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# Strategic Campaign Communication: Evidence from 30,000 Candidate Manifestos

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**Abstract**

In representative democracy, individual candidates often run for parliamentary seats under a national party platform, which limits their ability to compete on policy issues at the local level. I exploit a novel dataset of 30,000 candidate manifestos issued before the first and second rounds of nine French legislative elections to show that politicians strategically adjust their campaign communication to persuade voters who do not support their platform—not by moderating their policy positions but by advertising neutral non-policy issues instead. Doing so predicts better performance in office and may therefore provide voters with information that matters for representation.

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# 1 Introduction

Democracy relies on electoral competition, yet we know surprisingly little about how politicians compete against each other. A large literature assumes that candidates can freely choose their policy position and adopt the platform that maximizes their chances of winning the election (Downs 1957).[1] Another view is that politicians have their own policy preferences and cannot commit to implementing their electorate's preferred platform (Osborne and Slivinski 1996; Besley and Coate 1997). This dichotomy omits the fact that, in representative democracy, parliamentary elections are often held between candidates who compete at the local level (a district) while belonging to a party seeking majority in a national parliament. Examples of such elections include general elections in the UK, Canada or France, and congressional elections in the US. Whether they have their own preferences or not, running under the umbrella of a common party platform may prevent office-motivated politicians from strategically adapting their policy positions to the preferences of their electorate and to the positions of their local competitors.[2]

This paper shows that individual candidates use their campaign communication to persuade voters, not by adjusting their own policy positions but by choosing when to talk about the policy positions of their party and when to advertise neutral, non-policy issues instead. To carry this analysis, I assemble and analyze a novel dataset of more than 30,000 candidate manifestos issued before the first and second rounds of nine French legislative elections between 1958 and 1993. This unique dataset provides several benefits.

First, candidate manifestos provide a systematic record of the campaign messages sent by every competing politician (more than 24,000 in my sample). During the electoral season, candidates use language and rhetoric to communicate with voters, which helps the latter make an informed vote choice (Holbrook 1996). However, in most countries there is no record of campaigns ran by individual politicians at the local level, and studies of campaign messages are limited to either party manifestos (e.g., the Comparative Manifesto Project (Merz et al. 2016)) or

[1] The median voter theorem states that, under certain conditions, candidates will converge to the platform preferred by the median voter in the electorate in order to be elected.

[2] Partisan constraints are particularly stringent in parliamentary systems with strong party discipline, where elected representatives issue and vote on bills as instructed by their party (Schwarz et al. 2017). As an example, a French Socialist candidate or a UK Labour candidate may not credibly promise that they will support tax cuts on the wealthiest once elected, when their overall party is pushing for the opposite policy—even if voters in their local district would indeed prefer a tax cut.

statements of national candidates (e.g., the American Presidendy Project (Woolley and Peters 2017)). In France, individual candidates issue their own campaign manifestos, which are mailed by the state to all registered voters a few days before the election. They represent a primary method of communication for politicians to address their constituents directly, and for citizens to learn information about their district-specific candidates—beyond the national campaign of their party. Second, the dataset contains campaign messages sent by the same individual at different stages of the competition. In the French two-round electoral system,[3] candidates who make it to the runoff extend their campaign for one more week—and issue a new manifesto. They face a reduced set of competitors in the second round and need to secure the support of their own voters while appealing to those who have voted for a different candidate in the first round. I use various methods of computational text analysis to characterize how candidates adjust their electoral discourse as they adapt their strategy to this new competitive environment.

First, I scale the manifestos on the left-right dimension of language. I adopt a supervised method that uses the known party affiliations of candidates to give each manifesto a partisan score, which reflects the prevalence of polarized words spoken relatively more often by left-wing as opposed to right-wing candidates (and vice-versa). This approach yields a first (non-mechanical) result: the ideological content of candidates' communication closely follows their party's location on the left-right scale, and candidates from the same party tend to use similar language—as one would expect knowing that they run under a common party platform. Interestingly, I find that candidates endorsed by extreme parties do use more polarized rhetoric than candidates endorsed by more centrist parties.

Next, I leverage the large number of repeated candidate manifestos in my dataset (close to 7,000) to provide evidence that candidates moderate their discourse in the runoff. I measure the within-candidate change in partisan score between election rounds and find that, on average, individual *"extremeness"* is reduced by a fourth of the observed mean extremeness in the first round. This estimate corresponds to a significant shift in content, equivalent to replacing about 20% of partisan words with completely neutral words, or to replacing 40% of those partisan words with partisan words from the opposite ideological side. Discourse moderation between

[3]Two-round systems are common round the world. Examples include local elections in Italy, statewide elections in a number of US states, and most presidential elections outside the US.

election rounds corresponds to about a half of the overall difference in mean extremeness between second- and first-round manifestos—while the other half is explained by the runoff qualification of candidates who issued more moderate manifestos than average in the first round.

Discourse modration on the left-right scale is consistent with a Downsian model of electoral competition, in which candidates change their policy positions to attract voters who support a more centrist platform. Individual politicians tied to a national party platform might choose to emphasize some of the platform's policy proposals over others, or to deviate from the plaform altogether and advertise different policy positions—at the risk of not being credible. But a series of additional tests shows that discourse moderation in the partisan space does *not* reflect policy moderation. Instead, it corresponds to a shift in communication strategy—from writing a manifesto focused on the party platform, where policy positions are very salient, to writing a more personalized manifesto, where the salient issues are less partisan, non-policy issues instead. First, I provide evidence that, along with moderating their discourse on the left-right scale, candidates tend to use less party-specific language in the runoff. This result holds for candidates affiliated with extreme parties who support a polarized platform, but it also holds for centrist candidates whose party rhetoric and policy positions are already moderate in the first round. Hence discourse moderation is unlikely to be driven by candidates adopting more centrist positions, or advertising only the most moderate policy proposals of their party platform. In addition, candidates tend to choose words that are more neutral in the runoff, as opposed to using polarized words from both ideological sides—so discourse moderation is also unlikely to be driven by candidates adopting the policy positions of their opponent. In fact, words that are most often dropped are words referring to policy issues, such as *"firm"*, *"economy"*, *"family"* or *"safety"*. At the same time, candidates shift to refer to their own names and their opponents' names, as well as local places around their district, more often. I conclude that discourse moderation reflects the personalization and the *"depolicization"* of campaign communication between election rounds.

To interpret these results, I present a framework in which candidates may choose which dimension to campaign on: the policy dimension—which is partisan—or a different dimension that is not about policy and that does not divide voters along the traditional partisan lines. For instance, candidates can advertise their own ability, experience, or attachment to their local

district. They can also attack their opponents for lacking such attributes. Focusing on the non-policy dimension is likely easier for *"high-quality"* politicians, who have good rhetorical skills and political abilities. Campaigning on non-policy issues and signaling one's quality is likely to attract voters who do not strongly support any of the policy platforms available on the ballot. It may also cost politicians the support of some core ideological voters, disappointed to see their preferred candidate silence their party's positions. Hence candidates face a trade-off between using partisan arguments to secure their base and running a more personalized campaign with neutral content to persuade new voters. In a two-round election, the net benefits of adopting this second strategy are likely higher in the runoff, when fewer candidates are present on the ballot and a larger share of voters have weak preferences over the remaining plaftorms. Hence this simple framework predicts discourse moderation on the left-right scale, as some candidates shift from partisan policy issues in the first round to neutral non-policy issues in the second. It yields another set of predictions pertaining to the type of candidates who moderate their discourse and their reasons for doing so, which I can empirically test for.

First, I provide evidence that moderating one's discourse is neither random nor common to all candidates—as would be the case if politicians simply seeked to diversify their communication between election rounds—but reflects a strategic decision from more vulnerable candidates, who have fewer base voters to lose. I find that within the same party, discourse moderation is negatively correlated with several measures of observed electoral advantage. For instance, a 10-percentage-point increase in the vote share received in the first round is associated with a 10% decrease in discourse moderation, relative to the overall mean discourse moderation in the sample. I also show that discourse moderation predicts lower electoral success: a one standard-deviation increase in discourse moderation reduces the predicted probability of winning by 3 percentage points, even when controlling for observed measures of electoral vulnerability. While this result could reflect a negative causal impact of discourse moderation on electoral success, I provide additional evidence consistent with a selection effect: using candidate fixed effects over time, I find that among politicians affiliated with the same party, those who decide to switch to non-policy issues in the second round are those whose chances of winning are systematically lower, regardless of their campaign strategy.

Next, I do not find any evidence that changes in discourse during the campaign map into more or less extreme bill proposals once elected—which further suggests that discourse moderation does not reflect policy moderation but conveys another type of information. Consistent with the prediction that candidates who campaign on non-policy issues tend to be high-quality politicians, I find that discourse moderation correlates with subsequent performance in office. Using data on the legislative activity of each representative (Gavoille and Verschelde 2017), I show that politicians who were elected after moderating their discourse between election rounds tend to engage in more activity, including activities that favor charismatic politicians with good rhetorical skills—such as speaking up during legislative debates—and activities focused on non-partisan constituency service—such as issuing written questions to the government on their constituents' behalf.

Overall, this paper suggests that while party competition is certainly important, competition between individual politicians also shapes their campaign strategies and the type of information made available to voters. Beyond the French context that I study, these findings provide insights for any democracy where national representation is defined by political parties. More broadly, they could be relevant to (non-electoral) forms of economic competition between agents who are constrained by a national brand and may choose either to advertise that brand or to personalize their communication away from the brand's core values depending on their local market and local competitors.

### 1.1 Contribution to the literature

My methods and results contribute to several strands of the literature. First, they document how politicians under electoral pressure engage in strategic behavior at the individual level. Using party (not candidate) manifestos or statements in the media, existing papers have provided empirical evidence that parties may change their policy positions as a response to changes in competition.[4] However, *individual* candidate response to electoral incentives has been investigated much less, primarily due to data limitations. Measures of ideological positions are often limited to the post-election behavior of elected politicians, such as roll-call voting (Poole and Rosenthal 1985; Lee et al. 2004), legislative debates and speeches (Gentzkow et al. 2019b; Perry and Benoit 2017; Ash et al. 2017). Attempts to estimate the ideological position of all

[4]For an extensive literature review on party positioning, see Adams (2012).

candidates—as opposed to elected ones—have used candidate surveys (Ansolabehere et al. 2001) or less direct measures of policy preferences such as campaign donations (Bonica 2014, 2018). A few studies have looked at candidate repositioning in experimental settings (Tomz and Van Houweling 2014), and others have exploited observational data to compare ideological positions between primary and general election candidates using campaign donations (Hall and Snyder 2015) or speeches Acree et al. (2020); between incumbents and challengers using television advertisements (Henderson 2016); and between multi-member and single-member districts using candidate manifestos (Catalinac 2018). Finally, Enke (2020) studies the variation in moral appeal from documents issued by Hillary Clinton and Donald Trump over the 2016 campaign.

To the best of my knowledge, this paper is the first to measure within-candidate rhetorical adjustments over the electoral season in a systematic way, using actual campaign messages issued by a large sample of individual politicians, as opposed to national parties or elected legislators only. Importantly, I provide evidence of discourse moderation that is not policy moderation. To carry this empirical analysis, I borrow from an emerging literature that uses text as data to measure discourse polarization (Grimmer and Stewart 2013; Gentzkow et al. 2019a). While the main results are built on a simple scaling approach based on Wordscores (Laver et al. 2003), they are robust to multiple other methods.[5]

More generally, my findings relate to research on electoral campaigns and political advertisement, which have been found to influence voters' choice.[6] Experimental evidence shows that voters respond to information on candidates' platforms (Tomz and Van Houweling 2008; Kendall et al. 2015) and care about campaign promises when they are made explicit (Cruz et al. 2018). Unlike previous contributions, this paper exploits campaign statements issued *"in the wild"* by all candidates and distributed to all voters. They make a particularly appealing dataset as one may reasonably expect politicians to use this controllable communication medium in the best and most strategic way—however marginal the impact on voters' choice might be.

Finally, the paper contributes to a relatively recent literature on two-round electoral systems and provides evidence of strategic discourse adjustments between rounds. Since the contribution of Duverger (1955), many studies have exploited runoff elections to study the prevalence and

[5] Alternative methods include those presented in Taddy (2013) and Gentzkow et al. (2019b).

[6] For instance, see Ansolabehere and Iyengar (1997); Hillygus and Shields (2008); DellaVigna and Gentzkow (2010); Gerber et al. (2011); Pons (2018); Spenkuch and Toniatti (2018); Bekkouche and Cagé (2019); Le Pennec and Pons (2020).

impact of strategic and expressive voting (Cox 1997; Piketty 2000; Blais et al. 2007; Fujiwara et al. 2011; Bouton 2013; Bouton and Castanheira 2012; Pons and Tricaud 2018), candidate entry and policy volatility (Bordignon et al. 2016), or longer and more divisive electoral competition (Fouirnaies and Hall 2020). When it comes to candidates' realignment, Laver et al. (2006) argues that—in the context of French presidential elections, *"given the short time between rounds (i.e., two weeks), it also seems reasonable to assume that candidates cannot dramatically change policy positions between the two rounds in any credible way."* While I support the claim that candidates cannot switch policy positions between rounds, I show that they can adjust other aspects of their campaign communications instead.

The remainder of the paper is organized as follows. Section 2 presents the institutional setting and data. Section 3 provides evidence of discourse moderation and personalization between election rounds. Section 4 interprets this finding and discusses a simple framework in which candidates strategically choose when to campaign on their party platform and when to advertise consensus-based non-policy issues instead. Section 5 tests for the prediction that discourse moderation is a strategic decision from electorally vulnerable candidates and from high-quality politicians. Finally, Section 6 concludes.

## 2 Institutional context and data

### 2.1 Legislative elections in France

Legislative elections are typically held every five years to elect about 550[7] representatives (*"députés"*) at the bicameral Parliament's lower house, the *"Assemblée nationale"* (or henceforth: AN). These representatives are elected by all French citizens aged eighteen or above under a two-round uninominal plurality rule in a multiparty setting. Multiple individual candidates compete for one seat in each district (*"circonscription"*). A candidate is elected after the first election round if she receives an absolute majority of votes (50% of the valid ballots) representing at least 25% of the number of registered voters. Otherwise, a second round is held one or two weeks later, in which all candidates who received enough votes can run. If less than two candidates pass the qualifying threshold, the first two candidates run against each other in the

[7] The total number of representatives varies across elections.

runoff. The candidate who gets the most votes in the second round wins the election. While a few districts have three, four, or sometimes only one candidate running in the second round, a vast majority of them (close to 80%) end up with two candidates on the ballot. Typically, a candidate who makes it to the runoff would face other candidates affiliated with sister parties from the same political orientation (e.g., Socialist and Communist parties on the left) in the first round, and a strong competitor from the opposite orientation in the second round (e.g., a left-wing Socialist candidate against a right-wing Gaullist candidate). More specifically, 70% of the runoff candidates in the sample face an opponent from the opposite political orientation—left or right—in the second round.

The main sample used in this paper covers nine legislative elections since the beginning of the French Fifth Republic: 1958, 1967, 1968, 1973, 1978, 1981, 1988, and 1993.

**Party affiliations** Candidates may declare a party endorsement when filing their individual candidacy to the Ministry of the Interior prior to the election. The Ministry then uses the self-reported party affiliations to report electoral results by party—or coalition of parties—which is what I observe in my data.[8] Candidates who do not want to run under a party ticket or fail to secure a party endorsement may still run as independents—in which case they do not benefit from the political and financial resources of a national party organization, the public recognition of the party name, or the support of voters who strongly identify with a specific party. As pointed by Snyder and Ting (2002), party labels are particularly useful as they provide voters with a strong signal of candidates' policy preferences. The possible benefit of running unaffiliated, however, is a greater flexibility in position taking and the support of voters who may not like any of the parties running a candidate in their district. In my sample, while 25% of the candidates present in the first round are identified as independent candidates, only 3% of them make it to the runoff. Hence, an overwhelming majority of candidates who get an opportunity to adjust their campaign strategy between election rounds chose to run with a party affiliation.[9]

[8]The Ministry of the Interior identifies between 5 and 17 different parties per election year.

[9]There is no legal process for candidate selection and endorsement within a party. In all likelihood, parties endorse and allocate candidates to districts in order to maximize their chances of winning seats, taking into account factors such as politician quality and local competition (Gavoille and Verschelde 2017).

A last key feature of the French parliamentary system is the strong party discipline (Sauger 2009) that constrains elected representatives. Similar to British MPs, French *"députés"* are elected on a party ticket and have a negligible personal vote once in office (Eggers and Spirling 2014).

Following the existing literature,[10] I use the official party labels provided by the Ministry of the Interior to classify candidates (including independent ones) between five partisan families: far left, moderate left, center, moderate right and far right. About 9% of the candidates in my sample do not fall in any of these traditional ideological categories and are refered to as *"non-classified"*. In the rest of the paper, I refer to political orientation as the broader categories *"left"* (far left and moderate left) and *"right"* (far right and moderate right), unless specified otherwise.

### 2.2 Candidate manifestos

During the official campaign, individual candidates have the right to issue one electoral manifesto (*"profession de foi"* or *"circulaire"*) before each election round.[11] Examples of candidate manifestos are provided in Appendix Figures A1 through A4. The preparation and printing costs are part of the official campaign expenditures that are fully reimbursed by the state[12]. These two-page documents are then mailed to all registered voters, in a single envelope, by the state.

Survey evidence depicts these manifestos as an important campaign tool. In a survey published before the 2017 presidential election (OpinionWay, 2017), 24% of citizens declared that they counted manifestos among the three most important ways of gathering information about candidates. In comparison, television was mentioned by 64%, online media by 26%, printed news by 18%, and the radio by 15%. The fact that, in 2017, candidate manifestos were mentioned about as often as online media suggests that they are not a negligible part of the heavy campaign communication voters receive during the weeks leading up to the election. In all likelihood, this number is a lower bound for the share of voters who learned about their candidates through the manifestos over my sample period, when much fewer media options were available to individual politicians. Of course, television was already an important medium of communication during this time. But while television shows and debates are the prominent media for candidates who

[10] E.g., Pons and Tricaud (2018)

[11] These candidate manifestos are distinct from their national party manifesto

[12] The state refunds all official expenditures (*"dépenses officielles"*) and up to 47.5% of other expenditures to candidates who received more than 5% of the votes in the first round.

campaign at the national level—such as candidates for the presidential elections or party leaders who advertise their national platform before the legislative elections—it is unlikely that voters learn much about the individual candidates running in their district on TV. Conversely, individual manifestos are a prime vehicle for candidates to run their own campaign communication and tailor the message to the specific voters in their district.

This paper exploits a novel dataset of manifestos from candidates running in French legislative elections between 1958 and 1993. Manifestos issued over that period were collected by the CEVIPOF and recently digitized by the CEVIPOF and the SciencesPo Library (Gaultier-Voituriez 2015, 2016). The digitized corpus is publicly available online through the Archelec project.[13] Appendix B.1 provides additional details on both the original corpus and how the final dataset is contructed. In particular, it describes the steps I followed to disaggregate the CEVIPOF corpus, digitized at the district×election round level, into a corpus of single-candidate manifestos—where each manifesto's author was identified manually and linked to candidate-level electoral results using fuzzy string matching.[14] The final dataset contains 31,314 manifestos, including first-round manifestos for 90% of all candidates competing in a first election round, and both first- and second- round manifestos for 86% of candidates present on a runoff ballot[15] in metropolitan France over the 1958-1993 period. More precisely, I observe repeated manifestos for 6,793 candidates across 3,312 district-level races. As shown in Appendix Table A1, the observable characteristics of these candidates are comparable to those of all runoff candidates—including those whose manifestos are missing.

Appendix Table A2 provides summary statistics at the district level for all 4,224 races included in the sample—including those in which a runoff was not held—by election year. The average number of candidates per district ranges from 5 to 9 in the first round, with an overall mean of 6 candidates. 81% of the districts hold a runoff election, with an average of 2 to 3 candidates competing in the second round. Finally, turnout is quite high, at an average of 75% in both rounds, without any systematic pattern of increased or decreased turnout between election rounds.

[13] https://archive.org/details/archiveselectoralesducevipof/

[14] Data on electoral results at the candidate level were generously provided by Vincent Pons and Clémence Tricaud (for the election year 1978), Abel François (for the election year 1993) and Nicolas Sauger (for all other years).

[15] Candidates without any manifesto account for 13% of all candidates over that period. They are either very minor candidates who did not issue a manifesto, or their manifesto is missing because in some election years, a few local agencies did not mail the candidates' manifestos to the CEVIPOF, despite official government's instructions.

I complement the main sample with manifestos issued before the 2017 election, which were made available online by the French Ministry of the Interior prior to the election.[16] I will use this shorter corpus to show that patterns of discourse adjustment measured up until 1993 still hold true today. As described in Appendix B.1, manifestos issued between 1993 and 2017 are currently unavailable.

### 2.3 Legislative activity

I collect data on the legislative activity of elected representatives from several sources. First, I exploit the dataset constructed by Gavoille and Verschelde (2017) from the *"Tables nominatives"* of each representative. It provides the yearly number of (a) bills that the representative worked on as primary author, (b) public interventions during legislative debates, (c) reports on bill proposals,[17] and (d) oral questions asked to members of the government. These measures of legislative activity have been exploited in existing research to measure how much effort elected representatives exert on activities that benefit their local constituents as opposed to citizens nationwide (Bach 2011) or their overall quality as politicians (Gavoille and Verschelde 2017).

Next, I construct a new dataset of legislative *textual content* from written questions to the government—typically issued by representatives to refer to local issues raised by their constituents—as well as short descriptions of bill proposals. These data are available for the latest legislatures covered by the sample of manifestos, after 1981, and were collected by scraping the AN's website. More details on these legislative tools and the construction of this database can be found in Appendix B.2. The sample on legislative content includes the content of written questions issued between 1981 and 1997 (between 47,000 and 68,000 questions per legislature) and the short description of bill proposals between 1988 and 1997 (about 2,000 per legislature).

[16] The online 2017 manifestos account for 63% of the candidates running in the first round that year and 61% of those running in the second round.

[17] Before being discussed in public session, a proposed bill must be reviewed by the appropriate committee. A representative is then chosen to write a report on the outcome of these discussions and provide some expertise on the subject.

# 3 Discourse moderation and personalization

## 3.1 Partisan discourse

I first project the content of each candidate manifesto onto a unidimensional partisan space and provide descriptive evidence that the ideological content of the campaign messages sent by individual candidates closely follows their parties' ranking from left to right.[18] I start with standard text pre-processing, described in Appendix C.1, which reduces the vocabulary to an average of 4,800 unique words per election and 230 unigrams (words) per manifesto. Next, I perform an unsupervised principal component analysis to evaluate how many dimensions are needed to explain variation in the choice of words used by candidates. Methods and results are described in detail in Appendix C.2. I find that the first component explains between 6% and 16% of the total variance depending on the election year, which is about twice as much as the share of the total variance explained by the second component (see Appendix Table A3). Importantly, as shown in Appendix Figure A5, the first principal component tends to separate left-wing candidates from right-wing ones, given their known party affiliation. This exercise suggests that manifestos' content is not entirely reduced to the left-right partisan cleavage and varies along other dimensions of language, but that the partisan aspect of discourse is the primary source of variation in word choice across candidates.

I adopt a supervised approach to scale these documents explicitly on a left-right axis—that is, to assign a single *"partisan score"* to each manifesto. Intuitively, I use the known party affiliation of the candidates in the sample to determine which political orientation is associated with each word, and to get a finer estimate of any candidate's partisan leaning based on their choice of words. I use a simple approach that builds on the Wordscores method introduced by Laver et al. (2003). The partisan score of document $j$—where a document is the manifesto of a given candidate before a given election round in a given election year—is defined as:

$$S_j = \sum_w p_{wj} \cdot s_w$$

[18] In the rest of the paper I use the words *"partisan"* and *"ideological"* interchangeably to refer to the traditional left-right cleveage in politics.

where $s_w$ is the score of word $w$, and $p_{wj} = \frac{c_{wj}}{m_j}$ is the normalized frequency of word $w$ in document $j$, with $c_{wj}$ the frequency of word $w$ in document $j$ and $m_j$ the total number of words in document $j$.

Following studies of discourse polarization (Gentzkow and Shapiro 2010; Gentzkow et al. 2019b), I aggregate the content of manifestos issued by candidates from left-wing and right-wing parties[19]—excluding non-classified candidates and candidates from parties labeled as *"center"*—in the **first election round** as reference texts to anchor the partisan space. Then I define:

$$s_w = \frac{p_w^R}{p_w^L + p_w^R} - \frac{p_w^L}{p_w^L + p_w^R}$$

where $p_w^I = \frac{\sum_{j \in I} c_{wj}}{\sum_{j \in I} m_j}$ is the normalized frequency of word $w$ in the aggregate of manifestos from ideological side $I$ (with $I = L, R$). The score of each word ranges from $-1$, when it is only used by left-wing candidates and never right-wing ones, to $1$, when it is only used by right-wing candidates and never left-wing ones.

