pre-war period, there were very few triangular contests (as the Conservatives and Liberal Unionists ran in an electoral alliance, and the Liberals and Labour largely respected the 1903 stand-down pact), but this changed after the war – how did candidates’ campaigns differ depending on the relative strength of their different opponents?

GEOGRAPHIC VARIATION Another element that remains underexplored in this dissertation is the geographic dimension of British politics. The overemphasis on England – and corresponding lack of attention paid to the other constituent parts of the United Kingdom – is a common element in the study of British history and politics (Hoppen, 1985; Williams, 2008), and one which this dissertation does not do very much to address. Indeed, geographically, the three papers actually have different scopes: while Chapter 2 encompasses MPs from England, Wales, Scotland and Ireland, the analysis of the campaign manifestos in Chapters 3 and 4 excludes Ireland due to the high (and selective) rate of missingness of Irish campaign speeches. Further, the analysis of how agricultural labourers affected incumbent positivity in Chapter 4 also excludes Scotland, as the census parishes could only be matched to parliamentary constituencies for England and Wales.

While these reasons for excluding nations were hard to avoid, exploring the geographic variation in the campaign manifestos in particular might be another interesting avenue for future work. As previous work on campaigning in the UK has

²While matching constituencies would be challenging due to the changing boundaries, the number of enfranchised women might be a proxy one could use.

largely been more local or regional than national in scope due to its qualitative nature (e.g. Hanham, 1959; Lawrence, 2009; Blaxill, 2011; Rix, 2016), exploring some of the implications of this qualitative work using the dataset of election manifestos may prove fruitful.

EXTERNAL VALIDITY. Moreover, while this thesis has attempted to shed light on the British case in general, and, in turn, to use the British case to understand political development more broadly, there are, of course, limits to the external validity of the findings outlined here. While systems explicitly based on the British Westminster model are perhaps more reasonable points of comparison than more distant political systems, extrapolating beyond the scope of the thesis itself is always potentially fraught. Not only do the specific incentives and how they change differ greatly across countries, but the way politicians respond to these incentives and changes may also differ. Aspects of the British experience, such as its general freedom from external interference, the sequencing of how institutions changed, and the relative peace with which they did so, all set Britain apart from many other cases.

Thus, some insights probably travel better than others. One potentially generalizable insight is the importance of examining rank-and-file politicians to fully understand the effects of institutional change; party leaders are likely to be atypical candidates and legislators in many ways, and so understanding how politicians' decision-making changes in response to new institutional incentives requires a wider look than just at the leadership.

I feel somewhat less confident about generalizing about the substantive findings of the thesis regarding campaigning. Does franchise extension lead politicians to favour curtailing corruption or enforcing retroactive accountability in elections?

It seems to have done so in Britain, but that does not mean that it would have the same effect elsewhere. Given different underlying institutions, or even a more radical suffrage expansion, politicians may have reacted very differently – as in fact they did in other countries, such as Germany (Craig, 1978, p. 163). Similar studies in other countries would provide a greater understanding of how the effects of institutions can vary in different contexts.

On the other hand, a lesson that likely does have wider application is that text is a valuable resource for political scientists, even when looking at historical institutional development, and especially when considering rank-and-file politicians. Particularly in systems with strong party discipline, parliamentary and campaign speeches provide more information about backbenchers' stances than we might otherwise have. And frontbenchers, too, can express themselves with more nuance in speeches than in votes. The advent of quantitative tools for large-scale text analysis has made it possible for researchers to gain a fuller understanding of the preferences of politicians, as well as of how they might use speeches to communicate different preferences than they do in their voting behaviour (e.g. Slapin and Proksch, 2010; Schwarz, Traber and Benoit, 2017).

As methods become more efficient and computational power increases, the options available to researchers will surely continue to expand. At the same time, tools are only as good as the data they are applied to, and so the collection and digitization of texts is another way in which further work can and should develop. While text analysis sometimes exhibits a bias towards more modern periods due to the current proliferation of political texts that either originate online, such as on Twitter, or are digitized contemporaneously, such as the transcripts of televised debates or parliamentary minutes, this dissertation has shown (alongside a lot of other work, particularly by Eggers and Spirling) that it is also a fruitful way

to gain a fuller understanding of political developments that have long passed. And this dissertation has also shown that lesser-used sources, such as election addresses, can provide a useful complement to more widespread texts, such as legislative debates. Alongside our substantive findings about the development of campaigning, the data contribution of over 6000 campaign manifestos used in this dissertation is one of the key ways in which it adds to this growing scholarship.

A

A.1 APPENDIX: BALLOT IN CONTEXT

Table A.1 shows the context in which the word “ballot” was used in parliamentary speeches. It was used a total of 7249 times in 1584 speeches, and the table presents eight-word windows on either side of 100 randomly sampled instances. As the table shows, the rate of false positives is extremely low; almost every instance is about the use of the secret ballot in elections.

A.2 APPENDIX: TOPICS

Table A.2 shows the top eight words associated with each of the 35 topics estimated by the topic model on the corpus of parliamentary debates between 1847 and 1874. These topics are unsupervised and can be interpreted by the researcher based on the top words and documents associated with each topic. Here, topic 35 is the ‘corruption’ topic; we can see that other topics include the army (2), the navy (8), Catholicism (10), banking (11), European politics (12), the judicial system (14), franchise reform (17), land rights in Ireland (19), universities (22), manufacturing (24), taxes (25), schools (26), criminal justice (27), India (30) and poor rates (33). There are also a host of procedural topics (4, 9, 13, 16, 20, 21, 23, 28, 31 and 32).

Table A.1: ‘Ballot’ in context

Pre	Ballot	Post
of the Committee appointed to inquire into the	Ballot	, to make some observations , though he
, might be called the father of the	Ballot	. Even the right hon Gentleman himself had
of giving their constituents the protection of the	ballot	. All the arguments yet used in opposition
great moral reform , I long for the	ballot	. As a counteraction to the venal ,
fair opportunity of trying the experiment . The	ballot	applied to these towns , would prevent any
But it was now hardly pretended that the	Ballot	could , in practice , be really secret
said , by universal suffrage and vote by	ballot	, and it is not therefore for me
other countries to which the advocates of the	Ballot	had recourse in support of their views before
would be necessary to have recourse to the	ballot	. Voluntary service was , unquestionably , infinitely
not one of your recent converts to the	Ballot	, made by either miracle or pressure .
in the sincerity of those who opposed the	ballot	on the ground that it would promote deception
. The reason for his voting for the	ballot	was , that though he thought it a
in order to secure the passing of the	Ballot	Bill , he was obliged to give up
. 1207 .] After this warning the	Ballot	was rejected by a majority of 117 ;
told that there were in favour of the	Ballot	Bill 45 Petitions , signed by 7,500 people
it , and if you have got the	Ballot	you ought to adopt a house-to-house polling ;
to canvass for voters , especially under the	Ballot	. He preferred to let the voters decide
respect to the utility and efficacy of the	Ballot	, because he did not think any hon
adopted in London and other places where the	Ballot	at present prevailed , and would be excluded
, should for the future be elected by	Ballot	. He confessed that he could not understand
this would continue after the operation of the	Ballot	, which would only operate to destroy for
. Even many of those who oppose the	ballot	in this country say , as I remember
attended by thousands of electors , where the	ballot	was unanimously supported . How , therefore ,
secrecy which was assumed as inseparable from the	ballot	really did exist . With re - 417
to prepare the details for carrying out the	Ballot	. The Amendment of the hon Baronet (
I am beaten , nothing . ” The	ballot	has other advantages , if a man wants
of defence to which the opponents of the	ballot	commonly resorted , and which he had demolished
giving an extension of the franchise or the	ballot	to people who appeared so little able to
but now that they were to have the	Ballot	he should oppose it no longer . In
. Now , when hon Members assimilate the	ballot	used in political elections with the 433 ballot
vices or virtues of a man elected by	ballot	form no criterion whatever , on which to
Mr . Maguire) would tell him the	ballot	. But if a clergyman who from being
be devised for taking the poll without the	Ballot	as quietly , orderly , and regularly as
desired not to impede the progress of the	Ballot	Bill , to which he had never raised
well aware of the protective power of the	ballot	that they have almost universally adopted it ,
But in America , as everybody knows ,	ballot	voting is not secret . It is ticket
. On that occasion 333 voted against the	ballot	, and 216 for it . But from
who were yet in favour of the compulsory	Ballot	, to vote for a milder provision ?
being present during the elections . But the	Ballot	would not put a step to that ,
papers were altered . He remembered when the	Ballot	Bill was passing through that House he took
. In 1832 there was one for the	ballot	and the shortening of Parliaments ; and in
very considerable effect in making converts to the	Ballot	. But did they really think that the
an hon Member who was elected by the	Ballot	in Australia , was not present to give
their peril . ” The King found the	Ballot	so inconve - nient because he could not
denominational education . He did not think the	Ballot	ought to be looked upon as a political
the House there was no need of the	Ballot	. He did not think that under any
to bear upon the Ministry to support the	Ballot	Bill , and let the other measure go
nothing to do with the working of the	Ballot	, and he felt that it would have
could not take his paper out of the	ballot	box . Hon . Gentlemen , in their
valuable mainly by being kept distinct . Your	ballot	and your bounty will paralyse , degrade ,
Parliamentary Electors to be taken by way of	Ballot	. Until very lately he thought he should
their Bill upon the principle of a secret	ballot	, and the object of the details of
Act , when Triennial Parliaments , and the	Ballot	, and other such alterations upon it were
regulation the public would lose confidence in the	Ballot	and in their being fairly represented by the
himself . The chief objection taken to the	ballot	in the present day was generally couched in
but the existing legal machinery for bringing the	ballot	into operation is cumbrous in the extreme ,
of the land . He voted for the	Ballot	in 1857 , and he had lived to
find that , instead of having that oppressive	ballot	which has been spoken of at public meetings
to do away with the principle of the	Ballot	a principle which had been asserted in that
of the Bill and now to bring the	ballot	into favour ? The only thing I have

A.3 OTHER SAMPLES

Since the main results are estimated on a subsample of the constituencies – specifically boroughs which did not undergo a boundary change, in England, Wales, Scotland and

