Ideological Clarity in Party Competition: A Theory and Measure of Election Manifestos

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Abstract

Parties in advanced democracies take ideological positions as part of electoral competition, but some parties communicate their position more clearly than others. Existing research on democratic party competition has paid much attention to assessing partisan position-taking in electoral manifestos, but it has largely overlooked how the clarity of position is reflected in manifestos. We present a scaling procedure that better reflects the data generating process of party manifestos. Our new estimator allows us to recover not only positional estimates, but also estimates for the ideological clarity or ambiguity of parties. We validate our results via Monte Carlo tests, a manifesto drafting simulation, and a human coding exercise. Finally, we apply our estimator to party manifestos in four multiparty democracies and demonstrate that sending ambiguous ideological signals can be an electorally successful strategy when combined with moderating the overall ideological stance of the party.

1 Introduction

Parties offer policy alternatives to voters as part of electoral competition, but vary in how they communicate their policy positions to the electorate. Parties may present voters with a clear message, or they may offer a program that conveys a variety of viewpoints, possibly muddying its ideological content. This ambiguity may arise in a party's program for a variety of reasons. Conflicting ideological views may exist within the party leadership, who must then determine how best to accommodate differing opinions in the party program. Alternatively, the party may attempt to attract a wide array of voters by pitching different, and possibly incompatible messages to different electoral audiences. Lastly, new parties may need to learn which messages resonate best with their voters, and they may attempt different pitches before settling on a message that works. Regardless of the underlying reason, parties face choices over how to represent their programs to the public when multiple viewpoints exist. Much recent work has used election manifestos — documents written by parties at the start of an election campaign expressing a core platform — to estimate party positions. But few studies explicitly acknowledge that parties must aggregate various policy proposals into a single document. We argue that we can learn about the *clarity or ambiguity* of the party message, in addition to the party's overall *ideological position*, by examining party manifestos.

We introduce a theory of party manifesto drafting in which parties put forward a single electoral platform to signal a policy program to voters and other parties. Parties draft a document containing an ideological position and some latent level of ambiguity around that position; they may include multiple, perhaps conflicting, statements on an issue, or they may remain vague, or even silent. Regardless of whether ambiguity represents a strategic choice by party leaders to attract voters or results from intra-party pressures, we argue that as the lack of ideological clarity grows, the language parties use to communicate party positions in their program displays greater variance. We model this variation within manifesto texts to estimate the latent ambiguity of a party's position. Our new estimates of ideological ambiguity allow us to study the effects of positional clarity on parties' electoral success.

Our findings contribute to at least three distinct literatures. First, our approach speaks to the comparative parties literature which increasingly relaxes the party-as-a-unitary-actor assumption to examine phenomena such as party factions (e.g. Budge, Ezrow and McDonald, 2010), party switching (e.g. Heller and Mershon, 2008), and roll call vote defections (e.g. Carey, 2009; Kam, 2009). Second, we contribute to the growing literature on the role of ambiguity (Dewan and Myatt, 2008; Tomz and Van Houweling, 2009; Somer-Topcu, 2013) and party positioning in electoral competition (e.g. Bawn and Somer-Topcu, 2012; Ezrow, 2005, 2010; Adams and Somer-Topcu, 2009). And third, our approach speaks to the literature using text as data to estimate latent variables in political science (e.g. Diermeier et al., 2012; Grimmer, 2010; Hopkins and King, 2010; Laver, Benoit and Garry, 2003; Quinn et al., 2010; Spirling, 2011). We specifically argue that the models underpinning political text analysis can greatly benefit from incorporating substantive information about the data-generating process behind the text under investigation.

We begin by presenting a theory of manifesto drafting, and we then derive a scaling model of text that jointly estimates latent document positions and ambiguity from manifestos. The properties of our estimator are tested through Monte Carlo simulations, demonstrating that our model recovers both position and clarity parameter values when our distributional assumptions hold. To evaluate the validity of our estimates, we first simulate the manifesto drafting process on the basis of our theoretical model. We draft documents that are set *a priori* to have a certain level of ambiguity, and show that the scaling model successfully recovers differences in ambiguity. Second, we demonstrate that human coders correctly perceive the level of ambiguity in our manufactured statements through a text coding exercise. Third, we apply our estimator to party manifestos in Germany, Ireland, the Netherlands and Sweden. And lastly, we use our position and ambiguity estimates as independent variables to explain parties' electoral success. We find that moves away from the ideological center hurt a party electorally as its position become more ambiguous, but lead to electoral gains when coupled with greater ideological clarity.

2 Intra-party Politics, Manifesto Drafting, and Electoral Competition

Scholars of political parties have long noted the importance of accounting for internal party organization to understand party competition (e.g. Duverger, 1963; Sartori, 2005), but empirical and theoretical work on party competition, coalition formation, and policy-making has tended to treat parties as unitary actors (e.g. Downs, 1957; Laver and Shepsle, 1996; Tsebelis, 2002). While recent work on comparative legislative and electoral behavior has relaxed the unitary actor assumption (e.g. Budge, Ezrow and McDonald, 2010; Heller and Mershon, 2008; Martin and Vanberg, 2011; Tavits, 2009, 2011), work on estimating positions from election manifestos has not emphasized the fact that the content of policy programs is the result of meshing different, and often competing, views (e.g. Gabel and Huber, 2000; Laver, Benoit and Garry, 2003; Klingemann et al., 2006). Extant measures of party positions largely overlook the degree of policy ambiguity in these positions. Empirically, manifestos are treated as documents reflecting clearly defined policy positions, either through the application of a manual policy coding scheme as applied by the *Comparative Manifesto Project* (Budge, Robertson and Hearl, 1987; Budge et al., 2001; Klingemann et al., 2006) or through automated techniques (Laver, Benoit and Garry, 2003; Lowe, 2008; Slapin and Proksch, 2008). To the extent that existing methods capture ambiguity, they do so indirectly by reporting uncertainty around the position estimate, highlighting document length, or comparing parties in and out of government (Benoit, Laver and Mikhaylov, 2009; Gabel and Huber, 2000; Marks et al., 2007). While it has become standard to report estimates of uncertainty around measures of party positions derived from manifestos (Benoit, Laver and Mikhaylov, 2009; Laver, Benoit and Garry, 2003; Lowe et al., 2011; Slapin and Proksch, 2008), this uncertainty need not just be due to ambiguity; rather it could be due to other features of a stochastic text generation model (Benoit, Laver and Mikhaylov, 2009).

While the empirical literature on manifestos rarely considers the clarity of parties' ideological positions, a large body of literature, both empirical and theoretical, suggests that level of ambiguity surrounding party and candidate positions has important consequences for party politics and electoral competition. For example, formal models of leadership suggest the ability to communicate clearly is important in determining leaders' influence over followers (Dewan and Myatt, 2008). Moreover, much of the literature on electoral competition and campaigns suggests that policy ambiguity can affect voter support for a party or candidate (e.g. Shepsle, 1972; Page, 1976; Campbell, 1983; Tomz and Van Houweling, 2009; Somer-Topcu, 2013). However, the direction of the effect of position ambiguity on voter support remains clear, and relationships are often highly contingent. For example, in the American context, Campbell finds that the effects of ambiguity vary with issue salience and popular support for a given policy, while Tomz & Van Houweling find that its effect is contingent on partisanship. While recent studies examine how shifts in policy positions affect party support in multiparty democracy (e.g. Ezrow, 2005; Adams and Somer-Topcu, 2009; Kalandrakis and Spirling, 2011; Bawn and Somer-Topcu, 2012), almost no study examines how the ambiguity of party positions interact with position-taking to affect electoral outcomes in multiparty democracies.[1]

The remainder of the paper assumes that the manner in which manifestos are drafted should affect the type of signal they send to voters and parties. We provide a theory of the data generating process behind election manifestos which enables researchers to leverage the variation in word usage they contain. Our theory suggests that we can estimate policy ambiguity as well as policy positions from these documents. If parties remain ambiguous or silent on issues, then the documents contain additional variation in word usage that a single estimated position cannot capture. After examining the validity of our estimates, we use them to evaluate theories of electoral politics that account for both policy position and policy ambiguity.

3 A Theory of Manifesto Drafting

How do parties draft manifestos? Conventional wisdom suggests that "politically sophisticated party elites [draft manifestos] with many different objectives in mind" (Laver and Garry, 2000, p.620). Yet, there are few common procedures that govern how parties arrive at the final draft. We may find variation in drafting procedures across party systems (e.g. the manifesto tradition is quite different in the UK compared with Japan, see Proksch, Slapin and Thies (2011)), across time (e.g. manifestos

[1]But see Somer-Topcu (2013) for a recent exception.

frequently increase in length over time), across parties that compete in the same election, and within parties themselves (e.g. by using different agenda-setting procedures across elections). It is difficult to determine *ex post* the actual procedure used to draft each manifesto, the number of party factions and their preferences, the drafters' intended audience(s), the various proposals under discussion, and the number of iterations the manifesto draft actually went through. At one extreme, a small committee composed of the party leadership may write the manifesto. At the other extreme, a party conference may discuss various proposals and vote on an issue-by-issue basis on amendments. Irrespective of the actual procedure used, multiple actors within the party are involved in the drafting process and there are multiple audiences within the party to whom the policies in the manifesto may be addressed. Even if we knew the exact procedure a party used, we would still need to connect the procedure to the actual content of the drafted manifesto. Unfortunately, we do not have strong prior expectations that a party elite-driven process would lead to systematically different manifestos than a party conference approach — party leaders in a divided party may take internal party divisions into account when drafting the manifesto even without directly consulting the larger party conference. Thus, party factions do not necessarily have to be directly involved in the drafting process for the manifesto to represent the variation of beliefs in the party.

Our approach seeks to map policy ambiguity into a text generation mechanism. We begin with the simple assumption that a party can represent different positions using different textual statements. For ease of exposition, we consider a party that wishes to connect with two different groups of voters — groups A and B —, which the party believes to value different and possibly opposing messages. The exact same logic, however, would apply when considering how a party might resolve differences between competing factions within the party elite. While theoretically distinct, the observational implications of our theory for these different scenarios are indistinguishable. Prior to an election, the party must decide how to present the party message to both groups in the manifesto. Assume that on each policy issue i, each position is represented by a textual statement T_i. Thus, the position of group A can be expressed through statements T_{A1} and T_{A2}, and the position of group B through T_{B1} and T_{B2}.[2] The precise content

[2]Text statements expressing different policy positions are assumed to use different words. For the purposes of theoretical

of the final manifesto depends on how the party decides to weigh the ideological differences among their voters.

[INSERT TABLE 1 ABOUT HERE]

Table 1 lists numerous scenarios describing how the party may arrive at different versions of the manifesto. First, one group may be dominant, and the party may simply decide to speak solely to this group on both issues (scenarios 1 and 2). In another instance, one group may care more about one policy issue, while the second group cares more about the other. In this scenario, the manifesto may represents a log roll of the two groups' positions (scenarios 3 and 4). We can also imagine alternative scenarios in which the party reaches a compromise position that attempts to assuage both groups. In one such scenario, the party may formulate an entirely new compromise platform (scenario 5). In other compromise scenarios, the party may decide to include statements to speak to both groups (scenarios 6 to 10), or to remain silent on an issue entirely (scenarios 11 to 18). Thus, manifesto writers can agree to a log roll, to a compromise position, to a partial compromise representing both positions, to remain silent on some issues, or some combination of these approaches.[3] We can contrast these scenarios with the baseline case in which the party speaks to a unified base. In that case, the manifesto would simply include two statements, one expressing the single agreed-upon first issue position, and a second expressing the single agreed-upon second issue position.

Given the variety of ways that parties can aggregate positions, we expect that *more* ambiguity leads to *higher* variance in the language used. In other words, relative to the baseline of internal agreement, parties with multiple groups, audiences, or factions may choose to express ambiguous positions by mentioning both positions on both issues, by remaining silent on one issue, or by agreeing to a (possibly unclear) compromise position on both issues. Our aim is not to explain when and why parties choose one of these strategies over another. In fact, this would only be possible if we knew the procedure that parties chose for specific elections, and even then we would not know whether the proposals already

exposition, we also assume that there is no stochastic text generation process — factions expressing the same position use the same words. We do not make this assumption in the empirical section.