Intuitively, a manifesto with a negative (positive) score contains mostly words that are primarily spoken by left (right)-wing candidates, while a manifesto with a partisan score close to zero either uses words primarily spoken by either side indifferently or uses words that are just as common among left-wing candidates as among right-wing ones. I implement the normalization proposed by Martin and Vanberg (2007),[20] which ensures that the original distance between the two reference texts is preserved in the estimated score dispersion. Hence, the final partisan score is not bounded between $-1$ and $1$. Instead, a score of $1$ corresponds to the score of a representative manifesto from the right side, while a score of $-1$ corresponds to the score of a representative manifesto from the left side.

The twenty words with the highest (*most right*) and lowest (*most left*) average score over the nine elections are shown in Appendix Table A4. On the left side, polarized words refer to the

[19] Examples of left-wing parties include Workers' Struggle, Communist Revolutionary League, Communist Party, Socialist Party, Other Left, etc. Examples of right-wing parties include the National Front, Rally for the Republic, Other Right, etc.

[20] The final partisan score is defined as:

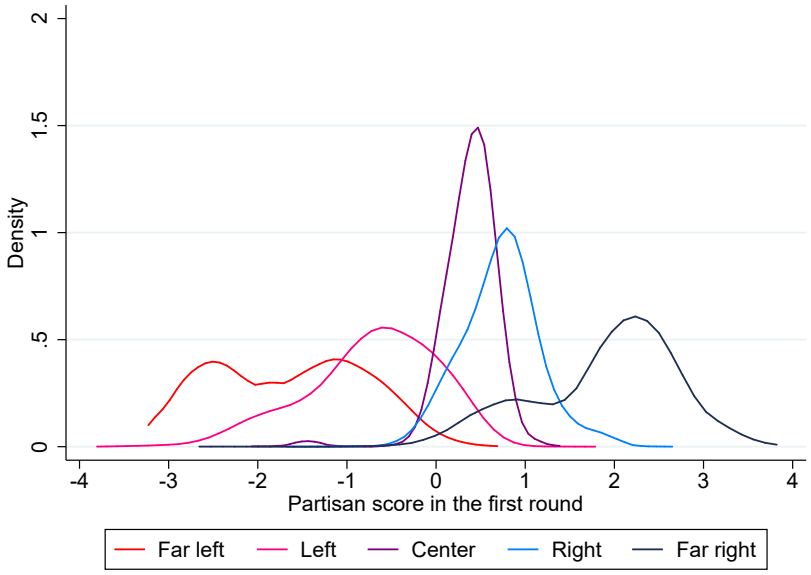
$$Score_j = \frac{S_j}{S^R}$$

where $S^R = \sum_w p_w^R \cdot s_w$ is the estimated partisan score of the aggregate right-wing corpus. Therefore $Score_j = 1(-1)$ is the estimated partisan score of the right-wing (left-wing) reference text.

left-wing agenda over the Cold-War period—*"disarmament," "democracy"*—or to pro-worker policies—*"capitalist," "employers," "railroad worker," "layoff."* On the right side, polarized words refer to economic policies—*"recovery," "free trade," "deficit"*—and conservative moral values—*"patriot," "moral."*

Figure 1 shows the kernel density of estimated partisan scores in the first round, by political orientation and pooled across election years: far left, left, center, right, and far right. The observed dispersion of scores from left to right follows the expected ranking of candidates given their known party affiliation. Importantly, manifestos issued by extreme candidates tend to receive a more negative (on the left) or more positive (on the right) score than moderate candidates, suggesting that extreme candidates do employ a more polarized discourse and choose words less likely to be used by candidates from the opposite political orientation. Similarly, centrist manifestos—which were excluded from the construction of word scores—receive a partisan score close to zero but closer to the right side of the scale. This is intuitive, as French parties labeled as centrist are often closer to moderate right-wing parties than left-wing ones.

Figure 1: Kernel density of partisan scores by political orientation




*Notes:* I plot, for each political orientation from far left to far right, the kernel density of partisan scores in the first round (pooling all election years). The partisan score indicates the partisan leaning of each manifesto from left-wing (negative score) to right-wing (positive score). The sample includes all candidates whose first-round manifesto is available and non-empty after text pre-processing, excluding non-classified candidates and candidates whose political orientation is missing. N=22,160.

Appendix Figure A6 shows similar results when restricting the analysis to candidates endorsed by one of the four or five main party organizations over the period: the Communist Party, the Socialist Party, the Union for French Democracy and the Rally for the Republic from 1958 to 1981, and the National Front in 1988 and 1993.[21] Communist candidates tend to use more left-wing rhetoric than Socialist candidates, while candidates from the center-right Union for French Democracy tend to use either similar or more moderate language than the conservative candidates from the Rally for the Republic, who themselves tend to use more moderate language than candidates from the radical right National Front. One may also note that partisan scores within a given party and a given election year are less spread-out than partisan scores across different parties from the same broader partisan family (Figure 1). This empirical fact is consistent with the intuition that, as supporters of a common party platform, individual candidates from the same party do use similar language in their campaign manifesto.

In spite of this compelling evidence that a simple scaling approach provides reliable measures of latent discourse partisanship, I raise a few concerns about the validity of the method (Lowe 2008) and discuss how I address them in Appendix C. The results are robust to alternative choices of vocabulary and word score definitions.[22] They are also robust to alternative scaling methods, including a more recent approach: multinomial inverse regression with gamma-lasso penalization, developed in Taddy (2013), Taddy et al. (2015), and Taddy (2017). Technical details and results are shown in Appendix C.3 and Appendix Figure A10.

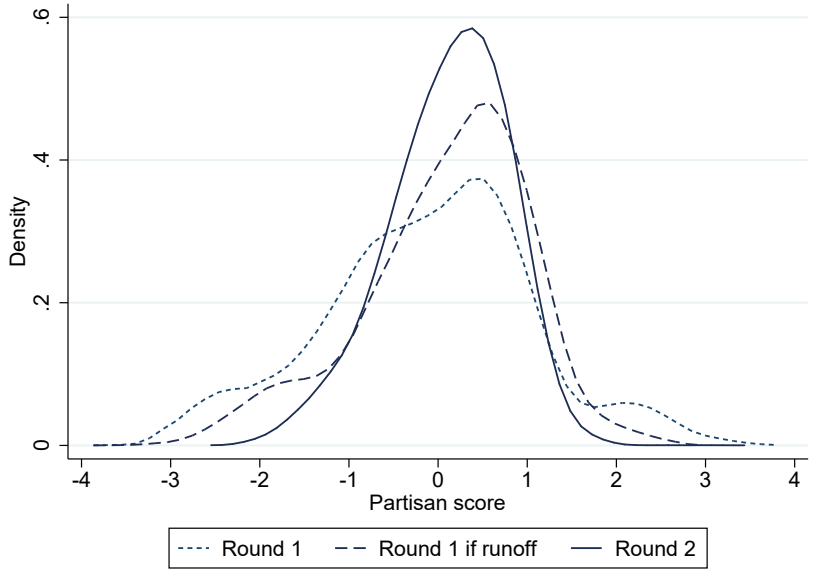
### 3.2 Discourse moderation

I now show that candidates tend to moderate their discourse between election rounds. First, I plot the kernel density of partisan scores across election rounds in Figure 2. The tighter tails of the distribution of partisan scores in the first round for candidates who eventually compete in the runoff, as opposed to the distribution of all partisan scores in the first round, are indicative of the selection of more moderate candidates in the second round. Those who are qualified for the runoff

[21] For each election year, I identify the Ministry of the Interior's label corresponding to each of the five main party organizations spanning the 1958-1993 period, taking into account party transformations and name changes. For instance, Union for French Democracy refers to the main Christian-democrat party organization in each year, from the Popular Republican Movement in 1958 to the actual Union for French Democracy party in 1973 and later. 71% of candidates in the runoff sample are endorsed by one of these parties.

[22] Alternative vocabularies pool manifestos from both rounds or exclude words with low Tf-Idf scores. Alternative word score definitions give more negative (positive) weight to words used by far left (far right) candidates.

Figure 2: Kernel density of partisan scores across election rounds




*Notes:* I plot the kernel density of partisan scores in the first round (dotted and dashed lines) and partisan scores in the second round (solid line), separately. The sample includes all candidates whose first-round manifesto is available and non-empty after text pre-processing (dotted line, N=24,431), candidates who run in both election rounds and whose first round manifesto is available (dashed line, N=7,138), and candidates who run in both election rounds and whose second round manifesto is available (solid line, N=6,883).

and decide to stay in the competition were less extreme in the first place. The even tighter tails of the distribution of partisan scores in the second round show *discourse moderation* between rounds, among candidates who make it to the runoff: partisan scores tend to be closer to a neutral score (zero) in the second round.

To explore this pattern more systematically, I first estimate the following regression model:

$$Extremeness_{ire} = \alpha + \beta^{O} R_{ire} + u_{ire} \tag{1}$$

where $Extremeness_{ire} = |Score_{ire}|$ is the absolute partisan score of candidate $i$ in round $r$ of election $e$ and $R_{ire}$ is a dummy variable equal to one if $r = 2$. Standard errors are clustered by district×year to account for correlated shocks within the race.[23]

[23] As shown in Appendix Table A5 (columns 1 and 2), results are robust to clustering standard errors two ways by district and department×year instead. This clustering strategy accounts for redistricting: a district whose boundaries may have changed over time is separated across several clusters. They are also robust to alternative scaling methods discussed in Appendix D and shown in Appendix Table A6.

$\beta^O$ represents the overall difference between the mean extremeness measured in manifestos issued in the runoff and the mean extremeness measured in all manifestos issued in the first round. Column 1 of Table 1 shows that manifestos issued in the second round are, on average, less extreme than manifestos issued in the first round. The estimate of -0.37 is significant at the 1% level and corresponds to about 40% of mean extremeness among all first-round candidates. This result may be driven by two effects: the runoff qualification of politicians who tend to be more moderate than the average candidate in the first round, and a change in rhetoric between election rounds—among candidates who compete in both rounds. To test for the latter, I estimate a regression model of the form:

$$Extremeness_{ire} = \alpha_{ie} + \beta^I R_{ire} + u_{ire} \tag{2}$$

where candidate×year fixed effects $\alpha_{ie}$ are included—which restricts the sample to candidates who are present in both rounds and excludes those who compete only in the first.

Table 1: Discourse moderation

| | Main sample (1958-1993) | | Additional (2017) | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| Runoff | -0.372*** | -0.189*** | -0.422*** | -0.135*** |
| | (0.005) | (0.005) | (0.013) | (0.010) |
| Observations | 31,316 | 13,590 | 5,420 | 1,208 |
| $R^2$ (within) | | 0.16 | | 0.21 |
| Mean, first round | 0.918 | 0.735 | 0.945 | 0.658 |
| Candidate*Year FE | | X | | X |

*Notes:* Standard errors are clustered by district×year and shown in parentheses (***, **, * indicate significance at 1, 5, and 10%, respectively). The outcome is discourse extremeness, defined as the absolute partisan score on the left-right scale. In column 1, the sample includes candidates who do not run in the second round and whose first round manifesto is available, and candidatates who run in both election rounds and whose second round manifesto is available. In columns 2 and 4, candidate×year fixed effects are included and the sample includes candidates who run in both election rounds and whose two manifestos are available.

$\beta^I$ measures the within-candidate change in extremeness in the runoff.[24] Column 2 of Table 1 shows that, on average, as candidates adjust their manifesto toward less partisan content, their extremeness decreases by 0.19. This estimate is significant at the 1% level and corresponds to

[24]One may note that both $\beta^O$ from equation 1 and $\beta^I$ from equation 2 are simple differences in means between two samples, but equation 2 further accounts for the fact that each observation in the runoff sample is paired with an observation from the first round sample, resulting in a more precise estimate.

about a quarter of mean extremeness in the first round—among candidates who make it to the runoff. It also corresponds to 51% of the overall difference in extremeness between election rounds (column 1), indicating that half of this overall difference is driven by individual discourse moderation among candidates who compete in both rounds—while the other half is driven by the qualification of candidates who issued a more moderate manifesto in the first round.

**Heterogeneity across parties and election years** Discourse moderation is a common pattern across candidates from all partisan leanings. Figure A7 shows kernel density plots of partisan scores in each round by political orientation. A shift to the center of the scale is visible for both left-wing and right-wing candidates, but the shift is much stronger for the far right (Figure A7e). Appendix Figure A8 shows a similar pattern at a finer party level, when looking at each of the five main party organizations in the sample. Discourse moderation is particularly pronounced for candidates endorsed by the Communist Party or the National Front, as opposed to candidates running for the mode centrist Socialist Party, Union for French Democracy or Rally for the Republic.

Density plots for each election year, pooling all parties together, can be found in Appendix Figure A9. While the discourse moderation pattern is stronger in some years than others, it remains consistent over the whole period. Interestingly, the density plots also suggest a decrease in discourse polarization over time, especially among candidates who qualify for the runoff. While the distribution of first-round partisan scores among candidates who will run in the second round is very similar to the overall distribution of first-round partisan scores in election years prior to 1973, candidates who qualify for the runoff after that date tend to be candidates who issued more moderate manifestos in the first round. In addition, polarized discourse shifts from left to right, with a large density of negative scores (left-wing discourse) in the first election years shrinking over time, and a large density of positive scores (right-wing discourse) emerging after 1981.

**Discourse moderation today** I test for discourse moderation patterns in more recent elections using the corpus of manifestos from the 2017 election. Columns 3 and 4 of Table 1 show that applying the standard Wordscores approach to estimate changes in partisanship across rounds

in 2017 yield similar patterns. In particular, column 4 shows a slightly smaller within-candidate moderation pattern corresponding to a fifth of the mean absolute score in the first round, but still significant at the 1% level.

### 3.3 Discourse personalization

On average, the content of second-round manifestos is less partisan than it was in the first round, both because candidates who compete in the runoff tend to be more moderate candidates, and more interestingly because they adjust their rhetoric to issue a less partisan message in the second round. Discourse moderation may reflect several types of rhetorical shifts. First, candidates could moderate their discourse by choosing to emphasize only the most moderate aspects of their party platform in the runoff. Second, they could follow an updated, more centrist platform, issued before the runoff by the party for all candidates to use. Third, they may decide to advertise more moderate policy positions, regardless of the party line—and even though they cannot credibly commit to act on these promises once elected. I now provide evidence against these hypotheses and show that discourse moderation does not reflect policy moderation, but an alternative strategy of discourse personalization and *"depolicization"*.

**Party-specific rhetoric** First, I show that candidates tend to reduce the prevalence of language specific to their party between election rounds—even when that party's rhetoric is likely moderate. I follow the Wordscores approach described in Section 3.1 to construct party-specific scores—instead of left-right partisan scores. I restrict the sample to candidates endorsed by one of the five main party organizations over the period. In each election year separately, I give each word a score reflecting how often that word is used by candidates from a given party in the first round, as opposed to candidates from any of the other parties. These scores are averaged at the document level and normalized as in Section 3.1 to give each manifesto a party-specific score. A Socialist manifesto with a high positive Socialist score uses many words that are often used by other Socialist candidates and never by other parties, while a manifesto with a low negative Socialist score uses words that are rarely used by other Socialist candidates but are prevalent among other parties. Column 1 of Table 2 estimates equation 2 using each candidate's own party-specific score as outcome. The coefficient is significant at the 1% level and corresponds to a

24% decrease in the prevalence of party-specific language, relative to the mean party-specific score in the first round. Columns 2 through 6 replicate this exercise for each party separately and show that candidates from all five parties tend to reduce the prevalence of party-specific rhetoric in their second round manifesto. This is particularly true for Communist and National Front's candidates, with coefficients equal to -0.89 and -0.86 respectively (columns 1 and 5). Their second round manifesto is, on average, equivalent to a neutral first round manifesto that would not use any word strongly favored by the Communist Party or the National Front, or that would mix these party-specific words with words strongly favored by other parties. This pattern is also true for more centrist parties, including the center-right party Union for French Democracy whose candidates' discourse lies around the center of the left-right scale of language in the first round (Appendix Figure A6). These results suggest that candidates do *not* moderate their discourse by emphasizing elements that are less polarizing but that are still specific to their party's rhetoric. In addition, they show that even candidates from parties that hold centrist policy positions do adjust their discourse between election rounds.

Table 2: Party-specific score across election rounds

| | All | COM | SOC | UDF | RPR | FN |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Runoff | -0.547*** | -0.885*** | -0.555*** | -0.440*** | -0.358*** | -0.861*** |
| | (0.007) | (0.016) | (0.014) | (0.014) | (0.011) | (0.045) |
| Observations | 11,838 | 2,290 | 3,774 | 2,064 | 3,488 | 222 |
| $R^2$ (within) | 0.49 | 0.72 | 0.47 | 0.48 | 0.36 | 0.77 |
| Mean, first round | 0.979 | 0.959 | 0.968 | 0.954 | 1.030 | 0.822 |
| Candidate*Year FE | X | X | X | X | X | X |

*Notes:* The outcome is each manifesto's party-specific score, which measures the prevalence of language specific to the candidate's own party. In column 1, the sample includes candidates affiliated with the Communist Party (COM), the Socialist Party (SOC), Union for French Democracy and predecesors (UDF), Rally for the Republic and predecessors (RPR), or the National Front (FN). In columns 2 through 6, the sample is restricted to candidates from each of the five parties separately. Other notes as in Table 1 (column 2).

Appendix E proposes an alternative approach to measure discourse personalization away from the party platform. I construct a measure indicating how much of a manifesto's content is identical to that of any other manifesto from the same party—in a given election round—and define personalization as (negative) the change is this measure between election rounds.

Candidates that personalize their manifesto the most are candidates who use a template common to all politicians endorsed by their party in the first round, and use their own layout and own words in the runoff. Appendix Figure A11 shows a positive correlation between discourse moderation[25] and discourse personalization, suggesting that candidates who moderate their discourse the most also write more personalized manifestos in the second round. This is not a mechanical result. Discourse moderation would correlate with *less* content personalization if moderation reflected a shift in party platforms between rounds and if all candidates from the same party adopted a common template to advertise this new platform. I conclude that discourse moderation is not driven by national party constraints, but an individual decision to personalize one's manifesto in the runoff.[26]

I now provide evidence that, instead of personalizing their discourse by advertising policy positions that would differ from their party platform, candidates simply drop policy issues from their campaign communication in the runoff.

**Choice of neutral words** The observed pattern of discourse moderation—and personalization away from their party's rhetoric—can reflect two types of adjustment: candidates using more neutral words or candidates using polarizing words from both left and right in the runoff. I estimate equation 2 with each manifesto's mean absolute word score as the outcome, $\sum_w p_{wj} \cdot |s_w|$, divided by its standard deviation in the first round, to facilitate the interpretation of the results. A word's absolute score is a measure of how predictive of a political orientation that word is. Words with low absolute scores are indifferently used by left-wing and right-wing candidates and are therefore unlikely to carry any strong partisan meaning. Consequently, manifestos with a low (high) mean absolute word score tend to use neutral (polarized) words.

Results are shown in column 2 of Table 3: on average, the mean absolute score of words used in second-round manifestos decreases by 20% of a standard deviation relative to first-round manifestos. This estimate is significant at the 1% level. Together with the estimate displayed in

[25]Moderation is defined as (negative) the change in absolute partisan score between election rounds—hence, a positive moderation value corresponds to a candidate issuing a partisan manifesto in the first round but a more neutral one in the second.

[26]Conversely, candidates could both personalize their manifesto in the runoff and become more extreme in their discourse, either by insisting on the most partisan aspects of their party platform or by referring to policy propositions from more extreme parties. Appendix Figure A11 suggests, instead, that discourse personalization involves issuing less partisan content in the runoff.

column 1 of Table 3, which shows that the average length of a manifesto decreases by 159 words—more than half of the mean number of tokens in the first round—I conclude that candidates write shorter statements and tend to choose less polarized words in the runoff.[27] These findings provide additional evidence that moderating one's discourse in the runoff is unlikely to be driven by candidates adopting the partisan positions of their opponent, but by candidates adopting a different type of vocabulary—that did not divide politicians along the regular party lines in the first round.

Table 3: Change in manifesto content across rounds

| | Text length (1) | Word polarization (2) | Own name (3) | Opponent's name (4) | Department (5) | Municipality (6) |
|---|---|---|---|---|---|---|
| Runoff | -158.719*** | -0.200*** | 0.947*** | 0.674*** | 0.402*** | 0.261*** |
| | (2.376) | (0.009) | (0.019) | (0.027) | (0.014) | (0.017) |
| Observations | 13,590 | 13,590 | 13,590 | 11,770 | 13,590 | 13,590 |
| $R^2$ (within) | 0.47 | 0.06 | 0.27 | 0.10 | 0.11 | 0.04 |
| Mean, first round | 367.821 | 0.311 | 0.007 | 0.000 | 0.005 | 0.013 |
| Candidate*Election FE | X | X | X | X | X | X |

*Notes:* In column 1 the outcome is the number of words used in the manifesto. In column 2 the outcome is the mean absolute score, or polarization, of words used in the manifesto. Outcomes in columns 3 through 6 are shares constructed from counting the number of mentions of the candidates' names, the district's department and its municipalities, and dividing by the total number of words in the manifesto. In columns 2 through 6, the outcome is divided by its standard deviation in the first round. In column 4, the sample is restricted to candidates ranked first or second in the first round. Other notes as in Table 1 (column 2).

**Change in vocabulary** Next, I compute the within-candidate change in normalized frequency from first to second round for each word and identify the words that are, on average, dropped or added the most. Appendix Table A8 shows the 20 words with the highest mean negative change over the nine elections and the 20 words with the highest mean positive change. While words added the most to second-round manifestos are mostly generic words specific to the electoral rule—*"lead," "second," "outcome," "abstention"*—words that are dropped the most tend to refer to policy-making and programmatic content—*"firm," "economy," "family," "safety," "taxation."* It suggests that second-round manifestos contain fewer elements of actual policy platforms and

[27] The main result on discourse moderation (Table 1, column 2) is robust to controlling for text length in equation 2, suggesting that moderation is not entirely driven by a cut in the length of the manifesto but by a deeper change in content too. Estimates are shown in Appendix Table A5 (columns 3 through 6).

more mundane statements regarding the outcome of the first election round and the current state of the campaign.

I perform the same analysis separately for left- and right-wing candidates and show the 20 words dropped or added the most when weighting their average difference in usage across rounds by their word score. This exercise reveals which polarized words tend to be dropped the most between rounds. Results are shown in Appendix Table A9 and suggest a similar pattern: programmatic words such as *"rent," "health," "profit"* and *"factory"* on the left or *"budget," "monetary,"* and *"trade"* on the right tend to be dropped. The polarized words added the most in the second round suggest an emphasis on a defensive strategy against the opponent and an increased usage of candidates' names from left-wing candidates (*"block," "fear," "Fernand," "Guy,"*) and an emphasis on personal achievement from right-wing candidates (*"cross," "legion," "honor,"* and *"medal"* refer to military or civil awards).

**Personal and local references** As additional evidence of discourse personalization and *"depolicization"*, I measure the prevalence of personal and local references in each manifesto. First, I count the number of times a manifesto mentions the name of any candidate in the race. I estimate model 2 with two alternative outcomes: the number of occurrences of one's name and the number of occurrences of the main opponent's name,[28] relative to the overall number of tokens in the manifesto. Each outcome is divided by its standard deviation in the first round to faciliate the interpretation of the results. Columns 3 and 4 of Table 3 show that in the second round, candidates refer more often to themselves (the number of occurrences of a candidate's own name increases by 95% of a standard deviation) and to their opponent (67% of a standard deviation). In addition, Appendix Table A10 (columns 1 and 2) shows positive coefficients on an interaction term between the runoff dummy and discourse moderation—defined as (negative) the change in absolute partisan score between rounds. All estimates are significant at the 1% level and suggest that politicians personalize their runoff manifesto by referring more often both to themselves and to their individual competitors.

Next, I count the number of times a manifesto mentions the department in which the candidate is running and the number of times it mentions a municipality (*"commune"*) from that

[28]The main opponent is defined as either the leading candidate if the manifesto is issued by a runner-up or vice-versa. Consequently the sample is restricted to first and second-ranked candidates for this specification.

department, relative to the overall number of tokens in the manifesto.[29] These outcomes are also divided by their standard deviation in the first round. Columns 6 and 7 of Table 3 show that the number of local mentions goes up in the second round: by 40% of a standard deviation for the district's department and 26% of a standard deviation for municipalities in the department. Again, the coefficients on an interaction term between the runoff dummy and discourse moderation are positive (Appendix Table A10, columns 3 and 4), and all estimates are significant at the 1% level. Candidates put more emphasis on their local anchoring in the second round, as a possible attempt to make themselves appear to be the candidate of *all* voters in the district, not only that of the ideological voters who supported their party platform in the first round.

Overall, discourse moderation on the left-right scale is not likely to reflect policy moderation, but to correspond instead to a rhetorical shift from a partisan policy platform to more neutral non-policy issues—such as personal traits or local matters. To illustrate these rhetorical adjustments, Appendix G compares two concrete examples: a first candidate (Jean-Marie Le Pen) who substantially moderated and personalized his discourse in the runoff, issuing completely different manifestos across election rounds, and another candidate (Dominique Paillé) who issued an almost identical manifesto in both rounds. Why do some candidates choose to moderate their discourse by focusing their communication on non-policy issues in the runoff, while others stick to the same partisan rhetoric and leave their manifesto virtually unchanged? In the next section, I propose a theoretical framework that rationalizes discourse moderation as a strategic response to a change in the set of competitors, adopted primarily by high-quality politicians with low partisan support from voters.