Table A.2: Top words for each of the 35 topics

Topic	Top words
1	act; railway; provis; power; limit; regul; line; licenc
2	armi; regiment; militia; soldier; militari; volunt; troop; recruit
3	experi; life; class; evil; labour; societi; old; often
4	claus; amend; bill; introduc; second; measur; read; object
5	marriag; law; women; wife; prohibit; legal; husband; marri
6	coloni; crown; island; canada; colonist; constitut; imperi; legislatur
7	day; hour; week; month; six; knew; close; meet
8	vessel; ship; admiralti; dockyard; naval; navi; harbour; seamen
9	feel; confid; languag; speech; sentiment; prime; honour; polit
10	cathol; roman; protest; religion; religi; christian; priest; rome
11	money; bank; sum; debt; loan; payment; paid; fund
12	russia; treati; turkey; franc; europ; russian; emperor; french
13	committe; report; inquiri; commiss; select; inquir; recommend; commission
14	court; attorney; judg; jurisdic; tribun; chanceri; solicitor; appeal
15	offic; salari; retir; clerk; depart; servic; appoint; list
16	right; friend; proposit; say; argument; point; question; deal
17	borough; franchis; reform; counti; represent; constitu; repres; town
18	bishop; rev; ecclesiast; church; dissent; prelat; clergyman; dioces
19	tenant; landlord; land; ireland; estat; irish; rent; leas
20	hon; gentleman; member; baronet; gentlemen; speech; spoken; learn
21	nobl; earl; lord; lordship; marquess; duke; viscount; friend
22	univers; colleg; scotch; scotland; oxford; cambridg; edinburgh; student
23	difficulti; consider; thought; might; possibl; felt; great; adopt
24	trade; manufactur; cattl; commerci; slave; price; diseas; articl
25	tax; exchequ; expeditur; incom; estim; reduct; revenu; chancellor
26	school; children; educ; inspector; parent; teacher; instruct; child
27	prison; punish; magistr; offenc; crime; sentenc; polic; commit
28	discuss; motion; resolut; hous; debat; opportun; cours; busi
29	metropoli; park; build; metropolitan; work; road; board; erect
30	india; indian; nativ; east; director; compani; governor; china
31	whether; ask; wish; said; beg; intent; secretari; repli
32	will; may; can; shall; think; say; know; find
33	poor; rate; relief; guardian; exempt; union; pauper; assess
34	communic; letter; correspond; document; inform; majesti; date; paper
35	elect; vote; corrupt; candid; ballot; bribery; seat; voter

Ireland – this section shows that they are largely similar when considering other samples. Model A1 shows the effect for all boroughs, including those with a boundary change; the effect of enfranchisement on discussion of corruption is smaller, but remains significantly positive. When considering only England and Wales, as the Scottish and Irish Reform Acts passed in 1868 were slightly different from the English and Welsh one of 1867, the effect also holds.

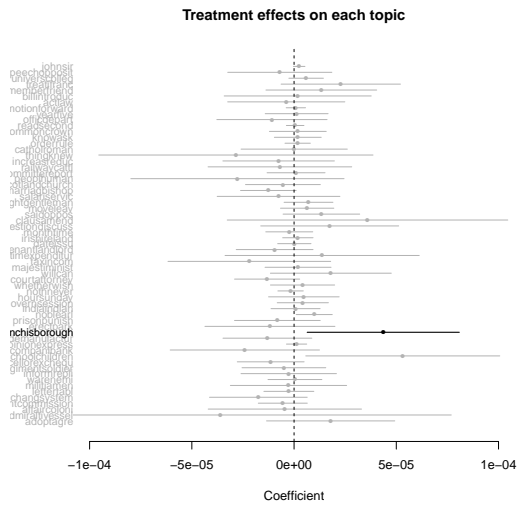
Table A.3: Predicting the corruption topic proportion: other samples

	Incl. boundary change (A1)	Only Engl. and Wales (A2)
Change in Electors * Post-Reform	0.00002** (0.00001)	0.00006** (0.00002)
No. of Speeches	93,180	47,788
No. of Constituencies	212	114
Constituency FEs	Yes	Yes
Parliament FEs	Yes	Yes

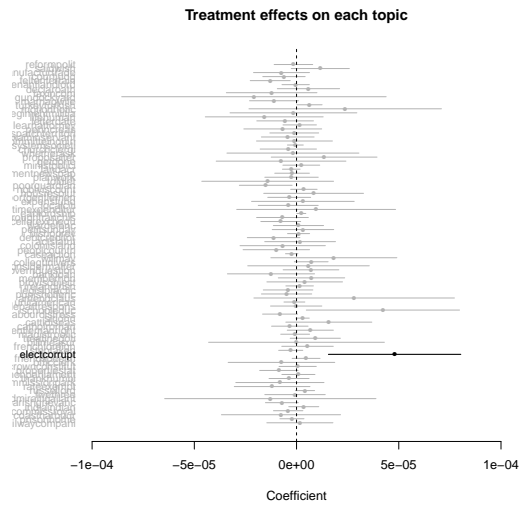
A.4 MORE TOPICS

One potential problem with topic models is that specifying a different number of topics might change the result of any analysis done on their output. In order to make sure this is not the case, I re-ran the same analysis on models using many different numbers of topics; the results are the same across specifications, with the corruption topic being the only significantly increased topic (though sometimes, the school topic remains significant as well).

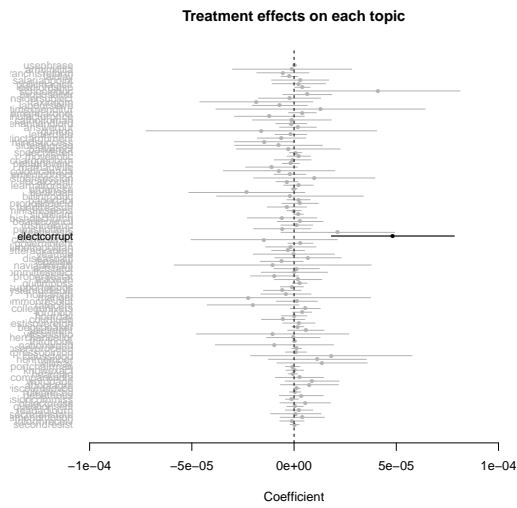
Another potential problem might be that the other topics (taxation, poor laws, justice, colonialism, etc.) are much broader than corruption. This might mean that stable levels of discussion of these broad topics might mask important changes occurring on narrower sub-topics within them - such as specific kinds of taxation more important to industrial workers, for example. The logic here is that the enfranchisement could be causing changes in how much MPs talk about these sub-topics which is not showing up in the 35-topic model used in the paper. The graphs in figure A.1 address this by estimating much larger topic models, going up to 110 topics. Even in this large model, in which many of the broader topics will have been subdivided, corruption (in black) is the only topic of which discussion has significantly increased as a function of enfranchisement.



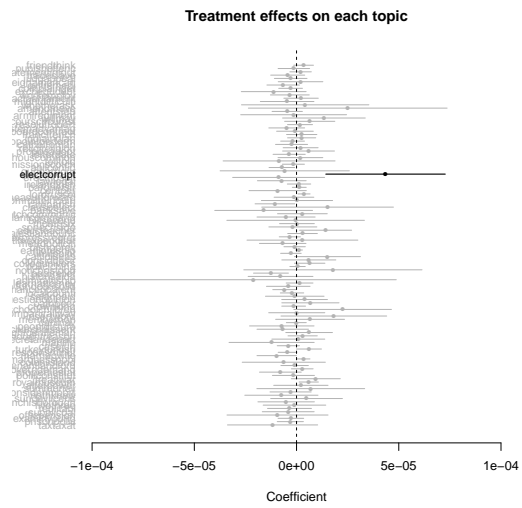
(a) 60 topics



(b) 90 topics



(c) 100 topics



(d) 110 topics

Figure A.1: Treatment effects for different numbers of topics

A.5 PLACEBO TEST

While the diff-in-diff design allows us to rule out the possibility that the effect might be driven by time-invariant factors that differ in constituencies which receive different dosages of the treatment, we might be worried about time-varying factors. That is, it may be that different trends are at play in those constituencies in which a greater percentage of electors was additionally enfranchised. While considering the pre-reform trends helps alleviate this concern somewhat (Figure 2.4), we might also want to test this more rigorously.

In this model, we discard the post-treatment period, and estimate the same model treating the last pre-reform period as the post-treatment period instead. We can see that the ‘effect’ of the extra enfranchised voters on speaking about corruption is now negative and statistically insignificant (Figure A.2); that is, in the pre-treatment period, MPs from boroughs which saw a greater enfranchisement did not speak differently about corruption than those from boroughs with fewer enfranchised voters. This gives us more confidence that the results in the previous section are actually driven by the enfranchisement, rather than by other factors that happened to be changing at the same time in the same kinds of constituencies.

Pre-treatment (placebo) effect

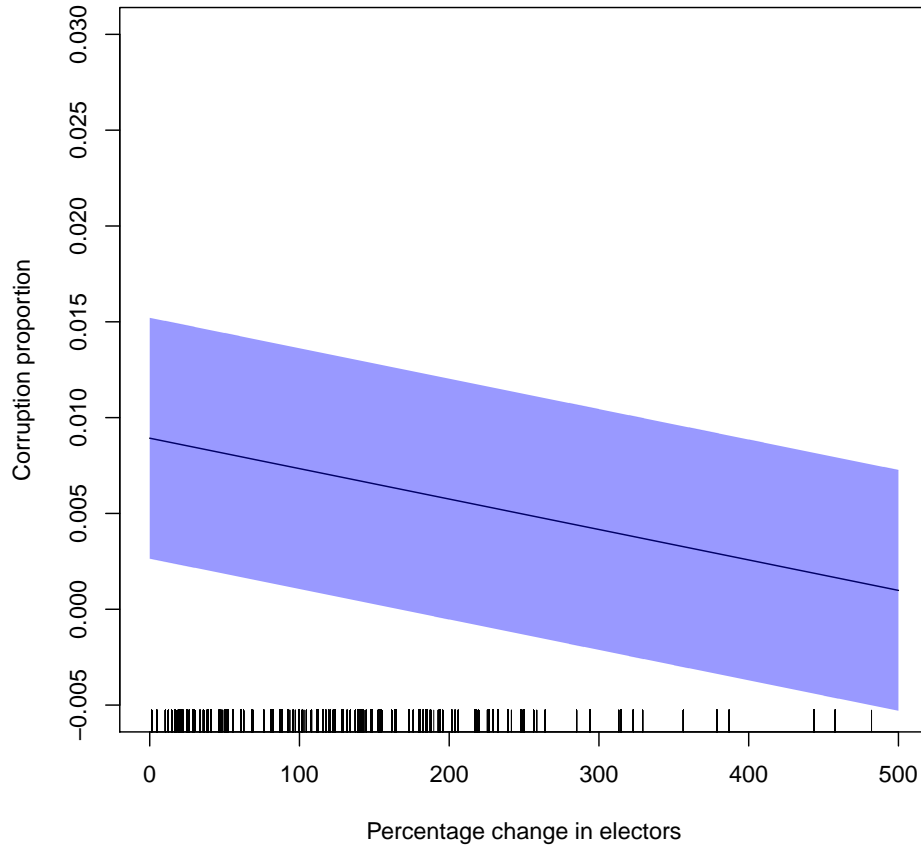


Figure A.2: Treatment effect in the pre-treatment period (placebo test)

A.6 OPENING UP THE CORRUPTION TOPIC

While this paper has shown that MPs from boroughs with a large increase in enfranchisement talked more about corruption, we might be interested in the specifics - within the corruption topic, what specifically did they talk about? Rather than discussing corruption in the abstract, MPs from boroughs with a great deal of enfranchisement were increasingly focused on the mechanics of curtailing it. Figure A.3 examines the corrup-