[3] The list in table 1 is not exhaustive, but it includes the most important scenarios.

reflect a scenario described above. Thus, we point out that ambiguity is likely linked to higher variance in word usage. More formally, for manifestos of a given length, our expectation is that a party that stakes out an ambiguous position will use ideologically discriminating words more frequently or less frequently than a cohesive party.

[INSERT TABLE 2 ABOUT HERE]

The following example demonstrates the word usage patterns for parties with a clear message and parties expressing more ambiguity. Imagine we have three parties with a clear message — a left-wing party, a right-wing party, and a centrist party — and one centrist party with an ambiguous message. The parties communicate positions by emphasizing words from the same political vocabulary — for example "jobs", "equal", "taxes", and "individual" — and all parties write manifestos of the same length. We can represent these manifestos as term-document matrices, and Table 2 presents such a hypothetical matrix. The left party A frequently includes words that emphasize its left-wing position — "jobs" and "equal" — while the right party B frequently uses words associated with a right-wing position — "taxes" and "individual".[4] In contrast, the cohesive centrist party C mentions words from across the political spectrum in equal amounts. Party D with an ambiguous message, however, mentions some words in a similar manner to the left party, some words in a similar manner to the right party, and is silent on other words. Current methods would — correctly — place parties C and D in the center of the political space, but they would not be able to distinguish the level of clarity between them. The scaling model we propose below suggests that party D, while still expressing a centrist position, is more ambiguous than party C.

4 A Model of Party Manifestos: Connecting Theory and Data

Our theoretical model of manifesto drafting suggests that we can learn about the clarity of a party's message, as well as position-taking, from word usage in manifestos. We develop a scaling model for

[4] We ascribe these words an ideological connotation for expository purposes only. In actual manifestos, these words may, or may not, represent left- and right-wing positions. Their ideology would be determined through the estimation process.

this purpose, taking the Slapin and Proksch (2008) Wordfish model as our starting point. We begin by reviewing the Wordfish model.[5] Let i $(1 \leq i \leq I)$ indicate a party, and t be a time period $(1 \leq t \leq T)$. The data come from the $P = I * T$ manifestos that each party produces in each separate time period, and we attempt to recover ω_{it}, the ideal point of each party i in time period t. Across all the manifestos, let J represent the total number of unique words across all documents. The frequency that word j appears in the manifesto of party i at time t is assumed to follow the Poisson distribution:

$$y_{ijt} \sim Poisson(\lambda_{ijt}) \tag{1}$$

$$\lambda_{ijt} = exp(\alpha_{it} + \psi_j + \beta_j * \omega_{it}) \tag{2}$$

where y_{ijt} is the count of word j in the document of party i at time t, α is a set of actor fixed effects, ψ a set of word fixed effects, and β a word-specific weight capturing the importance of word j in discriminating between party positions. The Poisson distribution expresses the probability of a number of events occurring in a fixed period of time conditional on a known average rate, but other parameterizations of this model can also be chosen.

The negative binomial offers one such alternative parameterization. It is the probability distribution associated with the number of successes in an independent sequence of Bernoulli trials before a specified number of failures occur. The negative binomial distribution $X \sim NB(r, p)$ is characterized by two parameters, the probability of success p and the predefined number of failures r. As r increases, a Poisson distribution with expected value λ can be reparameterized as a negative binomial distribution as follows:

$$Poisson(\lambda) = \lim_{r \to \infty} NB(r, \frac{\lambda}{\lambda + r}) \tag{3}$$

[5]The "bag of words" approach adopted by Wordfish and other text-as-data models assumes that words are conditionally independent from one another, an assumption that never holds in real text as grammar matters. Nevertheless, "bag of words" models tend to work in practice, and our validation approach explicitly tests the sensitivity of our results to these assumptions.

This suggests that the Wordfish model described in equation (1) can also be rewritten as:

$$y_{ijt} \sim NB(r, \frac{\lambda_{ijt}}{\lambda_{ijt} + r}) \tag{4}$$

for any sufficiently large value of r. Because a negative binomial distribution with parameters r and p has mean $\mu = r(1-p)/p$ and variance $\sigma^2 = r(1-p)/p^2 = \mu + \frac{1}{r}\mu^2$, fixing $r = 50$ is generally sufficient for the distribution to approximate the Poisson. However, equation (4) is not the final model we estimate. Rather than estimating a single value of r or fixing it to a certain value, we instead allow it to vary across documents. We therefore estimate the negative binomial scaling model

$$y_{ijt} \sim NB(r_{it}, \frac{\lambda_{ijt}}{\lambda_{ijt} + r_{it}}) \tag{5}$$

Our central estimand of interest from (5) is the document parameter r_{it}. Given the formula for the variance of a negative binomial distribution, $\frac{1}{r_{it}}\mu^2$ captures the amount of overdispersion for the document of party i at time t relative to what one would expect from the Poisson distribution. For ease of interpretation, we report $\theta_{it} = \frac{1}{r_{it}}$ as the clarity parameter — as θ_{it} increases, overdispersion also increases, which we substantively interpret as a decrease in ideological clarity (or increase in ambiguity). After controlling for text length and position, the parameter captures situations in which parties logroll, omit, or include conflictual statements, which lead to term-document matrices that omit, or contain more words than would be the case if parties were perfectly clear. The model is estimated through Markov Chain Monte Carlo.[6] Like all scaling techniques, identification of $\alpha_{it}, \psi_j, \beta_j$, and ω_{it} is only relative. We identify our model by constraining the first value of $\alpha_{it} = 0$ and the first value of β_j to what is estimated using the Poisson algorithm, though our results are not sensitive to the choice of identifying restriction. Note also that all cohesion parameters θ_{it} are identified with no additional identifying restrictions.

Our theory focuses on intra-party reasons for parties to remain vague or silent on issues, either

[6]Estimation is conducted in R using slice sampling, with a burnin of 1,000 iterations. Point estimates are taken as posterior means of 5,000 draws.

due to internal party divisions or strategic decisions to remain deliberately ambiguous. It is useful to consider to what extent system-wide (rather than party-specific) reasons for vagueness or deliberate silence would affect our measure. First, following from Riker's Heresthetics (1986) and Budge et al's (2001) saliency theory, there may be issues that all parties are reluctant to discuss. An example of such an issue in the U.S. would be Social Security reform, commonly referred to as the "third rail" of American politics. For issues where silence/vagueness is universal across parties, words referring to the issue will universally appear with 0 or very low counts. This will result in both small fixed effects for the words, and small word discrimination parameters (ie. $\psi_j \approx 0$ and $\beta_j \approx 0$), meaning silence will have little to no effect on estimates of party positions or clarity estimates. Second, silence may occur because of issue ownership advantages (see Petrocik, 1996). For example, it may be beneficial for parties on the right to repeatedly mention "law and order" in their manifestos, but not for parties on the left. To the extent that issue ownership is correlated with ideology, this will affect our positional estimates by loading onto the word discrimination parameter β_j. This in turn will help to produce an "expected" number of word frequencies conditional on the position estimated, and heterogeneity from the expected word frequency is interpreted in our model as heterogeneity in word usage that is conditional on ideology.

5 Simulations and Text Coding Exercise

Before proceeding to substantive applications of our estimator, we test it in two ways. First, we apply our estimator to term-document matrices generated from simulated political texts with different levels of ambiguity, and show that our model captures these differences. Second, we present human coders with manifestos generated according to our model of the data-generating process. Our coders correctly perceive the relative levels of clarity in our documents, providing additional validation of the results from our manifesto simulation.

Manifesto Drafting Simulation

A standard testing procedure for scaling algorithms are Monte Carlo simulations, that allow researchers to simulate data based on the true data-generating mechanism. In our case, this means the simulation of term-document matrices where each word count is consistent with a negative binomial data generating mechanism. Such a simulation reveals that our estimator is able to recover the true spatial configuration of parties as well as their ideological clarity.[7] At the same time, a Monte Carlo simulation as a diagnostic tool is of limited use for our purposes. We know that natural language is complex and word counts are not generated according to a simple probability distribution such as the negative binomial. Therefore, a document scaling model should work, in particular, for term-document matrices from actual political texts. Therefore, we conduct a manifesto drafting simulation and start by selecting eleven policy areas likely to be covered by an actual party manifesto. We formulate generic statements on these areas in English with regard to British politics, an arbitrary choice made for linguistic convenience only. The topics cover a broad range of policy areas, including employment, the tradeoff between taxes and public spending, environment, global warming, energy, defense, European Union and the Euro, immigration, public health, crime, and education and families.

For each of these eleven policy areas, we draft three policy statements assuming that parties compete on a single dimension. Thus, the first statement in each policy area always expresses a "left" position, the second statement a "center" position, and the third statement a "right" position. Our goal in drafting these statements is to compose sentences that adhere to natural language rules and reflect policy positions that could realistically appear somewhere in a party's manifesto. In formulating the sentences, we follow three guiding principles: first, the statements should reflect the ability of parties to freely choose which issues to emphasize; second, the sentences should reflect the fact that parties use different words from the political lexicon to talk about similar issues;[8] and third, the statements should reflect that parties emphasize particular words to convey their message. By merging the ideologically similar statements across policy areas, we can form three manifestos expressing clear positions that

[7]The appendix provides the details for this Monte Carlo simulation.

[8]We take as much vocabulary from actual British manifesto sentences as possible, and adjust it as necessary.

reflect left leaning, centrist, and right leaning parties. All 33 statements are listed in the appendix.

Using our 33 policy statements, we can now simulate ideological clarity by creating additional manifestos. We start with a centrist party that chooses to remain ambiguous by including left and right statements in its manifesto. This lack of clarity could be due to intra-party divisions or for strategic reasons. In the simulation, the party includes center statements on five of the eleven policy areas, left statements on three, and right statements on the remaining three areas. The clear advantage of this approach is that we know *a priori* that this manifesto should express a position that is *less clear* than the previously generated three left, center, and right manifestos. To examine whether the scaling algorithm is able to pick up different *levels* of clarity, we create additional manifestos that reflect a party that is even more ambiguous. Thus, rather than choosing five center, three left and three right policy categories for the manifesto, this party includes only one center statement, five statements on the right, and five on the left. *A priori*, we expect that this manifesto should display more ambiguity as a result. For each of the two simulated clarity levels, we generate ten manifestos, each time randomizing which policy areas are expressed by the left, the center, or the right statement. Randomization guarantees that the results do not depend on a particular combination of paragraphs.

In total, our manifesto drafting exercise yields 23 manifestos: three (clear) left, center, and right manifestos, 10 manifestos with moderate ambiguity levels, and 10 manifestos with large ambiguity levels. Each of these manifestos are independently "readable" in the sense that the grammar, syntax, and style of all manifestos presented here are valid. We include an additional nine manifestos that span the entire ideological space between the left and the right statements.[9] In total, we estimate positions and cohesion parameters for 32 manifestos and the estimates shown are posterior means of 5,000 draws after a burn-in of 1,000 iterations.

[9]These anchoring manifestos do not come from texts, but are simply rounded linear interpolations of the left and right manifestos for each word. For example, if the word "market" appeared once in the left manifesto but 11 times on the right manifesto, the word "market" would appear (2, 3...10) times in our 9 anchoring manifestos. These anchoring manifestos make the ideological space appear more continuous, simulating the ideological distribution we might expect in a multi-party democracy.

[INSERT FIGURE 1 ABOUT HERE]

Figure 1a shows the position estimates for the documents from the standard Wordfish model. As expected, all manifestos with some level of ambiguity are estimated as centrist documents. Thus, if we were simply to estimate positions while ignoring ideological clarity, we would be able to estimate positions that are theoretically plausible, because these manifestos are a combination of center, left, and right statements. Next, we jointly estimate positions and clarity using our new scaling model. As expected, the positional estimates from our model correspond closely to those estimated using Wordfish, correlating at $r = 0.997$. However, the crucial test is whether the algorithm also captures variation in ideological clarity across the documents. Our baseline manifestos, which include the anchoring documents and the three clear manifestos on the left, center, and right, should exhibit very low levels of overdispersion, whereas the ten manifestos with medium levels of ambiguity should receive overdispersion estimates that are higher, and the ten manifestos with high levels of ambiguity should have the largest overdispersion parameters.