# 4 Interpretation and discussion

## 4.1 Theoretical framework

The set of empirical regularities described in Section 3 cannot be fully explained by traditional models of electoral competition. Discourse moderation on the left-right scale is certainly consistent with Downsian competition (Downs 1957) and echoes recent models of two-stage

[29] Metropolitan France is divided into 90 to 95 *"départements"* depending on the year, and each department is a collection of electoral districts.

elections in which candidates adopt more centrist positions after the primary stage (Agranov 2016). However, policy convergence toward the center is an unrelatistic prediction in a context where candidates' ability to adjust their policy position is limited—because they are tied to a national party platform—and results from Section 3.3 suggest that discourse moderation is indeed capturing something else—a rhetorical shift to make consensus-based, non-policy issues more salient.

The absence of policy moderation is consistent with citizen-candidate models (Osborne and Slivinski 1996; Besley and Coate 1997), in which candidates have their own preferences and cannot commit to the platform preferred by their electorate. But these models do not account for the alternative communication strategies, beyond issue positioning, that candidates can adopt to compete with one another. Recent models of political selection depart from the assumption that candidates can endogenously choose their policy platform and consider politicians with exogenous platforms who may decide whether to enter the race or not (Dal Bó and Finan 2018). Others study politicians tied to their previous policy announcements, who cannot re-adjust their policy positions over the campaign but can choose the timing of these announcements (Kamada and Sugaya 2020).

I follow a similar path and propose a simple framework in which politicians cannot adjust their policy platform—determined *ex ante* by their party—once they have entered the competition. Instead, they can choose one of two communication strategies: advertising their (polarised) party platform, or campaigning on neutral non-policy issues. A formal model, tailored to the French two-round system, is developed in Appendix A. I present here a broader set of intuitions and discuss the theoretical implications that I can test for empirically.

**Benefits and costs** While advertising one's party platform may be as easy as printing a template common to all candidates, campaigning on non-policy issues is likely to require more skills and effort. To issue a convincing message stripped of any policy proposal, candidates need good rhetorical abilities and alternative arguments to put forward, such as a record of personal achievements or a strong local presence in their district. Hence those who adopt this campaign strategy are likely to be *"high-quality"* politicians, where quality refers to charisma, ability,

experience, and other factors that can account for political performance.[30] Voters receiving a campaign statement focused on non-policy issues may infer that its author is likely a competent politician who will perform well in office—as candidates with enough charisma, ability and experience to run a non-policy campaign are also likely to be influential and productive representatives once elected. Voting for such a candidate (over a low-quality one) may be particularly appealing to voters who are relatively indifferent between the party platforms available on the ballot.

High-quality candidates may gain votes from some voters who do not support their party platform by campaigning on non-policy issues and hence revealing their desirable type. But adopting such campaign strategy is also likely to bear a cost. The model I propose in Appendix A assumes that a fixed share of voters is purely ideological: these voters are disappointed and turn away from their preferred party's candidate if the latter does not advertise the party platform. Candidates with a large base of partisan voters have more of these idelogical voters to lose than candidates whose party has fewer supporters. Alternatively, campaigning on non-policy issues may be risky: in expectation it yields the same vote share as campaigning on the party platform, but voters' behavior is uncertain and advertising non-policy issues could either attract many voters or scare away many others. In both cases, only vulnerable candidates whose party platform does not receive much support in the electorate are willing to campaign on non-policy issues in hope of expanding their base, while candidates with strong partisan support prefer sticking to their party platform to secure their existing base and avoid paying a large electoral cost or taking an unecessary risk.

**Equilibrium strategies in a two-round election** Campaigning on non-policy issues yields higher returns when a larger share of voters is undecided or has weak preferences over the candidates' policy platforms—as these are the voters likely attracted to a candidate signaling their quality through non-policy campaigning. This is likely the case in a bipartisan general election if a large group of independent voters does not identify with any of the two parties available. This is also the case at the runoff stage of a two-round election, when fewer candidates are on the ballot and many

[30] Politician quality is also referred to as *"valence"* in the literature, which Polborn and Snyder (2017) define as: *"any attribute that is important to voters and not related to the main policy cleavage that is captured by the national party positions."* Note, however, that here I do not assume high-quality politicians to have better moral qualities such as honesty or empathy.

voters have to choose between candidates they did not support in the first round. In comparison, there is little to gain from campaigning on non-policy issues in a multipartisan election—including the first round of a two-round election—as voters have a wide range of candidates to choose from and are likely to support their preferred party regardless of candidates' expected quality.

In the French context, advertising the party platform is likely to be the dominant campaign strategy for all candidates present in the first round. Candidates who benefit from a strong electoral advantage are likely to stick to their party platform in the runoff—regardless of their ability to campaign on non-policy issues—as the net benefit of securing their base is higher than pandering to other voters. However, high-quality candidates who are electorally vulnerable are likely to switch to neutral non-policy issues in the second round. Appendix A presents a formal setup and derives conditions for the existence of such an equilibrium.

### 4.2 First prediction: discourse moderation

A first prediction of the framework described above is *discourse moderation* between election rounds: as the number of candidates shrinks in the second round, the mean ideological content of campaign messages is expected to be more neutral. This is because some candidates change the focus of their message from partisan policies in the first round to consensus-based non-policy issues with neutral ideological content in the runoff.

Section 3.2 has provided evidence that candidates do tend to moderate their discourse and make consensus-based non-policy issues more salient than partisan policy issues in their second-round manifesto. However, these empirical findings do not ensure that discourse moderation is a strategic response to the change in the set of competitors and the increased benefit of signaling one's quality to a broader range of voters. An alternative driver of between-round discourse moderation could be the passage of time: candidates might switch to non-policy issues in the runoff because they already advertised their party platform in the first round and they want to provide new information to the voters in the second. Appendix F provides suggestive evidence that the latter explanation is likely wrong, and that discourse moderation is (causally) determined by the number of candidates qualified for the second round—so that deciding to adjust one's discourse is induced by the competitive environment and the number of competitors in the race.

While a majority of districts hold a runoff between two candidates (70% of the races in the sample), it is possible for a third candidate to compete if all three candidates receive more than the required number of votes in the first round. The number of candidates present in the second round is expected to affect the first two candidates' strategic decision to adjust their manifesto, as the number of indifferent voters whose preferred ideological candidate is unavailable is reduced, limiting the possible gains from advertising non-policy issues and signaling one's quality as a politician.[31] Hence, the first two candidates are expected to moderate their discourse less often when more than two candidates qualify for the runoff.

I closely follow the empirical strategy described in Pons and Tricaud (2018) to estimate the causal impact of the qualification of a third candidate on discourse moderation among the first- and second-ranked candidates—holding these candidates' characteristics constant, including their electoral vulnerability and politician quality. Technical details and results are discussed in Appendix F and Appendix Table A11. Overall, estimated effects are quite noisy—possibly due to small sample sizes—but they follow the predicted patterns described above: first- and second-ranked candidates tend to moderate *less* when a third candidate qualifies for the runoff. Interestingly, this negative impact seems mostly driven by the response of candidates who face a main opponent (first- or second-ranked) from the opposite political orientation but a third-ranked candidate from the same orientation, as opposed to candidates who face both a main opponent and a third-ranked candidate from the opposite orientation.[32] The interpretation is intuitive: if voters switch their support more easily from their preferred ideological candidate toward other candidates from the same political orientation, as opposed to candidates from the opposite orientation, then a candidate facing an ideologically close opponent faces a higher risk of losing (disappointed) core ideological voters when advertising non-policy issues. In order to secure the support of her base voters against that third ideologically-close opponent, she should reinforce her partisan message and stick to her party platform.[33]

[31] Findings in Pons and Tricaud (2018) support this intuition: voters tend to favor their preferred ideological candidate and vote expressively in the runoff instead of voting strategically for a stronger candidate with better chances of winning.

[32] Columns 2 and 3 of Appendix Table A11 exclude non-classified candidates whose political orientation is not clear.

[33] This hypothesis is supported by the data: in the sample, 84% of the first- or second-ranked candidates who run in a district where the third-ranked candidate is from the same political orientation are moderate candidates, while the third-ranked candidate is from an alternative moderate party as well (as opposed to an extreme party).

To conclude this discussion, the regression discontinuity test provides suggestive evidence that candidates do indeed moderate their discourse as a response to the change in the set of competitors between election rounds.

### 4.3 Second prediction: strategic selection

A second set of predictions from the framework sketched in Section 4.1 relates to *who* moderates their discourse between election rounds. Discourse moderation is expected to be more common among high-quality politicians who can run a credible personalized campaign focused on non-policy issues, and among vulnerable candidates whose party platform receives less support in their district. In the next section, I exploit the data described in Section 2 to test the following predictions empirically:

**Selection on electoral vulnerability:** Candidates holding an electoral advantage are likely to moderate their discourse *less* often than weaker candidates.

**Selection on politician quality:** As discourse moderation does not reflect a commitment to a more moderate platform but a signal of politician quality, politicians who moderated their discourse during the campaign are unlikely to use more moderate rhetoric once elected. However they are expected to engage in more legislative activity and perform better in office.

## 5 Selection on electoral vulnerability and politician quality

### 5.1 Electoral vulnerability

As discussed in Section 3.2, candidates from the far right National Front are more likely to moderate their discourse than candidates from other parties (Appendix Figures A7 and A8). As these candidates campaign on very polarized policy platforms with strong partisan words in the first round, their extremeness naturally shrinks significantly more when they switch to neutral non-policy issues in the runoff, as compared to candidates who advertise more moderate policies—and hence use more moderate words—initially. However this pattern is also consistent with the prediction that candidates who moderate their discourse between election rounds are electorally vulnerable (Section 4.3), as extreme candidates who make it to the runoff are arguably

weaker than their mainstream opponents and have a larger incentive to advertise non-policy issues in the second round.

I now test more directly for this prediction and first show that, among candidates from the same party, benefiting from an observed electoral advantage after the first round predicts *less* discourse moderation. Second, I show that candidates who select into discourse moderation are those who have fewer chances of winning their district—regardless of their campaign strategy.

**Advantage in the runoff** I estimate an equation of the form:

$$Moderation_{ie} = \alpha_{de} + \lambda_{pe} + \gamma X_{ie} + \delta Extremeness1_{ie} + u_{ie} \tag{3}$$

where $Moderation_{ie}$ is (negative) the change in absolute partisan score between election rounds for candidate $i$ in election year $e$, and $\alpha_{de}$ is a district×year fixed effect[34] that controls for district-level factors common to all candidates competing in the same race—such as the number of candidates qualified for the runoff. $X_{ie}$ is a measure of candidate $i$'s electoral advantage before the second election round, which I define below.[35] $Extremeness1_{ie}$ is the candidate's absolute partisan score in the first round and $\lambda_{pe}$ are party×year fixed effects. This specification estimates differences in discourse moderation between candidates who are affiliated with the *same* party and issued manifestos of similar extremeness in the first round, but face different electoral prospects in their respective district.

I first test whether candidates who received a high vote share in the first round are less likely to adjust their rhetoric toward non-policy issues in the runoff. Column 1 of Table 4 shows that a 10-percentage-point increase in first round vote share predicts a decrease in discourse moderation by 0.02, an estimate that corresponds to about 10% of the overall mean discourse moderation in the sample and that is significant at the 1% level. Next, column 2 shows that discourse moderation is lower among incumbent representatives who benefit from an incumbency advantage (-0.03) than it is among challengers, an estimate that accounts for 15% of the overall mean moderation and is significant at the 1% level as well.

[34] In all specifications that include party×year fixed effects as well as department×year or district×year fixed effects, I allocate singleton observations to a common year fixed effect to avoid dropping them from the sample.

[35] I also include dummy variables indicating whether $X$ is defined for candidate $i$. This allows to keep as many observations as possible across specifications, including candidates whose characteristics may be missing.

Table 4: Electoral advantage and discourse moderation

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| Vote share, 1st round | -0.186*** | | | -0.018 |
| | (0.049) | | | (0.049) |
| Incumbent | | -0.032*** | | -0.028*** |
| | | (0.008) | | (0.009) |
| Predicted vote gain | | | -0.270*** | -0.216*** |
| | | | (0.077) | (0.059) |
| Observations | 6795 | 6795 | 6795 | 6795 |
| Mean moderation | 0.189 | 0.189 | 0.189 | 0.189 |
| District*Year FE | X | X | X | X |
| Party*Year FE | X | X | X | X |

*Notes:* Standard errors are clustered by district×year and shown in parentheses (***, **, * indicate significance at 1, 5, and 10%, respectively). The outcome is discourse moderation, defined as (negative) the change in absolute partisan scores between election rounds. All specifications control for extremeness in the first round as well as district×year and party×year fixed effects. The sample includes candidates who run in both election rounds and whose two manifestos are available.

Finally, I construct a measure of the predicted gain in support from voters whose preferred ideological candidate did not make it to the runoff. Absent any change in campaign strategy, supporters of a candidate who is not on the runoff ballot are expected to support the candidate with the next best (ideologically-closest) platform in the second round. I focus on districts where only the first two candidates compete in the runoff and construct a lower bound of the predicted gain in votes for each candidate, depending on their own political orientation, the orientation of their opponent, and the vote shares received by candidates of each orientation in the first round. For instance, a mainstream left-wing candidate facing a mainstream right-wing candidate is predicted to gain (at least) the support of voters who chose either a different candidate from the left or a candidate from the far left in the first round. Conversely, an extreme right-wing candidate facing a mainstream right-wing one is predicted to gain the support of voters who chose a different candidate from the far right in the first round—so in most cases, no voter at all.[36] According to the negative estimate in column 3 of Table 4, candidates who are more likely to benefit from that increased support between election rounds moderate their discourse less often than others. The point estimate is significant at the 1% level and indicates that for each 10 percentage-point increase in predicted vote gain, candidates are expected to decrease their

[36]When both runoff candidates have the same orientation, I divide the total predicted vote gain from voters who chose any eliminated candidate by two.

discourse moderation by 0.03 (15% of the mean discourse moderation overall). It remains as high and significant when I include the three measures of electoral advantage described above in the same regression (column 4).[37]

Overall, Table 4 provides empirical support for the theoretical prediction that candidates switch to a communication strategy focused on less partisan non-policy issues in the second round when they are electorally weak.

**Electoral success** I now test whether the electoral success of candidates who moderate their discourse between election rounds differ from that of candidates from the same party who do not. I estimate a model of the form:

$$Y_{ie} = \alpha_{de} + \lambda_{pe} + \beta Moderation_{ie} + \delta Extremeness1_{ie} + u_{ie} \tag{4}$$

where $Y_{ie}$ is a measure of electoral success for candidate $i$ in election $e$, $\alpha_{de}$ is a department×year or district×year fixed effect depending on the specification and $\lambda_{pe}$ is a party×year fixed effect.[38] To facilitate the interpretation of the results, I divide discourse moderation by its overall standard deviation.

Column 1 of Table 5 shows the $\beta$ estimate from using a dummy variable equal to one if candidate $i$ is elected in election $e$ as outcome. On average, a one standard-deviation increase in discourse moderation decreases the predicted chance of winning by 9 percentage points, an estimate that is significant at the 1% level. This negative correlation is not suprising, given the previous finding that candidates who moderate their discourse the most were electorally vulnerable in the first place. However, column 2 shows that the negative relationship between discourse moderation and the probability of winning the election still holds when controlling for the three observed measures of electoral advantage included in column 4 of Table 4: a one-standard-deviation increase in discourse moderation decreases the election rate by 3 percentage points, an estimate that is also significant at the 1% level.

[37] The mean first round vote share received by runoff candidates is 31pp (with a standard deviation of 10pp) and the mean predicted vote gain is 13pp (with a standard deviation of 9pp). 36% of these candidates are incumbents.

[38] In some specifications, I also control for the three measures of *ex ante* electoral advantage from columns 2 through 5 of Table 4, as well as a set of dummy variables indicating whether each of these included factors is missing.

Columns 3 and 4 of Table 5 show a similar pattern when defining electoral success as the (actual) gain in votes from first to second round as outcome: candidates who moderate their discourse the most gain fewer votes than others. When controlling for the observed electoral advantage, a standard-deviation increase in discourse moderation predicts a reduction in the actual gain in votes of 0.3 percentage point (an estimate significant at the 10% level). Finally, columns 5 and 6 of Table 5 show that, among elected politicians, candidates who moderated their discourse win by a smaller margin of victory as well. On average, a one standard-deviation increase in discourse moderation decreases the election margin by 0.7 percentage point when controlling for the observed electoral advantage (column 6), an estimate that is significant at the 1% level.

Table 5: Discourse moderation and electoral success

| | Elected | | Vote share gain | | Election margin | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Moderation | -0.086*** | -0.034*** | -0.006*** | -0.003* | -0.006 | -0.007*** |
| | (0.016) | (0.011) | (0.002) | (0.002) | (0.004) | (0.003) |
| Observations | 6795 | 6795 | 6795 | 6795 | 3034 | 3034 |
| Number of electionss | 9 | 9 | 9 | 9 | 9 | 9 |
| Mean outcome | 0.453 | 0.453 | 0.148 | 0.148 | 0.130 | 0.130 |
| Party*Year FE | X | X | X | X | X | X |
| District*Year FE | X | X | X | X | | |
| Department*Year FE | | | | | X | X |
| Electoral advantage controls | | X | | X | | X |

*Notes:* Standard errors are clustered by district×year in columns 1 through 4, heteroskedasticity-robust in columns 5 and 6, and shown in parentheses (***, **, * indicate significance at 1, 5, and 10%, respectively). The outcome is a dummy for being elected (columns 1 and 2), the change in vote share between election rounds (columns 3 and 4), and the difference in vote shares between first- and second-ranked candidates in the runoff (columns 5 and 6). All specifications control for party×year fixed effects and extremeness in the first round. Columns 1 through 4 control for district×year fixed effects, while columns 5 and 6 control for department×year fixed effects. Columns 2, 4, and 6 control for the observed measures of electoral advantage from Table 4. The sample includes candidates who run in both election rounds and whose two manifestos are available. In columns 5 and 6, the sample is further restricted to candidates who win the election.

The negative relationship between discourse moderation and electoral success could reflect a treatment effect: moderating one's discourse by switching to non-policy issues in the runoff may cause a candidate to lose more often. Appendix Table A13 raises some doubt about this interpretation. When restricting the sample to candidates who run in both election rounds over multiple consecutive election years and adding candidate fixed effects to equation 4, the size of the

correlation between discourse moderation and victory drops further and is no longer significant (column 1).[39] Hence the negative estimate from column 1 of Table 5 is likely driven by politician-specific factors that do not vary over time: candidates who moderate their discourse the most are also candidates who have lower chances of winning their district, regardless of their campaign strategy—possibly because they run in areas where their party is always less popular. Columns 2 and 3 of Appendix Table A13 show that, within a candidate, discourse moderation does not significantly predict either a lower gain in votes nor a lower election margin if elected.

Therefore, my preferred explanation for the results in Table 5 is a selection effect, consistent with the prediction stated in Section 4.3: among candidates affiliated with the same party and having issued a manifesto of similar extremeness in the first round, those who moderate their discourse the most are electorally vulnerable on both observed and possibly unobserved dimensions, which is why they win less often. These relatively weak candidates may have done even worse if they had not switched their communication strategy toward less partisan arguments in the runoff. This strategy may be effective in swinging votes and mitigating their electoral vulnerability if campaigning on non-policy issues is a credible signal of their quality. I now test for the prediction that candidates who moderate their discourse are indeed better politicians.

### 5.2 Selection on politician quality

**Partisanship once elected** I first test whether discourse moderation between election rounds maps into more moderate rhetoric once elected. This would be expected in a Downsian world where candidates moderate their discourse by adopting a more centrist platform and commit to more moderate policy positions once in office, but not in a world where discourse moderation reflects a change in communication strategy toward neutral non-policy issues. I show that, indeed, discourse moderation only weakly correlates with measures of partisanship once elected. To do so, I apply the scaling method described in Section 3.1 to scale elected representatives on the left-right space of language based on the observed textual content they issue while in office:

[39] These candidate fixed effects are truly candidate×district fixed effects, as they identify candidates who ran for multiple consecutive election years in the same district. Districts that were recently altered by redistricting are excluded. Appendix Table A12 (column 1) shows that discourse moderation is as strong among re-runners as in the overall sample.

their written questions to the government and the short descriptions of bill proposals they work on.

First, I estimate regression model 4 using extremeness in written questions to the government as outcome (divided by its standard deviation for interpretability). I include party×year and department×year fixed effects, and restrict the sample to candidates who were elected after two election rounds.[40] The results, shown in column 1 of Table 6, suggest that candidates who moderated their discourse more than other elected candidates from the same party tend to be less extreme in their questions to the government as well, but the point estimate is extremely small and not significant.

Table 6: Discourse moderation and extremeness once elected

| | Extremeness in written questions (1) | Extremeness in bill proposals (2) |
|---|---|---|
| Moderation | -0.002 | -0.011 |
| | (0.065) | (0.106) |
| Observations | 1124 | 587 |
| Number of elections | 3 | 2 |
| Mean outcome | 0.904 | 1.014 |
| Party*Year FE | X | X |
| Department*Year FE | X | X |

*Notes:* Heteroskedasticity-robust standard errors are shown in parentheses (***, **, * indicate significance at 1, 5, and 10%, respectively). The outcome in column is the partisan score (divided by its standard deviation) constructed from the content of written questions to the government issued by each representative after the 1981, 1988 and 1993 elections. In column 2, the partisan score is constructed from the short descriptions of bills proposed by each representative as primary author after the 1988 and 1993 elections. Both columns control for party×year and department×year fixed effects, and extremeness in the first round. The sample includes candidates who run in both election rounds, who win the election and whose two manifestos are available.

Similarly, column 2 shows no significant relationship between discourse moderation and extremeness in bill proposals. This result provides further evidence that discourse moderation is not about policy moderation—as representatives who moderated their discourse during the campaign do not tend to propose more moderate bills than representatives from the same party who did not. Instead, discourse moderation is likely to convey another type of information. I now

[40] Appendix Table A12 (column 2) shows that discourse moderation is weaker among elected candidates than in the overall sample (Table 1, column 1). However the change in discourse extremeness between rounds is still negative and significant at the 1% level, suggesting that discourse moderation is a common strategy among elected politicians as well.

provide some evidence that campaigning on non-policy issues associates with the candidate's quality as a politician.

**Legislative activity** While I do not observe politician quality directly, I use an *ex post* measure of candidates' performance based on their legislative activity once in office. First, I construct a measure of politicians' yearly activity once elected by aggregating the four measures described in Section 2: bill authorship, interventions, reports, and oral questions to the government.[41] Finally, I standardize each average measure and sum them up to obtain a mean activity Z-score.[42] I estimate regression model 4 with the (standardized) mean Z-score defined above as the outcome. Column 1 of Table 7 shows that a one-standard-deviation increase in discourse moderation increases the predicted activity Z-score by 8% of a standard deviation, an estimate that is significant at the 5% level. While this result is consistent with the prediction that discourse moderation is more common among high-quality politicians who are likely to be more productive and perform better once elected, I discuss two additional explanations.

Table 7: Discourse moderation and legislative activity

| | Mean Z-score | | Bill proposals | Interventions | Reports | Oral questions | Written questions |
|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Moderation | 0.082** | 0.085** | 0.087* | 0.222** | 0.029 | 0.073* | 3.864 |
| | (0.036) | (0.036) | (0.047) | (0.108) | (0.046) | (0.037) | (2.936) |
| Observations | 2909 | 2909 | 2909 | 2909 | 2909 | 2909 | 1113 |
| Number of elections | 9 | 9 | 9 | 9 | 9 | 9 | 3 |
| Mean outcome | 0.031 | 0.031 | 0.602 | 3.122 | 0.511 | 0.894 | 24.651 |
| Party*Year FE | X | X | X | X | X | X | X |
| Department*Year FE | X | X | X | X | X | X | X |
| Electoral advantage controls | | X | X | X | X | X | X |

*Notes:* The outcome in columns 1 and 2 is the (standardized) mean Z-score of the four outcomes in columns 3 through 6: the number of bill proposals the representative worked on as primary author, the number of public interventions in legislative debates, the number of reports written on others' bill proposals, and the number of questions asked to members of the government during designated sessions. All four measures are yearly averages. In column 7 through 9, the outcome is the average yearly number of written questions issued by each representative after the elections of 1981, 1998 and 1993. Columns 2 through 7 control for the observed measures of electoral advantage from Table 4. Other notes as in Table 6.

First, the positive correlation between discourse moderation and legislative activity may be a result of the selection on vulnerability discussed in Section 5.1: representatives who got elected

[41] I average these four measures over the number of years the representative held office because some representatives are promoted to ministers or die before the end of their term, hence appearing less productive over the five years of legislature in the data even though they were not.