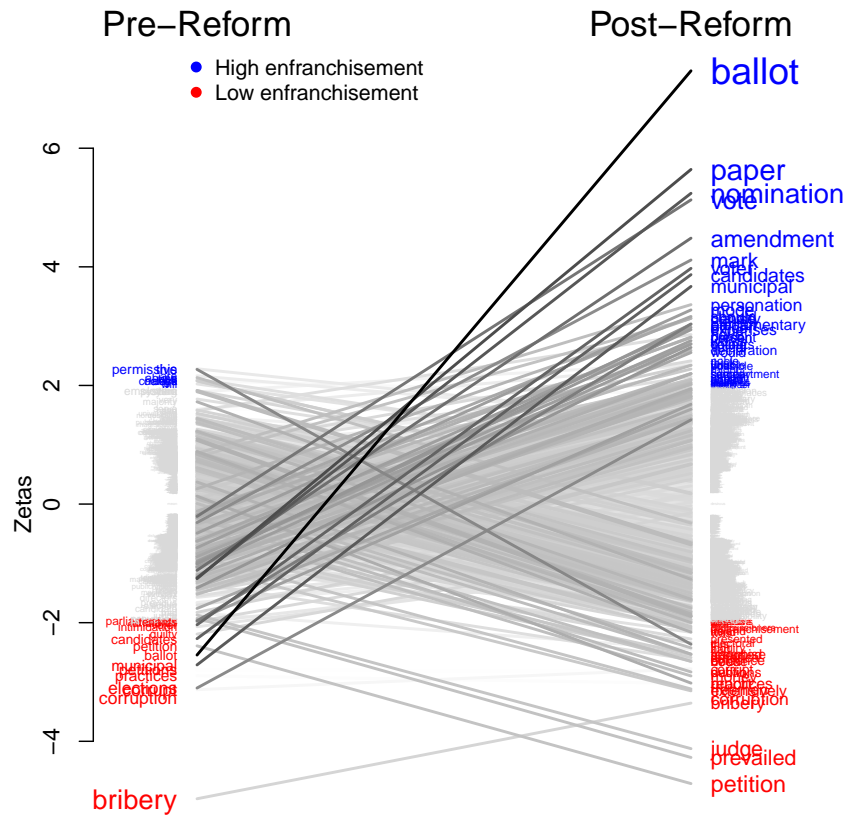


Figure A.3: Examining word usage change within the corruption topic

tion topic more closely, comparing which words were used most distinctively by high- (blue) and low-enfranchisement (red) boroughs both before and after reform (Monroe, Colaresi and Quinn, 2008).¹ The words associated with low-enfranchisement groups do not change much - both before and after reform, when these MPs talk about corrup-

¹The absolute value of the zeta parameter (and the size of the word) signify the distinctiveness of the word to each group, with big blue words being those which were associated with MPs from high-enfranchisement constituencies, while big red words were associated with low-enfranchisement constituencies.

tion, they discuss accusations, using words such as “bribery”, “petition” and “corruption” directly. However, there is a big change among MPs from high-enfranchisement constituencies; after reform, they suddenly talk much more distinctively about the mechanics of preventing vote-buying, using words like “ballot”, “paper”, “mark” (on the ballot) and “vote”. Talking about these specific measures shows that they were concerned not just with corruption in the abstract, but focused increasingly on how to curtail it.

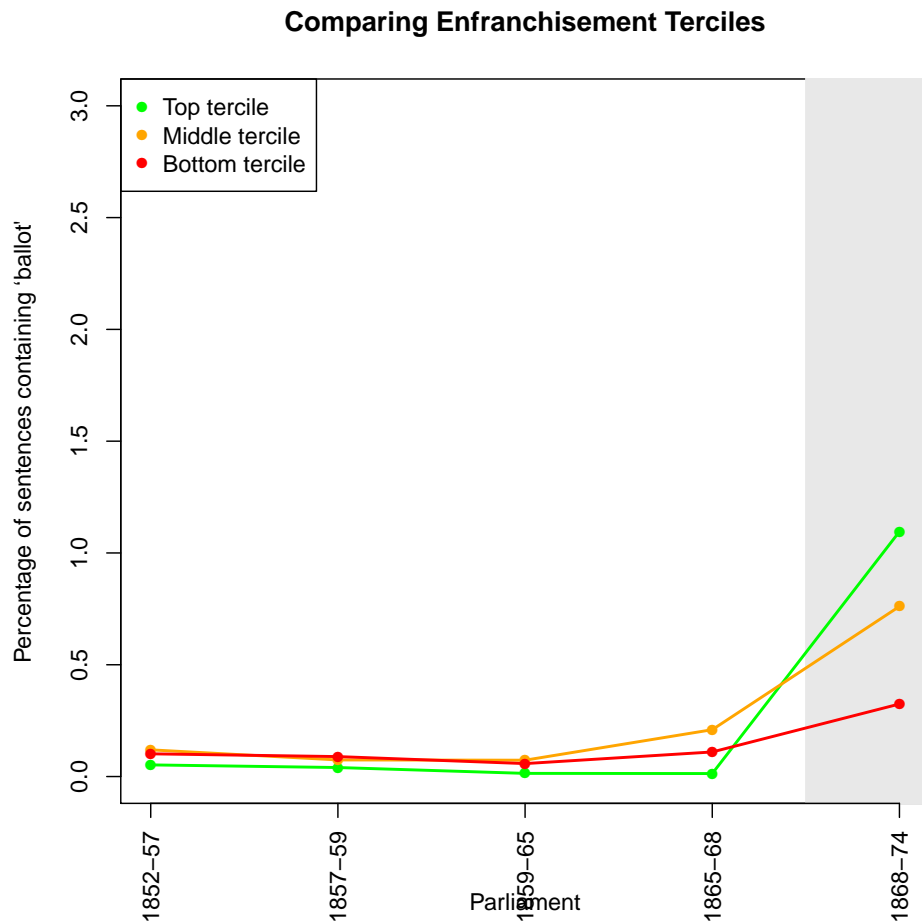


Figure A.4: Usage of the word ‘ballot’

Figure A.4 shows this in more detail. This is the same parallel trends graph as shown in the paper, but instead of the corruption topic as a whole, this one shows the change in the percentage of sentences that contained the word ‘ballot’ as a function of time and increase in enfranchisement. We can see that the word ‘ballot’ is barely used across most of the Parliaments; it increases slightly in the 1865-68 Parliament, in which two ballot bills were brought but not debated much, and finally increases drastically in the 1868-74 Parliament. Moreover, the increase is driven by the tercile of constituencies which saw the greatest increase in enfranchisement. The use of the word ‘ballot’ alone is clearly a large driver of the results.

A.7 VOTING ON THE BILL BY ENFRANCHISEMENT

This appendix compares MPs’ voting behavior on two different roll calls - once on a ballot amendment proposed as part of the Second Reform Act in 1867 (which failed, 112:158), and once at the third reading of the ballot bill (which passed, 274:216).

Figure A.5 shows how each party voted on these bills; the left column of graphs is for Liberals, while the right is for Conservatives, and the rows show loess curves for the prevalence of Ayes (top), Abstentions (middle) and Noes (bottom), by the percentage change in electors in each constituency. The red line shows the pre-reform distribution of each outcome, while the green line shows the post-reform distribution. We can see that for the Conservatives, there is essentially no difference between how members voted on the 1867 and on the 1872 bills. For the Liberals, however, there is a difference: the proportion of Ayes increased, while the Abstentions decreased (and the Noes, which were already quite scarce, became even scarcer). Moreover, we can see that for MPs from constituencies which were to see very small and very large increases in enfranchisement in 1868, the proportion of Ayes was already quite high pre-reform, so the major change occurred for MPs from constituencies whose constituencies were to see middling

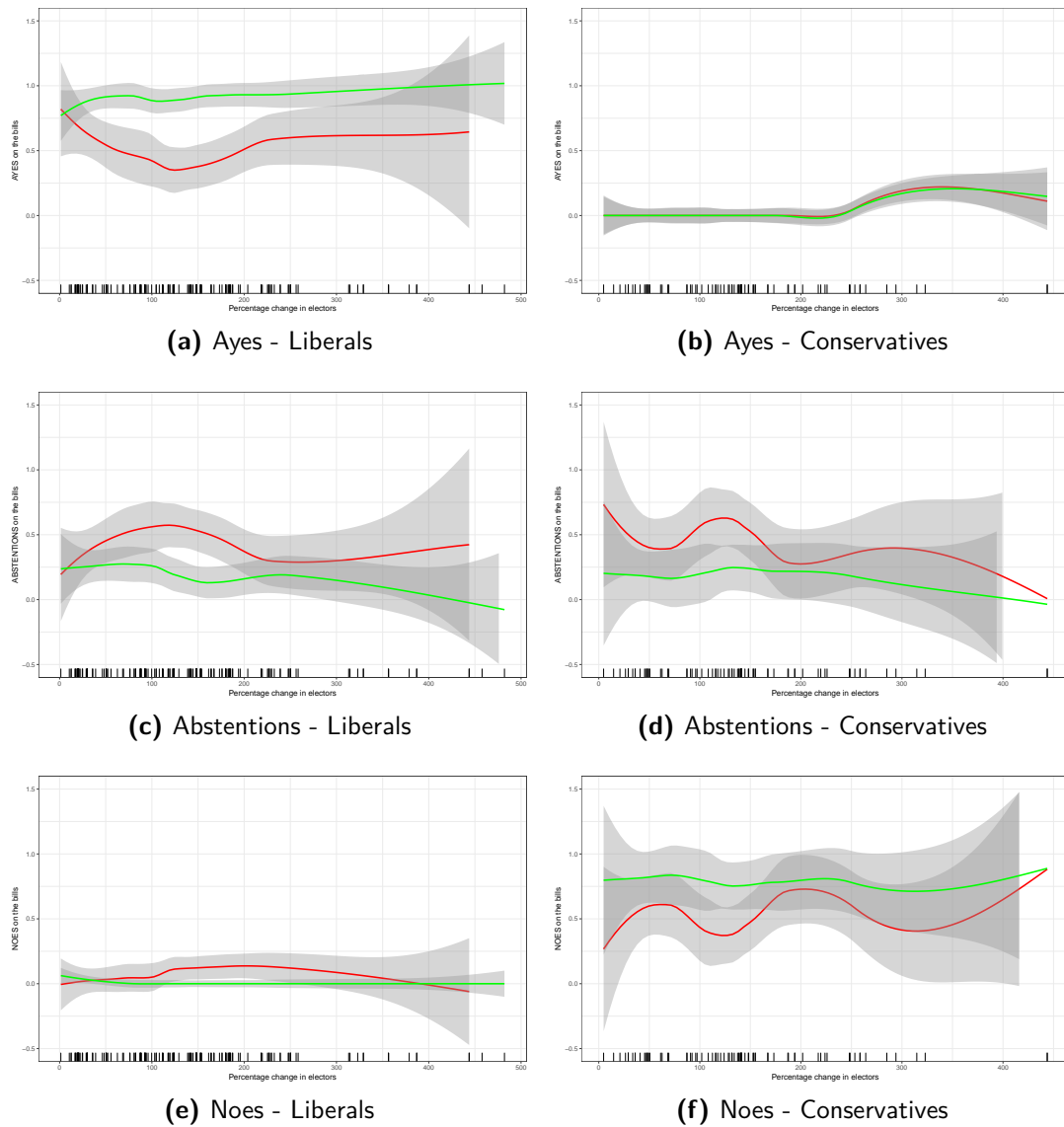


Figure A.5: Voting on the ballot - pre-reform (red) and post-reform (green)

increases in enfranchisement (i.e. a 50% to a 200% increase).