Figure 1b shows the estimated clarity levels for all documents. The left, center, and right documents all exhibit very high clarity (low ambiguity) levels , with θ_{it} varying between 0.008 and 0.0154, largely consistent with the original Poisson distribution.[10] The average clarity estimate for these three documents is .011. In contrast, the five documents with moderate levels of ambiguity exhibit much higher θ_{it}'s, with an average of .041, nearly four times higher than the average for the left, center, and right manifestos. The 10 documents vary in the actual levels, but this is not surprising given the stochastic nature of combining the statements across policy areas. Important for our purpose, however, is the overall trend towards *larger* θ_{it}'s (more overdispersion) for *more ambiguous* manifestos. Note, in particular, that the 10 most ambiguous manifestos have the 10 largest θ_{it} estimates. The average θ_{it} for this set is .284, more than seven times higher than the average for manifestos with moderate levels

[10] While this is true, we emphasize that it is entirely possible that longer, but clear, manifestos may also be overdispersed. Rather than focusing on absolute levels of dispersion, we instead concentrate on the relative differences between the ambiguous versus the baseline documents.

of clarity.[11] Overall, the results from the manifesto drafting simulation are reassuring in demonstrating that our algorithm correctly recovers substantive clarity differences between simulated manifestos.

Manifesto Coding Exercise

While the previous simulation shows that the estimator successfully detects differences in of simulated intra-party disagreement, it provides limited insight into the extent to which the theoretical story of manifesto drafting translates into perceptions. Do people actually view manifestos from parties with ambiguous positions, simulated in accordance with our theoretical model, as expressing an unclear or divided position? After all, our argument is that ambiguity is reflected in the texts, albeit in subtly. As a test of the construct validity of our theoretical argument, we construct a manifesto coding exercise with human coders along the same lines as the the drafting simulation. We select economic policy as the policy area of interest and choose ten economic issues on which parties state a position. For each issue, we construct three sentences expressing a left, a right, and a centrist position. Analogous to the simulation, a manifesto is a combination of ten sentences that are selected from these three bins.[12] We construct two types of manifestos: those with low levels of intra-party disagreement (or ambiguity), defined as six centrist sentences, two left sentences, and two right sentences; and those reflecting high levels of intra-party disagreement (or ambiguity), consisting of two centrist, four left, and four right sentences. Our expectation is that manifestos with higher simulated levels of disagreement are also perceived by coders as such.

We created 25 pairwise comparisons of a low disagreement manifesto and a high disagreement manifesto. Each time, we randomly selected sentences to construct the manifesto. Thus each of the 25 comparisons consists of a different set of constructed manifestos, but in each we juxtapose manifestos

[11] With 10 moderately and 10 highly ambiguous documents, we can make 100 pairwise comparisons for our estimator between moderate and high ambiguity. In all 100 cases, our estimator correctly identifies the more ambiguous manifesto. While these 100 comparisons cannot be used to calculate p-values because they are not independent, they speak to the robustness of the results.

[12] The difference is that we limit ourselves here to one policy area and sentences instead of paragraphs. These choices were made to keep the exercise manageable and not too time-consuming for respondents.

with the same levels of clarity. The exercise was conducted online, and we invited 25 graduate students and post-docs in political science at [REDACTED] to participate. First, we presented respondents with an introduction:

> "We are interested in how you perceive internal conflict within political parties. Suppose a political party is preparing its manifesto for an upcoming election campaign. Two different versions of the economic policy section of the manifesto are under consideration, as shown below. Please read these two statements carefully."

Respondents were then presented with two statements and asked to indicate which of the two expressed more internal disagreement (the appendix presents one of these 25 pairwise comparisons as it appeared in the actual online survey). Out of the 25 invited coders, we received 18 responses. Of these 18 coders, 15 correctly identified the text statement with more internal disagreement (83%). The probability that one would observe at least this many correct answers by chance alone is $p = .0007$.[13] These results suggest that when we construct documents with a lack of clarity in line with our theoretical model of manifesto drafting, human coders correctly perceive these documents as ambiguous. This provides independent validation for our manifesto simulation from the previous section.

6 Manifesto Analysis

We conclude our analysis by applying our estimator to post-1990 election manifestos in Germany, the Netherlands, Sweden, and Ireland.[14] We choose these countries for theoretical, empirical, and linguistic

[13] We calculate this p-value by examining the area under the binomial distribution when the underlying probability of choosing the correct statement is .5. We also asked respondents to indicate the perceived level of difficulty for this coding task on a scale from 1 (not difficult at all) to 3 (very difficult), and the average reported level was 2.1, suggesting the coding task was feasible.

[14] The time periods are 1990-2005 for Germany (25 manifestos), 1992-2007 for Ireland (22 manifestos), 1994-2006 for Netherlands (30 manifestos), and 1991-2006 for Sweden (34 manifestos). For Germany, we use the dataset from Slapin and Proksch (2008) contained in the *R* package `austin` (Lowe, 2011). For the other countries, we keep all words that appear at least once in each election. This results in a matrix of 1,955 words for Ireland, 910 words for Sweden, and 4,226 words for the Netherlands. Manifestos were downloaded from the Political Documents Archive (`www.polidoc.net`,

reasons. Theoretically, our country selection is comprised of stable multiparty systems with a strong tradition of manifesto writing. Empirically, they provide us with a sufficient number of documents over a reasonably long time frame, and their manifestos are readily available in electronic format. Linguistically, our case selection demonstrates that our automated technique works well on documents written in four different languages. Our goal is threefold: we cross-validate the positional estimates for the party manifestos with alternative measures, we wish to evaluate the clarity parameter in view of relatively limited information available on clarity of party positions, and we want to demonstrate that we can use information from our estimation for comparative analysis of party politics.

Cross-Validation

We first assess the validity of our position estimates, we correlate them with two commonly used sources of data on party left-right ideology — the left-right (RILE) positions from the Comparative Manifesto Project (CMP) (Budge et al., 2001; Klingemann et al., 2006), and the general left-right dimension taken from the Chapel Hill Expert Survey of party positions (Marks et al., 2007; Hooghe et al., 2010). We find moderate to strong correlations across all four countries between our estimates and both extant measures. The strong positive trends, shown in the appendix, suggest that our estimates succeed in capturing the positional information in the manifestos. Positions estimated with the negative binomial model correlate highly with the Wordfish positions, ranging between +.78 and +.96. The correlations between the positions and the Manifesto left-right scale range between +.46 and +.87, and the average correlation across the four countries is +.66. The positions also correlate equally well with an alternative version of the Manifesto Project left-right scale, the logit transformed scale proposed by Lowe et al. (2011). Lastly, the positions correlate highly with expert survey positions, as well. Correlations range between +.57 and +.87, with an average of +.78 across the four countries.[15] Taken together, the results show that positional estimates are robust across countries and consistent with existing measures.

Benoit, Bräuninger and Debus, 2009).

[15]The Chapel Hill surveys were conducted in 1999, 2002, and 2006. We match election years to the closest survey year and drop all elections prior to 1997.

A similar validation exercise is not possible for the clarity parameter because alternative measures are largely absent. Moreover, just as with any other scaling model, the estimates are not directly comparable across models because identification is country and language specific (the same applies for the positional estimates). One potential alternative approach to ideological clarity is to study possible observational consequences. As the perceived ambiguity around a position increases, our estimated clarity estimate should as well. We examine this supposition with uncertainty estimates generated from the Chapel Hill expert surveys. The expert survey uncertainty estimates are the standard deviations of the expert position scores on the left-right dimension.

Marks et al. (2007) and Hooghe et al. (2010) attempt to explain variation in expert assessments of party positions, and find that the standard deviations of expert assessments of European integration positions increase with internal party dissent on that dimension (as assessed by the experts). Of course, clarity of stance is certainly not the only factor that explains expert standard deviations. The research also finds that experts are better able to assess party positions for parties receiving more votes and parties that are more ideologically extreme. Lastly, a large amount of the variance in the expert placement standard deviations remains unexplained, suggesting that much of the variation may be due to random noise. We run an OLS model similar to Hooghe et al. (2010), explaining the expert standard deviations on the Chapel Hill Left-Right dimension as a function of our clarity (overdispersion) parameter, vote share, and the absolute value of our estimated party ideology. Because the clarity and party position estimates are not directly comparable across countries, we create dummies for these two variables to avoid making comparisons on an interval scale. *Extreme Position Dummy* equals 1 if the position estimate belongs to the 20 percent most extreme positions (absolute value of the position estimate is greater than 1.2 standard deviations from the mean), while *Ambiguity Dummy* equals 1 if the overdispersion parameter of that manifesto is greater than the mean overdispersion within the country. In addition, we include country fixed effects. Based on the results reported by Hooghe et al. (2010), we expect a positive sign on the cohesion dummy parameter, a negative sign on vote share, and a negative sign on the extreme position dummy. The results are presented in table 3. As expected, ambiguity as captured by the clarity parameter is positively associated with the expert survey standard deviations. In addition, parties receiving higher vote shares have smaller standard deviations, but positional extremity seems to correlate positively with expert standard deviations.

[INSERT TABLE 3 ABOUT HERE]

As a final test, we compare our ideological clarity estimates for Ireland to an alternative manifesto-based measure that we develop based on the policy dictionary created by Laver and Garry (2000).[16] Based on a hierarchical manifesto coding scheme, the dictionary includes keywords for nine different policy areas. Importantly, Laver and Garry assigned keywords to positive, negative, and – if possible – neutral subcategories within each area. For instance, keywords for the economic policy area are subdivided into the following three categories: (a) those expressing support for state intervention in the economy, (b) those expressing opposition to state intervention, and (c) those expressing a neutral stance regarding the level of state involvement.

Laver and Garry use keyword matches from the first two categories (pro or con state intervention) to calculate economic policy positions, disregarding the matches for the neutral keywords. For a potential validation with our clarity estimates, however, the occurrence of neutral keywords regarding the level of state intervention may be particularly useful. If parties use these neutral keywords more frequently to express more ambiguous positions, then we would expect that our clarity estimates correlate positively with the occurrence of neutral keywords. To test this hypothesis, we first apply the economic policy dictionary to Irish party manifestos. As a measure of ambiguity, we calculate the proportion of matches in the neutral category out of all matches in the economic policy category. Applied to Irish manifestos, this measure ranges from .35 to .60, with a mean of .45. In other words, on average 45 percent of economic policy keywords mentioned in a manifesto are in the neutral category, and 55 percent are either expressing a position pro or contra state intervention. Finally, we correlate this measure with our clarity estimate. The proportion of neutral keywords correlates significantly at +.47 (t = 2.39,

[16] This dictionary was originally used to estimate policy preferences expressed in manifestos. Although it was developed using British party manifestos, the authors demonstrate applicability to Irish party manifestos as well. We use their dictionary as implemented in the content analysis software Yoshikoder (`http://www.yoshikoder.org`).

$p = 0.027$) with our parameter estimate. In sum, the results lend support to the notion that our estimate captures substantive information regarding ideological clarity.

Ideological Clarity and Electoral Success

We now use the clarity and position estimates in a model to explain parties' electoral success. Little work to date examines the effect of positional ambiguity on electoral success in multiparty democracies (but see Somer-Topcu, 2013), and no work examines the effect of ambiguity using party elite level data.[17] Using our estimates, we investigate the interaction effect of party position shifts and changes in ambiguity on electoral success. In line with previous research, we expect parties to pick up votes as they move to the center (e.g. Ezrow, 2005; Adams and Somer-Topcu, 2009; Kalandrakis and Spirling, 2011). However, we also hypothesize that changes in ideological clarity may alter how position shifts affect party vote share. In particular, parties are likely to find ambiguous positions more advantageous as they moderate their ideological stance; they can reach out to a larger segment of the electorate at the center of the political space. Conversely, parties moving to the extremes may win more votes as they stake out clearer positions. At the extremes, there are fewer additional voters for parties to pick up through broadening their ideological appeal. Rather, the relatively few extreme voters may view ideological ambiguity as a sign of weakness, or insufficient commitment to their cause.[18] This leads us to the following hypotheses:

> **Hypothesis 1:** *Parties gain votes when taking more moderate and more ambiguous positions.*

> **Hypothesis 2:** *Parties gain votes when taking more extreme and less ambiguous positions.*

To test these hypotheses, we use change in party vote share from the previous election as the dependent variable. We use our estimates of ideology and clarity as our independent variables. As in

[17] Somer-Topcu (2013) takes a different approach to a similar question examining the effects of voters' perceptions of party position ambiguity.