[42] The mean Z-score is itself standardized to have a mean of zero and a standard deviation of one.

after moderating their discourse because they were electorally weak are likely to work harder once in office to increase their chances of reelection. In column 2 of Table 7, I repeat the estimation from column 1, controlling for my three measures of electoral advantage: the politician's vote share in the first round, incumbency status, and predicted vote gain between rounds. The point estimate is virtually unchanged, suggesting that the positive correlation between discourse moderation and legislative activity is *not* solely driven by the fact that candidates who moderated their discourse the most were also electorally vulnerable. Appendix Table A14 shows that the result is also robust to including the election margin as an additional control,[43] and Appendix Table A15 shows no significant heterogeneous pattern when I interact $Moderation_{ie}$ with each of the measures of electoral advantage described in Section 5.1—neither separately nor when all are included in the same regression. Interestingly, the different measures of electoral avantage are *positively* correlated with legislative activity (although estimates are mostly insignificant), suggesting that vulnerable candidates who got elected after a tough race—including those who moderated their discourse to possibly increase their chances—are not more likely to perform better in office than those who had an easy victory and enjoy higher chances of reelection. Overall, the evidence provided here points against electoral vulnerability as the main driver of the positive relationship between discourse moderation and legislative activity.

Second, the positive estimates in columns 1 and 2 of Table 7 may reflect a causal impact of discourse moderation on legislative activity, in which case switching to non-policy issues in the runoff is not only a signal of quality but a binding commitment to work harder once in office. While very appealing, this interpretation is unlikely to be true: column 1 of Appendix Table A16 shows that the correlation between discourse moderation and legislative activity turns negative and not significant when restricting the sample to representatives who were elected after two election rounds over multiple consecutive elections, and controlling for politician fixed effects over time.[44] Hence discourse moderation and legislative activity are likely both determined by a third (time-invariant) factor like politician quality.

[43] The election margin is most likely endogenous to discourse moderation, as shown by the positive relationship in Table 5 (columns 5 and 6), but it provides a good measure of *ex post* electoral vulnerability, as representatives who barely won their district do not enjoy the same electoral security as those who won in a landslide.

[44] Column 3 of Appendix Table A12 shows, similar to column 2, a significant pattern of discourse moderation among representatives who were elected after two election rounds multiple times.

In columns 3 through 6 of Table 7, I estimate model 4 for each activity measure separately. The pattern described above is strikingly similar across all activities: discourse moderation is correlated (though not always significantly) with higher levels of activity across all measures.[45] The significant relationship between discourse moderation and the overall activity index seems particularly driven by interventions during public legislative debates. A one-standard-deviation increase in discourse moderation increases the predicted number of interventions by 7% of the mean number of interventions made by a representative in a year, an estimate that is significant at the 5% level. Since the 1950's, these interventions have been broadcasted on TV and can attract much attention from the media. Hence this exercise naturally favors charismatic politicians who speak well in public—that is, high-quality politicians with excellent rhetorical skills.

Column 7 examines the number of written questions to the government collected from scraping the AN website. While the estimated coefficient falls short of statistical significance (possibly because these data are available for three legislatures only, reducing statistical power), it represents a positive relationship between discourse moderation and written questions as well. A one-standard-deviation increase in discourse moderation increases the predicted yearly number of written questions issued by a representative by 3, an estimate that represents about 16% of the mean number of written question issued by a representative in a year. This result is particularly interesting, as written questions to the government are arguably the most constituency-focused activity a representative can engage in. For instance, Bach (2011) uses the number of such questions as a proxy for casework activity that benefits a representative's constituents and only them—as opposed to legislative committee work that can benefit citizens nationwide. Hence the positive correlation—although not significant at any conventional level—between discourse moderation and the number of written questions suggests that politicians who adjust their discourse the most toward less-partisan arguments during the campaign also tend to perform better on less-partisan activities like constituency service.

These findings are consistent with the prediction that candidates who moderate their discourse are high-quality politicians (Section 4.3). In particular, together with the finding that elected politicians who moderate their discourse tend to win by a smaller vote share margin

[45]The fact that discourse moderation predicts more effort on all types of activities, as opposed to a strategic substitution between different types of activities depending on the politician's relative strengths, is additional evidence of selection based on politician quality as opposed to electoral concerns.

(columns 5 and 6 of Table 5), the positive correlation between discourse moderation and legislative activity suggests that representatives who switched to less-partisan arguments during their campaign were both more vulnerable and of higher quality than those who won after sticking to their party platform. It is important to note that, due to sample selection issues, the results presented in this section do not imply that *all* the candidates who moderate their discourse—including non-elected ones—tend indeed to be high-quality. Despite this limitation, the empirical result that elected representatives who moderated their discourse during the campaign also tend to perform better in office provides evidence that campaigning on non-policy issues in the runoff does convey information about some of the candidates' attributes. It supports the intepretation that individual politicians' communication strategy can help voters choose high-quality candidates over low-quality ones when they do not have strong preferences over the policy platforms available on the ballot—and little information about the candidates' quality prior to the campaign.

## 6 Conclusion

I analyze a new dataset of more than 30,000 manifestos issued by individual candidates to French legislative elections between 1958 and 1993, and show that candidates adapt their communication strategy to the competitive environment in which they are running—even when their policy positions are determined by a national party. I construct individual partisan scores in each election round using a supervised scaling approach and show that candidates who make it to the runoff tend to send a more neutral manifesto in the second round. Discourse moderation does not reflect policy moderation but a strategic switch from partisan policy issues to less-partisan, non-policy issues. Importantly, their communication choices can be informative of their quality as politicians and their performance as representatives once elected.

The findings in this paper apply to many settings in which candidates run under a party ticket that provides them with the public recognition of that party but limits their ability to adjust their policy positions to the local context and the preferences of their electorate. They also extend to settings in which policy competition is limited for other reasons. For instance, in electoral systems with primary and general elections, politicians may be constrained by their primary-stage policy

announcements and may not be able to credibly alter them between stages (Adams and Merrill 2008). Even though candidates are not able to credibly switch from polarized policy positions to a centrist platform before the general election—as Downsian competition would predict—they may still be able to adjust their campaign communication toward a more neutral discourse focused on non-policy issues and swing votes that way.

More broadly, my results may provide useful insights about economic competition on local markets when agents are tied to a national brand. For example, a franchise unit can decide to advertise the brand values and guidelines common to all franchisees (e.g., the products that they sell) or to advertise other business aspects that are orthogonal to these common values (e.g., the personal traits of the local owner). Like electoral candidates, stores operating in different locations—and seeking to increase their market share—are likely to choose one advertisement strategy over the other depending on the preferences of their consumers and the number of competitors they face.

Finally, this paper suggests that candidate-specific campaigns benefit voters, as they may provide information that is hidden from national party platforms and matters for representation, such as information on politician quality and their expected performance in office. Individual campaigns may also benefit parties, as their ability to win seats in districts where their platform receives low electoral support is likely to increase when their high-quality candidates are able to signal their type. In particular, politicians from extreme parties with fewer ideological supporters may expand their electoral base by advertising non-policy issues, as opposed to insisting on their polarized policy positions. Further research will be needed to determine whether the strategic recourse to non-policy advertisement in campaign communication has contributed to the growing success of parties from the radical right in many consolidated democracies.

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# Online Appendix to "Strategic Campaign Communication" (Le Pennec)

- Appendix A: Theoretical framework
- Appendix B: Data
- Appendix C: Scaling methodology
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# A Theoretical framework

## A.1 Setup

**Voters** I follow the framework in Bordignon et al. (2017) and consider an electorate with four groups of ideological voters, $J = 1, 2, 3, 4$, ranging from far left to far right. Voters within a group share the same policy ideal point $q_J$, with $q_1 < q_2 < q_3 < q_4$. For simplicity, I assume that ideal points are evenly spaced on the unit interval: $q_1 = \frac{1}{8}$, $q_2 = \frac{3}{8}$, $q_3 = \frac{5}{8}$, $q_4 = \frac{7}{8}$. However, the voter groups are not evenly sized. The share of voters who have *extreme* preferences is $2\underline{\alpha}$: $\underline{\alpha}$ are far left ($J = 1$), and $\underline{\alpha}$ are far right ($J = 4$). A share $\overline{\alpha} - \sigma$ of voters is *moderate* left ($J = 2$), while a share $\overline{\alpha} + \sigma$ is *moderate* right ($J = 3$), where $\sigma$ is a random shock uniformly distributed on $[-e, e]$. Intuitively, the share of extreme voters on each side is known before any election is held, but the relative strength of moderate left-wing ideology over moderate right-wing ideology among voters is uncertain.

I further impose that $\underline{\alpha} < \overline{\alpha}$ and $\overline{\alpha} - \underline{\alpha} < e < \overline{\alpha}$. The interpretation of these two assumptions is that each moderate group is larger than any extreme group. However, it is possible for the $\sigma$ shock to be large enough that one of the two moderate groups falls below the size of each extreme group.

**Parties and candidates** Each voter group supports a corresponding ideological party—$P = 1, 2, 3, 4$—with policy platform $q_P = q_J$. An election is held between four individual candidates—also referred to as politicians—affiliated with each party and committed to following their party's guidelines if elected. They get an office rent $R > 1$ if elected and nothing otherwise.

Besides their party affiliation, candidates differ in quality $\theta \in 0, 1$: with probability $\eta$, candidate $P$ is a high-quality politician, $\theta_P = 1$, while with probability $1 - \eta$, candidate $P$ is a low-quality politician, $\theta_P = 0$.[46] Unlike their party affiliation $P$, candidates' quality $\theta$ is private information.

**Vote choice** Voters $J$ gain utility from being represented by their corresponding ideological candidate $P = J$. They also gain utility from being represented by a high-quality politician, including from candidates $P \neq J$.

[46] I assume that $\eta$ is the same across candidates of all parties, but this assumption is not crucial and could be relaxed.

Voters $J$'s utility from electing candidate $P$ is of the form:

$$V_J(P) = \mu \mathbb{1}[P = J] - (q_P - q_J)^2 + \omega\theta_P$$

where utility decreases quadratically in the distance between the voters' ideal point $q_J$ and the party platform of the elected politician $q_P$. I define $\mu$ as the utility premium from being represented by the candidate affiliated with the voters' preferred party $P = J$. It represents the voters' identification or attachment to that party, in addition to the benefits of being represented by a candidate who supports their preferred policy platform. I assume that $\mu$ is large enough that if candidate $P = J$ is on the ballot and has a non-zero chance of winning the election, $J$ would prefer voting for them over any other candidate—regardless of their quality as politician. $\omega$ represents the benefits from being represented by a high-quality politician. I further assume that $\frac{3}{16} < \omega < \frac{5}{16}$: if candidate $P = J$ is *not* on the ballot—and if candidates' quality is known—voters prefer being represented by a high-quality politician over a low-quality one who would be ideologically closer, unless that high-quality politician is located at the opposite extreme of the ideological spectrum. In other words, moderate right-wing voters may be enticed to vote for a high-quality candidate from the far left, but extreme right-wing voters would never be.

**Proof:** Voters choose a (known) high-quality candidate with an ideologically distant—but not too distant—policy platform ($(q_P - q_J)^2 = \frac{1}{4}$) over a (known) low-quality candidate with a closer platform ($(q_P - q_J)^2 = \frac{1}{16}$) if:

$$-\frac{1}{4} + \omega > -\frac{1}{16} \iff \omega > \frac{3}{16}$$

However, they prefer a low-quality candidate closer to their ideal point to a high-quality candidate with a very distant platform if:

$$-\frac{1}{4} > -\frac{9}{16} + \omega \iff \omega < \frac{5}{16}$$

Moreover, if all candidates (such that $P \neq J$) on the ballot are of the same quality type, voters $J$ vote for the candidate whose platform is closest to their ideal point $q_J$. In case of a tie, they randomly choose between the two closest candidates. For instance, if candidates $P = 2$ and $P = 4$

are on the runoff ballot and are known to be of the same quality type, voters $J = 1$ and half of voters $J = 3$ choose $P = 2$, while the other half of voters $J = 3$ choose $P = 4$.[47]

To ensure that candidates always vote for their ideologically preferred candidate $P = J$ when she is on the ballot, I consider the decision of extreme voters who may have an incentive to vote strategically for the moderate candidate of the same political orientation in the first round to increase their chances of victory against the opposite political orientation, even when their preferred extreme candidate is still in the race. If voters $J = 1$ vote for $P = 1$, that candidate is selected for the second round with probability $1 - \frac{\overline{\alpha}-\underline{\alpha}}{e}$ and wins the election in the second round with at least probability $(1 - \frac{\lambda}{2})\underline{\alpha}$—i.e., the vote share an extreme candidate would get by campaigning on non-policy issues in the runoff if it were not a credible signal of quality. If voters $J = 1$ vote for $P = 2$ instead, that candidate is selected for the second round unequivocally and wins with at most probability $1 - (1 - \frac{\lambda}{2})\underline{\alpha}$ (i.e., the vote share she would get when facing an extreme candidate or a weak moderate candidate who campaigns on non-policy issues non-credibly).

Hence, the expected utility of voters $J = 1$ from voting for $P = 1$ exceeds the expected utility from voting for $P = 2$ if:

$$\begin{aligned} \left(1 - \frac{\overline{\alpha}-\underline{\alpha}}{e}\right)(1 - \frac{\lambda}{2})\underline{\alpha}\mu \quad &> \quad \left(1 - (1 - \frac{\lambda}{2})\underline{\alpha}\right)(-\frac{1}{16} + \omega) \\ &\iff \\ \mu \quad &> \quad \frac{\frac{1}{8}\left(1 - (1 - \frac{\lambda}{2})\underline{\alpha}\right)}{\left(1 - \frac{\overline{\alpha}-\underline{\alpha}}{e}\right)(1 - \frac{\lambda}{2})\underline{\alpha}} \end{aligned}$$

where I used the fact that $\omega > \frac{3}{16}$. So for $\mu$ large enough, extreme voters prefer to vote for their extreme party's candidate over a close moderate candidate in the first round—even if that moderate candidate was known to be high quality.

**Electoral rule** The election has two rounds: the four candidates compete in the first round, the $\sigma$ preference shock is realized and an election is held. The two candidates with the highest vote shares compete against each other in the second round. A random popularity shock with mean

[47] I assume that voters must vote and abstract away from participation concerns.

zero shifts a share $\epsilon$ of votes from one candidate to the other, and the candidate who gets the most votes among the two is elected.

**Campaign messages and beliefs** Before each election round $r$, candidates can send campaign messages. The ideological content of the message projected on the left-right partisan space is $\tilde{S^r} = S^r \times q_P$, with $q_1 < q_2 < q_3 < q_4$. $S^r \in 0, 1$ indicates whether the candidate campaigns on her party platform ($S^r = 1$) or on non-policy issues with neutral ideological content ($S^r = 0$).

Advertising the party platform has no cost to the candidate: the platform is decided and put together at the national level such that any affiliated candidates can use the material produced by the party's leadership without any editing work. In contrast, campaigning on non-policy issues bears an implementation cost, as the message has to be personalized and cannot come directly from the national party. This cost is assumed to be lower for high-quality politicians. First, writing a convincing manifesto focused on non-policy issues requires strong political and rhetorical skills. Second, it requires the politician to have a good knowledge of the local political context or positive personal qualities and experience to put forward. Hence, the implementation cost is defined as $c_P = c^H \theta_P + c^L(1 - \theta_P)$, with $c^H < c^L$. Campaigning on non-policy issues can be an informative signal of the candidate's unknown quality type. I define $\tilde{\theta}^S = P(\theta_P = 1 \,|\, S_P = S)$ as the voters' posterior belief that candidate $P$ is high-quality after receiving campaign message $S \in \{0, 1\}$.

A second key assumption of the model is that not all voters are Bayesian updaters. A large fraction $1 - \lambda$ of voters across all ideological groups do update their belief of candidates' quality using Bayes' rule, so that:

$$\tilde{\theta}^S = \frac{P(S_P^r = S \,|\, \theta_P = 1)\eta}{P(S_P^r = S \,|\, \theta_P = 1)\eta + P(S_P^r = S \,|\, \theta_P = 0)(1 - \eta)}$$

where $\eta$ is the rational prior belief that candidate $P$ is high-quality, absent any signal. A smaller fraction $\lambda$ misunderstands the candidates' incentives to campaign on non-policy issues. These voters believe that a candidate chooses to advertise non-policy arguments because they are not fully committed to the policy platform of the party they are running for, without updating their belief of the candidate's quality. In addition, the utility of electing candidate $P$ for these voters is

of the form:

$$V_J(P) = \mu \mathbb{1}[P = J] + \omega\theta_P$$

so that—conditional on quality—they only derive utility from being represented by the candidate of their preferred party and are indifferent between all other candidates. Therefore, if candidate $P$ chooses $S_P^r = 0$, a share $\lambda$ of her supporters $J = P$ expects to lose their $\mu$ benefit from electing that candidate and randomly chooses between her and any other candidate. This assumption is necessary to impose an electoral cost of advertising non-policy issues on top of the implementation cost. Importantly, this electoral cost penalizes primarily strong candidates with a large share of ideological voters.[48]

## A.2 Pooling-then-separating equilibrium

I now derive conditions for the existence of a pooling-then-separating equilibrium, in which all candidates choose to campaign on their party platform in the first round but some prefer to switch to non-policy arguments in the second.

**First round** In the first round, the four candidates are present on the ballot and seek to maximize their vote share to be qualified for the second. As $\sigma$ is unknown, all candidates have a chance to qualify, and voters vote for their preferred ideological candidate—no matter their beliefs on the candidates' quality. Hence, there is no opportunity for any candidate to poach voters from other ideological groups by advertising non-policy issues and signaling quality. Instead, choosing $S_P^1 = 0$ would cost candidate $P$ a share $\frac{3\lambda}{4}$ of voters who would randomly choose another candidate instead—as well as the direct implementation cost $c_P$—for no benefit at all. Therefore, in the first round all candidates choose $S_P^1 = 1$, and all voters assign the same prior probability of being high-quality $\eta$ to all candidates.

The $\sigma$ shock is realized, the election is held, and the moderate candidate with vote share $\overline{\alpha} + |\sigma|$ is selected for the second round. With probability $\frac{\overline{\alpha}-\underline{\alpha}}{e}$, the other moderate candidate with vote share $\overline{\alpha} - |\sigma| > \underline{\alpha}$ is selected, and with a lower probability $1 - \frac{\overline{\alpha}-\underline{\alpha}}{e}$, an extreme candidate with vote share $\underline{\alpha}$ is randomly selected instead.

[48] This feature of the model is what allows me to build a separating equilibrium on electoral vulnerability. Importantly, I need the electoral cost to remain the same no matter who the opponent is and which strategy they choose in the second round.

**Second round** I define $sh(S_P^2)$ as the vote share of candidate $P$ before the second round popularity shock $\epsilon$, given campaign strategy $S_P^2$. The probability of being elected is given by:

$$P\left(sh(S_P^2) + \epsilon_P > \frac{1}{2}\right) = sh(S_P^2)$$

where I assume that $\epsilon$ is uniformly distributed, $\epsilon \sim U(-\frac{1}{2}, \frac{1}{2})$. Hence candidate $P$'s expected value from choosing $S_P^2 = 0$ is $E[V_P \mid S_P^2 = 0] = sh(0) \cdot R - c_P$, where $R$ is the office rent and $c_P$ is the implementation cost of advertising non-policy issues. The expected value from choosing $S_P^2 = 1$ is $E[V_P \mid S_P^2 = 1] = sh(1) \cdot R$. Candidate $P$ chooses $S_P^2 = 0$ if the former exceeds the latter.

**Proposition 1:** For $\frac{c^L}{R} > (1-\lambda)\underline{\alpha} > \frac{c^H}{R}$, only high-quality candidates ever choose $S^2 = 0$, while all low-quality candidates choose $S^2 = 1$.[49]

**Proof:** The highest possible gain from campaigning on non-policy issues as opposed to the party platform in the runoff would be obtained by an extreme candidate running against an "adjacent" moderate candidate. Without loss of generality, let us consider an election with $\sigma > \overline{\alpha} - \underline{\alpha}$, so that the moderate left-wing candidate $P' = 2$ qualifies for second round and the extreme left-wing candidate $P = 1$ is randomly chosen to compete against her. The maximum gain of playing $S_P^2 = 0$ is obtained when candidate $P'$ plays $S_{P'}^1 = 1$ and advertising non-policy issues is a credible signal of quality—so that voters believe $P$ is high quality but $P'$ is not. In this case, the extreme candidate gains the support from the share $1 - \frac{\lambda}{2}$ of the rational voters from groups $J = 3$ who are not too distant to the platform $q_1$ - so $(1 - \frac{\lambda}{2})(\overline{\alpha} - \sigma)$—as a fraction $\lambda$ of them do not update their belief on the candidate's quality and randomly choose between $P' = 2$ and $P = 1$. The electoral cost is the share $\frac{\lambda}{2}$ of voters $J = 1$ who lose confidence in their preferred candidate and choose randomly between her and $P'$. Hence, the net gain is:

$$R(1-\lambda)(\overline{\alpha} - \sigma) - c_P$$

In the limit, this quantity is maximized when $\sigma \to \overline{\alpha} - \underline{\alpha}$. Hence, for:

$$c^L > R(1-\lambda)\underline{\alpha}$$

[49] Proofs of each proposition are shown in Appendix A

the direct cost of campaigning on non-policy issues is always higher than the potential benefit for $c_P = c^L$. Therefore, low-quality politicians always choose $S^2 = 1$, and a share $1 - \lambda$ of voters updates accordingly: $P(S_p^2 = 0 \,|\, \theta_P = 0) = 0$ and $\tilde{\theta}^0(.) = 1$—that is, voters infer that a candidate who campaigns on non-policy issues is high quality, no matter their vote share.

Intuitively, if the cost of campaigning on non-policy issues for low-quality politicians is higher than the best possible gain from doing so, they always continue advertising their party platform in the second round. As a consequence, a share $1 - \lambda$ of voters correctly infer that all candidates who campaign on non-policy issues are high-quality politicians ($\tilde{\theta}^0 = 1$).

This proposition implies a separation in terms of quality: low-quality politicians never campaign on non-policy issues. However, it does not imply that all candidates who campaign on their party platform are low quality. Indeed, even if the cost of advertising non-policy issues is lower than the expected benefit for some high-quality politicians, it could remain higher for others due to the electoral cost of losing a share $\frac{\lambda}{2}$ of core ideological supporters.

**Proposition 2:** For $(1 - \lambda)\underline{\alpha} - \frac{\lambda}{2}(\overline{\alpha} + e) < \frac{c^H}{R} < (1 - \lambda)\underline{\alpha} - \frac{\lambda}{2}\overline{\alpha}$, there exists a $\sigma^*$ on $[0, e)$ such that high-quality candidates with vote share $\overline{\alpha} + \sigma^*$ or higher choose to campaign on their party platform in both rounds.

**Proof:** By symmetry, the highest potential gain in votes from playing $S_P^2 = 0$ instead of $S_P^2 = 1$ for the advantaged moderate candidate $P = 2$—when facing extreme candidate $P' = 1$—is gaining a share $(1 - \frac{\lambda}{2})(\overline{\alpha} - \sigma)$ of voters from the voter groups $J = 3$ when the opponent $P' = 1$ also plays $S_{P'}^2 = 0$. The cost is the loss of a share $\frac{\lambda}{2}$ of voters from groups $J = 2$ and $J = 4$, who would have voted for $P = 2$ otherwise, so $-\frac{\lambda}{2}(\overline{\alpha} + \sigma + \underline{\alpha})$. Hence, in the limit, the net gain of advertising non-policy issues instead of the party platform for advantaged candidate $P = 2$ is:

$$R\left((1 - \lambda)\underline{\alpha} - \frac{\lambda}{2}(\overline{\alpha} + \sigma)\right) - c_P$$

This quantity is also the highest possible gain of campaigning on non-policy issues for an advantaged moderate candidate facing the moderate candidate from the opposite orientation (e.g., $P = 2$ against $P = 3$). For $(1 - \lambda)\underline{\alpha} - \frac{\lambda}{2}(\overline{\alpha} + e) < \frac{c^H}{R} < (1 - \lambda)\underline{\alpha} - \frac{\lambda}{2}\overline{\alpha}$, there exists a $\sigma^*$ on $[0, e)$ such that for any preference shock $\sigma > \sigma^*$, the best possible gain of playing $S_P^2 = 0$ for the

advantaged candidate with vote share $\overline{\alpha} + \sigma$ is lower than the cost of doing so:

$$\left((1-\lambda)\underline{\alpha} - \frac{\lambda}{2}(\overline{\alpha}+\sigma)\right) R < \left((1-\lambda)\underline{\alpha} - \frac{\lambda}{2}(\overline{\alpha}+\sigma^*)\right) R = c^H$$

In this equilibrium, moderate candidates with a first-round vote share higher than $\overline{\alpha} + \sigma^*$ never play $S_P^2 = 0$, even if they are high-quality politicians. All high-quality politicians with a vote share lower than $\overline{\alpha} + \sigma^*$ receive a higher benefit of switching to non-policy issues than the cost of doing so. A share $1 - \lambda$ of voters updates accordingly: $\tilde{\theta}^0(\overline{\alpha} + \sigma) = 1$ for any $\sigma < \sigma^*$. As both high- and low-quality politicians with a first-round vote share $\overline{\alpha} + \sigma$ or higher play $S_P^2 = 1$, voters expect candidates with high support to be high-quality with probability $\eta$.

