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TRUTH IN SIMPLICITY: POPULISM AND LANGUAGE COMPLEXITY IN THE ITALIAN CHAMBER OF DEPUTIES

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The **Comparative Politics and Public Philosophy Lab** (**LPF**) at Centro Einaudi is directed by Maurizio Ferrera and funded by Compagnia di San Paolo. It includes the **Welfare Laboratory** (**WeL**) and the **Bioethics Lab** (**La.B**). LPF analyses the transformation of the political sphere in contemporary democracies with a focus on the relationships between policy choices and the value frameworks within which such choices are, or ought to be, carried out. The reference here is to the "reasonable pluralism" singled out by John Rawls as an essential feature of political liberalism.

The underlying idea is that implementing forms of "civilized" politics is desirable as well as feasible. And, as far as the Italian political system is concerned, it is also urgently needed, since the system appears to be poorly prepared to deal with the challenges emerging in many policy areas: from welfare state reform to the governance of immigration, from the selection criteria in education and in public administration to the regulation of ethically sensitive issues.

In order to achieve this end, LPF adopts both a descriptive-explanatory approach and a normative one, aiming at a fruitful and meaningful combination of the two perspectives. Wishing to foster an informed public debate, it promotes theoretical research, empirical case studies, policy analyses and policy proposals.

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KEYWORDS

POLITICAL COMMUNICATION, POPULISM, LANGUAGE COMPLEXITY, TEXT
ANALYSIS, ITALIAN POLITICS

ABSTRACT

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Is simple language a feature of political populism? Language can divide society into 'elite' and 'popular' classes. Populist politicians have ideological and electoral incentives to exploit this division by simplifying their communication style. This study (1) develops and validates a novel dictionary of political populism; (2) applies this dictionary to a corpus of 78,855 utterances from the most recent Italian parliament to estimate the relationship between populist term usage and language complexity at the individual and party levels; and (3) observes whether a change in allegiance from a populist to a mainstream parliamentary group increases a lawmaker's plenary spoken language complexity. Our results suggest that populist ideology, both at the individual and party levels, influences how lawmakers shape their communication style.

TRUTH IN SIMPLICITY:
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1. INTRODUCTION

Populist politicians throughout the world are said to use language to connect with their electorate and to identify themselves with the 'common people', whose interests they claim to represent (Albertazzi and McDonnell 2007). There are numerous examples of populist leadership communication in modern politics. Donald Trump's simple and direct language has been described as analogous to that of a sixth grader (Schumacher and Eskenazi 2016). Juan Peron's language, even if not simplistic in its content, has been described as comprehensible not only for the highly educated but also for the lower classes' (Rooduijn 2014). Hugo Chavez employed a simple language to convey his pro-people message, using references to popular myths and symbols (Hawkins 2009). Members of Marine Le Pen's National Front are said to use an accessible and plainspoken language to communicate with their electorate (Davies 2012). Silvio Berlusconi's speech style has been defined as popular and easily understandable (Albertazzi and McDonnell 2007).

But why do populists use a simple language? We argue that ideology and electoral strategy weave together, shaping the style of the populist rhetoric. The outcome is a plain speech style which reflects the language of 'the people' and is used to present straightforward solutions to complex issues. This communication strategy helps cultivate a reputation for 'straight talk' which, in turn, can attract increased support from disaffected voters. The connection between populism and political communication has been mainly studied descriptively thus far and, while informative, comprehensive evaluations of the effect of populism on the complexity of elected officials' communication are scarce.

Relying on data from the most recent Italian Chamber of Deputies, we tackle the following research questions:

1.   Does a populist vocabulary predict the spoken language complexity of an MP?
2.   Does membership in a populist party influence an MP's spoken language complexity?

Motivated by theoretical frameworks from the field of legislative studies that emphasize the importance of individual MP characteristics in explaining legislative behaviour—in our case, communication behaviour—we answer these questions by employing a large-scale analysis of Italian MPs' parliamentary oral communication with the help of computational methods. Results from a cross-sectional analysis of MP spoken language, as well as a quasi-experiment of the influence of party switching on language usage, suggest that populist ideology indeed influences language complexity. Our overarching conclusion is that language simplicity might be thought of as a feature of populist communication. The relationship between populism and language complexity arguably has implications for the ability of populist actors to use a simple communication style to outperform their mainstream counterparts when competing for voters' support (see Bischof and Senninger 2017).

2. RELATED WORK

2.1 Political populism and language complexity

The literature offers several descriptive accounts of European populist parties and political leaders who employ a simple communication style. Populist parties are said to speak 'the language of the tavern, the café and the street' (see Zaslove 2008, p. 327). Albertazzi and McDonnell (2007) point to the Berlusconi phenomenon as a case of populism combined with a popularized television language. The spontaneous and non-institutionalized language spoken by members of the populist Italian Lega Nord is considered one of the main features of the party's rhetoric (Albertazzi and McDonnell 2007). The electoral success of the Swiss People's Party in the 1990s is ascribed to the simple and media-friendly language used by Christoph Blocher (Kriesi 2005). Beppe Grillo, leader of the Italian populist Five Star Movement party, is said to communicate with his electorate through a simple language which functionally aims to articulate complex concepts to the layperson (Bordignon and Ceccarini 2013).

Comprehensive empirical studies on the relationship between populism and the complexity of political communication are still quite rare, however. In part, this lacuna can be attributed to the significant cost in time and resources which is required by large scale manual content analysis of political texts. Fortunately, the mass digitization of political texts along with the democratization of computational methods have improved our ability to study large scale political corpora. Prior works include Rooduijn and Pauwels (2011) who rely on a corpus of party manifestos and a dictionary-based approach to determine the level of populism of 24 European political parties. Similarly, Pauwels (2011) employs a dictionary to measure the degree of populism of Flemish parties, using party manifestos and party membership magazines. Some comprehensive work on political language

complexity also exists. Schumacher and Eskenazi (2016) use the REAP model to measure the readability of five presidential candidates' campaign speeches in the 2016 US presidential elections. The authors find that the complexity of Donald Trump's speeches is just below the sixth-grade level. Degani (2016) shows that Trump's presidential campaign announcements have an average grade level of 5 on the Flesch-Kincaid scale.