[18] Although a somewhat different argument, our hypothesis is in line with the findings in the niche party literature that niche parties are punished at the polls when they moderate their views (e.g. Adams et al., 2006).

the previous regression model, we must ensure cross-national comparability. We cannot naively pool our estimates in a statistical model as we do not know whether ideological distances and levels of clarity of the same value mean the same thing in different countries. We solve this issue by transforming the variables. The first variable *Clarity change* is a dummy coded 1 if the overdispersion estimate of a party in election t is lower than the estimate for the same party in the previous election $t-1$, and 0 if the overdispersion estimate is higher (i.e. a party is more ambiguous than before). The second variable *Position change* is a dummy indicating whether the party's position is further from the center of the political space in election t than in the previous election $t-1$.[19] To capture the conditional effect, we also include the interaction of the clarity and position change dummies.

While the dummy variables solve the identification issue across countries, they do not allow us to make any substantive comparisons regarding the magnitude of the effects. After all, parties may not change position or clarity from one election to the next. To account for this possibility, we code additional variables. *Large position change* is coded as -1 if a party's position is more than one standard deviation more moderate than before, $+1$ if it is more than one standard deviation more extreme, and 0 otherwise. Similarly, *Large clarity change* is coded as -1 if a party is more than one standard deviation more ambiguous than before, $+1$ if it is more than one standard deviation less ambiguous, and 0 if there is change. As a final alternative operationalization of parties' ideological clarity change, we calculate the variable *Significant clarity change* which takes into account the estimation uncertainty around the overdispersion parameter. The variable is coded as $+1$ if a party manifesto was more clear than in the previous election and the difference was statistically significant, as -1 if it was more ambiguous and that change was statistically significant, and as 0 if there was no statistically significant change compared to the previous election.

Table 4 presents the results. The sample size is $N = 86$ because we have to exclude the first election in each country as we are unable to calculate the change variables. The models control for parties' government status prior to the election t, as models of retrospective voting suggest that voters may

[19]To calculate the ideological center of the political space in each country, we weigh the estimated party positions by vote shares.

punish governing parties, party size using previous vote share, and country fixed effects. Models 1 and 2 show the effects for the dichotomous version of position change and clarity change, models 3 and 4 for the (categorical) large position changes and significant clarity changes, and models 5 and 6 for large position changes and large clarity changes. In each case, the second model includes country-fixed effects as a robustness check. In all models, a party's previous vote share has no effect, and our results are robust to omitting this variable. The main findings for our variables of interest are robust across all specifications. The independent effect of *Position change* is negative and statistically significant. *Clarity change* has no statistically significant independent effect, but the interaction terms are consistently positive and significant. To understand the substantive magnitude of these effects, we simulate various scenarios below.

[INSERT TABLE 4 ABOUT HERE]

Mirroring the findings of Ezrow (2005) and Adams and Somer-Topcu (2009), our results suggest that moving away from the center of the space can be costly for parties. However, with our new measure, we find that the effect is contingent upon changes in ideological clarity. Moving away from the center hurts a party that has become more ambiguous, but it leads to gains for a party that has become less ambiguous. These effects hold no matter what specification of position or clarity change we use. For example, in the simplest model with the dichotomous measures (model 3), opposition parties that make a move away from the center and become more ambiguous lose approximately 2.5% of their vote share on average, while parties that move away from the center and become less ambiguous make gains of around 2%. Moderating a position while becoming less ambiguous leads to vote share gains of approximately 1.7%, while moderating and becoming more ambiguous leads to gains of over 2.5%. These results are in line with other findings that extreme opposition parties are more likely to switch to moderate preferences than to remain extreme (Kalandrakis and Spirling, 2011).[20] And they suggest that expressing a more ambiguous position in a manifesto may result in vote loss or gain, depending

[20] Kalandrakis and Spirling (2011) derive their result on the basis of a model that features two parties that alternate power in a parliamentary system, and their empirical analysis uses data from single-party majority governments in Australia, Greece, Malta, New Zealand, and the United Kingdom to estimate latent party preferences based on alternation patterns.

on party positioning. Moreover, the results confirm that governing parties tend to be punished at the polls.

[INSERT TABLE 5 ABOUT HERE]

Models that take into account large shifts in position and clarity lend even stronger support to our findings (models 3 through 6). Table 5 shows the predicted vote share changes for various scenarios based on the estimates from model 5. The predicted change in vote shares if a opposition party made a large extreme shift *and* was substantively less ambiguous than before is +2.8. If the party makes the same extreme shift but becomes more ambiguous in its position, the predicted change in vote share is −3.8. This re-confirms the result that parties that move away from the center and take a clear position tend to gain votes, but they lose votes if they become more ambiguous. The first difference of over 6 percent in vote shares is not only statistically significant, but substantively large. We can also use the model to examine the effects of moderating a party's stance. A significant moderate shift combined with a significantly more ambiguous manifesto yields a +5.2 vote share change, the largest possible gain in our simulation. This suggests that parties can win by broadening their appeal when adopting more moderate positions. This is underscored by the fact that the same moderate shift with a less ambiguous manifesto does not result in a statistically significant change in vote shares. Finally, we can compare these predictions to those where parties do not change positions or clarity from one election to the next. Here, a party is estimated to gain around +1.2 percent, primarily because it was in opposition prior to the election and therefore tends to do better. Compared to this baseline, the potential vote losses and gains implied by our model are quite substantive. Making more ambiguous policy statements possibly leads to a larger vote share when parties can moderate positions, but also may lead to substantial losses if a party fails to do both at the same time. In sum, this suggests that the success of moderating a position is conditional on a party's shift in ideological clarity that accompanies it.

In their model, parties are either dominated by moderates or extremists. Thus, while they acknowledge intra-party heterogeneity, their model assumes that latent party positions themselves are not ambiguous. In addition for allowing this possibility, our approach examines stated party positions in manifestos and levels of ambiguity of parties in multiparty systems with government coalitions.

7 Conclusion

To take full advantage of the information contained in election manifestos, we argue it is necessary to consider the data-generating process underlying them. We propose a method that incorporates substantive information about this process into a text scaling model. Based on theory, we derive a scaling technique to estimate both ideological positions and clarity from manifestos. Previous methods of extracting policy positions from political texts have largely ignored the fact that manifestos are written by collective actors and aimed at multiple audiences. We demonstrate that our scaling procedure captures party ideology and clarity in simulated data — both in Monte Carlo and in manifesto drafting simulations. Furthermore, we corroborate the validity of the data-generating mechanism through an online coding exercise. Finally, we apply our technique to manifestos in four multiparty democracies. The results show that positions derived from the scaling model correlate with alternative manifesto-based measures and that manifesto clarity measures correlate well with alternative conceptualizations where available.

Lastly, we have used our estimates to explore how shifts in policy position interact with changes in the clarity of the party message to affect a party's electoral performance. While much has been written about party positioning and electoral success in multiparty democracy, virtually nothing has been written about ideological clarity and elections. We corroborate previous findings in the literature that moving to the center of the space can lead a party to pick up votes, but we show that the impact of clarity is highly contingent. Greater ambiguity can help parties as they move to the center, but it may hurt them as they move to the extremes. This finding opens up avenues for further research. In particular, we note that there is little research on why party ambiguity varies over time. In particular, how do new party members, changes in issue salience, leadership changes, changes in electoral strategies, appeals for coalition partners, and shifting voter preferences affect the clarity of a party's message? And in an environment where manifestos serve both as signals to the electorate and also to potential coalition partners, to what extent are our answers to these questions conditioned by strategic considerations? While our work does not provide answers to these questions, we believe we offer a promising first step towards doing so.

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Table 1: **Data Generating Process of Manifestos with Different Audiences**

Scenario		Manifesto	Explanation
01.	A is issue-by-issue median	$T_{A1} + T_{A2}$	A's position on both issues enters the manifesto (dimension by dimension median).
02.	B is issue-by-issue median	$T_{B1} + T_{B2}$	B's position on both issues enters the manifesto.
03.	Logroll AB	$T_{A1} + T_{B2}$	A's policy on 1st issue, B's policy on 2nd issue
04.	Logroll BA	$T_{B1} + T_{A2}$	B's policy on 1st issue, A's policy on 2nd issue
05.	Compromise	$\alpha(T_{A1} + T_{B1}) + \beta(T_{A2} + T_{B2})$	Policy compromise on pareto line, where $0 < \alpha, \beta < 1$
06.	Partial compromise ABA	$T_{A1} + T_{B1} + T_{A2}$	Inclusion of both statements on 1st issue, A's positions on 2nd issue.
07.	Partial compromise ABB	$T_{A1} + T_{B1} + T_{B2}$	Inclusion of both statements on 1st issue, B's positions on 2nd issue.
08.	Partial compromise AAB	$T_{A1} + T_{A2} + T_{B2}$	Inclusion of both statements on 2nd issue, A's positions on 1st issue.
09.	Partial compromise BAB	$T_{B1} + T_{A2} + T_{B2}$	Inclusion of both statements on 2nd issue, B's positions on 1st issue.
10.	No compromise ABAB	$T_{A1} + T_{A2} + T_{B1} + T_{B2}$	Inclusion of all statements on both issue.
11.	Silent disagreement AB—	$T_{A1} + T_{B1}$	Inclusion of both positions on 1st issue, silence on 2nd issue.
12.	Silent disagreement —AB	$T_{A2} + T_{B2}$	Inclusion of both positions on 2nd issue, silence on 1st issue.
13.	Silent disagreement, compromise	$\alpha T_{A1} + (1-\alpha)T_{B1}$	Compromise position on 1st issue., silence on 2nd issue.
14.	Silent disagreement, compromise	$\alpha T_{A2} + (1-\alpha)T_{B2}$	Compromise position on 2nd issue, silence on 1st issue.
15.	Silent disagreement, A dominant	T_{A1}	A's position on 1st issue, silence on 2nd issue.
16.	Silent disagreement, A dominant	T_{A2}	A's position 2nd issue, silence on 1st issue.
17.	Silent disagreement, B dominant	T_{B1}	B's position on 1st issue, silence on 2nd issue.
18.	Silent disagreement, B dominant	T_{B2}	B's position 2nd issue, silence on 1st issue.

Table 2: **Sample Word Count Matrix for 3 Parties with a clear position (A, B, and C) and 1 party with an ambiguous position (D)**

Words	Party A	Party B	Party C	Party D
jobs	10	0	5	10
equal	10	0	5	0
⋮	⋮	⋮	⋮	⋮
taxes	0	10	5	10
individual	0	10	5	0

Table 3: **Explaining Expert Survey Standard Deviations with Ideological Clarity**

	Expert Survey (OLS)
Ambiguity Dummy	0.146**
	(0.069)
Vote Share	−0.005*
	(0.003)
Extreme Position Dummy	0.154*
	(0.084)
Ireland	0.127
	(0.099)
Netherlands	−0.228**
	(0.094)
Sweden	−0.133
	(0.100)
R-squared	0.279
adj. R-squared	0.224
N	74

Note: Standard errors in parenthesis. Significance levels: *p-value$\leq$ 0.1, **p-value$\leq$ .05, ***p-value$\leq$ .01.