This proposition implies a separation in terms of electoral vulnerability. If the cost of campaigning on non-policy issues is large enough for high-quality politicians as well, it is optimal for candidates who secured enough support in the first round to keep advertising their party platform in the second instead of switching to non-policy issues and losing part of this support. Conversely, high-quality politicians with a lower first-round vote share switch to non-policy issues. A share $1 - \lambda$ of voters update their beliefs accordingly and infer that candidates with a vote share smaller than $\overline{\alpha} + \sigma^*$ play $S_P^2 = 0$ if they are high-quality politicians and $S_P^2 = 1$ if they are not. Candidates with vote share $\overline{\alpha} + \sigma^*$ or higher always choose $S_P^2 = 1$, whether they are high- or low-quality politicians.

Propositions 1 and 2 imply that there exists a pooling-then-separating equilibrium in which all candidates campaign on their party platform in the first round but high-quality politicians who are electorally vulnerable switch to non-policy issues in the second round.

# B Data

## B.1 Candidate manifestos

Electoral manifestos (*"professions de foi"*) are a key part of the French electoral campaigns, and together with ballots and election posters, they represent one of the three main parts of official electoral advertising. Candidates take care of the printing of these manifestos, which can be reimbursed by the state if they gather at least 5% of the votes during one of the two rounds of the

election (Electoral law, articles R39 and L216). The mailing is taken over by an official local *"propaganda committee"* as long as the format of the manifestos respects certain criteria. More specifically, electoral manifestos must have a maximum size of 210x297 millimeters and a weight ranging between 60 and 80 grams per square meter (Electoral law, article R29). Furthermore, they cannot combine the three colors of the French flag (blue, white, and red, per article R27 of the electoral law), except if they are part of a party's emblem. If these constraints are met, the manifestos are mailed to voters, together with ballots, maximum four days before the election (for the first round), and three days before the second round (in the case of a runoff) (Electoral law, articles R34 and R38). Examples of candidate manifestos are shown in Appendix Figures A1 through A4.

The CEVIPOF systematically collected the quasi-universe of manifestos after each election starting from 1958, thanks to the support of the government, which instructed departmental administrations (*"préfectures"*) to mail all manifestos issued in their districts to the research center, and to a large network of collaborating researchers who shared manifestos they had collected individually. This widespread collection effort faded away after 1993. It came back to life in more recent elections, including 2007 and 2012, but these corpora have not been digitized yet.

The digitized corpus of manifestos from 1958 to 1993 is publicly available on archive.org,[50] along with other campaign documents like electoral ballots, posters, flyers, etc. A major limitation of the public data in its current form is that each document corresponds to the collection of manifestos for one election round in one district, not a single candidate manifesto. A necessary step before performing any analysis is to break down district-level documents into individual manifestos and link each manifesto to their issuing candidate. An automatic identification of the author from each page's content is rendered difficult by the variety of names mentioned in each manifesto[51] and some heterogeneity in manifestos' length.[52] Therefore, each page was linked to their issuing candidate *"by hand"*, from the human-readable PDF version of each item.

I supplement the corpus of manifestos with electoral outcomes for each election over the 1958-1993 period, which were collected and generously provided by Nicolas Sauger, Vincent Pons, Clémence Tricaud and Abel François. Each election dataset includes district-level

[50] https://archive.org/details/archiveselectoralesducevipof/
[51] Many candidates also mention their opponent(s) in their manifesto.
[52] While the vast majority of manifestos are two pages long, they are sometimes one, three, or four pages long.

information such as the number of registered voters and turnout, as well as candidate-level characteristics—most importantly, official party affiliation and vote share in each election round. Incumbency status is also reported, but information on whether non-elected candidates ran in the past is not. Hence I use fuzzy string matching on candidates' last name and first name across election years to identify which candidates run for several consecutive election years in the same district. This exercise was performed in collaboration with Clémence Tricaud and Kevin Dano.

While the main sample ends in 1993, an additional sample of manifestos issued by candidates at the most recent legislative elections was also collected. In 2017, manifestos were made available online for the first time by the Ministry of the Interior[53] and webscraped by Regards Citoyens, an open-source website[54] advocating for transparency and accessibility of political data. I perform optical character recognition to convert the raw PDF documents into machine-readable text and pre-process the textual content as described above. As not all manifestos were posted online prior to the election, this sample contains 63% of the manifestos issued in the first round and 61% of those issued in the second.

### B.2 Dataset on legislative content

As per the general rules of the AN (Art. 135), elected representatives can express their voters' concerns and interests on specific topics and policies to members of the government by issuing *written questions*.[55] Written questions are directed to a single minister and must remain precise and concise. More importantly, they can be issued at any time even outside official legislative sessions. Their simplicity and flexibility has made them very successful, and their number has grown exponentially, from about 3,700 questions issued over the year 1959 to more than 20,000 in 2015.

I collect the content of written questions to the government as well as short descriptions of bill proposals by scraping the AN website, for the years in which the data is available. First, starting from the ninth legislature (1988-1993), written questions are all available in text format on the AN's website. The content of each question was scraped and their authors were linked to both electoral

[53] https://programme-candidats.interieur.gouv.fr/

[54] https://github.com/regardscitoyens/professions-foi-candidats

[55] Representatives can also ask *oral questions* to members of the government during specific legislative sessions, public or not. Unfortunately the content of these questions is not available over the period of interest.

results and campaign manifestos' content, leading to a total of 63,243 questions for 1988-1993 and 46,792 questions for 1993-1977.

The same strategy was followed for written questions issued over the 7th legislature (1981-1986), with one caveat: the full text of those questions is not available. Instead, I collected the preamble of each question—which lists the subject and key words—leading to total of 67,950 question preambles for that legislature.

Finally, the AN website also provides a list of bills introduced during the 9th and 10th legislatures[56] with a short description for each bill. These descriptions were scraped and the representative who worked on the bill as primary author was identified for each of them, leading to a total sample of 1,601 bills for the 9th and 2,029 bills for the 10th legislature.

**Examples of written questions** Question 1 of the 10th legislature[57] (1993-1997): Francis Delattre (Val d'Oise) asks the Minister of the Interior about existing differences in benefits received by personnel of the state working in local administration (*prefecture*) and personnel working in police stations. He argues that these public agents should be under the same pay scheme and asks if the Minister is planning to fix this.

Question 51139 of the 10th legislature[58] (1993-1997): Martin Malvy (Lot) asks the Minister of the Education about the future of the high school of Font-Romeu. Some high-level athletes like Colette Besson and Philippe Candeloro were trained there, and many local sport associations use the campus over winter. He asks if the Minister is planning to maintain the high-school training activity.

**Examples of bill description** Bill 3204 of the 10th legislature, proposed by Jacques Masdeu-Arus, asks employers to pay for their employees' highway toll fees.

[56] http://www.assemblee-nationale.fr/9/documents/index-dossier.asp
[57] http://questions.assemblee-nationale.fr/q10/10-1QE.htm
[58] http://questions.assemblee-nationale.fr/q10/10-51139QE.htm

# C Scaling methodology

## C.1 Text pre-processing

I pre-process manifestos' content following standard steps from the literature: removing stopwords and special characters, tokenizing documents at the single-word level, and lemmatizing each word using Spacy's French model (which, despite being often described as top-of-the-art, yields mixed results in this context). In addition, I restrict the vocabulary to words used by at least 0.5% and at most 50% of the first round-manifestos, for each election year separately. This reduces vocabulary to an average of about 4,800 unique words per election and 234 tokens per manifesto.

## C.2 Principal Component Analysis

I perform a principal component analysis on the document-term matrix[59] representation of the corpus of manifestos in the first round for each election separately. The ratio of variance in word count explained by each of the first five components is shown in Appendix Table A3. The first principal component explains close to twice as much variance as the second does in each election year, except for 1993, where both first and second principal components explain close to the same share of overall variance.

I then project each observation onto the first principal component and construct a bin scatter plot of the (standardized) first principal component score by political orientation, from far right to far left. Appendix Figure A5 shows these plots for each election year separately. The color scheme suggests that the dimension spanned by the first principal component is close to the left-right axis. For 1993 (Appendix Figure A5i) I plot projection onto the second principal component against the first and see that while the first PC (horizontal) still corresponds to a left-right scale, the second (vertical) separates the extreme far-right and far-left candidates from the more mainstream ones.

[59] A document-term matrix displays the frequency of each word in each document, where each word is a column and each document a row.

### C.3 Alternative scaling: MNIR

I raise two concerns about the validity of the main Wordscores approach (see Section 3) to construct partisan scores. First, this simple approach has been criticized for not being grounded into any explicit theoretical model of speech (Lowe 2008). Second, and more importantly, it may suffer from severe bias in a finite sample and provide measures too sensitive to infrequent words (Gentzkow et al. 2019b). Intuitively, some words may appear very polarized because they happen to be used only by right-wing or left-wing candidates in this particular corpus, even though they do not carry any meaningful partisan weight. To alleviate these concerns, I test alternative Wordscores specifications and find that both the partisan score and subsequent results are robust to changes in the reference scale, sample, or vocabulary (see Appendix D). Additionally, I adopt a second scaling approach that explicitly provides an estimation fix for bias in a finite sample.

**Multinomial Inverse Regression** I describe here the framework introduced by Taddy (2013). The frequency of word $w$ in document $j$ - $c_{wj}$ - is derived from a discrete choice model over the vocabulary of size $W$ and is assumed to follow a multinomial distribution of the form $c_{wj} \sim MN(q_{wj}, m_j)$, where $m_j$ is the number of words in document $j$ and

$$q_{wj} = \frac{exp(\alpha_w + \phi_w D_j)}{\sum_{k=1}^{W} exp(\alpha_k + \phi_k D_j)}$$

$D_j$ is equal to 1 $(-1)$ if $j$ is issued by a right-wing (left-wing) candidate. $\phi_w$ is a word *loading* that measures sensitivity to party affiliation or the gain in utility from using this word for a right-wing candidate over a left-wing one. A sufficient reduction (Cook et al. 2007) for $j$'s partisanship given the observed vector of word frequencies is the following projection:

$$Z_j = \sum_{w=1}^{W} \phi_w \cdot \frac{c_{wj}}{m_j}$$

which works as an alternative to the initial partisan score $Score_j$.

The parameters of interest $\alpha_w$ and $\phi_w$ are estimated through distributed multinomial regression (Taddy et al. 2015), where a Poisson approximation for the distribution of $c_{wj}$ allows for faster and more efficient distributed computing. The implied negative log-likelihood for each word is

proportional to:

$$l(\alpha_w, \phi_w) = \sum_{j=1}^{N} [m_j exp(\alpha_w + \phi_w D_j) - c_{wj}(\alpha_w + \phi_w D_j)]$$

Following Gentzkow et al. (2019b), I control bias through penalization. In particular, I apply the gamma-lasso procedure described in Taddy (2017) so that the preferred estimator is:

$$\hat{\alpha_w}, \hat{\phi_w} = argmin[l(\alpha_w, \phi_w) + N\lambda\gamma^{-1} log(1 + \gamma|\phi_w|]$$

where $N$ is the number of documents in the corpus, $\lambda$ is a standard Lasso penalty, and $\gamma$ is the penalty scale.[60] This penalized estimator shrinks noisy loadings to zero, resulting in a sparse solution that downweights the artificially high influence of rare words in the corpus.

Figure A10 shows bin scatter plots of the obtained sufficient reduction projection $Z_j$ against the Wordscores partisan score $S_j$ by political orientation for each election separately. It shows a striking correlation that suggests differences in discourse partisanship as measured by each method are negligible. More specifically, the ranking of candidates from most extreme on the left to most extreme on the right is well preserved.

# D Robustness checks

I first test for the robustness of the results in Table 1 to including the number of tokens in the manifesto as additional control in equation 2. The observed reduction in manifesto length could certainly be a valid mechanism for discourse moderation, if candidates dropped all polarizing words from their first round manifesto without adding any other, for instance. But this test shows that discourse moderation is not entirely driven by such mechanism and instead reflects a deeper change in textual content. Estimates are shown in Appendix Table A5.

Next, I test the robustness of within-candidate discourse moderation to alternative scaling methods on the main sample in Appendix Table A6. Column 1 shows the baseline estimate using Wordscores, as displayed in column 2 of Table 1. To facilitate the comparison across different methods, I divide the outcome by its overall standard deviation in the first round. Hence the

[60] For detail on the advantages of concave regularization and Gamma Lasso versus Lasso penalization, see Taddy (2017)

estimate in column 1 shows that extremeness decreases by 34% of a standard deviation between election rounds. In column 2, I apply the Wordscores approach described in Section 3.1 to the pooled vocabulary from manifestos issued both in the first and second election rounds. This may reduce the influence of words that are used in first round, but only very rarely in the second. This change in word usage is an endogenous mechanism that plays a role in discourse moderation, but it can also increase noise if there is little overlap between first- and second-round vocabulary. I overcome this potential concern by pooling the manifestos from both rounds when constructing word scores. The estimated decrease in extremeness is smaller in magnitude (17% of a standard deviation) but still significant at the 1% level.

Next, in column 3, I expand the left-right scale to give more negative weight to words used relatively more by the far left and more positive weight to words used relatively more by the far right. This specification excludes 1958, in which no party was considered far left. The estimate is still negative and significant at the 1% level, corresponding to a decrease in extremeness of 18% of a standard deviation.

Then I restrict the vocabulary to the most distinctive words using Tf-Idf weights. Tf-Idf is defined as the product of a term (word) frequency and its inverse document frequency, which gives more weight to words used frequently by some documents but not all. More precisely, I shrink to zero the frequency of words below the median non-zero Tf-Idf score and construct word scores as described in Section 3.1 from the new document-term matrix. This reduces the vocabulary size and increases the influence of words that are more document specific. Column 4 shows that this restriction yields an almost identical estimate of -35%, significant at the 1% level.

In column 5, I construct partisan scores from an alternative measure of word polarization: the Pearson's Chi-square statistic. This approach has been used in various studies (Gentzkow and Shapiro 2010; Jensen et al. 2012; Ash et al. 2017) to measure discourse polarization or divisiveness, as it provides a test for the null hypothesis that a word is being used equally often by left-wing and right-wing manifestos. I construct the statistic for each word (positive if being used more often by the aggregate of right-wing manifestos, negative if being used more often by the left-wing ones) and average it within the document to get an alternative partisan score for each manifesto. The estimates displayed in column 5 of Table A6, Panel a, suggest that using this alternative measure

as an outcome yields a similar moderation pattern, with a significant decrease of 4% of a standard deviation in extremeness.

Finally, I use the absolute value of the sufficient reduction projection from the multinomial inverse regression defined in Appendix C.3 as alternative outcome in column 6. The result is similar to the main estimate from column 1 (-33% of a standard deviation).

In columns 7 and 8, I construct out-of-sample word scores. First, the partisan score of candidates who compete in the runoff in a given election is constructed using word scores from candidates who *do not* make it to the runoff. Second, I construct word scores from a random subsample of candidates (*training set*), representing half of the observations in each election year. I then estimate model 2 on the subsample of candidates who were not selected to construct word scores (*test set*). The point estimates in both columns are still negative (-26% and -28% of a standard deviation, respectively) and significant at the 1% level.

Panel b of Appendix Table A6 shows that discourse moderation is robust to the alternative scaling approaches described above in the additional 2017 sample as well.

# E Measuring party cohesion and personalization

I propose a measure of *party cohesion* based on how much of a manifesto's content is identical to that of any other manifesto from the same party. I construct the Levenshtein distance, or *edit distance*, between every possible pair of candidates within a given party and a given election year. More precisely, I compute the minimum share of tokens that must be edited—inserted, deleted, or substituted—to make two manifestos exactly identical. I define *cohesion* between two documents as one minus this distance. Therefore, two manifestos that contain a large "copied and pasted" block of text would have a cohesion close to one, while two manifestos with very few identical chains of consecutive words would have a cohesion close to zero. Party cohesion is defined as the mean pairwise cohesion across all possible pairs of candidates within a same party (excluding independent candidates without a clear party affiliation).[61]

[61]The text pre-processing steps I adopt before constructing this measure differ slightly from those preceding the construction of partisan scores. In particular, I keep all infrequent and very frequent tokens, which were removed before scaling manifestos from left to right. Hence party cohesion may be defined for a few manifestos that were left empty after removing infrequent words and whose partisan score is therefore missing.

Appendix Table A7, Panel a, displays party cohesion in the first round, averaged by political orientation across all election years. Two facts are worth noting: first, the low mean cohesion among candidates from left, center and right-wing parties suggest that it is not common for mainstream candidates to use a large block of text that would be found in many other candidates' manifestos from the same party. Candidates from the same party may still expose similar arguments and defend a common policy platform, but they tend do so in personalized sentences and using their own layout. Second, mean cohesion is much stronger among candidates from extreme parties on the far left or the far right (24pp and 26pp, respectively), showing that candidates from marginal parties often use an identical template with much fewer personalized elements. A similar pattern is shown in Panel b, which displays mean party cohesion over election years for the five main party organizations throughout the period. Mean cohesion is 3 to 7 times higher among National Front's candidates than it is among candidates affiliated with mainstream parties (Communists, Socialists, Union for French Democracy or Rally for the Republic).

I now provide evidence that discourse moderation correlates with discourse personalization. To do so, I exclude candidates who do not compete in a runoff election, then calculate each candidate's mean cohesion with all other candidates from the same party in each separate election round. Discourse personalization is defined as (negative) the change in a candidate's mean cohesion between election rounds. Hence, a postive personalization value means that the candidate has reduced the share of her manifesto dedicated to a textual block common to all candidates in the party.

Appendix Figure A11 displays binned scatter plots of standardized personalization against standardized moderation, where candidate $i$'s discourse moderation in election year $e$ is defined as (negative) the change in absolute partisan score between election rounds:

$$Moderation_{ie} = Extremeness1_{ie} - Extremeness2_{ie}$$

Hence, a positive value of $Moderation_{ie}$ means that candidate $i$ issued a partisan manifesto in the first round but a more neutral one in the second. The scatter plot on the raw data shows a positive correlation, driven at the extreme by candidates who strongly moderate their discourse and

strongly reduce their party cohesion as well. The correlation is even more striking after residualizing both moderation and personalization on initial extremeness in the first round, party cohesion in the first round, and the interaction between the two, as well as district×year fixed effects and party×year fixed effects (Appendix Figure A11b). Candidates who moderate their discourse more than other candidates from the same party—who issued a similar manifesto in the first round—also tend to reduce the share of their manifesto that is dedicated to a common party block more than others.

# F Impact of the qualification of a third candidate

I closely follow the empirical strategy described in Pons and Tricaud (2018) to estimate the causal impact of the runoff qualification of a third candidate on discourse moderation among first- and second-ranked candidates. The outcome is defined as (negative) the change in absolute partisan score between election rounds. I use a non-parametric approach as in Imbens and Lemieux (2008) and Calonico et al. (2014) with MSERD bandwidths (Calonico et al. 2020). I choose to focus on elections held in 1978 or later, when the qualifying theshold is higher and so only a third candidate ever qualifies for the runoff. In the previous years, the threshold is lower, so multiple candidates can qualify, often leading qualified candidates to drop out of the race. Hence, the predictions of how qualifying a third candidate might affect discourse moderation among the first two are unclear. In addition, I only report reduced form estimates from the sharp RD design, where treatment is defined as competing in a runoff to which a third candidate qualified—without necessarily staying in the race. Indeed, the decision to stay on the ballot or not is endogenous and may impact the first two-ranked candidates' campaign strategies in different ways, beyond the impact of having a third candidate in the competition. Hence, the exclusion restriction required to interpret the estimates from a fuzzy RD design as the causal impact of the number of candidates in the race may be violated. Instead, reduced form estimates are informative of the direction in which the number of candidates on the ballot is likely to impact discourse moderation.

Column 1 of Appendix Table A11 shows a negative point estimate of -0.04, consistent with the prediction that first- and second-ranked candidates are less likely to moderate their discourse

when a third candidate is able to stay in the race, and when there are fewer opportunities to attract voters whose preferred ideological candidate is no longer on the ballot by signaling quality. However, this estimate is not significant at any conventional level.

I find a larger effect of -0.15, significant at the 5% level, when restricting the sample to first or second-ranked candidates who face a main opponent from the opposite political orientation and a third-ranked candidate from the same orientation[62] (column 2) and a much smaller insignificant negative effect when restricting the sample to candidates facing both a main opponent and a third-ranked candidate from the same orientation (column 3). These estimates are consistent with what one would expect (see Section 3.2 for more details on their interpretation).

There are two reasons why these estimates may only be marginally significant, despite pointing in the right direction: first, sample sizes are fairly small, with only a few hundred observations around the threshold, and the estimates may suffer from insufficient statistical power. Second, the outcome is quite noisy by nature, as discourse moderation is itself constructed from estimated word scores, which may inflate standard errors even more. This is why I interpret these RD results with caution and prefer to use them as supportive evidence for strategic discourse moderation, as opposed to a main finding.

## G Case study: Jean-Marie Le Pen vs. Dominique Paillé

To better illustrate the moderation and personalization patterns described in Sections 3.2 and 3.3, I provide and compare two concrete examples. First, I examine the first and second round manifestos of Jean-Marie Le Pen in 1993, whom I chose because he is the greatest *"moderator"* in that year and stands among the top 20 moderators across all years. Jean-Marie Le Pen is a controversial politician who founded the anti-immigration National Front party in 1972 and ran for office—including in presidential elections—multiple times after that. In 1993, he was a candidate for a legislative seat in the 3rd district of Alpes-Maritimes. He made it to the runoff but lost to a moderate right-wing candidate, Rudy Salles. The two pages of his manifesto issued before the first round are shown in Appendix Figure A1, while the two pages of his manifesto issued before the second round are shown in Appendix Figure A2.

[62] Excluding non-classified candidates whose ideoligical orientation is unclear.

In the first round, the manifesto is very dense and provides a lot of content. The first page contains a short paragraph from the candidate addressing the voters directly, to inform them of the *"grim future ahead of them"* and present the National Front as *"a beacon of hope to restore France's strength and glory."* The rest of the page displays three blocks, each of them attacking a different mainstream party with numbers and facts that speak against their policy platforms. The second page is a template used by the quasi-universe of National Front's candidates in that year, which describes the twenty policy priorities for the party. The key issues are displayed in large and bold font at the top of the page: *"immigration," "unemployment," "taxation," "insecurity," "injustice," "corruption."* Overall, this manifesto is as close as a candidate manifesto can get to a pure party platform.

The second-round manifesto looks very different. The first page displays a huge colored picture of Jean-Marie Le Pen and no text besides the invitation to vote for him. The second page is a rather short letter addressing the voters directly, signed by his hand. The letter thanks those who voted for him in the first round, asks them to keep mobilized in the second round, mentions that the incumbent representative is entangled in personal and family scandals, and finally reminds voters who did not support him in the first round that he is the candidate of *"integrity and honor."* There is not a single mention of the policy issues discussed at length in the first round manifesto.

Jean-Marie Le Pen's strategy in that election seems quite clear: campaign on detailed policy elements in the first round—emphasizing the most polarizing ones such as immigration and elite corruption, and using a template common to all candidates in the party—but switch to a much shorter and more general statement about his own consensus-based qualities (*"integrity and honor"*) in the second round. These qualitative observations are consistent with previous findings: candidates who moderate their discourse in the runoff do so by moving away from a common party platform and its policy issues to campaign on more neutral, personalized content instead.

Second, I analyze the manifestos of Dominique Paillé, a moderate right-wing candidate (Union for French Democracy) running in the 4th district of Deux-Sevres. He won in a landslide in the runoff because his opponent, another moderate right-wing candidate (running under the banner of Rally for the Republic), dropped out of the race. Unlike Le Pen, Dominique Paillé's estimated discourse moderation between rounds is close to zero. Paillé's manifestos issued in each round are

shown in Appendix Figures A3 and A4. Both documents look stikingly similar to one another, with identical structure and pictures. On the first page, the candidate addresses the voters directly to emphasize his commitment to the party values (*"economic liberalism," "social progress," "individual responsibility"*) as well as to local politics. The second page lists the national party platform and the candidate's propositions to address local issues. The differences between manifestos are marginal and meaningless.