B

B.1 VALIDATING THE DIMENSIONS

Section 3.4.2 quotes from some of the election addresses in order to validate the interpretation of the two dimensions. In this section, these speeches are quoted in some more detail (though often not in full, due to their length), with relevant passages bolded, in order to provide more context for the rather short excerpts in the main text. In all of these texts, formatting is retained from the election address text, where capitalization and/or all-caps were sometimes used for emphasis.

Each section also contains a table showing results of using a Naive Bayes classifier to predict being low and high on each dimension, supplementing the qualitative validation with a quantitative measure.

B.1.1 DIMENSION 1: IMPERIAL VS DOMESTIC

Dimension 1 is interpreted as a describing the substance of what is discussed in the manifestos, ranging from imperial matters on the low end of the dimension to domestic matters on the high end. Reading speeches that rank high and low on the dimension corroborates this interpretation. One of the most highly-ranked (more domestic) speeches overall on this dimension:

To the Electors of the South- West or Chichester Division of Sussex.
GENTLEMEN, I again beg to offer my services as your representative in Parliament. **The Lords still insist upon their claim to trample upon the**

WISHES OF THE PEOPLE. ... At this Election you are asked to say by your votes that the **CONSERVATIVE LORDS SHALL NO LONGER BE ABLE TO REJECT BILLS PASSED BY THE PEOPLE'S REPRESENTATIVES FOR THE PEOPLE'S GOOD.** If the Conservative Lords win at this Election they will shift the taxes from **THEIR LAND** on to **YOUR FOOD.** They want to tax your bread and butter, and also your clothes, to pay for Old Age Pensions and the increase in the Navy. The Old Age Pensions given by the **LIBERAL PARTY** have already prevented thousands of old people from going into the **WORKHOUSE.** Next month those in the Workhouse will be able to come out. The money for all this has been raised without putting any tax upon the necessaries of life. **THE CONSERVATIVE LORDS, HOWEVER, WANT TO MAKE THE POOR PEOPLE PAY FOR THE PENSIONS THEMSELVES.** This is a scandalous thing, and you are asked to vote against their doing so. An additional 5,000,000 has been provided for the **NAVY** this year, also without putting any taxes on food. I am in favour of complete Electoral Reform, including Votes for Women and 'One Man One Vote.' ... The Conservative Lords say the Canadians are traitors for doing this. **I believe in a big Imperial System of Federal Home Rule, and in NOT INSULTING THE COLONIES.** The Conservative Lords do not merely insult the Colonies, they insult the intellects of the Voters. They refuse to allow the people to have the reforms which they vote for. They want the people to **TOUCH THEIR HATS** and **NOT HAVE ANY RIGHTS.** They are, many of them, good men, but they do not understand that the **MIDDLE AGES HAVE GONE BY.** The Liberal Party propose to: (i). Take away the right of the Lords to reject Budgets. (ii). Take away the right of the Lords to reject Bills passed three times by the House of Commons. (iii). Prevent Tariff Reformers placing taxes on your food. I ask for your votes in favour of these proposals.

I have the honour to be, Gentlemen,

Your obedient Servant,

RICHARD REISS

On other other end of the spectrum, the lowest-ranked (most imperial) address

was held in 1892:

TO THE ELECTORS OF THE COUNTY OF RADNOR.

GENTLEMEN,- - The Parliament which has conducted the affairs of the United Kingdom for the past six years is now dissolved. **The issue for your decision is the same as it was in 1886. In that year the Constituencies decided by a large majority that the Home Rule Scheme of Mr. Gladstone was impracticable.** This majority, composed of Conservatives and a number of Liberals, combined for the purpose of resisting the proposed measure of Home Rule and formed the Unionist Government. **This Government has carried on the affairs of our Great Empire in a manner worthy of its best traditions. They have avoided all Foreign complications and kept out of war, at the same time maintaining the position and interests of England among the nations of the world.** In addition to this, the Government has not been neglectful in providing for the domestic wants of the nation, and have passed a series of measures which will prove of great benefit to the people. ... I believe that the electors of Radnorshire will remain true to the principles they supported in 1886, and that patriotic men of this county will, whether Conservative or Liberal, again show that the separation of England from Ireland, the inevitable result of Mr. Gladstone's proposal, is contrary to their convictions: ...

I have the honour to be, Gentlemen,

Your Obedient Servant,

JOSEPH ALFRED BRADNEY.

Another very low-ranked address from 1892:

TO THE ELECTORS OF THE NORTH- WESTERN OR CAMBORNE DIVISION OF CORNWALL.

GENTLEMEN,- - As the Liberal- Unionist candidate of this division I appeal for the support of all those electors who desire peace, reform, and the maintenance of the integrity of our empire. I will strenuously uphold the policy of that section of the Liberal party which 1. Has given peace, prosperity, and contentment

to Ireland. 2. Has opposed the disintegration of the United Kingdom. 3. Has maintained the most friendly relations with all foreign countries, while protecting the honour of our Empire. I will advocate with all the power at my command.

1. Reform of the Land Laws of England with the view of enabling every man to hold his house in perpetuity. 2. The abolition of restrictive regulations in Mining Leases, particularly with the view of facilitating the opening up of new mines. I will endeavour- - 1. To increase the prosperity of this Division as regards its staple industry. 2. To improve the condition of the working man. 3. To bind with closer bonds of union the interests of employer and employed.

I am, gentlemen,

Your obedient and faithful servant,

ARTHUR STRAUSS.

Even in 1910, an election fought explicitly about the Budget of 1909, speeches high on the ‘imperial’ dimension focused heavily on the Empire, as in this Conservative speech from Inverness:

TO THE PARLIAMENTARY ELECTORS OF THE INVERNESS DISTRICT OF BURGHS.

GENTLEMEN, The Unionist Associations of the Inverness Burghs having invited me to become a Candidate for your suffrages at the approaching General Election I accept the invitation, and now beg to solicit the honour of your vote and support.

... **IMPERIAL DEFENCE.- - I believe an overpowering Navy, and a small but highly trained Army, backed by adequate reserve forces, to be indispensable to our National safety.**

The cost of these is as nothing compared to the cost of a war that should find us unprepared. The vital question of the adequacy of the Navy is not appreciated by the Liberal Party. **The existence of the British Empire must not be sacrificed to what the Radicals call retrenchment.**

TARIFF REFORM.- - I am strongly in favour of the Fiscal Reform advocated by Mr. Balfour, believing as I do that it is the practical means of finding resources for the defence and support of the State, and at the same time of fostering the country’s commerce and manufactures, and consolidating,

in place of disrupting, the Empire. ... **SOCIAL REFORM.**- - I will support all carefully considered schemes for the wellbeing and improvement in the condition of the working classes, such as the reform of the Poor Law system, and amending the Old Age Pensions Act in the direction of removing the pauper disqualification, and enabling all those who, for one reason or another, are permanently disabled from working, to receive a pension. ... **IRELAND.**- - I will strenuously oppose the separation of Ireland from the United Kingdom, and will do everything in my power to afford protection to every law-abiding citizen in that country, to which he or she is entitled, against a lawless League which from time to time threatens the property and even the lives of peaceable inhabitants. **HOUSE OF LORDS.**- - The desire of the Radical party to destroy altogether, or to make the veto of a Second Chamber ineffective, will receive my strongest opposition. I am of opinion that there could be no greater danger to the rights of the people, or to the best interests of the country, than conferring on a single Chamber, without any check whatever, the power of Government. I am in favour of a reform of the present House of Lords, in the direction of making it more in consonance with the balance of opinion in the country than it is at present. ... **GENERAL POLICY.**- - **I am no 'Little Englander,' but one who is proud to be a citizen of the greatest empire the world has yet seen, and as such it will always be my endeavour to promote in every possible way the prosperity, not only of the United Kingdom, but also of every portion of the Empire which owns allegiance to the British Crown. ...**

I am, Gentlemen,
Your obedient Servant,
T. M'MICKING

On the other hand, we can see what a speech high on the 'domestic' score looked like in an election dominated by the Boer War. This Liberal speech from Nottingham West, one of the most highly-ranked in this dimension in 1900, is quoted at some length as it is a good illustration of this side of the ideological

spectrum, taking an anti-war position and justifying this with reference to the great need for social reform:

TO THE PARLIAMENTARY ELECTORS OF WEST NOTTINGHAM.
GENTLEMEN, ... UNANIMOUSLY INVITED BY THE LIBERAL ASSOCIATION, I am AGAIN A CANDIDATE FOR YOUR SUFFRAGES. I SUPPORT THE LIBERAL PROGRAMME and STRIVE for the victory of the GOOD OLD CAUSE. **I sympathise with THE OBJECTS of THE MINERS' ASSOCIATION, AND ORGANISED LABOUR IN GENERAL. Liberalism and Labour go hand in hand.** FOR THE REALM AND THE EMPIRE I have always urged a STRONGER ARMY, BETTER MANAGED, with PROMOTION ACCORDING TO MERIT. I am a MEMBER OF THE COMMITTEE of THE NAVY LEAGUE. I favour ARMAMENTS SUFFICIENT AND EFFICIENT, the money better spent. **I believe in A BRAVE AND HONOURABLE FOREIGN POLICY, but not the Jingo raiding game. CONDEMNING THE BLUNDERS THAT LET US IN FOR WAR, I VOTED STEADILY FOR MEN, MUNITIONS, MONEY, TO END IT as soon as possible.** I believe the War was made inevitable, that it was badly managed; and that Annexation is the only possible policy; but I HAVE NO FAITH IN THE GOVERNMENT'S SKILL IN SETTLEMENT. Important duties consequent upon the war await us; we must OVERHAUL THE WAR OFFICE AND PUT THINGS ON A BUSINESS FOOTING. We must CARE FOR THE WIDOWS AND ORPHANS OF OUR GALLANT DEAD, and SUSTAIN THE SICK, WOUNDED, AND MAIMED WITH THEIR DEPENDENTS as the Nation's charge. **Turning from War, we must CULTIVATE THE NEGLECTED ARTS OF PEACE.** IN HOME AFFAIRS I advocate OLD-AGE PENSIONS, LIQUOR LAW REFORMS, THE EIGHT HOURS BILL FOR MINERS, POSTAL REFORM, EARLY CLOSING, GRADUATED INCOME TAX according to a man's means, the LIVING WAGE, LAND LAW REFORM, PROPER COMPENSATION FOR ALLOTMENT GARDENHOLDERS, BETTER PUBLIC EDUCATION representatively managed, PROMPT AND ADEQUATE COMPEN-

SATION FOR WORKMEN'S ACCIDENTS, ABOLITION OF LANDOWNERS' ROYALTIES, and REDUCTION OF MINEOWNERS' EXCESSIVE PROFITS WHICH MAKE COAL DEAR, BETTER HOUSING FOR THE PEOPLE, ONE MAN ONE VOTE AND THE VOTE AT ONCE, ABOLITION OF THE HOUSE OF LORDS, INTERNATIONAL PEACE. As a Nonconformist I believe in RELIGIOUS EQUALITY, and therefore in DISESTABLISHMENT AND DISENDOWMENT TO PREVENT ABUSES IN CHURCHES WHICH PARISHIONERS ARE AT PRESENT POWERLESS TO REMOVE. As a Protestant I shall always PROTEST AND VOTE AGAINST ROMANISING PRACTICES IN THE STATE CHURCH. Special experience enables me to render special service to THE PEOPLE'S SCHOOLS, and in Parliament I have helped to improve them. But much remains to be done ere English children get so good a start as children in Scotland, Prussia, Switzerland, and Holland. Gentlemen, you cannot rely on Tory Ministers and Tory M.P.'s to REFORM THE WAR OFFICE, ADOPT SOUND FINANCE, or MAKE A WISE SETTLEMENT IN SOUTH AFRICA. All Army Reforms (such as Abolition of Purchase, Short- Service System, &c.) have come from Liberal Ministers; it is Liberal Budgets that reduce taxation and the National Debt; the loyalty and content of our Colonies are based on Liberal Constitutions. If you desire Reform, Thrift, Wisdom, and Fair Play in national affairs you will support the Liberal Programme.