 The above studies suggest a potential link between populism and language complexity. The use of computational text analysis to systematically study the relationship between populism and language complexity, though, is still in its earliest stages and offers mixed results. Bischof and Senninger (2017) and Brosius et al. (2017) provide, to our knowledge, the first such examples. Bischof and Senninger (2017) study the effect of populism on the complexity of campaign messaging in Austria and Germany. The authors use Bjornsson (1968)'s readability index (LIX) to measure the readability of party manifestos. Also employing a populism dictionary, Bischof and Senninger (2017) find empirical evidence of a positive effect of populist rhetoric on text simplicity. Brosius et al. (2017) use Flesch Kincaid reading grades to measure the complexity of speeches from the German Bundestag and English language speeches of six EU member states' heads of government, including Italy. The authors postulate that members of populist parties should use a simpler language than members of mainstream parties. However, in contrast with their hypothesis, they observe a higher language complexity for the speeches of the AfD, a right-wing populist party.

3. THEORETICAL EXPECTATIONS

3.1 The populist ideology and electoral strategy

Why would populist politicians opt to use a simple language? We argue that populists have ideological and electoral reasons to employ a straightforward communication style.

To characterize the populist ideology we rely on Mudde (2004)'s framework, whereby populism is understood as a 'thin ideology' which consists of people-centrism and anti-elitism. That is, populism divides society into two opposing and monolithic groups, the 'pure people' and the 'corrupt and self-interested elite'. Populists claim to defend the interests of 'the people' against 'the elite' and frame themselves as the incarnation of 'the people's' will and culture (Albertazzi and McDonnell 2007). Since language is strictly connected to culture, and indeed 'expresses cultural reality' (see Kramsch 1998, p. 3), populist politicians have strong ideological reasons to use a simple language. To demonstrate a complete identification with their 'popular' electorate, populists need to use a language that reflects people's 'simplicity' (Bischof and Senninger 2017).

A simple language also constitutes an effective propaganda instrument. Members of populist parties strategically employ a plain speech style to persuade voters that their political programme and actions belong to them—the people (Dramnescu 2014). Bos et al. (2013) find evidence of a positive effect of populist communication style on the perceived legitimacy of right-wing populist party leaders. A straightforward language, used to offer simple solutions to complex issues, can effectively influence public opinion and capture the emotions of discontented voters (Albertazzi and McDonnell 2007).

While the literature on the relation between populism and speech complexity offers instructive insights, we find two limitations: (1) most of the contributions are in the form of descriptive accounts; (2) systematic empirical evidence is still rare and mixed. To fill these gaps, we build on previous literature on intra-party dynamics and legislative behaviour to explain communication strategies in parliamentary bodies (Kam 2009; Krehbiel 1993; Mershon 2014).

3.2 Populism, intra-party dynamics and legislator behaviour

There is a general debate in the literature on whether individual-level characteristics or party affiliation is primarily responsible for legislative behaviour. The institutional approach views political parties as cohesive and unitary actors, and by extension, assumes that party affiliation has a causal effect on lawmakers' voting behaviour (Mershon 2014; Kam 2009). Opposing this perspective is the preference-driven approach, which claims that individual-level policy preferences are the main determinants of voting behaviour (Krehbiel 1993). Following Krehbiel (1993)'s contribution, many scholars began to study legislative party switching to obtain analytic leverage on the effect of partisanship on voting behaviour (Rosenthal and Voeten 2004; McCarty 2001). Specifically, these authors argue that, since the only factor that changes during a legislative switch is the party label, a change in the voting behaviour of the switching MP should be caused by the new party label. While most of the literature on legislative behaviour has analysed the voting agenda, contributions which relate to the debate agenda are still rare. However, Proksch and Slapin (2012) show that the party-affiliation versus individual-level dynamic is relevant also when studying parliamentary speeches. Building upon previous literature (Krehbiel 1993; Kam 2009), as well as on Proksch and Slapin (2012)'s study of legislative speech, we argue that a comprehensive study of the effect of populism on legislative speech complexity should take into consideration both individual and party-level dynamics.

Accordingly:

> **H1:** Populist rhetoric, both at the individual and party level, is negatively related to the complexity of MP oral communication, while controlling for personal characteristics such us age, gender, education and profession.

We investigate the presence of significant party effects by testing whether changes in parliamentary group affiliation of MPs impact their political communication style. If the level of populism of a party influences the complexity of the language used by an MP, changing party should also produce a change in an MP's rhetorical style.

Therefore:

> **H2:** A change in affiliation from a populist to a mainstream parliamentary group increases a parliamentarian's language complexity.

4. METHODS

To test our hypotheses, we perform a regression analysis and a quasi-experiment. We begin by gathering a corpus of 78,855 utterances from transcripts of plenary speeches in the 17th Italian Legislature, over the period March 2013—July 2016. To measure populism, we construct and validate a novel dictionary of Italian political populism. To measure language complexity, we employ a readability index designed for the Italian language (Lucisano and Piemontese 1988). To test our first hypothesis, we combine measures of populism derived from our novel dictionary with party affiliation and MP-level demographics to estimate the effect of individual-level populist term usage on MPs language complexity. For our second hypothesis we employ a quasi-experiment to test whether movements from a populist to a non-populist party impact parliamentarian communication styles.

4.1 Which Italian parties are populist?

Italy has been repeatedly presented as a showcase of populism movements and parties (Zanatta 2002). In post-war Europe the Italian Common Man's Front was among the most notable European populist movements (Mudde 2004). Although the movement staggered in the following years, until eventually collapsing in the 1950s, Italian populism survived the Common Man's Front. Starting from the 1980s, contemporary Italian populism rose in the form of northern regionalist leagues, which eventually led to the establishment of the Northern League in 1991 (Tarchi 2003). While the scandals of Tangentopoli prompted the demise of The First Republic, another political party—Forza Italia—led by the Italian populist politician par excellence, Silvio Berlusconi, was forming. In 2009, the most recent populist movement emerged in Italy—the Movimento 5 Stelle (Verbeek and Zaslove 2016).

Of the nine parties examined in the current study, two are typically acknowledged as populist. The Lega Nord (LN) has been defined as populist by the press and many scholars (Albertazzi and McDonnell 2007). The Movimento 5 Stelle (M5S) emerged in the 2013 general elections precisely thanks to its strong populist nature

(Bordignon and Ceccarini 2013). While scholars almost uniformly agree that LN and M5S are populist parties, some disagreement remains over the classification of the Popolo delle Liberta' (PdL) and Fratelli d'Italia-Centro Destra Nazionale (FDI-CDN). Although Berlusconi has rightfully gained the 'populist', Forza Italia and the PdL coalition have been described as more similar in their organization and rhetoric to Italian mainstream parties (Albertazzi and McDonnell 2007). Still, Berlusconi's prominence among party members is widely recognized and his leadership has been fundamental to the party's electoral success (Campus and Pasquino 2006). We therefore expect, even if to a lesser extent with respect to LN and M5S, to find evidence of populist rhetoric in the PdL's official communication. Similarly, situating FDI-CDN on the populist-mainstream spectrum is also not a straightforward endeavour. Notwithstanding the far-right populist ideology of Fratelli d'Italia and of their leader Giorgia Meloni, the coalition includes the Alleanza Nazionale (AN). Unlike most other European far right-wing parties, the AN does not seem to have been influenced by trans-national populist diffusion patterns (Van Hauwaert 2014). Instead, it has progressively moved towards more moderate positions (Albertazzi and McDonnell 2007). We therefore expect to a find evidence of populist terms in the official communication of the FDI-CDN, but to a lesser extent than LN and M5S. Given this general understanding of which Italian political parties might be classified as populist, we now proceed with the empirical investigation of populist communication in Italy.