# H Additional figures and tables

Figure A1: Jean-Marie Le Pen's manifesto in 1993 in the first round

ELECTIONS LEGISLATIVES DE MARS 1993 - 3ème CIRCONSCRIPTION DES ALPES-MARITIMES

**FRONT NATIONAL**
**LES FRANÇAIS D'ABORD !**

**VOTEZ**
**JEAN-MARIE**
**LE PEN**

Député Européen - Conseiller Régional Provence-Alpes-Côte d'Azur
Président du Front National

SUPPLÉANT :
Josiane
**PASTOREL**
Assistante Sociale
Conseiller Régional - Conseiller Municipal de Nice
Déléguée Départementale de l'Identité Française

*Chers compatriotes,*

*Chômage, insécurité, immigration, pauvreté, impôts, "affaires"... Force est de constater qu'en France aujourd'hui rien ne va plus ! Ce constat dramatique, mais malheureusement bien réel, vous inquiète. Or, il y a des responsables à cet état de fait : ce sont des politiciens de gauche comme de droite qui depuis plus de vingt ans se sont révélés incapables de gouverner correctement notre pays. A juste raison, l'avenir vous apparaît angoissant. Pourtant, en politique, il n'y a pas de fatalité. A nous de prendre notre destin en mains. Si vous voulez que la France retrouve sa force et sa grandeur, si vous voulez que justice, honnêteté, éducation, bien-être, fraternité, soient des mots qui aient une réelle valeur, si vous voulez faire entendre la voix du bon sens et de la vérité, je vous invite le 21 mars à voter Front National pour la renaissance de la France.*

*Jean-Marie LE PEN*

**LE SOCIALISME , ÇA SUFFIT !**

- **4,5 MILLIONS DE CHÔMEURS**
- **4 MILLIONS DE DÉLITS ET DE CRIMES**
- **7 MILLIONS D'IMMIGRÉS**
- **500 000 SANS-ABRI !**
- **500 000 SÉROPOSITIFS**

**ÉCOLOGISTES, ATTENTION DANGER !**

Partout où les écologistes sont élus, ils veulent augmenter les impôts, encourager l'immigration et persécuter les automobilistes. Dans les régions, ils se vendent toujours au plus offrant : en Lorraine à l'UDF, dans le Nord au PS, en Ile-de-France au RPR.

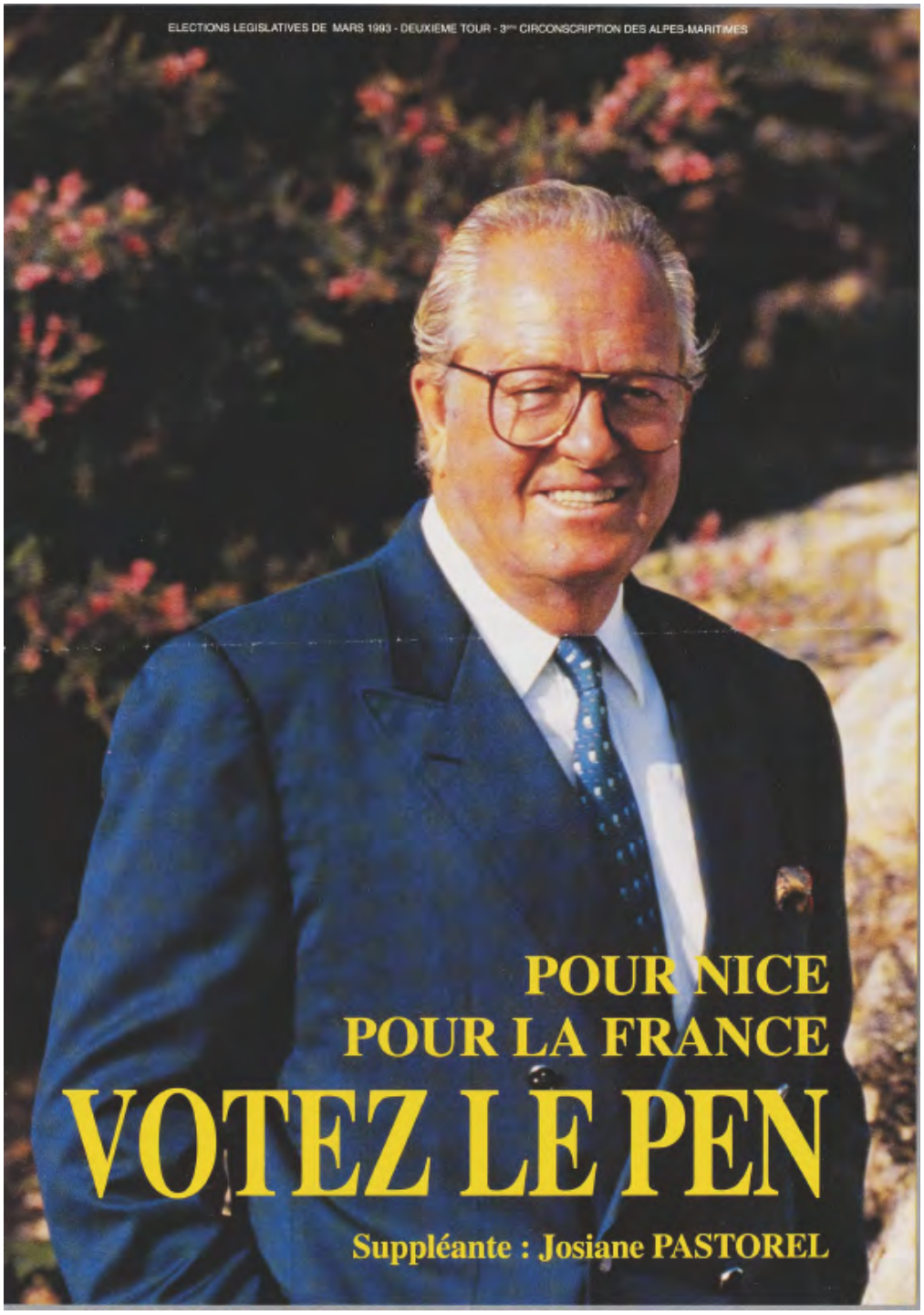
**RPR-UDF, ILS VOUS TROMPENT !**

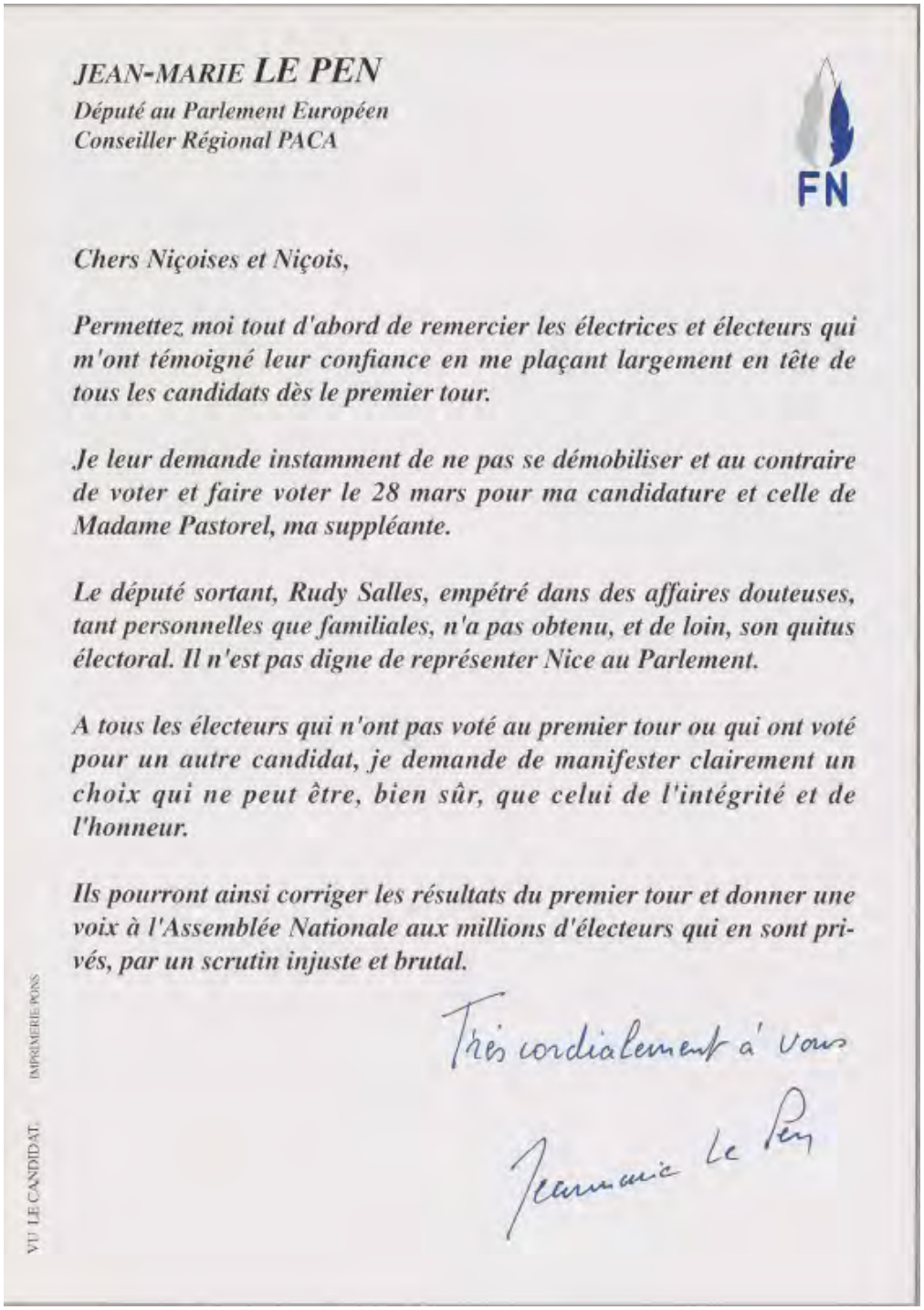
| ILS VOUS DISENT... | EN RÉALITÉ... |
|---|---|
| *Qu'ils sont contre l'immigration.* | Avec le PS et le PC, le RPR et l'UDF ont voté la carte de séjour de 10 ans renouvelable pour les immigrés. |
| *Qu'ils vont réformer le Code de la Nationalité.* | Ils l'avaient déjà promis en 1986, ils n'en ont rien fait. |
| *Qu'ils vont rétablir la sécurité.* | Les élus du RPR et de l'UDF se refusent encore aujourd'hui à rétablir la peine de mort. |
| *Qu'ils vont sauver l'agriculture.* | Le RPR et l'UDF ont approuvé la PAC 92 et ont dit OUI au Traité de Maastrich. |

**RPR-PS-UDF-PC : TOUS RESPONSABLES, TOUS COUPABLES !**


Source: Electoral archives of CEVIPOF SciencesPo, EL189L199303006031PFPdfmasterocr—https://archive.org/details/archiveselectoralesducevipof

Figure A2: Jean-Marie Le Pen's manifesto in 1993 in the second round





*JEAN-MARIE* **LE PEN**
*Député au Parlement Européen*
*Conseiller Régional PACA*

FN

*Chers Niçoises et Niçois,*

*Permettez moi tout d'abord de remercier les électrices et électeurs qui m'ont témoigné leur confiance en me plaçant largement en tête de tous les candidats dès le premier tour.*

*Je leur demande instamment de ne pas se démobiliser et au contraire de voter et faire voter le 28 mars pour ma candidature et celle de Madame Pastorel, ma suppléante.*

*Le député sortant, Rudy Salles, empêtré dans des affaires douteuses, tant personnelles que familiales, n'a pas obtenu, et de loin, son quitus électoral. Il n'est pas digne de représenter Nice au Parlement.*

*A tous les électeurs qui n'ont pas voté au premier tour ou qui ont voté pour un autre candidat, je demande de manifester clairement un choix qui ne peut être, bien sûr, que celui de l'intégrité et de l'honneur.*

*Ils pourront ainsi corriger les résultats du premier tour et donner une voix à l'Assemblée Nationale aux millions d'électeurs qui en sont privés, par un scrutin injuste et brutal.*

Très cordialement à vous

Jeanmarie Le Pen

VU LE CANDIDAT IMPRIMERIE PONS

Source: Electoral archives of CEVIPOF SciencesPo, EL189L199303006032PFPdfmasterocr—https://archive.org/details/archiveselectoralesducevipof

Figure A3: Dominique Paillé's manifesto in 1993 in the first round

Département des Deux-Sèvres

4e Circonscription : BRESSUIRE - THOUARS

**Élections Législatives du 21 Mars 1993**

# DOMINIQUE PAILLÉ

***Maire des Aubiers***

**Suppléant**
**ALBERT BROCHARD**
***Député sortant***

*Chères électrices, chers électeurs,*

***Votre choix du 21 mars est décisif pour l'avenir de la France et du Nord Deux-Sèvres.***

*Nous avons besoin d'une **majorité** capable de conduire le changement indispensable au **redressement du pays.***

*Et cette majorité, pour être porteuse d'**idées neuves**, doit accueillir très largement une **nouvelle génération** de responsables, condition essentielle d'une **alternance politique et morale** réussie.*

*A l'Assemblée Nationale, sans sectarisme ni complaisance, je défendrai les valeurs qui sont les miennes et celles de l'**UDF** à laquelle j'appartiens : un **libéralisme économique raisonné**, le **progrès social**, la **responsabilité** individuelle et la **solidarité**.*

*Enfant du pays, homme de terrain, **disponible** car je ne cumule pas les mandats, je mets à votre **service** et à celui du Nord Deux-Sèvres mon **dynamisme**, mon **expérience locale** et également **nationale**.*

" J'ai la conviction qu'ensemble, forts de ces atouts et de notre détermination, nous réussirons. Merci de votre confiance "

***DOMINIQUE PAILLÉ***

UDF

*L'efficacité au service du Nord Deux-Sèvres*

# AUCUNE PROMESSE MAIS LA VOLONTE D'ABOUTIR

**Nos priorités pour la France :**

- l'emploi par la réduction des charges, une autre politique éducative et l'amélioration de la formation professionnelle.
- un encouragement à l'investissement des P.M.E. - P.M.I. par un soutien fiscal à l'épargne investi dans les fonds propres et la création d'entreprises.
- l'aménagement du territoire au profit des zones rurales pour enrayer la désertification.
- la défense et la promotion de notre agriculture par la renégociation de la PAC, le refus du pré-accord GATT et la mise en place de vraies mesures nationales de diminution des charges fiscales et sociales qui pèsent sur nos exploitations.
- un traitement des problèmes sociaux qui fasse appel à la responsabilité de chacun pour préserver et améliorer notre système de protection.
- une véritable décentralisation des moyens culturels pour que la région parisienne ne soit pas la seule à bénéficier de toutes les actions.

**Mes priorités pour le Nord Deux-Sèvres :**

- offrir sur place à nos jeunes des formations diversifiées et de haute qualité.
- accélérer le développement de nos voies de communication afin qu'autour de notre seul axe national (la N 149) un maillage de voies secondaires puisse rapidement être réalisé.
- obtenir des liaisons ferroviaires entre Thouars et Tours permettant des correspondances pratiques avec le TGV.
- imposer le Nord Deux-Sèvres dans les zones d'aides européennes aux régions défavorisées ou en situation difficile.
- développer nos productions agricoles de qualité, accompagner leur mise sur le marché et soutenir les industries agro-alimentaires.
- maintenir le petit commerce, implanter harmonieusement l'habitat social dans notre campagne et promouvoir les actions touristiques complémentaires à l'activité économique et qui peuvent mettre en valeur notre environnement.

Député depuis 1973, j'ai accepté à la demande de Dominique Paillé et de nombreux amis, d'être son suppléant.

Je souhaite que vous lui apportiez massivement vos suffrages dès le 21 Mars prochain. Chaque voix en faveur de Dominique Paillé, c'est un pas en avant pour le Nord-Deux-Sèvres.

Albert

**Le 21 MARS,** vous choisirez un député :

- efficace, à la compétence nationale reconnue
- disponible parce qu'il ne cumule pas les mandats
- simple, accessible parce qu'il conçoit autrement la politique.

***VOTEZ UTILE DÈS LE 1er TOUR***
***VOTEZ et FAITES VOTER***
***D. PAILLÉ***

Vu, le Candidat,
**Dominique PAILLÉ**
*Maire des Aubiers,*

Suppléant :
**Albert BROCHARD**
*Député sortant.*

Source: Electoral archives of CEVIPOF SciencesPo, EL196L199303079041PFPdfmasterocr—https://archive.org/details/archiveselectoralesducevipof

Figure A4: Dominique Paillé's manifesto in 1993 in the second round

Département des Deux-Sèvres

4e Circonscription : BRESSUIRE - THOUARS

**Élections Législatives du 28 Mars 1993**

# DOMINIQUE PAILLÉ

*Maire des Aubiers*

**Suppléant**
**ALBERT BROCHARD**
*Député sortant*

***Chères électrices, chers électeurs,***

***Dimanche 21 mars, vous m'avez placé, ainsi qu'Albert BROCHARD, largement en tête des candidats présents au premier tour.***

*Ce résultat démontre que l'**engagement** pris devant vous répondait à une attente profonde, celle d'un **nouvel élan pour le Nord Deux-Sèvres et pour notre pays.***

***Il nous faut maintenant le confirmer et l'amplifier au second tour.***

*Comme je vous l'ai dit lors de la campagne électorale, à l'Assemblée Nationale, demain, je défendrai sans sectarisme, ni complaisance, les valeurs qui sont les nôtres : un **libéralisme économique raisonné**, le **progrès social**, la **responsabilité** individuelle et la **solidarité**.*

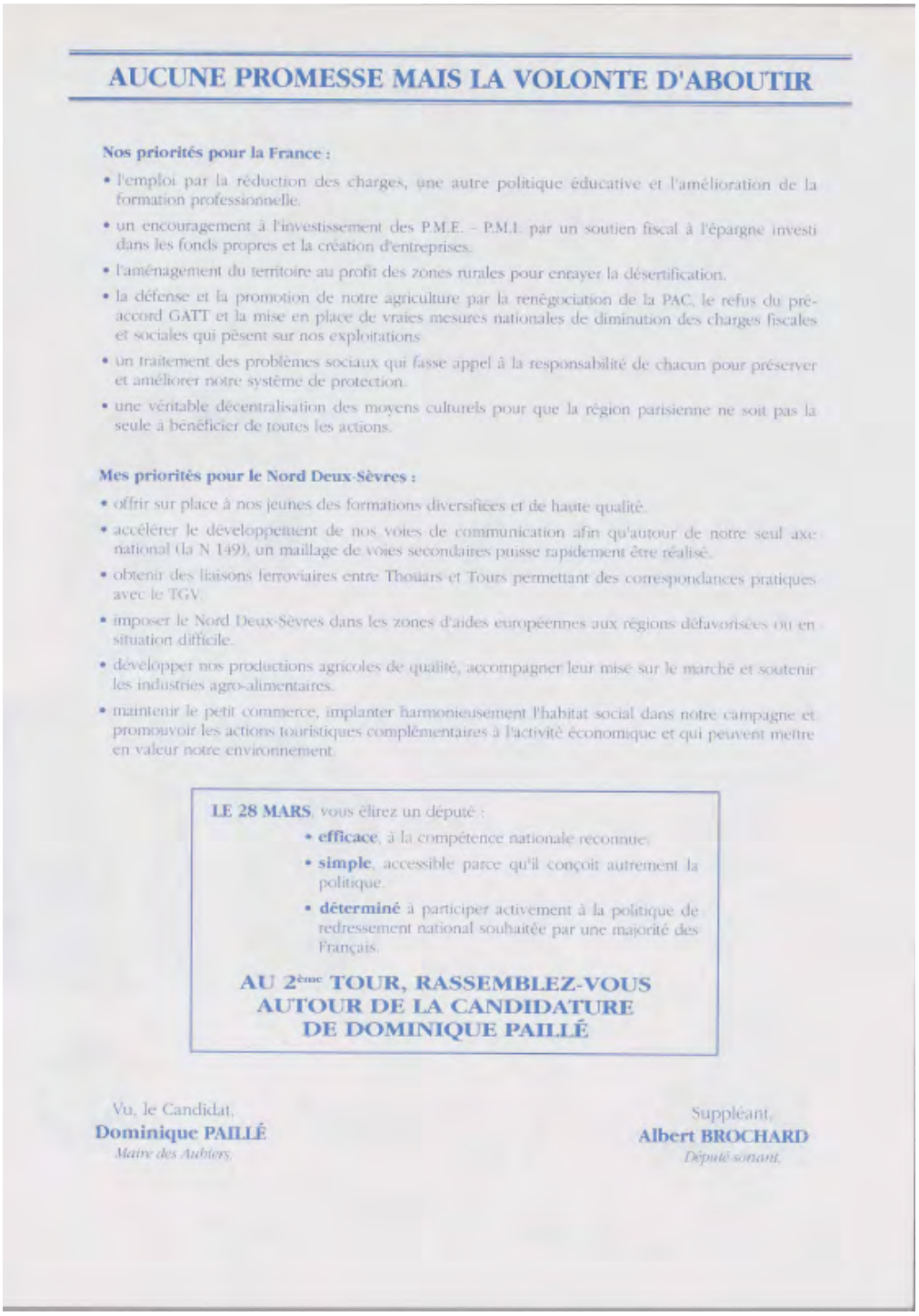
"Vous pouvez compter sur ma détermination.
Ensemble nous vaincrons.
Merci de votre confiance."

*DOMINIQUE PAILLÉ*

Albert BROCHARD
*Candidat suppléant*

L'efficacité
au service du Nord Deux-Sèvres

UDF



# AUCUNE PROMESSE MAIS LA VOLONTE D'ABOUTIR

**Nos priorités pour la France :**

- l'emploi par la réduction des charges, une autre politique éducative et l'amélioration de la formation professionnelle.
- un encouragement à l'investissement des P.M.E. - P.M.I. par un soutien fiscal à l'épargne investi dans les fonds propres et la création d'entreprises.
- l'aménagement du territoire au profit des zones rurales pour enrayer la désertification.
- la défense et la promotion de notre agriculture par la renégociation de la PAC, le refus du pré-accord GATT et la mise en place de vraies mesures nationales de diminution des charges fiscales et sociales qui pèsent sur nos exploitations.
- un traitement des problèmes sociaux qui fasse appel à la responsabilité de chacun pour préserver et améliorer notre système de protection.
- une véritable décentralisation des moyens culturels pour que la région parisienne ne soit pas la seule à bénéficier de toutes les actions.

**Mes priorités pour le Nord Deux-Sèvres :**

- offrir sur place à nos jeunes des formations diversifiées et de haute qualité.
- accélérer le développement de nos voies de communication afin qu'autour de notre seul axe national (la N 149), un maillage de voies secondaires puisse rapidement être réalisé.
- obtenir des liaisons ferroviaires entre Thouars et Tours permettant des correspondances pratiques avec le TGV.
- imposer le Nord Deux-Sèvres dans les zones d'aides européennes aux régions défavorisées ou en situation difficile.
- développer nos productions agricoles de qualité, accompagner leur mise sur le marché et soutenir les industries agro-alimentaires.
- maintenir le petit commerce, implanter harmonieusement l'habitat social dans notre campagne et promouvoir les actions touristiques complémentaires à l'activité économique et qui peuvent mettre en valeur notre environnement.

**LE 28 MARS**, vous élirez un député :

- **efficace**, à la compétence nationale reconnue.
- **simple**, accessible parce qu'il conçoit autrement la politique.
- **déterminé** à participer activement à la politique de redressement national souhaitée par une majorité des Français.