With heartfelt thanks for much past kindness, I am, and desire to remain,
Your obedient, faithful servant,
J. H. YOXALL

For reference, this is (the whole of) a particularly 'imperial' speech from the same year:

TO THE ELECTORS OF THE BOOTLE DIVISION OF LANCASHIRE.
GENTLEMEN,- Parliament being about to be dissolved by Royal Command, I have been invited by the Conservative Executive Committee and the Divisional Council of the Division to solicit your suffrages for election as your representative to the new Parliament. I therefore venture to ask for your support. During the

time that I have had the honour of being your representative, I have supported Lord Salisbury's Government in legislation, which, in my opinion, tended to further the good of the Nation and the interests of my Constituents. The views which I have enumerated from time to time, though ripened by experience, remain the same. By the bravery of our soldiers and the sacrifices of all classes of the community a difficult and costly war is about to be brought to a successful termination. If I have the honour to be again returned as your representative, **I will support the Government in a policy which will irrevocably settle the two Colonies, now called the Orange River Colony and the Vaal River Colony, as integral parts of Her Majesty's dominions in South Africa,** and the permanent settlement of the country under a firm and wise system of administration, which shall do justice to the claims of the British and European Colonists as well as of the Native races. **I would also support the Government in the measures they may consider it necessary to take for securing the safety of British traders in China, especially in the Valley of the Yangtze River.** I am now, as I have ever been, in favour of maintaining the forces of the country, both Naval and Military, in a state of complete preparedness for the duties which they may at any time be called upon to undertake in defence of the British Empire, and I trust that the Country will insist upon our Military Forces being thoroughly reorganised both in the system of administration at the War Office, and in the working details, and I shall support the Government in carrying this out, should I receive a mandate from you to that effect. I consider that, in order to provide for the food of the Nation in case of a reverse to our Navy in war, the Government should be called upon to provide means for large storage of grain in different parts of the country. I consider that a measure should be introduced as soon as possible for reducing the over-representation of Ireland, and adopting for that country Electoral units similar to those which obtain in the rest of the United Kingdom. In conclusion I consider that a proper settlement and an enduring peace in South Africa can only be secured by her Majesty's present Government being returned to power at the present time.

I have the honour to be, yours faithfully,

THOMAS MYLES SANDYS, COLONEL.

For Table B.1, we used a Naive Bayes classifier to predict membership of a speech in two groups, those low on the first PCA dimension (below the 25th percentile) and those high on the same dimension (above the 75th percentile). The words shown are those associated with the highest probability of belonging to each of these groups (probability of category given word).

Table B.1: Words that best predict Dimension 1

	Low on Dim 1 (More imperial)		High on Dim 1 (More domestic)	
	Word	Probability	Word	Probability
1	salisbury's	0.996	socialism	0.991
2	salisbury	0.965	socialists	0.99
3	territories	0.965	budget	0.986
4	coercion	0.948	unearned	0.983
5	prison	0.947	dearer	0.982
6	merchandise	0.945	socialist	0.981
7	september	0.94	increment	0.979
8	complications	0.938	children's	0.977
9	immigration	0.936	people's	0.974
10	gladstone's	0.936	peers	0.973
11	wings	0.934	democrat	0.97
12	queen	0.931	referendum	0.97
13	territory	0.929	haldane	0.969
14	australian	0.928	nationalisation	0.969
15	lessons	0.928	tariff	0.965
16	egypt	0.928	peer	0.965
17	termination	0.923	monopolists	0.964
18	conciliatory	0.918	tests	0.964
19	gladstone	0.917	luxuries	0.962
20	gallant	0.915	function	0.956

B.1.2 DIMENSION 2: ECONOMIC RIGHT-LEFT

Dimension 2 can be interpreted as an economic dimension, where the low end is right-wing and the high end is left-wing. The speech that ranks the highest on the second dimension is by a Liberal candidate in the December 1910 election:

TO THE ELECTORS OF PEMBROKESHIRE.

GENTLEMEN, For the third time in less than 2 1/2 years we are faced with a contested election in Pembrokeshire and again I ask you to renew the support which you have already given me so generously on two occasions. This is the most important Election in which any man now living has taken part. During the last 20 years the powers of the **unrepresentative House of Lords** have steadily increased and the powers of the direct representatives of the people correspondingly diminished. A victory for the Progressive Party, while it will leave the Second Chamber power to delay and amend legislation, **will make it possible for Liberal measures to become law**. The issue – important, critical and vital – is nevertheless simple, direct and clear: The House of Commons, elected, controlled and guided by the People, against the House of Lords permanently Tory, unchanged, unchangeable, responsible to no one, controlled only by themselves; **The rights of 50 million Citizens against the privileges of 600 Peers**. At one time, many years ago, Pembrokeshire alone among the Welsh Counties stood by the side of the Parliament. I appeal to Pembrokeshire men to stand once again for their own direct representatives, and thus establish for all time the real living enfranchisement of their County and their Nation.

I am, Gentlemen,

Your obedient Servant,

WALTER FRANCIS ROCH.

The third-most left-wing speech was also held by a Liberal, this time in 1895. Straus was ahead of his time, calling for an end to the House of Lords' veto 15 years before the constitutional crisis:

To the Electors of West Marylebone

GENTLEMEN, Since last summer, when I had the honour of being adopted as the candidate of the Liberal and Radical Party in West Marylebone, I have had frequent opportunities of addressing you, and my views on most current political questions are well known. I AM IN FAVOUR OF: 1.- HOME RULE. 2.- LOCAL OPTION (Sir W. Harcourt's late Bill having my hearty support). 3.- **All measures having for their object the AMELIORATION of the CONDITIONS under which the toiling masses of the action labour.** 4.- LAND REFORM, including BETTERMENT, THE BETTER HOUSING OF THE POOR, and TAXATION OF GROUND VALUES (which will take the ever increasing burden of taxation from the shoulders of the poor, and place it principally upon those for the protection of whose property a large expense is incurred). 5.- The NEWCASTLE PROGRAMME, including ONE MAN, ONE VOTE, REGISTRATION REFORM, and the principle of PERFECT RELIGIOUS EQUALITY. 6.- UNIFICATION OF LONDON (the Londoners themselves to have the control of the Water, Gas, Trams, Markets, and Police) 7.- WOMEN'S SUFFRAGE. ...Gentlemen, it is intolerable that such measures, after being carefully considered and passed by your Responsible Representative House, should be ignominiously and contemptuously rejected by an irresponsible chamber, the subservient instrument of one political party, and that party organised for the protection of class interest, monopoly, and privilege. It is for you to say whether you are content to have the will of the people, your will, flouted by the Peers, or whether you will enforce your claim to all the rights of representative Government, and so **ANNIHILATE the VETO of the House of Lords. ...**

And remain,

Your obedient Servant,

BERTRAM S. STRAUS

On the other end of the political spectrum - the economic right - the lowest-ranked speeches on this dimension were held by Tories. One of the most conservative speeches was by a Conservative in January 1910:

TO THE ELECTORS OF THE BOSWORTH DIVISION OF LEICESTERSHIRE.
Gentlemen, ... With reference to the leading political questions of the day, **I am opposed to many of the proposals of the BUDGET.** I think many of these proposals are financially unsound and unjust to individuals. **If passed into law, they will undoubtedly increase that feeling of insecurity amongst those having property of any description in this country.** By driving capital to other countries, home industries will be hampered, and unemployment increased. I think the HOUSE OF LORDS were right in referring this Budget to the people, so that they may have an opportunity of expressing their opinion on it. The Radical party are attacking the existing powers of the House of Lords, and are trying to set up in this country what would practically amount to single chamber Government, by which system the House of Commons would be enabled to pass any legislation without reference to the Electors. I am strongly opposed to the system of a single Chamber, and especially when party politics are carried to such a pitch as they are at present. I believe it would be fatal to good Government, and contrary to the interest of our great Empire. ... I am in favour of TARIFF REFORM because a strict adherence to so-called Free Trade in face of high tariff walls erected by foreign Governments against British products, has already tended to throw large numbers of our people out of employment. If this unfair system of so-called Free Trade is adhered to in the future, it is sure to cause more unemployment. I also believe that our ever-increasing National Expenditure must be met by a new source of revenue, by charging a moderate duty on such foreign manufactures coming to this country as can be manufactured here. I believe that its introduction will bring an increase of prosperity, will give more employment, and better wages. As to COLONIAL PREFERENCE, I am in favour of a closer commercial union with our Colonies. It is to our great Colonies beyond the seas that we must look for assistance in carrying on the work of this great Empire, and in maintaining our Navy and Military Forces. I am opposed to HOME RULE for Ireland, as I believe the continued union between Great Britain and Ireland to be to the advantage of the inhabitants of both islands. ... NATIONAL DEFENCE.-
- By their treatment of the Navy the present Government stand condemned. The

Navy means for us existence and freedom from invasion. It is the guarantee of our food supply, and at whatever cost we must maintain it. Our Navy must be efficient and strong enough to resist possible invasion. OLD- AGE PENSIONS. Amendments will be passed by the Unionist Government when they are in power, to do away with the many hardships which exist in the working of the present Act. On the question of AGRICULTURE, which is of the utmost importance, I will always support legislation tending to benefit this, our greatest industry, and all classes engaged in it. Where there is a fair prospect of SMALL HOLDINGS bringing prosperity to the cultivators, I will warmly support the increase of such holdings, and I hope to support the scheme outlined by Mr. Balfour for enabling when to purchase land for themselves on easy terms, so that in the course of time we may see many more, than at present, farming land of their own, and earning a good living thereby. ...