Table 1. Populism Dictionary

	Italian populist terms	*English translation*
Anti-elitism	antidemocratic*	undemocratic*
	casta Ɨ	caste
	consens*	consensus*
	corrot*	corrupt*
	disonest*	dishonest*
	elit*	elit*
	establishment Ħ	establishm*
	ingann*	deceit*
	mentir*	lie*
	menzogn*	lie*
	partitocrazia	establishm*
	propagand*	propagand*
	scandal*	scandal*
	tradim* §	betray*
	tradir* §	betray*
	tradit* §	betray*
	vergogn*	shame*
	verita'	truth*
People-centrism	abitant*	citizen*
	cittadin*	citizen*
	consumator*	consumer*
	contribuent*	taxpayer*
	elettor*	voter*
	gente	people
	popol*	popol*

This table reports the terms used in our dictionary of Italian political populism. Both Italian and English-translated terms are displayed. We append the Rooduijn and Pauwels (2011) dictionary with the following terms: (Ɨ) `casta` is a frequently used synonym of `elite`; (Ħ) the English word `establishment` is often used in reference to `partyocracy (partitocrazia)`; (§) the original dictionary by Rooduijn and Pauwels (2011) includes `tradi`, which may incorrectly ag unrelated words like `tradizione` (`tradition`)—we therefore include different Italian translations of the word `betray`, such as `tradim*`, `tradir*` and `tradit*`.

4.1.1 Constructing a dictionary of Italian political populism

In section 3.1 we have defined populism as an ideology that divides society into two opposing groups, the people and the elite. Accordingly, we construct our measure of populism with the aim of capturing specific words and expressions that relate both to the people-centric and anti-elitist components of populism. We follow previous studies in the literature (Rooduijn and Pauwels 2011; Jagers and Walgrave

2007) and measure the level of populism using a dictionary approach (see Table 1). Our dictionary is novel in that we expand upon Rooduijn and Pauwels (2011)'s dictionary by including a people-centric component. The authors chose to exclude this dimension from their dictionary, arguing that a large share of people-centric communication is composed of personal pronouns such as 'we' and 'our', which are used in speech more generally (see Rooduijn and Pauwels 2011, p.1275). We agree that such pronouns, while capturing an important aspect of the 'us-versus-them' element of the populist ideology, can overlap with irrelevant speech. However, the same argument could be made in relation to the anti-elite component of populism. Pronouns such as 'they' are also likely to be very common in both populist and unrelated discussion.

We propose an alternative approach which avoids the inclusion of pronouns entirely, while incorporating other terms that may accurately reflect the pro-people aspect of populist rhetoric, without succumbing to the problems correctly pointed out by Rooduijn and Pauwels (2011). Specifically, this dimension of our dictionary contains the Italian translations of the words indicated by Jagers and Walgrave (2007) in their description of the pro-people populist rhetoric[1]. Moreover, we make several adjustments to the Italian variant of the Rooduijn and Pauwels (2011) dictionary. We exclude the term 'politici*', which in English refers exclusively to a politician or the political class, while in Italian it can refer to many unrelated concepts since it is also an adjective. We add the term 'casta', a frequently used synonym of elite. We also remove the word 'referendum' to avoid a potentially misleading categorization of references to the widely discussed referendums on the privatisation of water services held in 2011 as instances of populist rhetoric.

4.1.2 Evaluating the validity of an Italian populist dictionary

We determine the face validity of our dictionary by performing an out-of-sample validation using a corpus of all available press releases[2] of the political parties included in our analysis[3]. The choice of this validation corpus is based on previous literature that demonstrates how press releases reliably represent party and party members ideology (e.g., Grimmer 2010). Our validation procedure follows three steps. (1) We start from a theoretical expectation on the relation between populist ideology and language complexity; (2) we collect an external source of information for each political party considered in our analysis; (3) we apply the dictionary to the

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[1] See Jagers and Walgrave (2007), p. 7.

[2] UDC is an enthusiastic member of the European People's Party (EPP), in the European Parliament. SC and CD sustain EPP's view and action. This is confirmed by the many references to EPP and to the European liberal-popular area that we have found in their press releases. To avoid confounding references to the European Popular Area-EPP with people-centric rhetoric, we have removed such references from the UDC, SC and CD press releases.

[3] We automatically retrieved the press releases (n = 16; 396) from official party websites using Python. For a detailed summary of the corpus by political party, please see Appendix A. We perform the dictionary analysis on the original text, with no pre-processing steps taken.

newly collected held-out set and observe how it performs. If the results obtained are in accordance with our theoretical expectations, we conclude that our dictionary constitutes a valid measure. As discussed above, we have rough theoretical priors about whether a party is mainstream or allegedly populist and we therefore expect populist parties to use populist words. If our dictionary constitutes a valid measure of populism, it should exhibit higher match frequencies when applied to the press releases of the allegedly populist parties.