Table 4: **Effects of Party Position and Clarity Changes on Electoral Success**

	(1)	(2)	(3)	(4)	(5)	(6)
Position change (dummy)	−5.073***	−5.182***				
	(1.432)	(1.475)				
Large position change (categorical)			−1.350*	−1.379*	−1.665**	−1.708**
			(0.749)	(0.778)	(0.739)	(0.769)
Clarity change (dummy)	−0.789	−0.708				
	(1.185)	(1.227)				
Significant clarity change (categorical)			0.732	0.720		
			(0.689)	(0.705)		
Large clarity change (categorical)					0.409	0.333
					(0.606)	(0.628)
Position change × Clarity change	5.252***	5.264***				
	(1.865)	(1.926)				
Large position change × Sig. clarity change			2.272**	2.288**		
			(0.951)	(0.995)		
Large position change × Large clarity change					2.804**	2.873**
					(1.122)	(1.159)
In previous government	−3.531***	−3.633***	−3.409***	−3.492***	−3.191***	−3.233***
	(1.077)	(1.120)	(1.103)	(1.143)	(1.102)	(1.138)
Previous vote share	0.008	0.014	−0.012	−0.010	−0.022	−0.024
	(0.040)	(0.042)	(0.040)	(0.042)	(0.040)	(0.042)
Ireland		0.297		0.416		−0.319
		(1.419)		(1.484)		(1.449)
Netherlands		0.660		0.399		0.105
		(1.326)		(1.372)		(1.377)
Sweden		0.594		0.003		−0.617
		(1.272)		(1.290)		(1.319)
(Intercept)	2.464**	1.990	1.469*	1.284	1.401*	1.662
	(0.999)	(1.371)	(0.750)	(1.210)	(0.732)	(1.217)
R-squared	0.269	0.272	0.224	0.226	0.227	0.231
adj. R-squared	0.223	0.196	0.175	0.145	0.179	0.151
N	86	86	86	86	86	86

Note: OLS regressions, standard errors in parenthesis. Significance levels: *p-value≤ 0.1, **p-value≤ .05, ***p-value≤ .01. *Position change (dummy)* indicates if the party's distance to the ideological center of gravity is larger, coded as 1, or smaller, coded as 0, than in the previous election. *Large position change (categorical)* is coded as 1 if a position change to the extreme is larger than a typical (standard deviation) position change in that country, -1 if a position change towards the center is larger than a typical position change, and 0 if there is no large change in the party position from the previous election. *Clarity change (dummy)* is a dummy indicating if the party position became more clear (less ambiguous), coded as 1, or less clear (more ambiguous), coded as 0. *Significant clarity change (categorical)* is coded as 1 if the party was statistically significantly less ambiguous, -1 if it was significantly more ambiguous, and 0 if there was no statistically significant change compared to the previous election. *Large clarity change (categorical)* is coded as 1 if a change towards more clarity was larger than a typical (standard deviation) clarity change in that country, -1 if a clarity change towards less clarity (more ambiguity) was larger than a typical clarity change, and 0 if there was no large change in clarity compared to the previous election. *In previous government* indicates if the party was in government prior to the election.

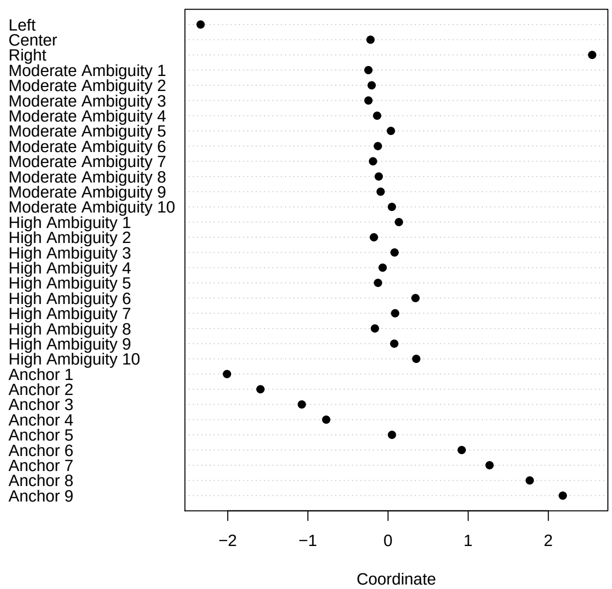
Table 5: **Effects of Positioning and Ideological Clarity on Parties' Vote Shares**

	Less ambiguous	No change	More ambiguous
More extreme	+2.8 (-0.4,+5.7)	-0.6 (-2.6,+1.2)	-3.8 (-6.9,-0.3)
No position change	+1.6 (+0.0,+3.0)	+1.2 (+0.1,+2.2)	+0.7 (-0.9,+2.4)
More moderate	+0.5 (-2.3,+3.2)	+2.9 (+1.2,+4.7)	+5.2 (+1.9,+8.5)

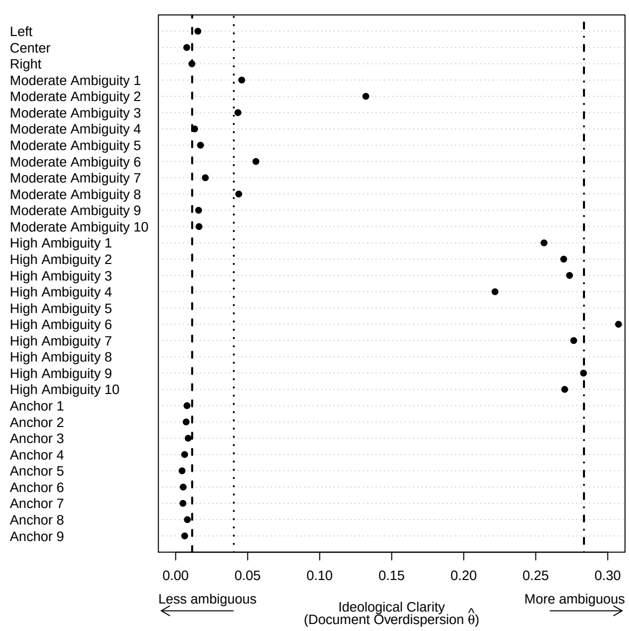
Note: Cell entries show simulated predicted vote share changes for a party that was previously in opposition based on model 5. 95-% confidence intervals in parentheses.

Figure 1: Manifesto Drafting Simulation

(a) Party Positions estimated with Wordfish



(b) Ideological Clarity Estimates



Supplementary Online Appendix

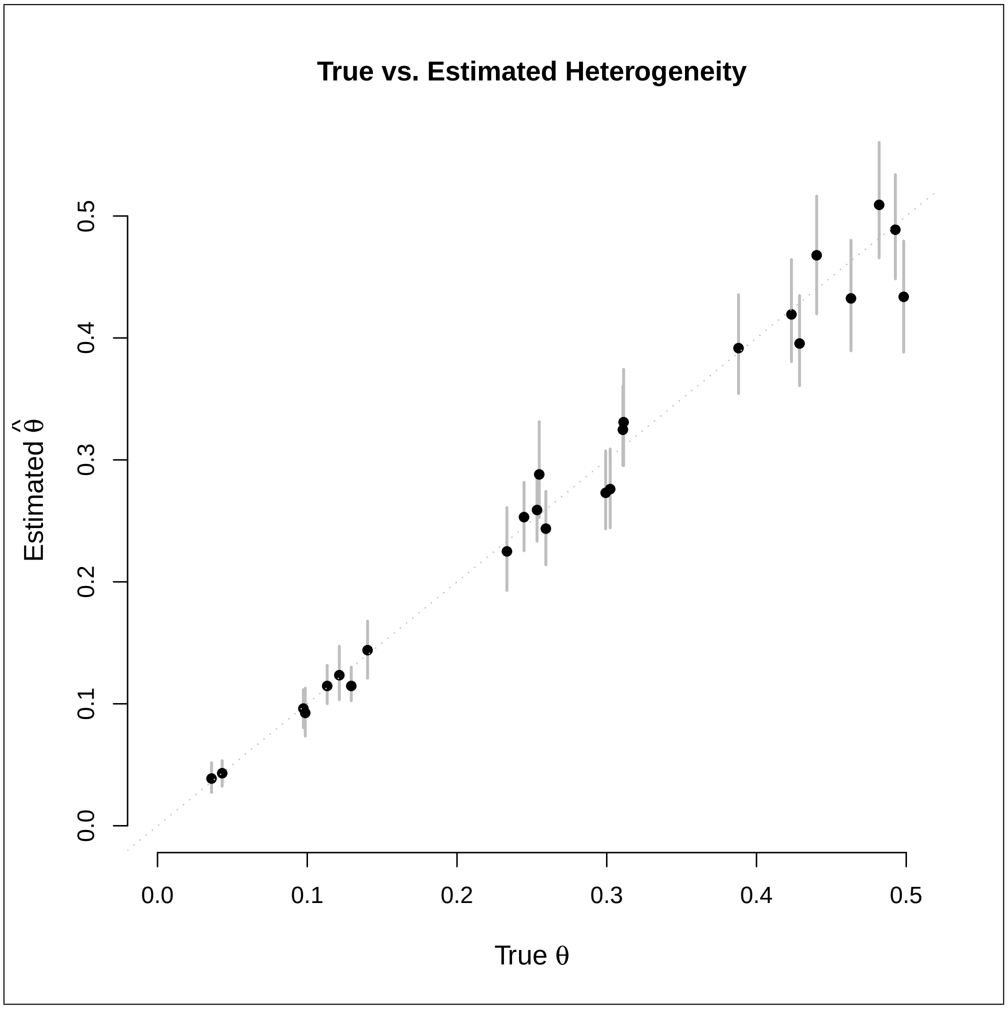
Appendix A. Monte Carlo Simulation

This section describes in more detail the results of the Monte Carlo simulation. To test the ability of our estimator to correctly estimate our parameters of interest, we simulate a term-document matrix of $P = 25$ manifestos and $J = 1,000$ words consistent with a negative binomial data generating mechanism outlined above. We draw our true parameter values from the following distributions: $\alpha \sim U(0.6, 1.2)$, $\beta \sim U(0.6, 2.1)$, $\psi \sim U(0.6, 1.2)$, $\omega \sim U(0.1, 1.6)$, and $\theta = \frac{1}{r} \sim U(0.02, 0.5)$. Using the true values of our parameter, we calculate λ for each word-document cell in our matrix and then draw from the negative binomial distribution using the value of the document overdispersion. Estimates shown are are posterior means of 5,000 draws after a burn-in of 1,000 iterations.

Our main parameters of interest are the manifesto positions ω_{it} and the manifesto cohesion (overdispersion) parameter θ_{it}. The estimated positions correlate strongly with the true values at $r = 0.996$, suggesting that we recover the true spatial configuration of the parties accurately. We obtain a Kendall's τ_c rank order correlation of 0.433. We examine recovery of the overdispersion parameters by plotting the true θ against the recovered values with 95 percent Bayesian confidence intervals (see Figure 1). Our results suggest that even with limited data, recovery of θ is quite good, with the 95 percent confidence intervals covering the true parameter in 24 out of 25 documents. Our results also suggest that as the true value of θ increases, our estimation uncertainy also increases. More specifically, the mean standard error of $\hat{\theta}$ is $\sigma_{\hat{\theta}} = 0.009$ in our simulation when the true $\theta < 0.2$, but increases to $\sigma_{\hat{\theta}} = 0.022$ for $\theta > 0.33$. Note that while we can use Bayesian confidence intervals to check for correct coverage of our cohesion parameter, comparing point estimates against one another visually is not possible because the estimates are not independent. However, such comparisons can be made with the complete samples, which are available upon request.

Substantively, we focus on the differences in θ across party manifestos, so testing our ability to distinguish between different values of $\hat{\theta}$ is of particular importance. We are especially concerned with our probability of committing Type 1 errors, where the null hypothesis is incorrectly rejected when it is true. This is especially problematic in light of problems introduced by multiple pairwise tests, leading to familywise error rates that would normally exceed a naively specified value of α (Hochberg and Tamhane 1987). We examine this issue by generating a term-document matrix from the same distribution of parameters as before, but fix $\theta = 0.33$ for all $P = 25$ documents. Note that this allows us to test differences in r across $\binom{25}{2} = 300$ different document pairings in a situation where no real difference in r exists. This is effectively Tukey's Honestly Significant Difference test in ANOVA, excluding any corrections for experiment-wide error rates. Testing differences across estimates of θ at the $\alpha = 0.05$ level of significance, we find that 6 per cent of our 300 pairings produce differences in θ that are statistically significant. Familywise error rates introduced by multiple comparisons therefore do not appear to be substantively much larger than what we would expect from naively pre-specified levels of α.