Your obedient Servant,

KEITH FRASER

The third most right-wing speech was also by a Tory, this time in the January 1910 election:

TO THE ELECTORS OF THE NORWOOD DIVISION OF LAMBETH.

Gentlemen,- - Having been selected as the Conservative and Unionist candidate for this Division, I have the honour to appeal to you for your vote and support. ... HOUSE OF LORDS AND THE BUDGET. The action of the House of Lords in declining to give its consent to the Budget until it had been submitted to the judgment of the country, has compelled the Radical Government, much against its wish, to take the verdict of the electors on its proposals. The question to be decided is whether you are content to bear the increased taxation of sixteen million pounds, or whether you would prefer a change in our fiscal system with the object of obtaining from the foreigner his share of the burden, in return for the privilege of using our markets. **It is stated by the Radical Government that the House of Lords has flouted the will of the people; but the people are the electors of this country, how then can it be flouting their will to consult**

them upon a question so momentous and one which must seriously affect their interests and the national welfare? For daring to give the people an opportunity of expressing their will, the House of Lords is marked out for extinction. May I venture to point out to you that it is the existence of a Second Chamber, alone, which stands between you and the unrestrained actions of a tyrannical majority placed in power upon some one question, but absolutely free during their period of office to do whatever may seem good to them. **Without a Second Chamber there would be no barrier to the passing of Socialistic legislation which a Government, supported by Socialists, could not, of necessity, refuse to sanction.** During the last four years you have had an example of what is likely to happen. Our present constitution would be undermined by granting Home Rule in Ireland, and there will certainly be a repetition of attacks upon political opponents, such as you have seen of late - - attempts to deprive parents of the right of having their children brought up in the faith of their fathers; attempts to disestablish and disendow the Church in Wales; and attempts to ruin those engaged in the legitimate trade of licensed victualling. RELIGIOUS FREEDOM. If you do me the honour to return me as your representative to the House of Commons, I should firmly resist any attempts to disestablish the Church of England and confiscate her possessions. I should support, by every means in my power, the inalienable right of parents to decide the religious belief in which their children shall be educated. ... TARIFF REFORM. Above all, I shall devote my best energies to the promotion of Tariff Reform.

I am, Gentlemen, yours faithfully,

HARRY S. SAMUEL

Again, we can also corroborate this using a Naive Bayes classifier to predict being on each of the ends of this dimension. As we can see, the words identified largely support this interpretation, with words like ‘socialistic’ and ‘vindictive’ used by those on the more right-wing side, while ‘primogeniture’, ‘coercion’ and ‘evicted’ were used by those on the left-wing side.

Table B.2: Words that best predict Dimension 2

Low on Dim 1 (More right-wing)		High on Dim 1 (More left-wing)		
Word	Probability	Word	Probability	
1	dollars	0.987	tories	0.995
2	socialistic	0.977	primogeniture	0.99
3	dumping	0.968	royalties	0.985
4	redmond	0.968	tory	0.984
5	vindictive	0.967	mutilated	0.983
6	negotiate	0.965	reaction	0.982
7	routes	0.964	coercion	0.981
8	negotiating	0.963	evicted	0.981
9	invincible	0.959	plural	0.98
10	socialists	0.959	toryism	0.978
11	revenge	0.957	harcourt's	0.978
12	japan	0.954	obstruction	0.972
13	toll	0.953	emancipation	0.968
14	reciprocal	0.952	incomes	0.968
15	bargain	0.949	contracting	0.966
16	rivals	0.946	traffic	0.964
17	battleships	0.945	irresponsible	0.961
18	ownerships	0.944	obstructive	0.958
19	consulted	0.939	selfishness	0.958
20	japanese	0.938	ballot	0.956

C

C.1 CODING EXAMPLES

The hand-coding of the sentences forms the core of the sentiment measure, so this appendix digs a little deeper into how sentences were coded. On balance, the decision was made to default towards classifying sentences as neutral - 415 out of the 800 sentences were coded as neutral, compared to 163 positive and 223 negative ones - particularly when the content was about policy, and to code sentences as positive or negative only when this reflected a genuine appeal to emotions, rather than just a positive spin on a policy (e.g. “Although I should like to see the pension age fixed at such a time of life as would leave the prospect of many years of enjoyable leisure, yet as a beginning I should support an experiment on the lines of the New Zealand scheme.” was classified as neutral, despite the use of positive words such as ‘enjoyable’ and ‘leisure’, because it is essentially policy-focused).

EXAMPLES OF POSITIVE SENTENCES

- “Tariff Reform, on the other hand, means a rise in the general level of prosperity throughout the country; every class will benefit.” ⇒ **Enthusiasm**
- “It can be said without fear of contradiction that the Unionist party appeals to the Electors for a renewal of their confidence with a record of success at home and abroad extending over many years.” ⇒ **Pride**
- “We shall in all things make it our first care to prove ourselves worthy of your confidence, and we shall reckon ourselves amply rewarded if at the end of our

term we are able to look back on a period of faithful and not wholly fruitless service to your ancient City.” ⇒ **Humility**

- “I also claim that the Unionist Government, to which I have given support as your representative, has, by its conduct of Foreign Affairs, and by the Treaties it has made, vastly strengthened the guarantee of the Peace of the World, and has secured the open door for our Trade in the East.” ⇒ **Pride**
- “My desire is to assist in the passing of measures for helping the people to be well-educated, well housed, well clothed, well fed, and for securing to them full Religious Liberty and Equality, and the clearing away of all hindrances to their leading higher, better, and happier lives.” ⇒ **Compassion/Enthusiasm**
- “Moreover, the Budget is a Budget of Hope.” ⇒ **Hope**
- “My progenitors on both sides, as far as I can trace them, were people who, in their time, all worked hard at manual tasks.” ⇒ **Humility/Identification/Brotherhood**
- “Our national trade to-day is greater than any country in the world has ever enjoyed.” ⇒ **Pride**
- “I am, Gentlemen, Yours faithfully, WILLIAM INGRAM.” ⇒ **Humility**

EXAMPLES OF NEGATIVE SENTENCES

- “The present Government have legislated during the last five years for their own particular class only, and in carrying out that particular object have burdened the British Taxpayer to an extent never before known.” ⇒ **Anger**
- “Any course short of this would be to disgrace ourselves as a Nation, and to dishonour the memory of those who have fallen in the contest.” ⇒ **Anger**

- “I am averse to any scheme of Home Rule for Ireland, and consider the Radical Government are directly to blame for the Terrorism and Outlawry which have prevailed in that country since they came into power.” ⇒ **Anger/Fear**
- “The feverish haste with which the Government has suspended the importation of yellow labour within a fortnight of taking office and before they had time to ascertain the trend of South African opinion was clearly due to the exigencies of the approaching election; however wide the differences of our opinions on the general principles involved we shall all agree in regretting that such an important Colonial question should have been made the subject of a party manoeuvre and that such a drastic step should have been taken without the most careful and dispassionate deliberation.” ⇒ **Anger**
- “If Democracy loses this fight, Licensing Reform Justice to Ireland, Registration Reform, including Adult Suffrage – irrespective of sex – with the Plural Voting, Land Reform – the main hope of the Unemployed – Insurance against and Loss of Work, the Abolition of the demoralising System of Poor-Law Relief, Social Reforms will be abandoned.” ⇒ **Fear**
- “Colonial Preference has been rejected, and no alternative means suggested for augmenting the gross output of corn in the world; and the cost of the quartern loaf is still left to the mercy of a bad harvest in one part of the world, a political disturbance in another, or of an American financier ‘cornering’ wheat.” ⇒ **Fear**
- “The Bill is vindictive, revolutionary, and unconstitutional.” ⇒ **Anger**
- “Poor Law methods allow the unfortunate to sink into Destitution, brand them as Paupers, and hold out no hope of restored self-respect and independence.” ⇒ **Misery**
- “The inequitable conditions against which our trade still has to struggle, the want of security in the home market, our partial exclusion from foreign markets,

the unfair competition of sweated labour from abroad still cry for a remedy.” ⇒

Anger

NEUTRAL - NO EMOTIONAL APPEALS

- “To the Parliamentary Electors of the City of Bath.” ⇒ **No emotive content**
- “Efficiency and economy must take the place of mismanagement and extravagance.” ⇒ **No emotive content**
- “Trades Unions have been deprived of the position specifically given them by Parliament, and we support the moderate amending proposals contained in Mr. Shackleton’s Bill.” ⇒ **Policy content, but no emotive content**
- “We believe, however, that no measures of social reform will prove adequate unless accompanied by a comprehensive scheme of Land Law Reform, including leasehold enfranchisement, powers for compulsory sale on reasonable terms to County Councils and Municipalities in order to facilitate the creation of Small Holdings and to mitigate the scandal of overcrowding, additional security of tenure for tenants in town and country, and the reclamation and afforestation of waste lands.” ⇒ **Policy content, but no emotive content**
- “Three years ago I placed before you the issues that were then at stake.” ⇒ **No emotive content**
- “Also I desire to see the Poor Law disqualification removed.” ⇒ **No emotive content**
- “I am also in favour of the principle of ‘One Man, One Vote,’ and I consider it very desirable that all elections should take place on the same day, and, for general convenience, on a Saturday.” ⇒ **No emotive content**
- “I was born in Birmingham and have lived here all my life.” ⇒ **No emotive content**

NEUTRAL - EQUAL EMOTIONAL APPEALS

- “South Africa has become a loyal and united colony, whilst the last batch of Chinese will leave within a month, these being the remnant of the 13,199 coolies licensed by the late Tory Government in the dying hours of its administration.” ⇒ Classified as **neutral** due to the balance between positive tone (pride) on South Africa, and negative tone (anger/racism) on Chinese workers
- “They also propose a system of joint conference between the Houses by which disagreement between them may be settled without those deadlocks that have been an undoubted source of trouble during the last few years.” ⇒ Classified as **neutral** due to the balance between negative tone (anger) on the trouble and positive tone (confidence) on the proposed solution
- “No one can appreciate more than I do the personal disadvantage which I suffer by being substituted, almost at the last moment, for Mr. Herbert Whiteley; but the grounds of his retirement were so creditable to him, that it is a pleasure to endeavour to assist in making that retirement as little detrimental as possible to the party of his political attachment.” ⇒ Classified as **neutral** due to the balance between negative tone (self-pity) on the disadvantage suffered, and positive tone (humility/pride) on Mr Whiteley
- “Their policy is one of drift and doubt, ours is one of steady progress.” ⇒ Classified as **neutral** due to the balance between negative tone (mistrust) on the other party, and positive tone (confidence/enthusiasm) on his own
- “If the Working Men of East Bradford are united they can send their Candidate with more votes than the two rich men’s Candidates put together.” ⇒ Classified as **neutral** due to the balance between positive tone (solidarity/brotherhood) on the Labour candidate and the negative tone (anger) on the two other parties

- “As regards the benefits of Preference, granted us by grateful Colonies at the present time, it should be borne in mind that the results would be entirely different if we paid the price demanded by Tariff Reformers in this country, but unasked by the Colonies themselves.” ⇒ Classified as **neutral** due to the balance between positive tone (patriotism/pride) on the Colonies and the negative tone (anger) on Tariff Reformers