Figure 1. Application of a populist dictionary to Italian party press releases
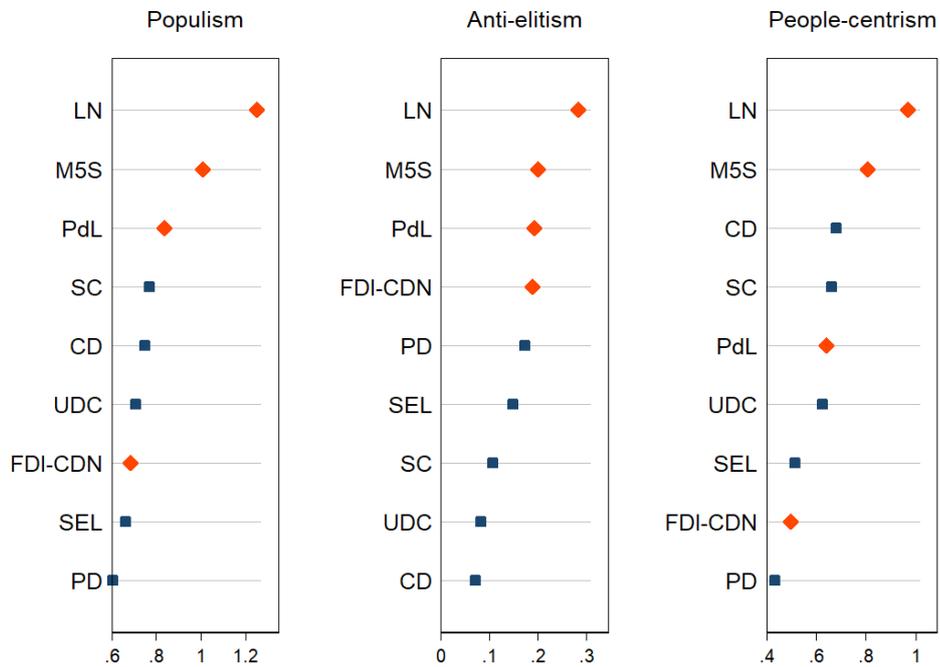
This figure displays the average percentage of populist words among all available online press releases of nine major Italian political parties (n = 16; 396). Specifically, Populism includes all terms from the components Anti-elitism and People-centrism as de ned in Table 1. Allegedly populist parties are marked with an orange diamond, mainstream parties are shown as blue squares.

The left panel of Figure 1 displays the share of populist words identified by our dictionary within a given party's corpus of press releases. Based on the discussion in Section 4.1, statistics of allegedly populist parties are marked with an orange diamond while those of mainstream parties are shown as blue squares. As expected, M5S and LN appear to be leaders in the usage of populist terms. PdL remains slightly above the median, while FDI-CDN exhibits percentages closer to those of the mainstream parties. We also observe how party press releases communicate concepts related to the two theoretical components of populism. The middle plot

of Figure 1 shows the relative frequency of anti-elitist terms by party. LN still exhibits a quite high percentage and is followed by M5S, PdL and

FDI-CDN. The right panel of Figure 1 displays the relative frequencies of people-centric terms. In line with our expectations, M5S and LN exhibit the highest share of people-centric words in their press releases. PdL also rank highly, while FDI-CDN does not seem to exhibit a consistent people-centric rhetoric in its press releases. While unexpected, the low levels of people-centrist term usage exhibited by FDI-CDN can be attributed to its strong nationalist ideology, which prefers to refer to "the people" in ethnic terms, i.e. "Italians"[4] (see also Appendix A).

Notwithstanding some inconsistencies, we find that allegedly populist parties are leaders in the usage of populist terms, while mainstream parties are less inclined to use such terms in their press releases. It is important to note, as well, that the dictionary also conforms with our theoretical expectations when applied to the parliamentary speeches, which is the corpus we rely on for the empirical tests in Section 6[5]. We are, therefore, satisfied that our metric of populist communication possesses sufficient face validity.

4.2 Selecting an indicator of language complexity for the Italian language

Measuring the complexity of language is not a simple task. Brosius et al. (2017) describe three main concepts of language complexity: simple, cognitive, and integrative complexity. Simple complexity refers to the length of words and sentences, i.e. longer words and sentences are more complex. Cognitive complexity measures the level of differentiation of a text or a speech, i.e. the larger the number of different perspectives expressed, the higher the complexity. Integrative complexity considers the degree of integration between differentiated elements. Simple complexity refers to the style used by the speaker, while cognitive and integrative complexity refer both to the style and to the content expressed.

An analysis of content complexity goes beyond the scope of this study, which concentrates on style complexity. A classic manual content analysis could more exhaustively evaluate the elaboration of the concepts expressed in the texts (Tetlock et al. 2014). Unfortunately, manual content analyses of large-scale corpora face daunting feasibility issues due to prohibitive costs in terms of time and resources, as well as sustained high costs for replication studies. The use of automated text analysis, on the contrary, allows for a much more economical analysis of large scale corpora, while also outperforming manual coding in terms of reliability (Laver and Garry 2000). While the literature offers examples of automated measures of cognitive and integrative complexity (Pennebaker and King 1999, Hermann 2005),

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[4] For a detailed discussion on the difference between people as ethnos and as demos in nationalistic and populist rhetoric, see Albertazzi and McDonnell (2007).

[5] See Appendix B for details.

to our knowledge they remain empirically underdeveloped, especially for the Italian language, and not entirely irreproachable (Tetlock et al. 2014). Therefore, we evaluate language complexity using the Gulpease index (G-index) (Lucisano and Piemontese, 1988):

$$Gulpease = 89 + \frac{300 * S_t - 10 * C}{W} \quad (1)$$

where S_t indicates the number of sentences, C the number of characters and W the number of words. The G-index assesses readability based on the average number of characters per word and of words per sentence. Higher levels of the index indicate greater readability. Most of the traditional readability metrics, such as the Flesch-Kincaid index or the Gunning fog index, have been created to assess the complexity of the English language. The use of readability indexes calibrated on the English language to study the complexity of texts written in Italian can produce inconsistencies due to the different morphological structures of the two languages (Franchina and Vacca 1986). Conversely, the G-index has been used widely by researchers who engage with the Italian language, ranging from topics such as school bullying (Gini et al. 2008) to the readability of political blogs (Bigi 2013). The index ranges from 0 to 100, where larger values indicate higher readability, i.e. lower language complexity.

5. OUTCOME AND INDEPENDENT VARIABLES

Our dependent variable is the readability of an MP's oral communication in the current Parliament (March 2013—July 2016). We focus on parliamentary speeches[6] for two reasons. First, parliamentary debates constitute an open forum for communication, where an MP can publicly explain her policy opinions to voters (Proksch and Slapin 2012). Moreover, the media enhance the communicative power of parliamentary debates by providing access to the public at large. News stations show extracts of parliamentary debates on a regular basis and many parliaments post videos of legislative speeches on their website (Proksch and Slapin 2012). The Italian Parliament is no exception as it offers live streams of debates held in the Chamber of Deputies[7] and it has a YouTube channel where it broadcasts the activities of the House[8]. Second, plenary speech reflects the actual behaviour of an MP and therefore, differently from self-reported behaviour, it enables academics to eliminate the problems related with response rates or sample bias (Martin 2011). Politicians clearly express their typical language usage when presenting their viewpoints in parliament.