**AU 2ème TOUR, RASSEMBLEZ-VOUS AUTOUR DE LA CANDIDATURE DE DOMINIQUE PAILLÉ**

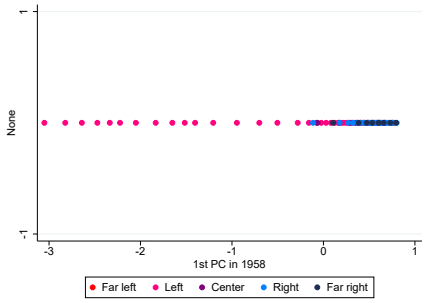
Vu, le Candidat,
**Dominique PAILLÉ**
*Maire des Aubiers.*

Suppléant,
**Albert BROCHARD**
*Député sortant.*

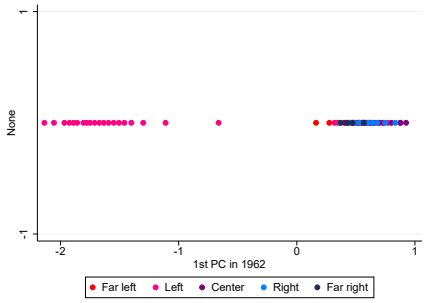
Source: Electoral archives of CEVIPOF SciencesPo, EL189L199303006032PFPdfmasterocr—https://archive.org/details/archiveselectoralesducevipof

Figure A5: Bin scatter plot of first principal component score by political orientation

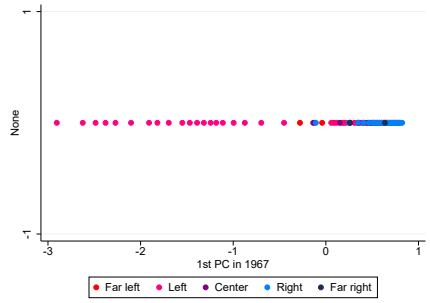
(a) 1958



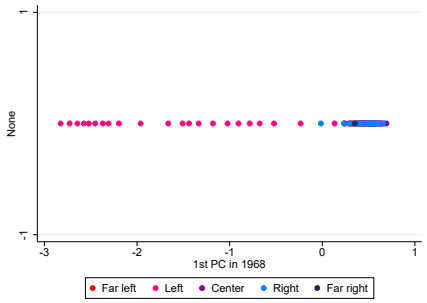

(b) 1962



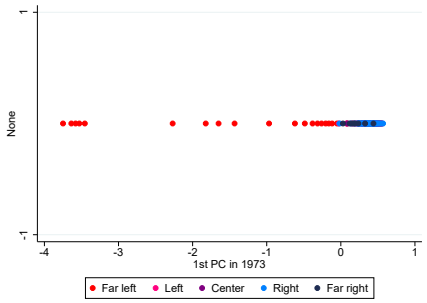

(c) 1967



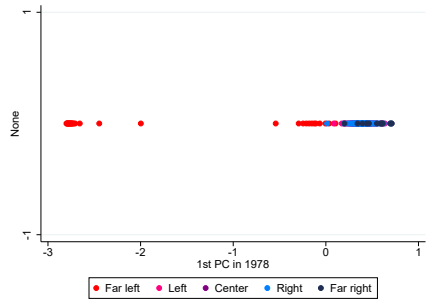

(d) 1968



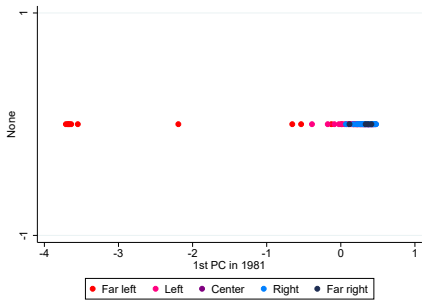

(e) 1973



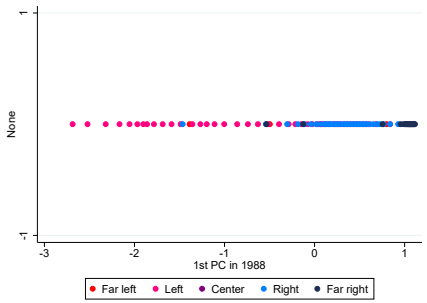

(f) 1978



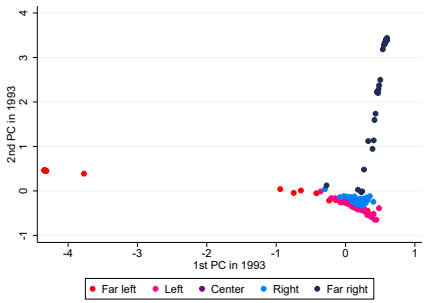

(g) 1981




(h) 1988

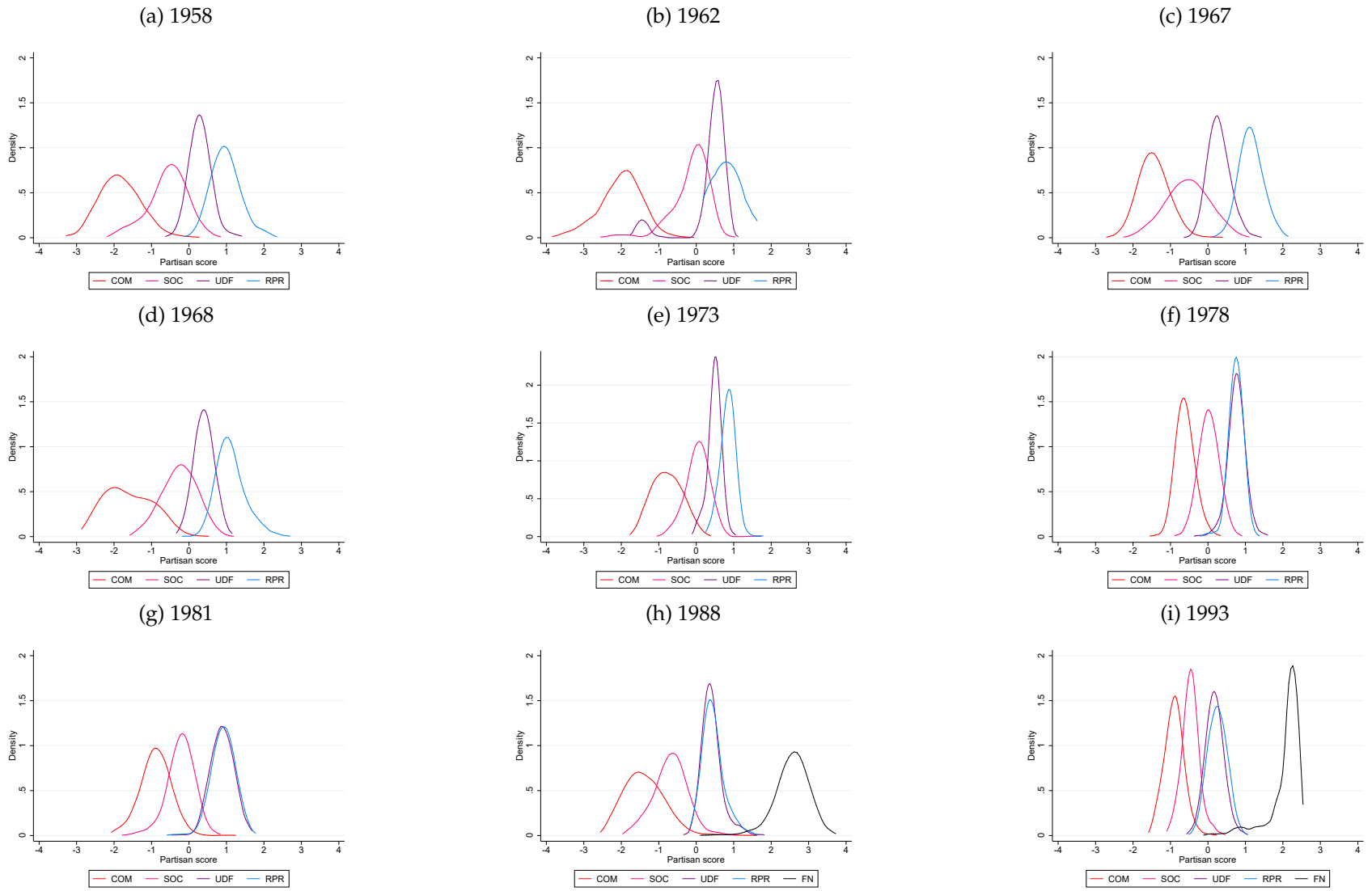



(i) 1993



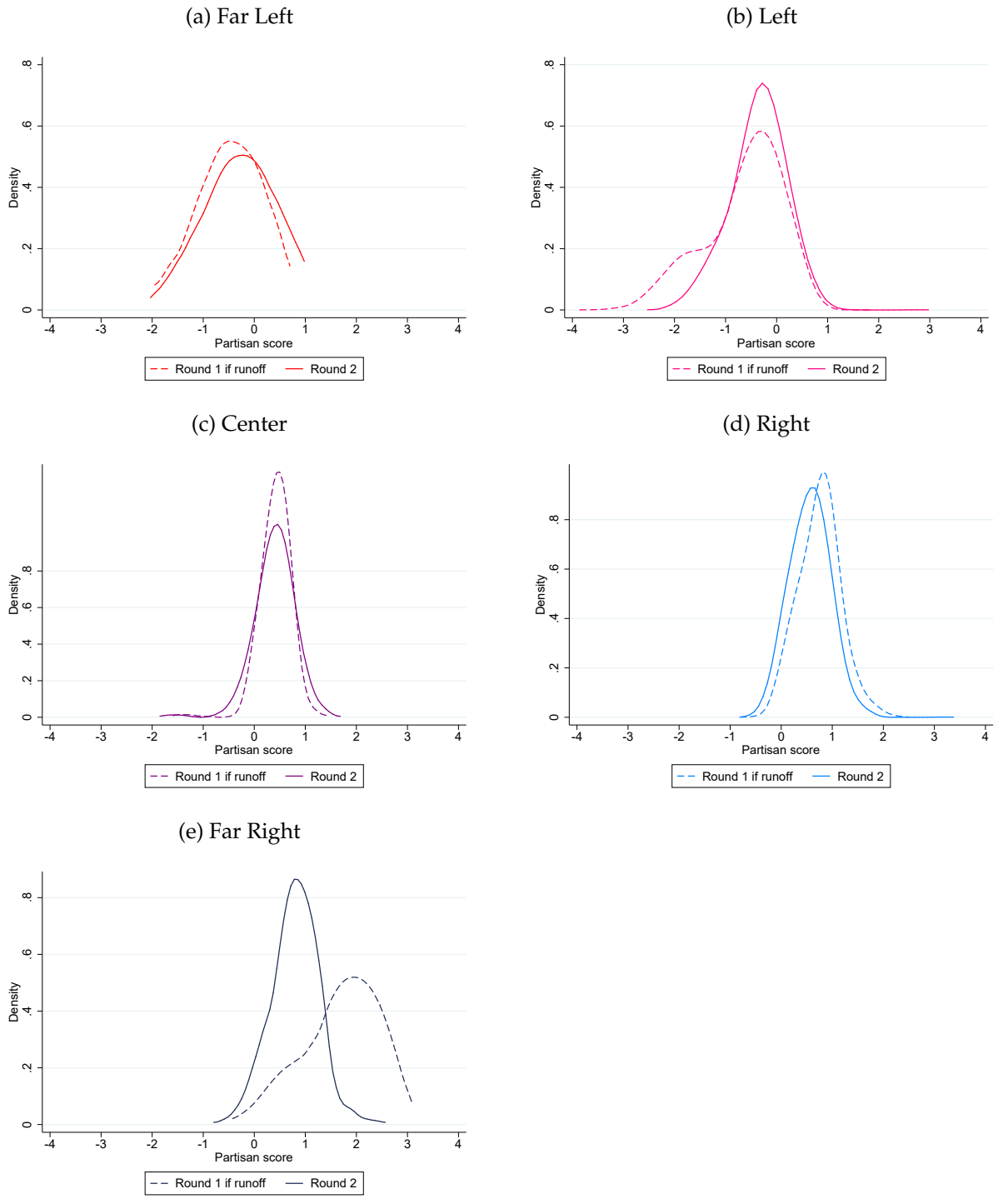

*Notes:* I show bin scatter plots of the standardized projection of each first round manifesto's content—represented as a vector of word frequencies—onto the first principal component from a principal component analysis of the document-term matrix, by political orientation and for each election separately. In Figure A5i the projection onto the second principal component is plotted against the projection onto the first component. The sample includes candidates whose first round manifesto is available, excluding non-classified candidates and candidates whose political orientation is missing. Large outliers—the top and bottom 1% of the standardized principal component in each year—are also excluded for visual purposes.

Figure A6: Kernel density of partisan score by party and by election year




*Notes:* Same notes as in Figure A7. The sample is restricted to candidates whose first round manifesto is available and who are affiliated with the Communist Party (COM), the Socialist Party (SOC), Union for French Democracy and predecesors (UDF), Rally for the Republic and predecessors (RPR), or the National Front (FN).

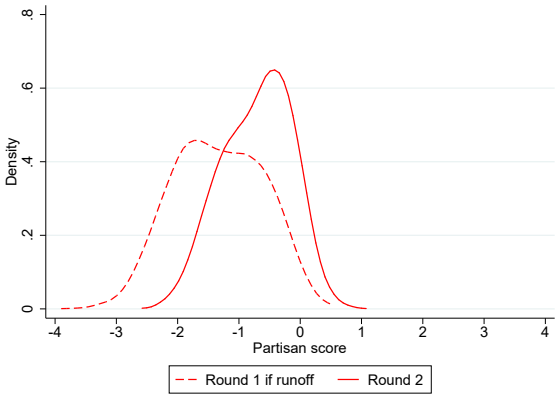
Figure A7: Kernel density of partisan scores across election rounds by political orientation



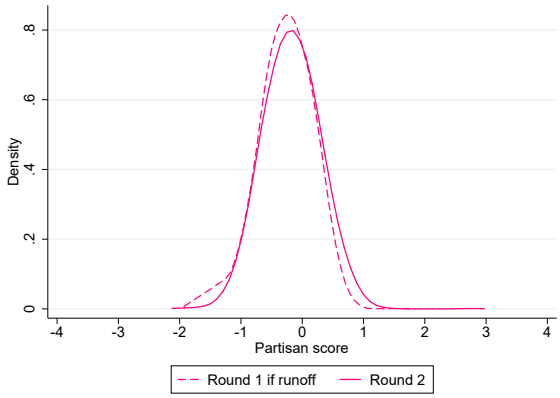

*Notes:* The sample includes candidates who run in both election rounds and whose two manifestos are available, excluding non-classified candidates and candidates whose political orientation is missing. Other notes as in Figures 1 and 2.

Figure A8: Kernel density of partisan scores across election rounds by party

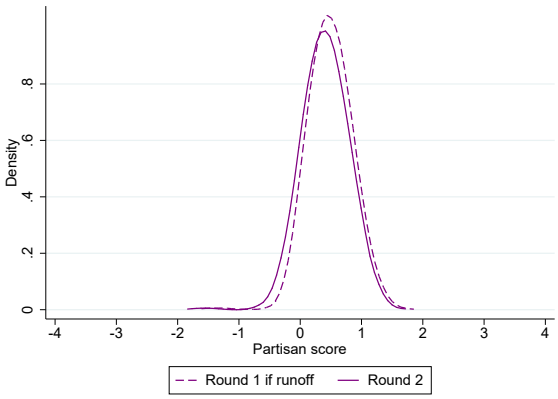
(a) Communist Party



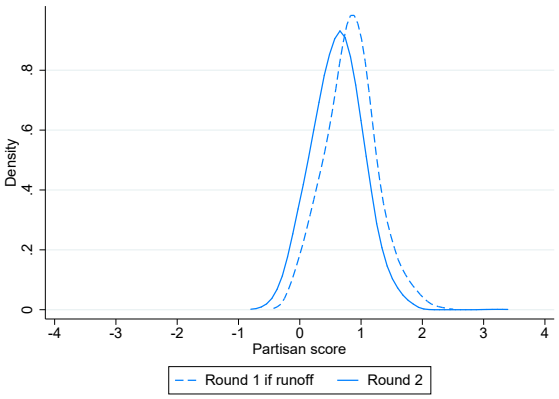

(b) Socialist Party



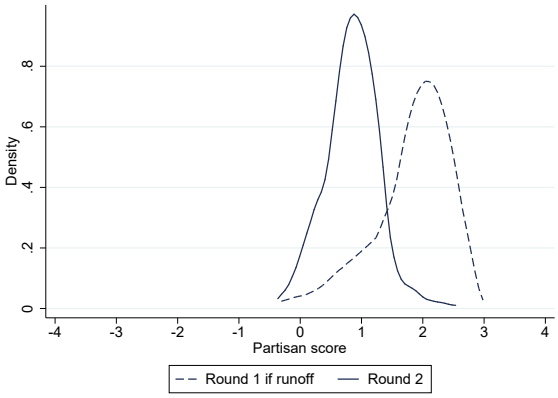

(c) Union for French Democracy




(d) Rally for the Republic



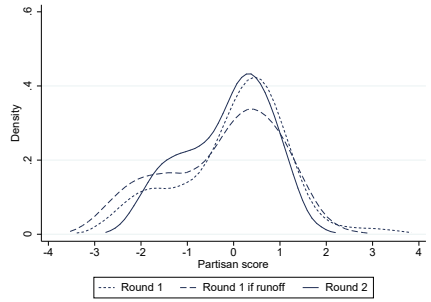

(e) National Front



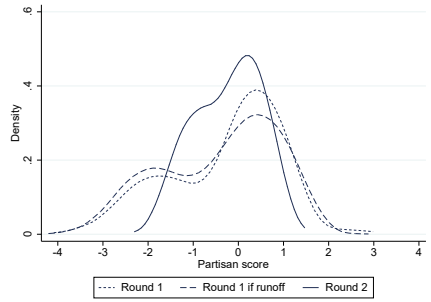

*Notes:* Same notes as in Figures A7 and A6.

Figure A9: Kernel density of partisan score across election rounds by election year

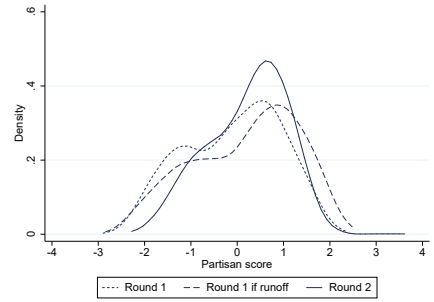
(a) 1958



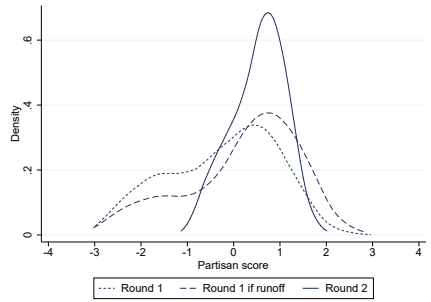

(b) 1962



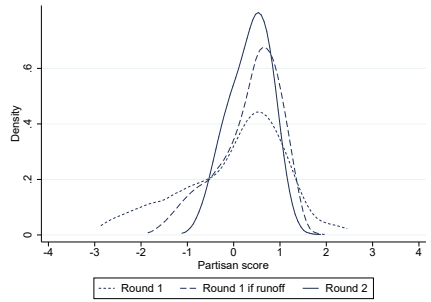

(c) 1967



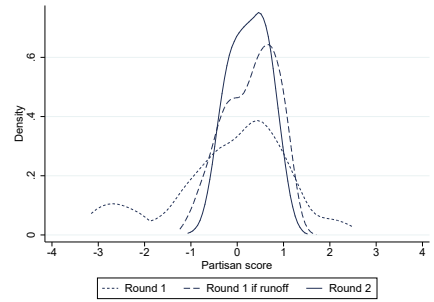

(d) 1968



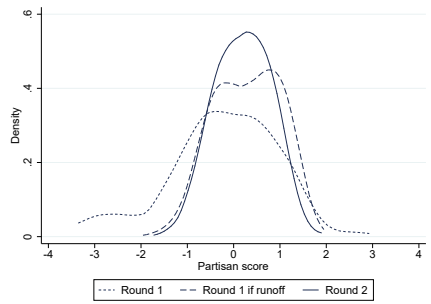

(e) 1973



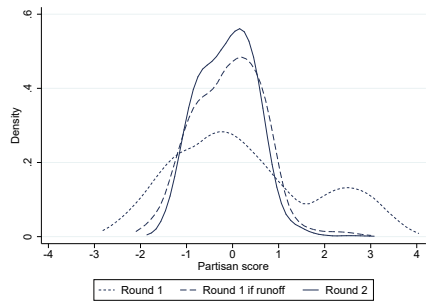

(f) 1978



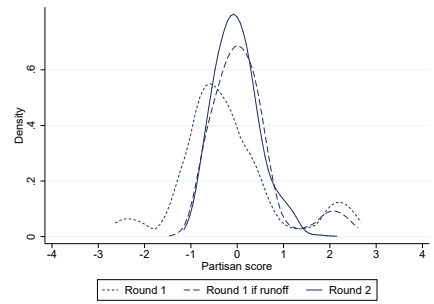

(g) 1981




(h) 1988



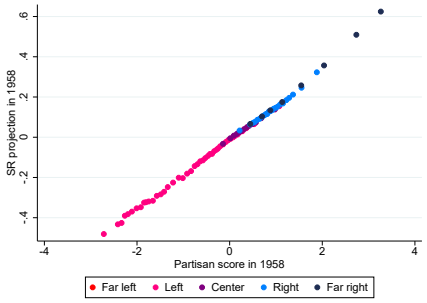

(i) 1993



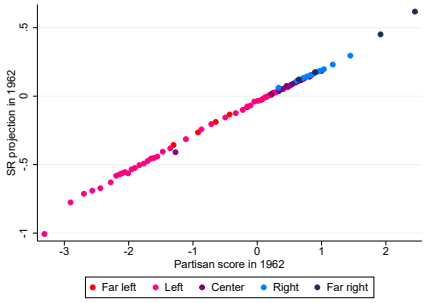

*Notes:* Same notes as in Figure A7.

Figure A10: Sufficient reduction projection and partisan score by political orientation

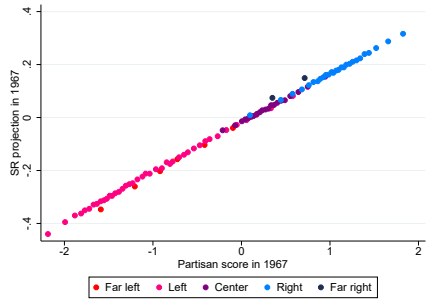
(a) 1958



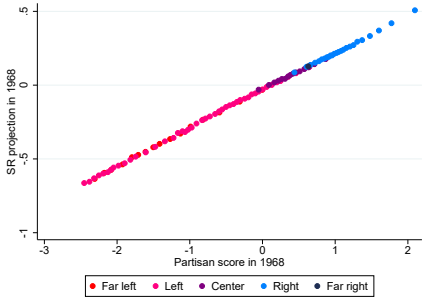

(b) 1962



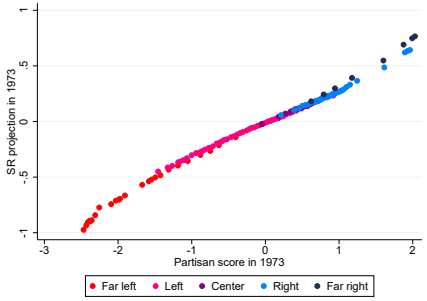

(c) 1967



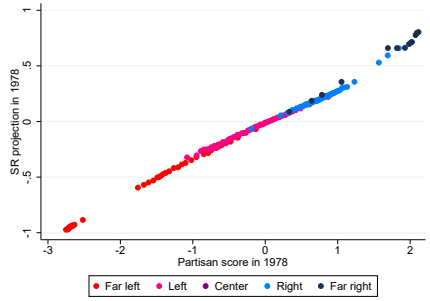

(d) 1968



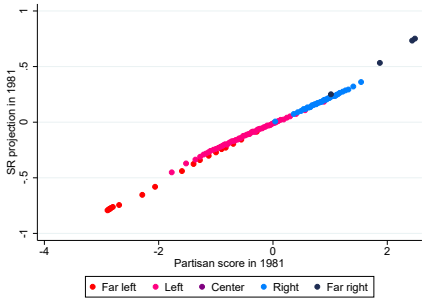

(e) 1973



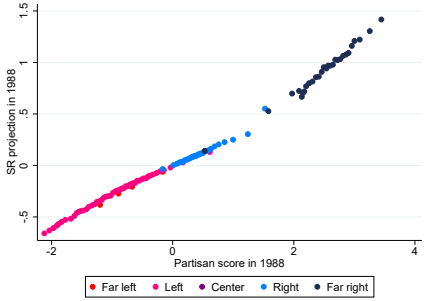

(f) 1978



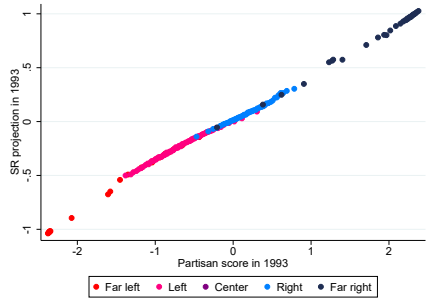

(g) 1981




(h) 1988



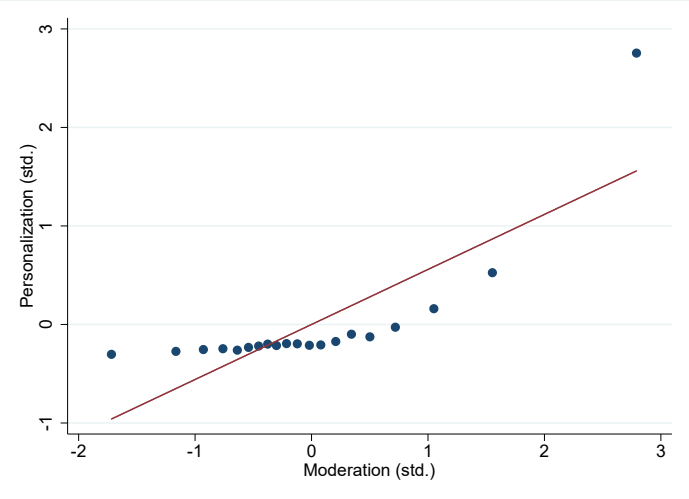

(i) 1993



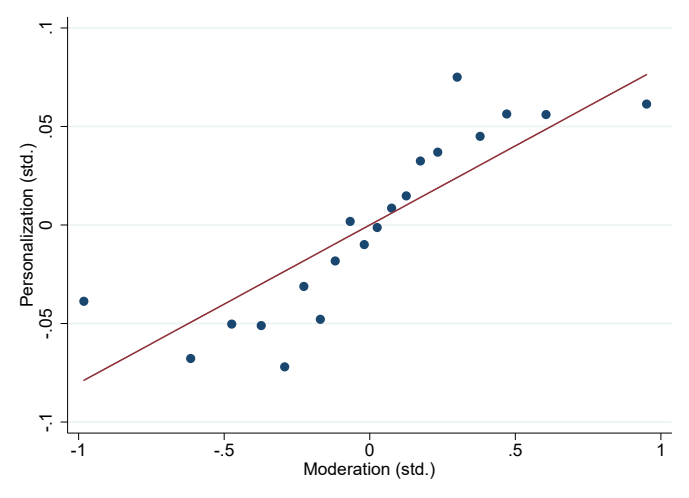

*Notes:* I show plots, binned by political orientation and for each year separately, of the sufficient reduction projection from estimating a multinomial inverse regression of word frequency on a binary variable equal to 1 if the candidate is right-wing and -1 if the candidate is left-wing, against the partisan score constructed with the Wordscores approach. The sample includes candidates whose first round manifesto is available.