CHALLENGING DECISIONS

- “That our troops have ultimately proved successful in the face of such difficulties is no credit to those responsible for these gross blunders, but is rather a tribute to the bravery and resource of those of our fellow subjects who have triumphed over all these obstacles.” ⇒ Classified as **positive (pride)** as despite negative language about blunders, the overwhelming appeal is to pride in the troops
- “I am in favour of all schools which are entirely maintained out of rates and taxes being placed under control of representatives elected by the people, and the abolition of theological tests, feeling strongly that until this is done we shall have strife, and the education of our children will suffer.” ⇒ Classified as **negative (fear)** due to the threat at the end
- “A strong Navy is essential to our existence, to protect our food supply and to maintain our trade routes.” ⇒ Classified as **negative (fear)** due to the implied threat to Britain’s existence in the absence of a strong Navy
- “The ever-propelling problems of the suffering prior, of the Unemployed, and of Poor Law administration, are not new subjects of consideration with me; and I should rejoice if I may be permitted to assist in legislation which would to any extent relieve the anxieties of our workpeople in their daily roll or in the dreaded approach of infirmity and old age.” ⇒ Classified as **positive (compassion)** as

despite evocative language describing suffering, the overall sense of the sentence is that the candidate wants to alleviate it

- “To this, I venture to submit, the only patriotic answer is the one which the representatives of the more loyal parts of Ireland have already pledged themselves to give- - a direct, unqualified, emphatic ‘NO!’” ⇒ Classified as **positive (pride)** due to the appeal to patriotism, even though the sentence is negative in its rejection of a policy
- “The percentage of unemployed in America is higher than here, and in Germany, in the great iron district of Essen, there is a meat famine, and the poor people struggle at the meat markets for a chance to buy condemned carcasses that have had to be boiled.” ⇒ Classified as **negative (misery)** due to the conditions described, though it might be that the point being made was that in fact the situation in Britain is comparably good
- “I appeal with confidence to the electors of Bordesley to register their votes in favour of Self- Government and Social Reform, and to repudiate the impudent claims of wealth and privilege to control the destinies of this great nation.” ⇒ Classified as **negative (anger)** due to the strike at the privileged, even though the first part of the sentence appeals to confidence and enthusiasm

C.2 ROBUSTNESS CHECKS FOR THE RD

CONTINUITY IN THE RUNNING VARIABLE. One key test for an RD is whether there is sorting around the cut-off of the running variable. If there is any sorting, any difference in outcome could be a result of different types of people being more likely to sort themselves into one or the other side (Imbens and Lemieux, 2008). The most common way to check for this is a McCrary test, which estimates the density of the running variable at the cut-point and tests the difference between each side (McCrary, 2008; Cattaneo, Jansson and Ma, 2017*b*). Figure C.1 shows density

plots of the running variable on each side of the cut-point. As the plot makes clear, while there is a difference at the cut-point, it is not significant ($p=0.43$), so there is no evidence of sorting.

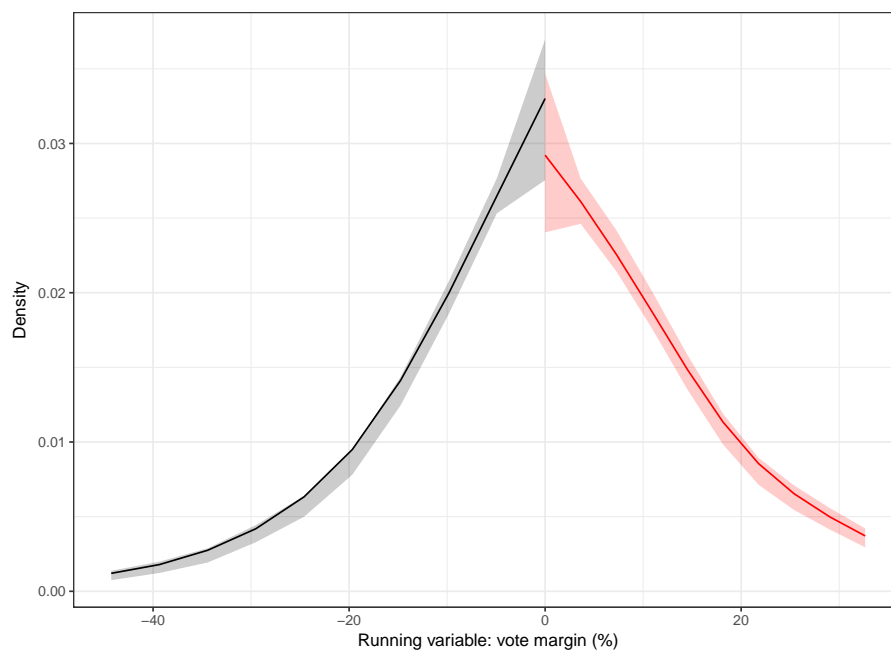


Figure C.1: Running variable density

COVARIATE TESTS. Another important test for an RD is whether pre-treatment variables vary significantly around the cut-off. This tests whether the groups on either side of the cut-off are balanced on covariates; any imbalances in covariates might hint that something else - not the treatment itself - is driving the observed differences in sentiment (Imbens and Lemieux, 2008). Figure C.2 shows the same RD as in the paper, but estimated with outcome variables of partisanship (whether candidates are Liberal or Labour, relative to Conservative or Liberal Unionist), population, percentage of agricultural labourers, and percentage of Anglican priests (used as a proxy for religious composition, as in Wald (1983)). As the Figure shows, none of these variables show any significant discontinuity around the cut-off; in fact, none of them vary

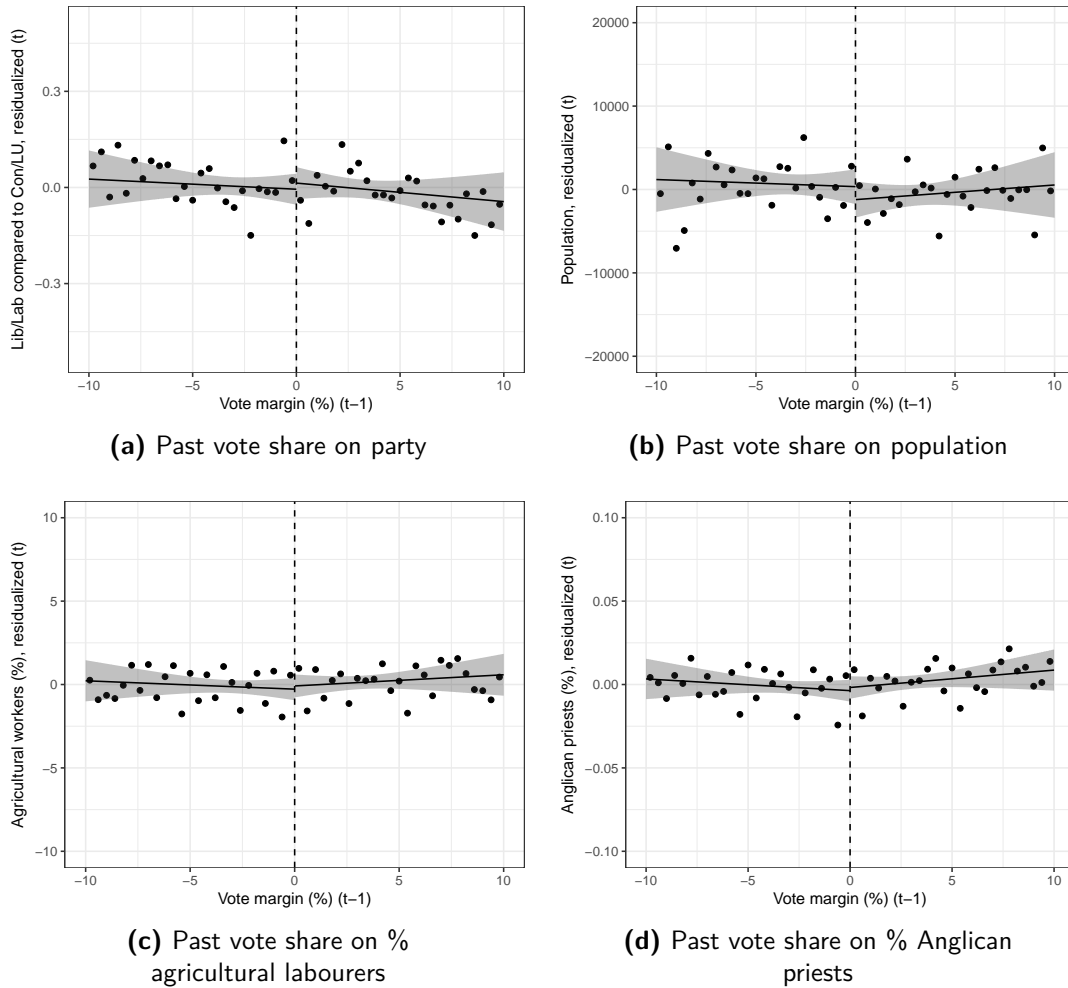


Figure C.2: The effect of past vote share on various pre-treatment variables

as a function of vote share at all, which is what should be expected.

ENDOGENEITY. Another concern we might have is that more positive candidates may be likelier to win close elections, and that this is what might drive the observed relationship between incumbency and sentiment (as in Caughey and Sekhon (2011)). Figure C.8 shows sentiment as a function of *current* vote share; that is, the relationship between campaign sentiment and vote share in the same election. As the graph shows, there is no relationship here; sentiment doesn't

appear to matter at all for how close elections turn out. This indicates that the relationship in the paper is, in fact, driven by incumbency itself.