Figure 2: True vs. Recovered Clarity Parameter



Appendix B: Party Manifesto Statements used for Simulation

1. Jobs / Employment

   - Left: "Workers have suffered too much with their lost jobs and low unemployment benefits. Creating skilled jobs, getting workers off unemployment, and creating a job recovery should be the government's top priorities. The government will work towards reducing unemployment by creating millions of skilled jobs for British workers over the next decade. Government must ensure that skilled jobs stay in Britain and that workers will not be unemployed and on unemployment benefits. Unemployed workers should receive full benefits and the government should help workers seek new employment and acquire new skills. Government should recover losses from any company that puts workers' employment at risk and prevents recovery. Only these policies will contribute to the recovery of the economy, create skilled jobs, create more employment and reduce the unemployment rate, and prevent future job loss. Government should simplify unemployment benefits and should allow unemployed workers to get into skilled jobs and progress in their life. We are confident that we will see a swift recovery, return to full employment, with more chances for workers to get on at their jobs. Transforming our country into a sustainable green economy will create more jobs for skilled workers. The job guarantees will put an end to long-term unemployment and a life on unemployment benefits. Our policy is to keep skilled jobs in Britain. As the economy recovers, we want to see more employment and higher wages for Britain's workers."
   - Right: "Government should foster growth by helping private business and industry generate wealth. Private businesses and industries drive innovation to produce growth and wealth. Economic growth led by private business and industry is the key to innovation, wealth, and success. The government should privatize industries and businesses to generate wealth and grow the economy. Private industry and business are better than the state at generating growth, sparking innovation, and creating wealth. Business and industry are the key to robust economic growth, which lead to a wealthy society. The government should not interfere with private business as this hampers growth and innovation. Private industry is the key to a healthy, innovative, and growing economy. Industry must be allowed to innovate to bring generate new wealth throughout the economy. Without private businesses and industry, innovation would stagnate. Private industry and business will lay the framework for future economic growth and innovation. Innovation, sparked by private industry, generates wealth. Today's private industry and business generate wealth and growth for future generations."
   - Center: "Workers have suffered too much with their lost jobs and low unemployment benefits. Creating skilled jobs, getting workers off unemployment, and creating a job recovery should be the governments top priorities. The government will work towards reducing unemployment by creating millions of skilled jobs for British workers over the next decade. Government must ensure that skilled jobs stay in Britain and that workers will not be unemployed and on unemployment benefits. Unemployed workers should receive full benefits and the government should help workers seek new employment and acquire new skills. Government should recover losses from any company that puts workers' employment at risk and prevents recovery. Government should foster growth by helping private business and industry generate wealth. Private businesses and industries drive innovation to produce growth and wealth. Economic growth led by private business and industry is the key to innovation, wealth, and success. The government should privatize industries and businesses to generate wealth and grow the economy. Private industry and business are better than the state at generating growth, sparking innovation, and creating wealth."

2. Taxes / Spending

   - Left: "In times of crisis, government needs to be creative. Nationalising some companies, at least for a short time, can be good for the economy. We need to redistribute from top to bottom. Everybody needs to get a fair and equal share of wealth in our country. Government should nationalise companies to pump money into the economy and to promote fairness and equality. In times of economic stagnation, increased spending is needed to ensure stability. The government has increased spending to nationalise banks to save the economy, and will continue to nationalise companies as needed to create a fair and equal economy. Nationalisation ensures fairness and equality. Nationalising companies requires increased government spending, but without increased spending, it will be impossible to fairly and equally redistribute money to the neediest citizens. Nationalisation will help the government meet its goal of a more fair and equitable distribution of resources among the population. Without redistribution, it is impossible to achieve a fair and equitable economy. Increased spending is required to provide equal and fair access to government services."

- Right: "We believe in giving more power to individuals. Empowering individuals means giving individuals more responsibility. Government can act responsibly by reducing both individual tax and corporate tax rates to help sustain the economy. More government money in the economy leads to higher inflation. Keeping prices and inflation down and reducing the deficit should be the government's top priority. Government must demonstrate fiscal responsibility, tackle the budget deficit, prevent rising inflation, all while reducing taxes. It is possible to both reduce corporate tax rates and individual tax rates, while stabilizing inflation and tackling the deficit. Reducing the deficit and taming inflation, in addition to reducing individual and corporate taxes is the most responsible course of action for the government to take. The government must promote fiscal responsibility by controlling inflation and reducing the deficit, while leaving tax rates untouched. Without reducing taxes, the fiscal burden borne by corporations and individuals is too high. Just as individuals must be responsible in their finances, the government must demonstrate responsibility by reducing the deficit without increasing individual or corporate taxes. Corporations and individuals already contribute a great deal to the economy. They should not be taxed further to solve the deficit problem. Their taxes should be reduced."
- Center: "Nationalisation ensures fairness and equality. Nationalising companies requires increased government spending, but without increased spending, it will be impossible to fairly and equally redistribute money to the neediest citizens. Nationalisation will help the government meet its goal of a more fair and equitable distribution of resources among the population. Without redistribution, it is impossible to achieve a fair and equitable economy. Increased spending is required to provide equal and fair access to government services. Reducing the deficit and taming inflation, in addition to reducing individual and corporate taxes is the most responsible course of action for the government to take. The government must promote fiscal responsibility by controlling inflation and reducing the deficit, while leaving tax rates untouched. Without reducing taxes, the fiscal burden borne by corporations and individuals is too high. Just as individuals must be responsible in their finances, the government must demonstrate responsibility by reducing the deficit without increasing individual or corporate taxes. Corporations and individuals already contribute a great deal to the economy. They should not be taxed further to solve the deficit problem. Their taxes should be reduced."

3. Environment

- Left: "We cannot sustain an economy without paying closer attention at our natural environment. Our environmental standards have been too low, we need to do more to make a transition towards a green and sustainable economy that at the same time protects natural environment through strict regulations. Green action on environmental protection, sustainable economy, more environmental regulation is at the heart of policy-making. Government should commit to protecting and enhancing our natural environment by regulating pollution, creating green standards, and focusing on sustainable practices. Without a focus on sustainable practices, it will be impossible to protect our natural environment. Government should create protected natural areas, develop green standards, and consider sustainable practices when writing regulations. Government must promote sustainable practices by establishing green regulations and standards. Government must introduce more environmental regulations to take charge of environmental sustainability and to protect the natural environment. Sustainability is not possible without government regulation and green standards. To protect the natural environment, government must ensure that tougher green standards and regulations are met in both the public and private sectors. Investment in green technology can help create sustainable jobs and protect the natural environment. Government should also support more regulation and protection of wildlife. Finally, we need more research on environmental protection and new ways for a sustainable, green economy."
- Right: "Conserving our tradition means understanding the importance of conservation. The conservation of our lands is a priority but it should not hurt the economic development. This means less red tape and bureaucracy. Businesses and individuals should take responsibility to conserve the environment while eliminating the bureaucratic red tape that traditionally has hampered land development. Land conservation is necessary to ensure that space is available for traditional outdoor activities, including hunting and fishing. It is possible to achieve land conservation without bureaucratic red tape. Government should introduce a plan that enables neighbourhoods to specify what kind of land development and conservation plans they want to see in their area without creating additional bureaucratic red tape. Land conservation should aim to set aside space for traditional activities such as hunting

and fishing. Government intervention in the environment generates bureaucratic red tape that hampers land development and undermines traditional practices. Traditional uses of land such as farming, hunting, and fishing, must be preserved. Land development should not become mired in bureaucratic red tape. Land conservation policy should conserve land for farming, hunting, and fishing. Bureaucratic red tape should not prevent development. Land conservation is possible without bureaucratic red tape. Hunting is part of our tradition and culture, and our conservation policies should seek to conserve tradition as well as land."

- Center: "Government should create protected natural areas, develop green standards, and consider sustainable practices when writing regulations. Government must promote sustainable practices by establishing green regulations and standards. Government must introduce more environmental regulations to take charge of environmental sustainability and to protect the natural environment. Sustainability is not possible without government regulation and green standards. To protect the natural environment, government must ensure that tougher green standards and regulations are met in both the public and private sectors. Investment in green technology can help create sustainable jobs and protect the natural environment. Government should also support more regulation and protection of wildlife. Finally, we need more research on environmental protection and new ways for a sustainable, green economy. Government intervention in the environment generates bureaucratic red tape that hampers land development and undermines traditional practices. Traditional uses of land such as farming, hunting, and fishing, must be preserved. Land development should not become mired in bureaucratic red tape. Land conservation policy should conserve land for farming, hunting, and fishing. Bureaucratic red tape should not prevent development. Land conservation is possible without bureaucratic red tape. Hunting is part of our tradition and culture, and our conservation policies should seek to conserve tradition as well as land."

4. Global Warming

- Left: "Global warming is here. Global warming is a threat and requires ambituous carbon emission cuts to prevent melting of polar ice. This requires ambitious global cooperation. We have established an ambitious low carbon policy to reduce global warming by controlling greenhouse gas emissions and encouraging use of emission free vehicles. We must act quickly to prevent global warming by reducing carbon emissions. Preventing global warming through ambitious programs to cut carbon emissions is necessary to protect the polar regions. Melting polar icecaps endanger wildlife, such as polar bears and other vulnerable species. Ambitious low carbon emissions policies are required to put an end global warming. Unless we reduce our carbon output, by reducing emissions from cars and factories, global warming will continue to threaten the polar regions. Melting polar icecaps threaten to raise sea levels, endangering coastal communities and wildlife. Ambitious low carbon policies are needed to prevent global warming from endangering vulnerable species such as polar bears. Individuals and industry must embrace controls on carbon output in order to reverse the trends in global warming. Ambitious low carbon cutting policies are needed to reduce the effects of emissions on the planet. Being ambitious now may reduce global emissions and lead to a transition of an economy free of harmful carbon use."

- Right: "These are uncertain times. Government must fund research to scientifically investigate the still uncertain causes of climate change. More scientific research is needed to determine whether our planet's climate is, indeed, changing as the result of human activity. Pollution may cause climate change, but scientific research on this is uncertain. Our government will not implement ineffective policies aimed at reducing climate change when we are uncertain whether it is caused by human activity. We will remain uncertain about the causes and degree of climate change without more scientific research. Government policies regarding climate change will be ineffective unless it is based on sound scientific research aimed at reducing uncertainty and uncovering the root causes of climate change. Ineffective policies aimed at ending climate change cause a waste of taxpayer money. We will not spend money on ineffective policies regarding the changing climate, especially those unsubstantiated by scientific research. Scientific research has yet to produce a definitive answer regarding the relationship between human activity and the causes of climate change. Climate change may be occurring but we are uncertain of its causes. Until scientific research fully explores the causes of climate change, attempts to implement policies to end climate change will be ineffective."

- Center: "Ambitious low carbon emissions policies are required to put an end global warming. Unless we reduce our carbon output, by reducing emissions from cars and factories, global warming will continue to threaten the polar regions. Melting polar icecaps threaten to raise sea levels, endangering coastal communities and wildlife. Ambitious low carbon policies are needed to prevent global warming from endangering vulnerable species such as polar bears.

Individuals and industry must embrace controls on carbon output in order to reverse the trends in global warming. Ambitious low carbon cutting policies are needed to reduce the effects of emissions on the planet. Being ambitious now may reduce global emissions and lead to a transition of an economy free of harmful carbon use. Ineffective policies aimed at ending climate change cause a waste of taxpayer money. We will not spend money on ineffective policies regarding the changing climate, especially those unsubstantiated by scientific research. Scientific research has yet to produce a definitive answer regarding the relationship between human activity and the causes of climate change. Climate change may be occurring but we are uncertain of its causes. Until scientific research fully explores the causes of climate change, attempts to implement policies to end climate change will be ineffective."