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[6]We automatically retrieved speeches from the Italian Parliament website (see http://www.parlamento.it) using Python. The procedure also entails text pre-processing steps: removal of HTML tags, stop words, and formal titles like 'Ministro'.

[7] http://webtv.camera.it/home.

[8] https://www.youtube.com/user/cameradeideputati.

As mentioned in Section 4.2, we operationalize readability using the G-index[9]. We have collapsed every utterance found in the official transcript by MP and parliamentary group. This means that if an MP changed parliamentary group affiliation within the sample period, she has been measured separately after the move. Our main explanatory variable is the usage of populist terms. To measure individual-level populism we apply the populism dictionary described in Section 4.1.1 to the parliamentary speeches collapsed by MP and parliamentary group, which yields the percentage of populist words used by every MP. With this procedure we construct three explanatory variables: Populism and its subcomponents, Anti-elitism and People-centrism. Populism combines the people-centric and anti-elitist terms, giving the overall percentage of populist words employed by an MP. Anti-elitism and People-centrism measure the percentage of anti-elite and pro-people words used by an MP. Moreover, we assume that members of populist political parties will be more likely to speak in a simpler manner, relative to their counterparts in mainstream parliamentary groups. To disentangle the effect of parliamentary group affiliation from that of individual-level populism, we include parliamentary group dummies in our regression models. We also control for demographic characteristics of a given MP—age, gender, educational attainment, and professional skill level[10]. We expect more educated and higher skilled MPs to speak in a more complex manner. We do not have strong theoretical priors on gender and age.

6. Assessing the relationship between populism and language complexity

6.1 Does a populist vocabulary predict simpler language in parliamentary oral communication?

Having evaluated the face validity of our populism dictionary and described how we intend to measure language complexity, we focus on the actual language used by MPs when giving plenary speeches in the Italian parliament. Are lawmakers who use a populist vocabulary also more likely to speak in a simpler form? In other words, does the populism level of an MP influence the complexity of her spoken communication?

6.1.1 Statistical methods

We employ a set of cross-sectional multivariate linear regression models to estimate the effect of populist language, party affiliation, and demographic characteristics on

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[9] The G-index readability function has been re-engineered from the textstat readability function by Benoit et al. (2017).

[10] Table 2 in Appendix A presents summary statistics of the dependent and explanatory variables.

the spoken language readability of MPs in parliament. We have chosen an allegedly mainstream party led by a former technocrat, (SC), as the reference category for the parliamentary groups dummies[11]. In the first model we include a combined measure of populist language as the main explanatory variable, while in a second model we explain the variation of language readability with the people-centric and anti-elitist characteristics of an MP's oral communication.

Figure 2. Explaining spoken language readability in the current Italian Parliament
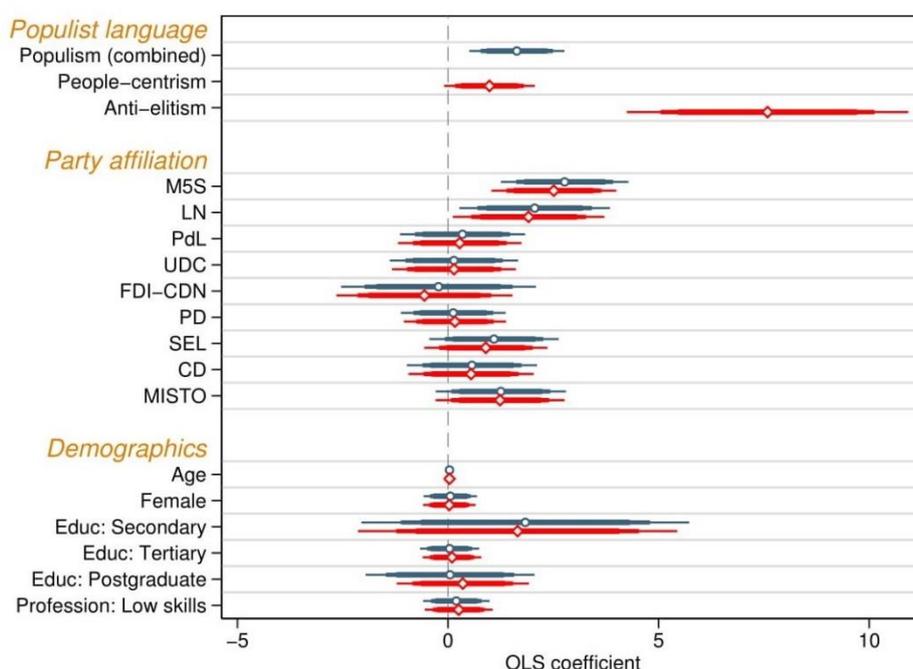
This figure displays linear regression estimates for the effect of populist ideology (combined, people-centric, and anti-elitist), party affiliation, and demographic characteristics on the readability of a given MP's plenary speeches in the 17th Italian Legislature. Regression coefficients and confidence intervals [90%, 95%, 99%] are displayed for the combined populism model (top, blue, circle) and component model (bottom, red, diamond). Standard errors are clustered by MP. See Appendix D for a table of these results.

6.1.2 Results

Figure 2 displays the regression estimates of the models described in Section 6.1.1. The results conform with our theoretical expectations. We find a statistically significant positive effect of the combined populism variable [$b = 1.63$; $p < 0.0001$].

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[11] SC is a centrist party which was founded in 2013 by Mario Monti, the outgoing Prime Minister of the 2011-2013 technocratic caretaker government.

Substantively, a shift from no populist term usage to the maximum observed frequency of populist language relates to an average increase of the G-index, from 42.9 to 50.5. Putting this in context, text with a G-index score below 40 is understood as being difficult for a secondary school reading level, while texts with a readability score below 60 are difficult for a junior secondary school reading level. We also find positive and statistically significant effects for the components of populism, people-centrism [b = 0.98; p < 0.018] and anti-elitism [b = 7.59; p < 0.0001] on language readability[12]. The substantive effects of these components are roughly equivalent in size. A minimum to maximum shift in anti-elitist and people-centric term usage corresponds roughly to an expected 4.5 points increase on the readability scale, while holding all other variables constant.

Party membership also seems to be relevant in shaping the complexity of an MP's spoken communication. In the combined populism model, we find a statistically significant positive effect of membership in the allegedly populist groups of LN [b = 2.06; p < 0.003] and M5S [b = 2.77; p < 0.0001], and in the mixed parliamentary group (MISTO) [b = 1.25; p < 0.037]. When estimating the components model, we find a similar effect: membership in the populist LN [b = 1.91; p < 0.006] and M5S [b = 2.51; p < 0.0001], and MISTO [b = 1.23; p < 0.038] remain positively and statistically significantly related with plenary speech readability, when compared to SC affiliation. Lastly, among the demographic controls, only age displays a statistically significant effect, [b = 0.034; p < 0.029], with older MPs being more likely to use a simpler language when speaking in parliament.