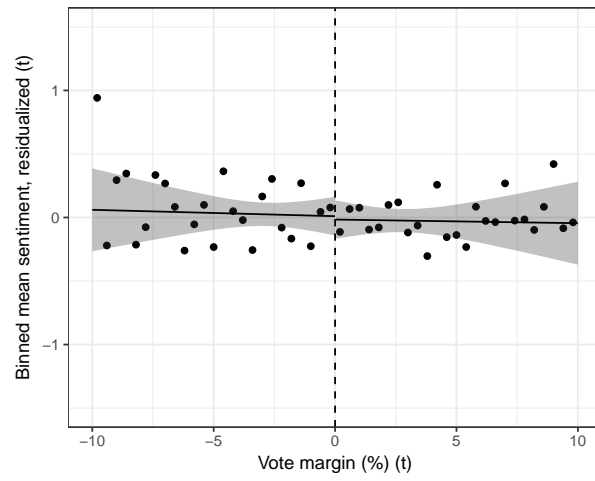


Figure C.3: The effect of sentiment on current vote share

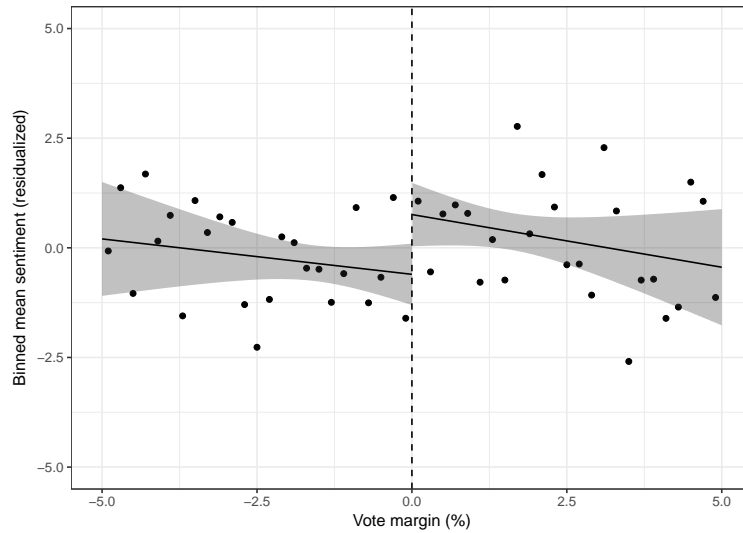


Figure C.4: Effect of winning on sentiment: Multinomial model

C.3 VALIDATING THE SENTIMENT SCORE

As a robustness test, I estimated a multinomial model to predict sentiment in the election addresses (see Model 3 in Table 4.4. Figure C.4 shows the RD, while Figure C.5 shows how the effect estimate varies with changes in bandwidth. As when using the linear sentiment model, the optimal bandwidth for the RD is between 5 and 6 percentage points, and the estimated effect starts out large (but uncertain) at small bandwidths and is quite constant after a bandwidth of about 4.

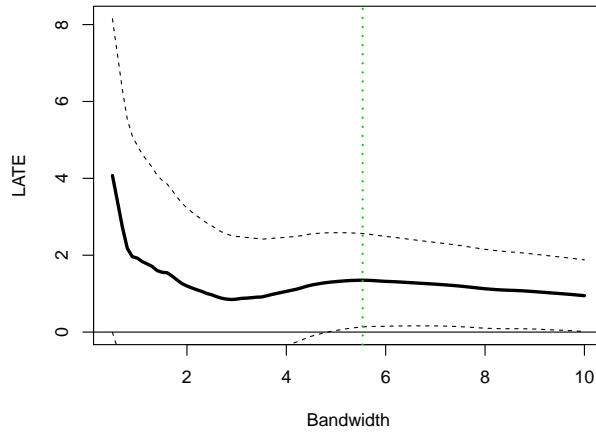


Figure C.5: Changing LATE by bandwidth: Multinomial model

Figure C.6 shows the mean sentiment of the two major parties in each election, like Figure 4.8, but using the multinomial model to predict sentiment. Like the main model, it shows that in each year, the governing party's sentiment is higher than the opposition party's.

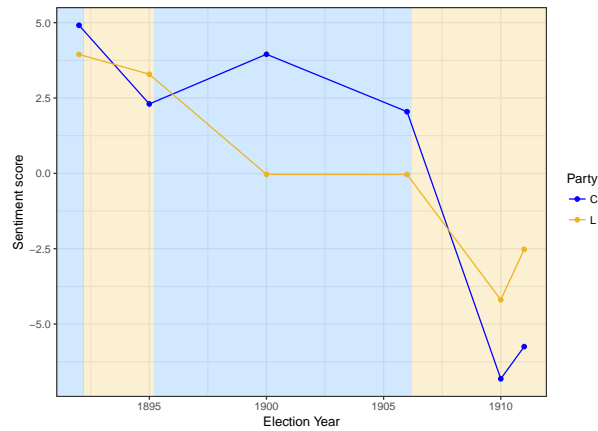


Figure C.6: Sentiment over time: Multinomial model

C.4 ADDITIONAL ANALYSES

INCUMBENCY ADVANTAGE. While literature on the US shows consistently that incumbents have an advantage in being re-elected, Figure C.7 shows that this is not true in Britain in our period, consistent with results in Eggers and Spirling (2017). In fact, as we would expect, current vote share and the likelihood of winning do rise as a function of past vote share - in other words, if a party does well in an election, it is likelier to do well in the next one - but there is no discontinuous jump at the cut-off that would imply that incumbency has any effect.

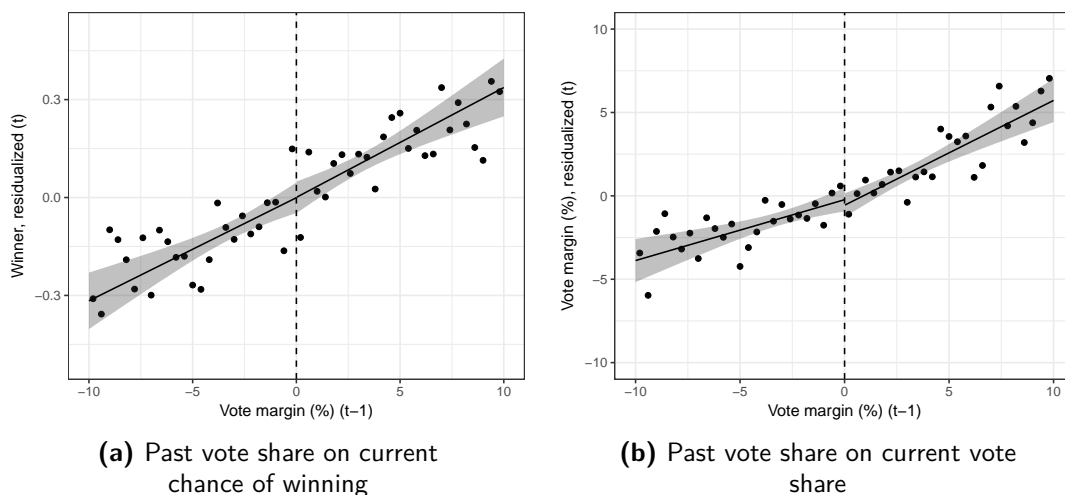


Figure C.7: No evidence of incumbency advantage

However, as Figure C.8 shows, we *do* see evidence that incumbency makes candidates more likely to run for office again. This graph shows that winning an election makes it much likelier that individual candidates - not parties - have run before; that is, narrowly winning an election makes a candidate more likely to run for another term than a candidate who narrowly lost. This is to be expected, as those candidates will feel that will be likely to win again - even though Figure C.7 actually shows that this is not the case.

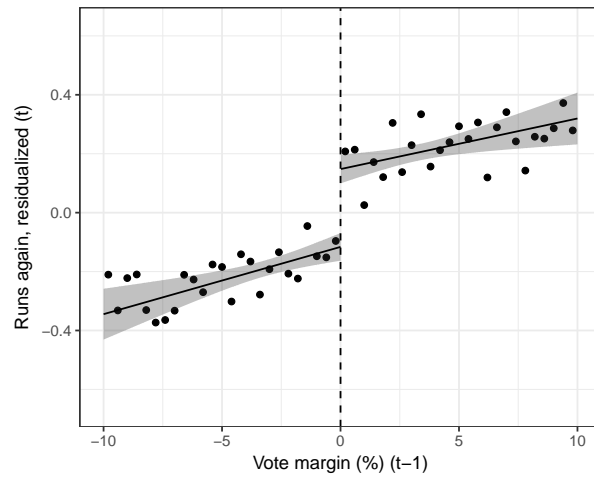
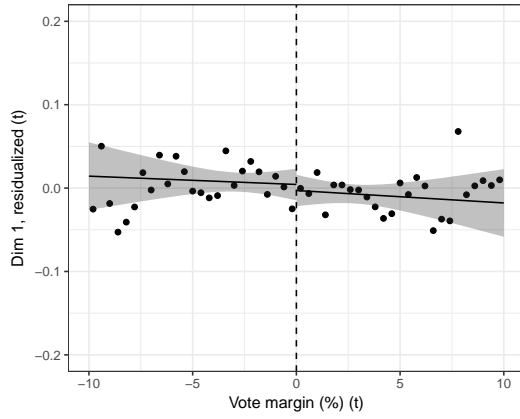
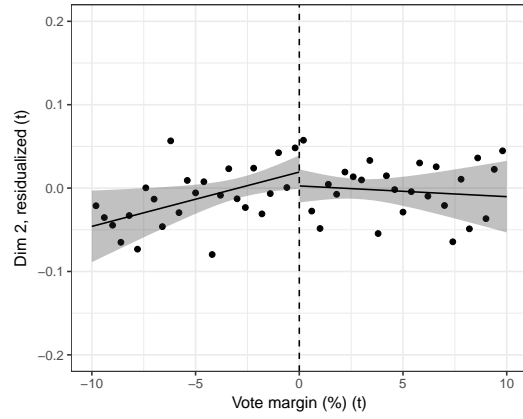


Figure C.8: The effect of past vote share on chance of running again

IDEOLOGY. As Chapter 3 shows, the ideology in the campaign manifestos can be captured very well in two dimensions, where the first is an imperial/domestic dimension and the second is a left/right dimension. We might be interested in how these ideological dimensions interact with vote share in close elections. Figures C.9 and C.10 show that in essence, neither dimension appears to interact with either past or current vote share. Figure C.9 shows that neither dimension is related to vote margin in close elections in the current election, while Figure C.9 shows that candidates don't position themselves differently on either dimension as a result of incumbency in the past election, either. The effect of incumbency on sentiment appears entirely unrelated to ideological positioning.

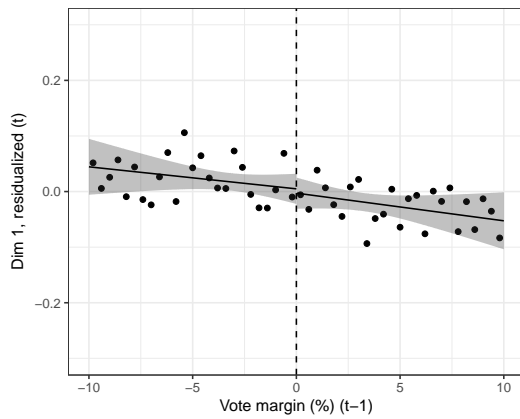


(a) Dim 1 (imperial/domestic) and current vote share

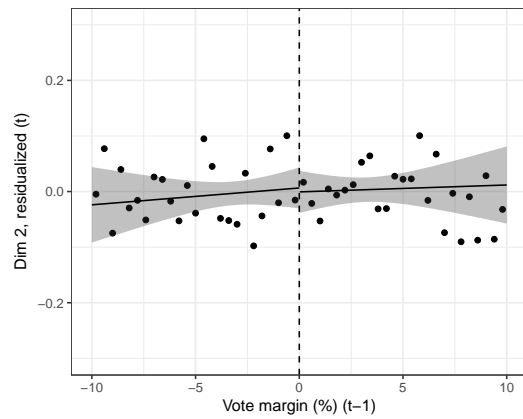


(b) Dim 2 (left/right) and current vote share

Figure C.9: The effect of speech ideology on current vote share



(a) Past vote share on Dim 1 (imperial/domestic)



(b) Past vote share on Dim 2 (left/right)

Figure C.10: The effect of past vote share on speech ideology

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