5. Energy

   - Left: "The transformation to a clean, alternative energy supply including renewable energies such as wind and solar power is an investment into the future. Government must thus invest now in alternative, renewable, and clean sources of energy. We need to increase energy from renewables like wind and solar by a lot. This includes solar, wind and geothermal power. By tapping alternative, renewable energy sources (e.g. wind, solar and geothermal power) the government will invest in the future of our country by providing new sources of clean energy. Wind, solar, and geothermal energy are renewable, alternative energy sources for cleanly powering and heating our homes and buildings. Investing in renewable, alternative energy - such as wind and solar power - is an essential investment in the future of our country. Investment in clean sources of renewable energy will help ensure we have a clean air to breathe in the future, and will ensure a clean environment. Greater investment in clean, renewable energy sources will reduce the cost of alternative energy from wind and solar power. Clean, renewable energy is not cheap. But it is an investment for the country without alternative."

   - Right: "We must continue to search for new sources of energy to reduce our dependence on foreign oil and gas, while trying to maintain price stability. We must look for other sources of power such as nuclear energy, nuclear fusion, and coal that we can produce at home. For the meantime, conventional coal and clean coal power is needed. This is true for our use of oil and natural gas. Nuclear power is dependable and cheap and keeps energy prices down. Nuclear fusion comes at a price, but holds great potential. Our dependence on oil and gas will make it very difficult to wean our nation off of foreign sources of oil without seeing drastic price increases. Government must consider all possible energy sources including coal, nuclear power and nuclear fusion, oil and gas, in an effort to keep energy prices affordable. As the price of oil and gas continues to rise, energy sources such as nuclear and coal become more attractive. We need to subsidize national energy production of nuclear energy that can reduce our dependence on oil and gas and create stable prices. Nuclear fusion may one day solve our energy demands at low prices and do away with our dependence on oil, gas, and coal for good. At the same time, we need to pay the price for keeping nuclear power stations safe."

   - Center: "The transformation to a clean, alternative energy supply including renewable energies such as wind and solar power is an investment into the future. Government must thus invest now in alternative, renewable, and clean sources of energy. We need to increase energy from renewables like wind and solar by a lot. This includes solar, wind and geothermal power. By tapping alternative, renewable energy sources (e.g. wind, solar and geothermal power) the government will invest in the future of our country by providing new sources of clean energy. As the price of oil and gas continues to rise, energy sources such as nuclear and coal become more attractive. We need to subsidize national energy production of nuclear energy that can reduce our dependence on oil and gas and create stable prices. Nuclear fusion may one day solve our energy demands at low prices and do away with our dependence on oil, gas, and coal for good. At the same time, we need to pay the price for keeping nuclear power stations safe."

6. Defense

   - Left: "Peace is at the heart of our defense policy. Peace can only be achieved by operating through multilateral channels, such as the UNO, and by concluding international treaties in close cooperation with our allies. It is our declared goal to operate through multilateral institutions such as the UNO to promote peace. Multilateral treaties can contribute to more disarmament than ever before, getting rid of some of the most dangerous weapons. A new round of multilateral disarmament talks is neccessary to work towards peace. We must increase multilateral involvement with our allies in the UNO, and lead the effort to create new multilateral UNO treaties in order to promote global peace through disarmament. Disarmament of the most dangerous weapons is essential to preserve long-lasting peace. Peace can only happen through the multilateral institutions of the UNO working towards disarmament. By working with our allies through the multilateral channels of the UNO, we can replace our troops operating globally with UNO peacekeepers. We are for more multilateral action in the UNO security council. To defend our country, we must seek to work with our allies through multilateral treaties and organizations, like the UNO, to secure peace. Through multilateral forums such as the UNO, we can pursue goals such as disarmament and peace. We need to do more for our veterans who fought so hard to preserve peace. Our allies have shown how to remunerate veterans and we need to do the same here. Veterans do a great service to this country. The sacrifices made by our veterans to ensure peace cannot go unrecognized. Veterans deserve our greatest respect. We must support our veterans."

- Right: "We have huge regard for our soliders and their contribution to our national defense. To defend our national interests, we must defend ourselves against terrorist threats. We must do everything we can to deter terrorist attacks. We must defend ourselves against the terrorists; the Terrorists cannot win. We must develop strong national defenses to deter our enemies. The threat of a terrorist attack against our nation is high. We must develop adequate defenses against such attacks. The deterent effect of our national defense forces with its many soldiers should be strengthened. Terrorist attacks are stopped by a strong national defense and soldiers who do their job when it is most needed. Government must take the terrorist threat more seriously than ever before. We need to make the national defense forces more attractive for new soldiers. Soldiers protect and defend our nation. Being a soldier is a national duty. Soldiers should be paid better and have better career possibilities than before. We cannot and will not abandon our soldiers, who defend this nation. Support for our soldiers is necessary to ensure the defense of our nation and national interests against the threat of terrorist attacks. Terrorist attacks represent the greatest threat to our way of life today."
- Center: "Peace is at the heart of our defense policy. Peace can only be achieved by operating through multilateral channels, such as the UNO, and by concluding international treaties in close cooperation with our allies. It is our declared goal to operate through multilateral institutions such as the UNO to promote peace. Multilateral treaties can contribute to more disarmament than ever before, getting rid of some of the most dangerous weapons. A new round of multilateral disarmament talks is neccessary to work towards peace. We must increase multilateral involvement with our allies in the UNO, and lead the effort to create new multilateral UNO treaties in order to promote global peace through disarmament. Government must take the terrorist threat more seriously than ever before. We need to make the national defense forces more attractive for new soldiers. Soldiers protect and defend our nation. Being a soldier is a national duty. Soldiers should be paid better and have better career possibilities than before. We cannot and will not abandon our soldiers, who defend this nation. Support for our soldiers is necessary to ensure the defense of our nation and national interests against the threat of terrorist attacks. Terrorist attacks represent the greatest threat to our way of life today."

7. European Union and Euro

   - Left: "Support for deeper European integration and more European trade should be a cornerstone of British foreign policy. Support for the Euro and the European constitution are key for trade promotion across the continent. Britain should purse deeper integration through the European Union by joining the Euro. Deeper European integration promotes democracy and stability across Europe by increasing trade ties among member states. Deeper European integration will lead to increased trade with continental Europe. The government should support efforts to strengthen supranational actors and implement the EU constitution. This will create deeper integration. The government should look into adopting the Euro as soon as possible. It is in the long term interest to be part of the Euro. By joining the Euro and supporting a new European constitution, the government will promote both trade and deeper cooperation with Europe. The Euro and the constitution are important symbols of European integration. European countries are the most important trading partners."
   - Right: "Britian must protect its independence and sovereignty and should not cede authority to Brussels without a referendum. We will veto any attempts to give Brussels more power. Britian should keep the pound. Any decision to drop the pound must be put to a referendum. The government must protect its independence and sovereignty by maintaining its right to veto any important policies decided in Brussels. The government must maintain a veto over sensitive issues and should reserve the right to withdraw from policy areas when Brussels pushes policy too far. Brussels cannot be allowed to threathen our sovereignty and independence. Britian should keep the pound and put to a referendum any further transfer of authority to Brussels. The British people must have a veto over the decision to give up the pound. The pound is a key symbol of our sovereignty and independence. Brussels

will not be allowed to take the pound away from us. A referendum must be held on any decision to drop the pound. Brussels cannot be allowed to impose laws on the British citizens against their will. The government must retain the ability to veto policy from Brussels. Without the ability to veto policy made in Brussels, the British government has effectively ceded sovereignty to Brussels."

- Center: "Support for deeper European integration and more European trade should be a cornerstone of British foreign policy. Support for the Euro and the European constitution are key for trade promotion across the continent. Britain should purse deeper integration through the European Union by joining the Euro. Deeper European integration promotes democracy and stability across Europe by increasing trade ties among member states. Deeper European integration will lead to increased trade with continental Europe. A referendum must be held on any decision to drop the pound. Brussels cannot be allowed to impose laws on the British citizens against their will. The government must retain the ability to veto policy from Brussels. Without the ability to veto policy made in Brussels, the British government has effectively ceded sovereignty to Brussels."

8. Immigration

- Left: "Minorities without citizenship face some of the hardest challenges in our country. Our goal, however, is a multicultural society where minorities feel like every other citizen. The government must offer migrants who come to our country a legitimate chance at asylum and citizenship. Government policies must promote multicultural awareness and minority rights. Minority groups and migrants contribute to our multicultural heritage. The responsibility of government is not just to its own population, but to those migrants who are on a path to citizenship. Migrants from other continents who seek asylum must be given opportunities in our multicultural society. Migrants who are successful asylum seekers need to receive citizenship. In a multicultural society, migrant and minority rights must be protected. We have a multicultural outlook on society. Minorities and migrants are key to our multicultural society. Minorities offer new and different perspectives and points of view. Migrants and minorities are part of our multicultural heritage. A clear path to citizenship is needed to protect the rights of asylum seekers. Asylum seekers must be protected. Asylum seekers need a direct path to citizenship. Multiculturalism is an important part of our society."
- Right: "The government must regain control of our borders, make sure that immigrants assimilate to our customs, and place limits on visas. Immigrants to Britian from elsewhere must learn our language and assimilate into British culture. Too often immigrants abuse the rights and priviledges granted to them. There is a limit how much the country can take. We must place limits on the number of visas issued to immigrants, and work to secure our borders. Refusing to set visa limits on new immigrants is irresponsible policy. Within our borders, immigrants must speak our language. We cannot continue to hand out visas to immigrants who do not learn our language, do not assimilate, and who abuse our visa system. Limits on the number of immigrant visas are necessary to protect our society, and language requirement should be part of the visa system. Immigrants who assimilate into our culture are welcome, but we must not allow immigrants to abuse the system and cross the border. To contribute to our society, immigrants must learn our language and assimilate into our culture. Increased border controls are necessary to eliminate abuse of the visa system. We must not allow immigrants to cross our border illegally."
- Center: "Minorities without citizenship face some of the hardest challenges in our country. Our goal, however, is a multicultural society where minorities feel like every other citizen. The government must offer migrants who come to our country a legitimate chance at asylum and citizenship. Government policies must promote multicultural awareness and minority rights. Minority groups and migrants contribute to our multicultural heritage. The responsibility of government is not just to its own population, but to those migrants who are on a path to citizenship. Migrants from other continents who seek asylum must be given opportunities in our multicultural society. Limits on the number of immigrant visas are necessary to protect our society, and language requirement should be part of the visa system. Immigrants who assimilate into our culture are welcome, but we must not allow immigrants to abuse the system and cross the border. To contribute to our society, immigrants must learn our language and assimilate into our culture. Increased border controls are necessary to eliminate abuse of the visa system."

9. Public Health

- Left: "The government must guarantee public access to affordable healthcare through the NHS. Patients must have access to the affordable public healthcare that only the NHS can provide. The NHS and its staff, in particular its nurses, provide a valuable public service to patients. Access to affordable public healthcare through the NHS must remain the cornerstone of government healthcare policy. Patients must come first in the government's healthcare policy. The NHS has many committed nurses, dedicated to patient care. NHS nurses must be paid a decent wage. Nurses earning a decent wage can focus on patient care and provide a better public service. Public access to professional nurses is an integral part of affordable healthcare. The NHS is committed to providing affordable public healthcare, which all citizens can access. The government must support the NHS in its pursuit to provide access to affordable public healthcare."