6.2 *Where is the party?*

In Section 6.1 we find significant and substantive effects of both individual-level populist language usage as well as populist party affiliation on the level of speech complexity in the Italian parliament. Party ideology thus seems to matter in shaping the complexity of an MP's language. In this section we exploit MP movements across parliamentary groups to further estimate the causal impact of party affiliation on language usage. Since we rely on observational data, we cannot assume that the analysed switchers are a random sample of all the MPs. To account for potential confounders, we employ a difference-in-differences (DiD) design with time and entity fixed-effects (Card and Krueger 2000; Angrist and Pischke 2008).

6.2.1 *Treatment and control groups*

In an ideal setting, we would wish to observe changes in language complexity for two groups of lawmakers: those who move from a populist to a mainstream party

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[12]We find similar results in unreported models that control for the logarithmic transformation of the populism, people-centrism, and anti-elitism variables.

and those who move in the inverse. If party effects are present, we would expect that MPs in the former (latter) group would increase (decrease) their spoken language complexity. Unfortunately, our data only include MPs who changed their affiliation from a populist to a mainstream party. Therefore, we concentrate our analysis only on the latter case to draw inferences on the effect of party switching on rhetorical style. Since we aim to estimate the isolated effect of party ideology on the complexity of an MP's spoken communication, we must consider parties that are different in terms of populist ideology, but similar with respect to ideological cohesion. In our dataset, we observe 21 MPs who moved from PdL to UDC, four from M5S to PD, and one from M5S to SC[13].

We now move to a more detailed explanation of the two treatments considered: the moves from M5S and those from PdL. Based on our discussion in Section 4.1, both movements represent, at first glance, a switch from an allegedly populist to a mainstream party. If party affiliation truly matters in shaping MPs' language complexity, we should observe a decrease in the G-index in both cases. Notwithstanding the usefulness of the ideological categorization offered by scholars and observers of the Italian politics that we present in Section 4.1, we believe that further scrutiny is necessary. We are mainly interested in two factors: (1) the magnitude of the difference in the level of populist ideology; and (2) the magnitude of the difference in the level of cohesion between the populist and mainstream parties that are relevant to a party switch. We define the level of populist ideology of a party as the average share of populist terms used by its members when speaking in parliament. Cohesion is measured as the variance of the share of populist words spoken by party members.

Based on the descriptive and statistical analyses in Section 4.1, the members of M5S, on average, use more populist terms than MPs from PD or SC[14]. There is a clear difference in populist ideology between these parties. Second, these groups are similar with respect to ideological cohesion[15]. In contrast, the difference in populism between PdL and UDC is not as clear cut. Based on our discussion in Section 4.1, our observations of populist rhetoric displayed in Appendix B, and a difference in means test, we conclude that the populist divide between UDC and PdL seems to be marginal[16]. However, the parties do show similar levels of ideological cohesion[17].

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[13] The total number of MPs moving from PdL to UDC is 21. However, two of them go back to the MISTO group after moving to UDC. Since we do not consider the move to MISTO as a treatment, we do not include these MPs in our analysis.

[14] A two-sample t-test finds a statistically significant difference in the mean levels of populism of PD/SC and M5S, at traditional levels: $t(392) = -6.891$; $p = 0.000$.

[15] We run a series of tests on the equality of variance of populist term usage between members of M5S and those of either PD or SC. We do not find statistically significant differences in these variances at traditional levels (Levene's robust test statistic: $Pr > F = 0.23$; Brown-Forsythe median statistic: $Pr > F = 0.30$; Brown-Forsythe 10% trimmed mean statistic: $Pr > F = 0.23$).

[16] We do not find a statistically significant difference in the mean share of populist term usage between members of PdL and UDC [$t(105) = 0.480$; $p = 0.632$].

[17] Levene's robust test statistic: $Pr > F = 0.15$; Brown-Forsythe median statistic: $Pr > F =$

While conventional wisdom on Italian populism would consider the two treatments as comparable, deeper inspection shows that a switch from M5S to PD/SC constitutes a *strong treatment*, while a move from PdL to UDC constitutes a *weaker treatment[18]*.

6.2.2 Statistical methods

Since the MPs included in our analysis who changed parliamentary group did so at different points in time, we have multiple treatment groups. To estimate our staggered-DiD model we regress the following time and entity fixed-effects model[19]:

$$G_{it} = a_i + \lambda_t + \beta D_{it} + \varepsilon_{it} \quad (2)$$

where G_{it} is the G-index of readability for individual i at yearly quarter t, a_i and λ_t are the entity and time fixed effects (FE), and D_{it} is an indicator for whether the treatment is present in quarter t for individual i. We also cluster standard errors on MPs to correct for heteroskedasticity and autocorrelation (see Bertrand et al. 2004).

When data on the same individuals are available over time, the treatment itself may not be randomly assigned, i.e. individuals with certain characteristics can be more likely to receive the treatment. Still, the identifying assumption for the FE model is that the treatment is only determined by individual fixed effect a_i. We therefore assume that an MP's choice to leave her parliamentary group is determined only by her own individual, time invariant, characteristics (see Pischke 2005, p. 12)[20]. Using individual-level panel data allows for a non-random treatment, but it still requires that the treatment and control groups exhibit parallel trends over time before the treatment occurs. In a model with multiple treatment groups, providing a simple visual inspection of parallel paths becomes unfeasible (see Pischke 2005, p. 7). We, therefore, present a formal test in Appendix E which demonstrates the presence of pre-treatment parallel trends.

0:24; Brown-Forsythe 10% trimmed mean statistic: Pr > F = 0:19).

[18]A common practice among Italian MPs is to join the mixed parliamentary group, (MISTO), before moving to a parliamentary group 'owned' by political party. When this is the case, we assume that the MP receives the treatment after entering a 'party-owned' parliamentary group. The MISTO intermediate step does not qualify as the treatment since the group is not led by a political party.

[19] See Autor (2003), Stevenson and Wolfers (2006).

[20]Notwithstanding the notorious habit of the M5S of banning members of the movement who explicitly disagree with the party leaders, the assumption still seems reasonable in this case, given that all the observed moves were voluntary.

Table 2. Time and entity FE estimates

	(a) M5S → PD/SC	(b) PdL → UDC
Treatment effect (DiD)	-3.177**	0.612
	(1.101)	(2.129)
Entity fixed effects	Yes	Yes
Time fixed effects	Yes	Yes
N	629	654
Treated units	5	19
Control units	73	53
Standard errors in parentheses	$p < 0.10$, * $p < 0.05$, ** $p < 0.01$	

This table displays the results of DiD models which estimate the effect of joining a mainstream parliamentary group from a populist group on plenary oral language readability. Column (a) displays the results of a move from M5S to PD or SC. Column (b) shows the results of a switch from PdL to UDC. Robust standard errors in parenthesis are clustered by MP.

6.2.3 Results

Table 2 shows the results for MPs moving, respectively, from M5s and PdL. In the M5S case, the treatment has a statistically significant negative effect [$b = -3.115$; $p < 0.01$]. Moving from M5S to a mainstream parliamentary group (either PD or SC) produces an expected decrease of 3.2 points in the G-Index of readability of an MP, independently from her ideology (sample mean = 46.4 points, range = 63 points). Conversely, moving from PdL to UDC does not have a statistically significant effect on readability. We thus find evidence of party effects only in one of the two cases analysed. We do not observe significant differences in the treatment effects after controlling for potentially time-variant individual-level populism (see Appendix D). So, where is the party? Given that we do not observe party effects when an MP moves from an allegedly populist party like PdL to a mainstream-centrist party like UDC, one might argue that party ideology does not matter in shaping the communication behaviour of MPs. However, we do observe a significant shift in language complexity for MPs moving from M5S to PD/SC. We argue that such mixed evidence is not produced by idiosyncrasies, but by the structurally different treatments involved. While both cases consider a shift between parties with similar ideological cohesion, M5S and PdL exhibits different *degrees of populism*. While M5S owes its electoral success mainly to its strong populist ideology, PdL has entirely delegated the expression of populism to its leader, while remaining similar in its structure and organization to the other mainstream Italian parties. To attach the populist label to both parties, without further distinction, would be prohibitively reductive. MPs who move from PdL to UDC do not significantly change their communication behaviour, therefore, because the change in party ideology to which they are subject is not substantively meaningful.

7. DISCUSSION

This study investigates the relationship between populism and language complexity. The results of our regression analysis suggest that populist ideology influences the complexity of the language used by Italian MPs, at the individual and party levels. In our quasi-experiment, we observe a significant party membership effect on language complexity for former members of M5S and no discernible effect on legislators who left PdL. Although these results appear as mixed, we argue that they largely depend on the structurally different treatments involved. Namely, the populist ideological distance between M5S and PD/SC is much larger than that between PdL and UDC.

Here we stress the importance of the *level* of populism in a given party. While scholars usually categorize political parties as either populist or mainstream, our analysis shows that the populist ideology should not be reduced to a dichotomous variable. A few authors have already moved in this direction. Rooduijn and Pauwels (2011) determine the strength of populist attitudes using word frequencies, Akkerman et al. (2014) evaluate voters' populist attitudes on a Likert Scale, Caiani and Graziano (2016) produce an additive populism index for political parties. Our study further confirms the suitability of continuous measures of populism.

Moreover, we speak to a general debate on political populism and communication. There is scholarly disagreement on whether populism should be defined as an ideology (Mudde 2004) or simply as a discursive strategy (Bonikowski and Gidron 2016), while others argue that ideology determines the rhetorical style of populist parties (Jagers and Walgrave 2007). We build on Jagers and Walgrave (2007)'s conception, arguing that the usage of populist terms by a political actor is determined by her populist ideology. Our central conclusion, though, is that populist rhetoric is not only characterized by the use of 'populist' terms, but also by the intrinsic simplicity of the language employed by populists. In other words, language simplicity could be thought of as a feature of populist political communication.

Given that our study is of a single country over a relatively brief timeframe, we appeal to future contributions to provide further insights. A widening of the scope of analysis will help inform our understanding of the ability of populist actors to outperform their mainstream counterparts when competing for voters' support. Bischof and Senninger (2017), indeed, demonstrate that individuals are better able to grasp the ideological positions of parties that present their campaign messaging using a simpler language. In the age of social media and a maximum limit of 280 characters per Tweet, a simple political communication style constitutes a competitive advantage in the contemporary marketplace of ideas. While mainstream policy solutions are indeed more complex than the opportunistic positions held by populist politicians, mainstream actors should strive to deliver their ideas in a more straightforward manner when communicating with the electorate.

REFERENCES

Akkerman, A., Mudde, C., Zaslove, A., 2014. How populist are the people? Measuring populist attitudes in voters. Comparative political studies 47 (9), 1324–1353.

Albertazzi, D., McDonnell, D., 2007. Twenty-first century populism. Palgrave Macmillan.

Angrist, J. D., Pischke, J.-S., 2008. Mostly harmless econometrics: An empiricist's companion. Princeton university press.

Autor, D. H., 2003. Outsourcing at will: The contribution of unjust dismissal doctrine to the growth of employment outsourcing. Journal of labor economics 21 (1), 1–42.

Benoit, K., Watanabe, K., Nulty, P., Obeng, A., Wang, H., Lauderdale, B., Lowe, W., 2017. quanteda: Quantitative Analysis of Textual Data. R package version 0.9.9-65. URL http://quanteda.io

Bertrand, M., Duo, E., Mullainathan, S., 2004. How much should we trust differences-in-differences estimates? The Quarterly journal of economics 119 (1), 249–275..

Bigi, A., 2013. Viral political communication and readability: an analysis of an Italian political blog. Journal of Public Affairs 13 (2), 209–217.

Bischof, D., Senninger, R., 2017. Simple politics for the people? complexity in campaign messages and political knowledge. European Journal of Political Research.

Bjornsson, C. H., 1968. Lasbarhet. Liber.

Bonikowski, B., Gidron, N., 2016. The populist style in american politics: Presidential campaign discourse, 1952-1996. Social Forces 94 (4).

Bordignon, F., Ceccarini, L., 2013. Five stars and a cricket. Beppe grillo shakes Italian politics. South European Society and Politics 18 (4), 427–449.

Bos, L., Van Der Brug, W., De Vreese, C. H., 2013. An experimental test of the impact of style and rhetoric on the perception of right-wing populist and mainstream party leaders. Acta Politica 48 (2), 192–208.

Bracciale, R., Martella, A., 2017. Define the populist political communication style: the case of italian political leaders on twitter. Information, Communication & Society, 1–20.