- Right: "Money in the health care system is wasted. People need to have a choice again to get the best doctors and the most effective medicine. We must reform our healthcare system to avoid waste, lower costs, and provide individuals with greater choice. Under our current system, doctors waste too much time on with red tape and cannot spend enough time practicing medicine. We will reform the system and transfer resources to support doctors and improve medicine. Reform is necessary to increase choice within the healthcare system. Doctors must be free to practice medicine as they see fit without worrying about wasteful government programs. Patients must be given a choice of doctors they are able to visit. The government must make an effort to keep the cost of healthcare under control without limiting patient choice. Reforms must reduce waste and excess costs, while giving doctors the freedom to practice medicine as they see fit."
- Center: "The government must guarantee public access to affordable healthcare through the NHS. Patients must have access to the affordable public healthcare that only the NHS can provide. The NHS and its staff, in particular its nurses, provide a valuable public service to patients. Access to affordable public healthcare through the NHS must remain the cornerstone of government healthcare policy. Patients must come first in the government's healthcare policy. The NHS has many committed nurses, dedicated to patient care. Patients must be given a choice of doctors they are able to visit. The government must make an effort to keep the cost of healthcare under control without limiting patient choice. Reforms must reduce waste and excess costs, while giving doctors the freedom to practice medicine as they see fit."

10. Crime

- Left: "We are proud of our record on civil liberties, protection of freedom, and privacy. The role of the government is to protect citizens' civil liberties and freedom. Government must also protect citizens' privacy while seeking justice. Bankers are responsible for reducing confidence in the justice of our system. They behavior is not civil. Bankers must be brought to justice. Bankers' criminal behavior has undermined our trust in liberties and freedom. Learing the lessons means bringing more bankers than ever before to justice. They do not have the freedom to do whatever they please. We need a return to civility. We need to protect the privacy of our citizens. Privacy is a basic civil liberty. The government must protect individual privacy and civil liberties. Government must protect freedom, basic civil liberties, and individual privacy in any democratic society. Without strong protections for civil liberties, true freedom is not possible."
- Right: "The crime rate is rising. Illegals threaten this country. Our prisons are full. Law and order is not upheld. We will change that. We will prosecute crime and ensure the law is upheld. Those who break the law and commit crimes and other illegal acts will be prosecuted and sent to prison. To create an orderly society, we must uphold the law and prosecute criminals who break the law. Anyone who breaks the law three times will be sentenced to prison for good. Illegals in this country will be prosecuted and law and order will be upheld. Illegal immigrants need to be sent to prison for a longer time if their are serious criminals. The state must prosecute crime more quickly than today and must build new prisons to send criminals to. Prisons must receive adequate funding. The government must enforce the law. The government should not tolerate any form of illegal activity. All illegal activity will be prosecuted, and the law will be upheld. The most serious of prosecuted illegal criminals need to be deported once they serve their time in prison."
- Center: "We are proud of our record on civil liberties, protection of freedom, and privacy. The role of the government is to protect citizens' civil liberties and freedom. Government must also protect citizens' privacy while seeking justice. Bankers are responsible for reducing confidence in the justice of our system. They behavior is not civil. Bankers must be brought to justice. Bankers' criminal behavior has undermined our trust in liberties and freedom. The state must prosecute crime more quickly than today and must build new prisons to send criminals to. Prisons must receive adequate funding. The government must enforce the law. The government should not tolerate any form of illegal activity. All illegal activity will be prosecuted, and the law will be upheld. The most serious of prosecuted illegal criminals need to be deported once they serve their time in prison."

11. Education and Family

- Left: “We want prosperity and social mobility for all. We will ensure that all children have the chance to move up the social mobility ladder and reach prosperity through education. Education is absolutely essential for ensuring childrens’ future social mobility. Children, regardless of their background should be entitled to a good education. Unless all children are provided with a good education, our future prosperity will be placed in jeopardy. Children, the most vulnerable people in society, must be protected. Children in vulnerable situations must be given access to quality education. A quality education is a child’s best ticket to social mobility and future prosperity. We cannot deny vulnerable children the chance at a good education. Without ample opportunities for social mobility through education, vulnerable children will never have the opportunity to experience prosperity. Government must do all it can to support vulnerable women and children and provide them with opportunties for education. Supporting vulnerable women and children will increase childrens’ chances at social mobility. All barriers to social mobility need to be tackled by giving the most vulnerable children free access to education. Education is fundamental to prosperity.”
- Right: “We will safeguard the real values of our community, including marriage, family, community, and parental control. Family is the core structure of our society. Government needs to encourage the family by introducing marriage allowance, which increases when couples are parents. Marriage takes a valuable place and is congruent with our family values. Parents face hard times. We must reduce fees that penalise parents, families and married couples. Society needs more community-based values and less fees that are a burden on families. Parents need to be in control over their families, not the government. The government must strive to build a strong community in which parents feel comfortable raising a family. The government must pursue more and more policies that strengthen community and family values and reduce the fee burden. Marriage forms the cornerstone of a healthy family. Parents must play a role in building strong community schools. Family values based upon marriage underpin our entire society. Parents must instill family values in their children. Communities built around strong family values are essential. Young people will be required to take courses in summer during which they will work in the community. These courses would instill community values in everyone. Parents want to see that traditional values play a large role. Young people need to be community leaders so that they can follow their parents and eventually be able to enter marriage and found their own family, all while being good community citizens.”
- Center: “We want prosperity and social mobility for all. We will ensure that all children have the chance to move up the social mobility ladder and reach prosperity through education. Education is absolutely essential for ensuring childrens’ future social mobility. Children, regardless of their background should be entitled to a good education. Unless all children are provided with a good education, our future prosperity will be placed in jeopardy. Children, the most vulnerable people in society, must be protected. arents must instill family values in their children. Communities built around strong family values are essential. Young people will be required to take courses in summer during which they will work in the community. These courses would instill community values in everyone. Parents want to see that traditional values play a large role. Young people need to be community leaders so that they can follow their parents and eventually be able to enter marriage and found their own family, all while being good community citizens.”

Appendix C. Sample Screen from Manifesto Online Coding Measurement Exercise

*We are interested in how you perceive internal conflict within political parties. Suppose a political party is preparing its manifesto for an upcoming election campaign. Two different versions of the economic policy section of the manifesto are under consideration, as shown below. Please read these two statements carefully.

Statement A:

Fiscal responsibility should be the government's top priority by reducing the deficit and public spending. Increased public spending is required to provide equal and fair access to government services. Moreover, sustainable economic recovery comes from lowering corporate tax rates and reducing the regulatory burden for businesses.

We must focus on job creation at home by helping industry expand their workforce. Private companies must be allowed to choose whom to hire. A national minimum wage for all workers and equal pay for equal work is essential. In addition, public workers need to get remunerated fairly for their service to this country.

The government should not interfere with private businesses as this hampers growth and innovation. In a healthy economy, competition between a small number of state-owned enterprises and private industry leads to growth. Finally, we see a swift return to full employment, with more chances to get on at work and a fair distribution of growth throughout the country.

Statement B:

A responsible budget that puts people back to work and controls public spending is necessary. Cutting taxes and eliminating wasteful spending on public services is a necessary step. Moreover, a good corporate tax code allows business to contribute to society by employing workers, investing in new technology, and giving back in taxes.

We must focus on job creation at home by helping industry expand their workforce. Business must be free to employ whomever they wish, provided they do not discriminate on the basis of gender or race. A minimum wage policy must ensure workers an adequate level of income without discouraging business from hiring. In addition, public workers need to get remunerated fairly for their service to this country.

The government should not interfere with private businesses as this hampers growth and innovation. In a healthy economy, competition between a small number of state-owned enterprises and private industry leads to growth. Finally, we see a swift return to full employment, with more chances to get on at work and a fair distribution of growth throughout the country.

In your opinion, which party statement expresses more internal disagreement?

Choose one of the following answers

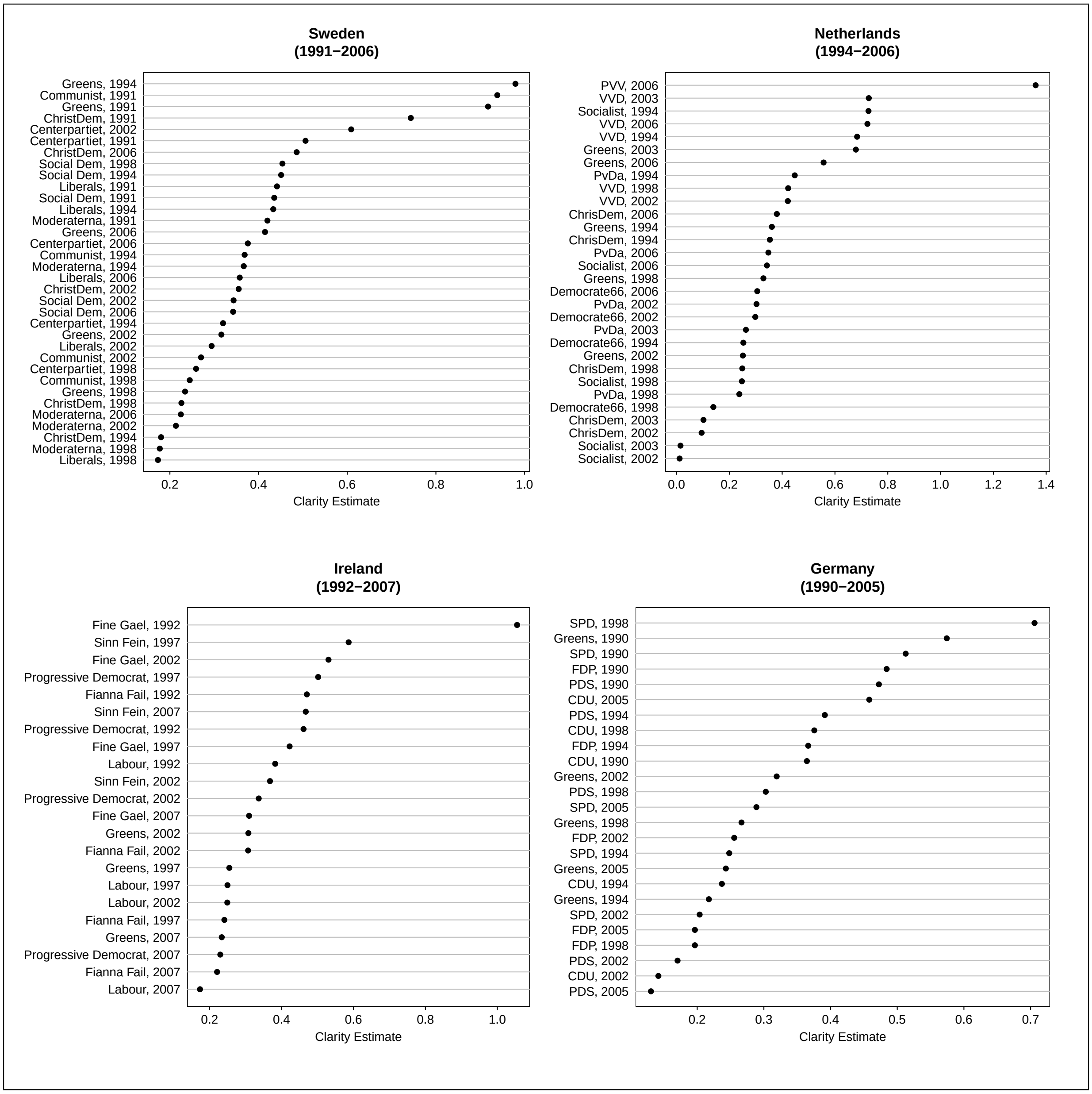
- Statement A expresses more internal disagreement
- Statement B expresses more internal disagreement

Appendix D. Correlations of Position Estimates

	C-Wordfish vs. Original (1990–2007)	C-Wordfish vs. RILE (1990–2007)	C-Wordfish vs. LogRILE (1990–2007)	C-Wordfish vs. Chapel Hill (1997–2007)
Germany	+.96	+.82	+.82	+.87
Ireland	+.95	+.46	+.49	+.85
Netherlands	+.92	+.48	+.50	+.83
Sweden	+.78	+.87	+.81	+.57

Note: Original = Poisson Wordfish, C-Wordfish = (Negative Binomial) Cohesion-Wordfish, RILE = Manifesto Project Left-Right scale (Klingemann et al. 2006), LogRILE = Manifesto Project Logit Left-Right Scale (Lowe et al. 2011).

Appendix E. Manifesto Clarity Estimates in Four Countries



Appendix F. Correlation of Irish Clarity Estimates with Alternative Measure Based on the Laver and Garry Policy Dictionary