Brosius, A., Bakker, B., Schoonvelde, M., Schumacher, G., 2017. Evaluating complexity in political speech. The Euengage working paper series.

Caiani, M., Graziano, P. R., 2016. Varieties of populism: insights from the italian case. Italian Political Science Review/Rivista Italiana di Scienza Politica 46 (2), 243–267.

Campus, D., Pasquino, G., 2006. Leadership in italy: The changing role of leaders in elections and in government. Journal of Contemporary European Studies 14 (1), 25–40.

Card, D., Krueger, A. B., 2000. Minimum wages and employment: a case study of the fastfood industry in new jersey and pennsylvania: reply. The American Economic Review 90 (5), 1397–1420.

Conway, L. G., Conway, K. R., Gornick, L. J., Houck, S. C., 2014. Automated integrative complexity. Political Psychology 35 (5), 603–624.

Davies, P., 2012. The national front in France: Ideology, discourse and power. Routledge.

Degani, M., 2016. Endangered intellect: a case study of clinton vs trump campaign discourse. Rivista semestrale ISSN 2281, 4582.

Dell'Orletta, F., Montemagni, S., Venturi, G., 2011. Read-it: Assessing readability of Italian texts with a view to text simplification. In: Proceedings of the second workshop on speech and language processing for assistive technologies. Association for Computational Linguistics, pp. 73–83.

Dramnescu, M., 2014. Communication. political speech. populist speech. Topical Communication Uncertainties 242.

Dunning, T., 2012. Natural experiments in the social sciences: A design-based approach. Cambridge University Press.

Fella, S., Ruzza, C., 2013. Populism and the fall of the centre-right in italy: The end of the berlusconi model or a new beginning? Journal of Contemporary European Studies 21 (1), 38–52.

Franchina, V., Vacca, R., 1986. Adaptation of Flesh readability index on a bilingual text written by the same author both in italian and english languages. Linguaggi 3, 47–49.

Gerner, D. J., Schrodt, P. A., Francisco, R. A., Weddle, J. L., 1994. Machine coding of event data using regional and international sources. International Studies Quarterly 38 (1), 91–119.

Gini, G., Pozzoli, T., Borghi, F., Franzoni, L., 2008. The role of bystanders in students' perception of bullying and sense of safety. Journal of school psychology 46 (6), 617–638.

Grimmer, J., 2010. A bayesian hierarchical topic model for political texts: Measuring expressed agendas in senate press releases. Political Analysis 18, 1–35.

Hawkins, K. A., 2009. Is chavez populist? measuring populist discourse in comparative perspective. Comparative Political Studies 42 (8), 1040–1067.

Hermann, M. G., 2005. Assessing leadership style: A trait analysis. The psychological assessment of political leaders, 178–212.

Jagers, J., Walgrave, S., 2007. Populism as political communication style: An empirical study of political parties' discourse in belgium. European Journal of Political Research 46 (3), 319–345.

Kam, C. J., 2009. Party discipline and parliamentary politics. Cambridge University Press.

Kincaid, J. P., Fishburne Jr, R. P., Rogers, R. L., Chissom, B. S., 1975. Derivation of new readability formulas (automated readability index, fog count and esch reading ease formula) for navy enlisted personnel. Tech. rep., DTIC Document.

Kramsch, C., 1998. Language and culture. Oxford University Press.

Krehbiel, K., 1993. Where's the party? British Journal of Political Science 23 (2), 235–266.

Kriesi, H., Lachat, R., Selb, P., Bornschier, S., Helbling, M., 2005. Der aufstieg der svp: Acht kantone im vergleich. NZZ Verlag.

Laver, M., Garry, J., 2000. Estimating policy positions from political texts. American Journal of Political Science, 619–634.

Lubello, S., 2016. Manuale di linguistica italiana. Vol. 13. Walter de Gruyter GmbH & Co KG.

Lucisano, P., Piemontese, M. E., 1988. Gulpease: una formula per la predizione della difficolta' dei testi in lingua italiana. Scuola e citta' 3 (31), 110–124.

Martin, S., 2011. Using parliamentary questions to measure constituency focus: An application to the irish case. Political Studies 59 (2), 472–488.

McCarty, N., 2001. The hunt for party discipline in congress. American Political Science Review 95 (3), 673–687.

Mershon, C., 2014. Legislative party switching. Oxford University Press Oxford.

Mudde, C., 2004. The populist zeitgeist. Government and opposition 39 (4), 542–563.

Pauwels, T., 2011. Measuring populism: A quantitative text analysis of party literature in belgium. Journal of Elections, Public Opinion and Parties 21 (1), 97–119.

Pennebaker, J. W., King, L. A., 1999. Linguistic styles: language use as an individual difference. Journal of personality and social psychology 77 (6), 1296.

Pischke, J., 2005. Empirical methods in applied economics: Lecture notes. Downloaded July 24, 2015.

Proksch, S.-O., Slapin, J. B., 2012. Institutional foundations of legislative speech. American Journal of Political Science 56 (3), 520–537.

Rooduijn, M., 2014. The nucleus of populism: In search of the lowest common denominator. Government and Opposition 49 (4), 573{599.

Rooduijn, M., Pauwels, T., 2011. Measuring populism: Comparing two methods of content analysis. West European Politics 34 (6), 1272–1283.

Rosenthal, H., Voeten, E., 2004. Analyzing roll calls with perfect spatial voting: France 1946–1958. American Journal of Political Science 48 (3), 620–632.

Schumacher, E., Eskenazi, M., 2016. A readability analysis of campaign speeches from the 2016 us presidential campaign. arXiv preprint arXiv:1603.05739.

Stevenson, B., Wolfers, J., 2006. Bargaining in the shadow of the law: Divorce laws and family distress. The Quarterly Journal of Economics 121 (1), 267–288.

Tarchi, M., 2003. L'Italia populista: dal qualunquismo ai girotondi. Vol. 147. Il mulino.

Tetlock, P. E., Metz, S. E., Scott, S. E., Suedfeld, P., 2014. Integrative complexity coding raises integratively complex issues. Political Psychology 35 (5), 625–634

Van Hauwaert, S. M., 2014. Trans-national diffusion patterns and the future of far-right party research: Independence vs. interdependence. European Journal of Futures Research 2 (1), 1.

Verbeek, B., Zaslove, A., 2016. Italy: a case of mutating populism? Democratization 23 (2), 304–323.

Zanatta, L., 2002. Il populismo. sul nucleo forte di un'ideologia debole. Polis 16 (2), 263–294.

Zaslove, A., 2008. Here to stay? populism as a new party type. European review 16 (03), 319–336.