Figure A11: Correlation betwen discourse moderation and content personalization

(a) Raw correlation




(b) Residualized




*Notes:* I show a bin scatter plot and the linear fit of standardized personalization against standardized moderation. Personalization is (negative) the change in pairwise Levenhstein distance to other manifestos from the same party between election rounds, and moderation is (negative) the change in the absolute partisan score on the left-right scale. In Figure *A11b*, both personalization and moderation are residualized on party cohesion in the first round, extremeness in the first round, the interaction between the two, district×year fixed effects, and party×year fixed effects. The sample includes candidates who run in both election rounds and whose two manifestos are available and non-empty after text pre-processing, excluding independent candidates who are not affiliated with any party. N=6,609.

Table A1: Mean characteristics of runoff candidates and sample selection

| | All runoff candidates | Candidates in sample |
|---|---|---|
| Far right | 0.02 | 0.02 |
| | (0.13) | (0.14) |
| Right | 0.45 | 0.43 |
| | (0.50) | (0.50) |
| Center | 0.06 | 0.06 |
| | (0.24) | (0.24) |
| Left | 0.46 | 0.47 |
| | (0.50) | (0.50) |
| Far left | 0.00 | 0.00 |
| | (0.05) | (0.05) |
| Non-classified | 0.01 | 0.01 |
| | (0.12) | (0.11) |
| Incumbent | 0.35 | 0.36 |
| | (0.48) | (0.48) |
| Rank, 1st round | 1.77 | 1.73 |
| | (0.89) | (0.82) |
| Vote share, 1st round | 0.31 | 0.31 |
| | (0.10) | (0.10) |
| Vote share, 2nd round | 0.45 | 0.46 |
| | (0.15) | (0.14) |
| Elected | 0.45 | 0.45 |
| | (0.50) | (0.50) |
| Nb. of observations | 8048 | 6793 |

*Notes:* I show the mean of the following variables, among all candidates who run in both election rounds, and among candidates who run in both elections rounds and whose two manifestos are available: dummies for each political orientation, vote share in the first round, vote share in the second round, a dummy for being the incumbent and a dummy for being elected. Standard deviations are shown in parentheses.

Table A2: District-level summary statistics

| Election year | Nb. of registered voters | Nb. of candidates, first round | Turnout, first round | Runoff | Nb. of candidates, second round | Turnout, second round | Nb. of districts |
|---|---|---|---|---|---|---|---|
| 1958 | 58203 | 5.71 | 0.77 | 0.91 | 3.14 | 0.76 | 361 |
| | (9434) | (1.43) | (0.05) | (0.29) | (0.72) | (0.05) | |
| 1962 | 59226 | 4.67 | 0.69 | 0.79 | 2.47 | 0.72 | 465 |
| | (10357) | (1.18) | (0.06) | (0.41) | (0.58) | (0.06) | |
| 1967 | 60242 | 4.63 | 0.81 | 0.84 | 2.20 | 0.80 | 461 |
| | (12566) | (1.09) | (0.04) | (0.36) | (0.41) | (0.04) | |
| 1968 | 59889 | 4.83 | 0.80 | 0.67 | 2.15 | 0.78 | 465 |
| | (12759) | (1.34) | (0.04) | (0.47) | (0.37) | (0.05) | |
| 1973 | 63175 | 6.54 | 0.81 | 0.90 | 2.23 | 0.82 | 473 |
| | (15679) | (2.94) | (0.04) | (0.31) | (0.43) | (0.04) | |
| 1978 | 72932 | 8.83 | 0.83 | 0.88 | 1.98 | 0.85 | 469 |
| | (21289) | (2.74) | (0.04) | (0.32) | (0.15) | (0.04) | |
| 1981 | 74958 | 5.39 | 0.71 | 0.67 | 1.97 | 0.75 | 474 |
| | (23817) | (1.85) | (0.05) | (0.47) | (0.18) | (0.06) | |
| 1988 | 67415 | 4.92 | 0.66 | 0.78 | 1.99 | 0.70 | 502 |
| | (23817) | (1.85) | (0.05) | (0.47) | (0.18) | (0.06) | |
| 1993 | 68269 | 9.26 | 0.69 | 0.87 | 2.00 | 0.67 | 554 |
| | (11141) | (2.21) | (0.04) | (0.34) | (0.26) | (0.07) | |
| Overall | 65211 | 6.16 | 0.75 | 0.81 | 2.22 | 0.76 | 4224 |
| | (15986) | (2.58) | (0.08) | (0.39) | (0.52) | (0.08) | |

*Notes:* I show the mean of the following variables across all districts included in the sample (i.e. districts in which I observe at least one first round manifesto), both overall and for each election year separately: the number of registered voters, the number of candidates who run in the first round, turnout in the first round, the probability of holding a runoff election, the number of candidates who run in the second round and turnout in the second round. Standard deviations are shown in parentheses.

Table A3: Ratio of explained variance

| Year | PC1 | PC2 | PC3 | PC4 | PC5 |
|---|---|---|---|---|---|
| 1958 | 0.07 | 0.03 | 0.03 | 0.01 | 0.01 |
| 1962 | 0.09 | 0.03 | 0.02 | 0.02 | 0.01 |
| 1967 | 0.06 | 0.03 | 0.02 | 0.02 | 0.01 |
| 1968 | 0.16 | 0.04 | 0.03 | 0.03 | 0.01 |
| 1973 | 0.11 | 0.07 | 0.04 | 0.03 | 0.03 |
| 1978 | 0.14 | 0.05 | 0.04 | 0.03 | 0.02 |
| 1981 | 0.16 | 0.05 | 0.04 | 0.03 | 0.02 |
| 1988 | 0.08 | 0.05 | 0.05 | 0.03 | 0.03 |
| 1993 | 0.12 | 0.10 | 0.04 | 0.04 | 0.03 |

Notes: For each election year separately, I show the ratio of the variance in word frequency–among all manifestos issued in the first round and represented as vectors of word frequencies–that is explained by each of the first five principal components, over the total variance explained by all components.

Table A4: Lowest and highest average word scores

(a) Left-wing words

| **Original word** | **English** | **Average score** |
|---|---|---|
| pcf | communist party | -0.97 |
| patronat | employers | -0.91 |
| capitaliste | capitalist | -0.90 |
| desarmement | disarmament | -0.83 |
| loyer | rent | -0.80 |
| democratiser | democracy | -0.78 |
| armement | armament | -0.76 |
| cheminot | railroad worker | -0.76 |
| syndicaliste | unionist | -0.75 |
| instituteur | teacher | -0.74 |
| licenciement | layoff | -0.74 |
| militant | activist | -0.74 |
| democra | democracy | -0.71 |
| revendication | claims | -0.69 |
| militer | advocate | -0.69 |
| edf | public electricity | -0.65 |
| nistes | communist | -0.64 |
| fortune | wealth | -0.64 |
| coucher | lay down | -0.61 |
| millier | thousand | -0.60 |

(b) Right-wing words

| **Original word** | **English** | **Average score** |
|---|---|---|
| ideologie | ideology | 0.76 |
| commandeur | leader | 0.74 |
| redressement | recovery | 0.69 |
| patrie | patriot | 0.68 |
| blesser | hurt | 0.66 |
| liberal | free trade | 0.63 |
| investiture | inauguration | 0.62 |
| chirurgien | surgeon | 0.62 |
| occidental | western | 0.62 |
| veterinaire | vet | 0.62 |
| officier | officer | 0.59 |
| croix | cross | 0.59 |
| morale | moral | 0.59 |
| legion | legion | 0.58 |
| deficit | deficit | 0.57 |
| medaille | medal | 0.55 |
| redresser | recovery | 0.55 |
| frontiere | border | 0.54 |
| exces | excess | 0.53 |
| cabinet | cabinet | 0.52 |

*Notes:* I translate in English the 20 words with the lowest (Panel a) and highest (Panel b) average word score over the nine election years. I rank words from all lemmatized tokens used by at least 0.5% of manifestos issued in the first round by left-wing or right-wing candidates, in every election year.

Table A5: Discourse moderation with alternative specifications

| | Main sample (1958-1993) | | | | Additional (2017) | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Runoff | -0.372*** | -0.189*** | -0.323*** | -0.190*** | -0.423*** | -0.120*** |
| | (0.011) | (0.010) | (0.007) | (0.007) | (0.015) | (0.010) |
| Observations | 31,316 | 13,590 | 31,316 | 13,590 | 5,420 | 1,208 |
| $R^2$ (within) | 0.05 | 0.16 | | 0.16 | | 0.23 |
| Mean, first round | 0.918 | 0.735 | 0.918 | 0.735 | 0.945 | 0.658 |
| Candidate*Year FE | | X | | X | | X |
| Text length | | | X | X | X | X |
| Larger clusters | X | X | | | | |

*Notes:* In columns 1 and 2, standard errors are clustered two ways by district and department×year. Columns 3 through 6 control for the number of words in the manifesto. Other notes as in Table 1.

Table A6: Discourse moderation with alternative scaling methods

(a) Main sample: 1958-1993

| | Wordscores (1) | Pooled vocabulary (2) | Far left to Far right (3) | Tf-Idf vocabulary (4) | Pearson X2 (5) | SR Projection (6) | Unqualified candidates (7) | Training/Test split (8) |
|---|---|---|---|---|---|---|---|---|
| Runoff | -0.343*** | -0.173*** | -0.179*** | -0.350*** | -0.044*** | -0.327*** | -0.259*** | -0.279*** |
| | (0.010) | (0.009) | (0.010) | (0.010) | (0.009) | (0.009) | (0.010) | (0.014) |
| Observations | 13,590 | 13,590 | 12,058 | 13,584 | 13,590 | 13,590 | 13,590 | 7,214 |
| $R^2$ (within) | 0.79 | 0.83 | 0.79 | 0.80 | 0.84 | 0.78 | 0.76 | 0.78 |
| Mean, first round | 0.155 | 0.049 | 0.048 | 0.159 | 0.004 | 0.143 | 0.085 | 0.103 |
| Candidate*Year FE | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 |
| indiv | X | X | X | X | X | X | X | X |

(b) Additional sample: 2017

| | Wordscores (1) | Pooled vocabulary (2) | Far left to Far right (3) | Tf-Idf vocabulary (4) | Pearson X2 (5) | SR Projection (6) | Unqualified candidates (7) | Training/Test split (8) |
|---|---|---|---|---|---|---|---|---|
| Runoff | -0.366*** | -0.219*** | -0.417*** | -0.500*** | -0.221*** | -0.307*** | -0.419*** | -0.342*** |
| | (0.028) | (0.027) | (0.028) | (0.027) | (0.027) | (0.026) | (0.029) | (0.033) |
| Observations | 1,208 | 1,208 | 1,206 | 1,206 | 1,208 | 1,208 | 1,208 | 892 |
| $R^2$ (within) | 0.21 | 0.09 | 0.26 | 0.35 | 0.10 | 0.18 | 0.25 | 0.20 |
| Mean, first round | 0.658 | 0.694 | 0.252 | 0.606 | 0.000 | 0.207 | 0.569 | 0.589 |
| Candidate*Year FE | X | X | X | X | X | X | X | X |

*Notes:* Standard errors are clustered by district×year and shown in parentheses (***, **, * indicate significance at 1, 5, and 10%, respectively). Panel a shows results similar to column 2 of Table 1 using alternative definitions of discourse extremeness. In each specification, the outcome is divided by its standard deviation in the first round. The partisan score is constructed using Wordscores from the vocabulary of first round manifestos only (columns 1); Wordscores from the pooled vocabulary across rounds (columns 2); Wordscores defined on a scale giving more (positive) weight to words used by the far right and more (negative) weight to words used by the far left, excluding observations from 1958 (column 3); Wordscores from the vocabulary restricted to large Tf-Idf weights (column 4); Pearson Chi2 statistic (column 5); the sufficient reduction projection from a multinomial inverse regression (column 6); Wordscores constructed on the subsample of candidates who did not qualify for the runoff exclusively (column 7) and Wordscores constructed on a random half-sample of candidates excluded from the subsequent analysis (column 8). Panel b shows results similar to column 4 of Table 1, using the alternative definitions of discourse extremeness described above.

Table A7: Mean party cohesion in the first round

(a) By political orientation

| Political orientation | Mean pairwise cohesion | Nb. of pairs |
|---|---|---|
| Far left | 0.239 | 98183 |
| | (0.290) | |
| Left | 0.061 | 1947303 |
| | (0.082) | |
| Center | 0.040 | 202761 |
| | (0.048) | |
| Right | 0.035 | 692484 |
| | (0.023) | |
| Far right | 0.255 | 280080 |
| | (0.258) | |

(b) By party

| Party organization | Mean pairwise cohesion | Nb. of pairs |
|---|---|---|
| COM | 0.081 | 952479 |
| | (0.105) | |
| SOC | 0.038 | 920044 |
| | (0.036) | |
| UDF | 0.036 | 400894 |
| | (0.033) | |
| RPR | 0.036 | 435810 |
| | (0.026) | |
| FN | 0.258 | 273414 |
| | (0.258) | |

*Notes:* I show the mean party cohesion in the first round across years, for each political orientation separately (Panel a) and for each main party organization separately (Panel b). Party cohesion is defined as one minus the mean edit distance between two candidate manifestos, across all possible pairs of candidates within the same party. These pairwise edit distances are constructed for each party and election year separately, then averaged over all parties and elections by political orientation in Panel a, and over all elections by party in Panel b. The sample includes candidates whose first round manifesto is available, excluding independent candidates who are not affiliated with a party and non-classified parties. In Panel b, the sample is further restricted to candidates affiliated with the Communist Party (COM), the Socialist Party (SOC), Union for French Democracy and predecesors (UDF), Rally for the Republic and predecessors (RPR), or the National Front (FN). Standard deviations are shown in parentheses.

Table A8: Words dropped vs. added the most between election rounds

(a) Words dropped

| Original word | English | Average change in frequency |
|---|---|---|
| entreprise | firm | -0.13 |
| creation | creation | -0.12 |
| economie | economy | -0.12 |
| famille | family | -0.11 |
| annee | year | -0.11 |
| securite | safety | -0.10 |
| augmentation | raise | -0.09 |
| charger | taxation | -0.09 |
| allocation | benefits | -0.09 |
| rural | rural | -0.08 |
| familiale | family | -0.08 |
| industrie | industry | -0.08 |
| activite | activity | -0.08 |
| entreprendre | entrepreneurship | -0.08 |
| domaine | area | -0.08 |
| formation | training | -0.08 |
| impot | taxation | -0.08 |
| industriel | industrial | -0.08 |
| local | local | -0.07 |
| revenir | come back | -0.07 |

(b) Words added

| Original word | English | Average change in frequency |
|---|---|---|
| tete | lead | 0.39 |
| prochain | next | 0.29 |
| second | second | 0.24 |
| victoire | victory | 0.22 |
| confirmer | confirm | 0.20 |
| accorder | give | 0.17 |
| deuxieme | second | 0.17 |
| rassemblement | gather | 0.16 |
| jean | jean | 0.16 |
| exprimer | express | 0.15 |
| apporter | bring | 0.14 |
| resultat | outcome | 0.14 |
| appel | call | 0.14 |
| appeler | call | 0.14 |
| nom | name | 0.14 |
| largement | widely | 0.13 |
| legislatives | legislative | 0.13 |
| volonte | will | 0.12 |
| abstention | abstention | 0.12 |
| pierre | pierre | 0.12 |

*Notes:* I translate in English the 20 words with lowest (Panel a) and highest (Panel b) average within-candidate change in normalized frequency (in percentage points) between election rounds, across all nine election years. I rank words from all lemmatized tokens used by at least 0.5% of manifestos issued in the first round (Panel a) or used by at least 0.5% of manifestos issued in the second round (Panel b), in every election year.

Table A9: Left- and right-wing words dropped vs. added the most

(a) Left-wing words dropped

| Original word | English | Average change in frequency |
|---|---|---|
| capitaliste | capitalist | -0.07 |
| reduction | decrease | -0.06 |
| loyer | rent | -0.04 |
| cooperation | cooperation | -0.04 |
| semaine | week | -0.03 |
| revendication | claim | -0.03 |
| sante | health | -0.02 |
| profit | profit | -0.02 |
| pension | benefits | -0.02 |
| conge | paid leave | -0.02 |
| armement | armament | -0.02 |
| licenciement | layoff | -0.02 |
| collectif | collective | -0.02 |
| fortune | wealth | -0.02 |
| population | population | -0.02 |
| payer | pay | -0.02 |
| gros | large | -0.02 |
| democratique | democracy | -0.02 |
| riche | wealthy | -0.02 |
| usiner | manufacture | -0.02 |

(b) Left-wing words added

| Original word | English | Average change in frequency |
|---|---|---|
| nom | name | 0.04 |
| accord | agreement | 0.02 |
| second | second | 0.02 |
| exprimer | express | 0.02 |
| pcf | communist party | 0.02 |
| prononcer | state | 0.02 |
| manquer | miss | 0.02 |
| barrer | block | 0.02 |
| largement | widely | 0.02 |
| marcel | marcel | 0.02 |
| massivement | massively | 0.01 |
| peur | fear | 0.01 |
| masser | crowd | 0.01 |
| echec | failure | 0.01 |
| montrer | show | 0.01 |
| fernand | fernand | 0.01 |
| gagner | win | 0.01 |
| guy | guy | 0.01 |
| faveur | favor | 0.01 |
| affirmer | affirm | 0.01 |

Table A9: Left- and right-wing words dropped vs. added the most (cont.)

(c) Right-wing words dropped

| Original word | English | Average change in frequency |
|---|---|---|
| professionel | occupation | -0.03 |
| effort | effort | -0.03 |
| fiscal | budget | -0.02 |
| monnayer | monetary | -0.02 |
| retablir | restore | -0.02 |
| monder | world | -0.02 |
| faciliter | enable | -0.02 |
| redressement | recovery | -0.02 |
| rural | rural | -0.02 |
| europeen | european | -0.02 |
| poursuivre | pursue | -0.02 |
| amenagement | amenities | -0.02 |
| profession | occupation | -0.02 |
| administratif | administrative | -0.01 |
| adapter | adapt | -0.01 |
| rapatrier | repatriation | -0.01 |
| equilibrer | balance | -0.01 |
| familial | family | -0.01 |
| commercer | trade | -0.01 |
| civil | civil | -0.01 |

(d) Right-wing words added

| Original word | English | Average change in frequency |
|---|---|---|
| croix | cross | 0.04 |
| prochain | next | 0.04 |
| legion | legion | 0.04 |
| docteur | doctor | 0.04 |
| abstenir | abstain | 0.03 |
| honneur | honnor | 0.03 |
| chevalier | knight | 0.03 |
| cher | dear | 0.03 |
| electrices | voters | 0.02 |
| medaille | medal | 0.02 |
| cour | court | 0.02 |
| resultat | result | 0.02 |
| accorder | allow | 0.02 |
| officier | officer | 0.02 |
| meriter | deserve | 0.02 |
| renouveler | renewal | 0.02 |
| abstention | abstention | 0.02 |
| chere | dear | 0.02 |
| independant | independent | 0.01 |
| renouveau | renewal | 0.02 |

*Notes:* I weight each word's average change in normalized frequency between election rounds, across all nine election years, by that word's score from the Wordscores approach. In Panels a and c, I rank words from all lemmatized tokens used by at least 0.5% of manifestos issued by left-wing (Panel a) or right-wing (Panel c) candidates in the first round, in every election year, and for which a word score is defined. In Panels b and d, I rank words from all lemmatized tokens used by at least 0.5% of manifestos issued by left-wing (Panel b) or right-wing (Panel d) candidates in the second round, in every election year, and for which a word score is defined. Other notes as in Table A8.

Table A10: Change in personal and local references across rounds

| | Own name (1) | Opponent's name (2) | Department (3) | Municipality (4) |
|---|---|---|---|---|
| Runoff | 0.908*** | 0.625*** | 0.384*** | 0.245*** |
| | (0.021) | (0.028) | (0.016) | (0.018) |
| Runoff*Moderation | 0.091*** | 0.125*** | 0.042*** | 0.038*** |
| | (0.021) | (0.028) | (0.014) | (0.014) |
| Observations | 13,590 | 11,770 | 13,590 | 13,590 |
| $R^2$ (within) | 0.27 | 0.10 | 0.11 | 0.04 |
| Mean, first round | 0.007 | 0.000 | 0.005 | 0.013 |
| Candidate*Election FE | X | X | X | X |

*Notes:* The runoff dummy is interacted with discourse moderation, defined as (negative) the change in absolute partisan score between rounds. Other notes as in Table 3.

Table A11: Impact of the qualification of a third candidate to the runoff

| Sample | (1) Any third candidate | (2) Third candidate from same orientation | (3) Third candidate from opposite orientation |
|---|---|---|---|
| RD Estimate | -0.041 | -0.152** | -0.013 |
| | (0.041) | (0.079) | (0.051) |
| Observations | 1038 | 304 | 435 |
| Number of clusters | 560 | | |
| Robust p-value | 0.226 | 0.035 | 0.771 |
| Bandwidth | 0.024 | 0.018 | 0.024 |
| Mean, left of the threshold | 0.105 | 0.057 | 0.091 |

*Notes:* Standard errors are clustered by district×year in column 1 and shown in parentheses (***, **, * indicate significance at 1, 5, and 10%, respectively). The outcome is discourse moderation, defined as (negative) the change in absolute partisan score between rounds. The assignment variable is a dummy equal to 1 if the vote share of the third-ranked candidate in the first round is above the 12.5% qualifying margin. The sample includes candidates who run in both election rounds, whose two manifestos are available, and whose were ranked first or second after the first round. It is further restricted to candidates facing a main opponent from the opposite orientation but a third-ranked candidate from the same orientation in column 2, and to candidates facing both a main opponent and a third-ranked candidate from the opposite orientation in column 3. All years preceding 1978 are excluded. Separate polynomials of order 1 are fitted on each side of the threshold. The optimal bandwidths are derived under the MSERD optimal procedure.

Table A12: Discourse moderation in selected samples

| | Candidates running multiple times | Candidates elected | Candidates elected multiple times |
|---|---|---|---|
| | (1) | (2) | (3) |
| Runoff | -0.183*** | -0.109*** | -0.122*** |
| | (0.007) | (0.007) | (0.009) |
| Observations | 7,696 | 6,162 | 3,452 |
| $R^2$ (within) | 0.15 | 0.08 | 0.10 |
| Mean, first round | 0.735 | 0.735 | 0.735 |
| Candidate*Year FE | X | X | X |

*Notes:* The sample is restricted to candidates who run over multiple consecutive elections in the same district (column 1), who are elected (column 2) and who are elected over multiple consecutive elections in the same district (column 3). Other notes as in Table 1 (column 1).

Table A13: Discourse moderation and electoral success within candidate

| | Elected (1) | Vote share gain (2) | Election margin (3) |
|---|---|---|---|
| Moderation | -0.025 | 0.002 | 0.004 |
| | (0.018) | (0.002) | (0.005) |
| Observations | 3848 | 3848 | 1701 |
| Number of electionss | 9 | 9 | 9 |
| Mean outcome | 0.577 | 0.156 | 0.140 |
| Party*Year FE | X | X | X |
| District*Year FE | X | X | |
| Department*Year FE | | | X |
| Candidate FE | X | X | X |

*Notes:* Standard errors are clustered two ways, by district×year and candidate (columns 1 and 2), or one way, by candidate (column 3). I control for candidate fixed effects over time. The sample includes candidates who run in both election rounds and whose two manifestos are available, for multiple consecutive years. Other notes as in Table 5.

Table A14: Discourse moderation and legislative activity controlling for election margin

| | Mean Z-score (1) | Bill proposals (2) | Interventions (3) | Reports (4) | Oral questions (5) | Written questions (6) |
|---|---|---|---|---|---|---|
| Moderation | 0.085** | 0.085* | 0.220** | 0.030 | 0.074** | 3.862 |
| | (0.036) | (0.047) | (0.109) | (0.046) | (0.038) | (2.932) |
| Observations | 2909 | 2909 | 2909 | 2909 | 2909 | 1113 |
| Number of elections | 9 | 9 | 9 | 9 | 9 | 3 |
| Mean outcome | 0.031 | 0.602 | 3.122 | 0.511 | 0.894 | 24.651 |
| Party*Year FE | X | X | X | X | X | X |
| Department*Year FE | X | X | X | X | X | X |
| Electoral advantage controls | X | X | X | X | X | X |

*Notes:* Same notes as in Table 7. I additionally control for the election margin, defined as the difference in vote shares between the first- and second-ranked candidates in the second round.

Table A15: Discourse moderation and legislative activity by electoral advantage

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| Moderation | 0.064 | 0.068* | 0.077** | 0.055 | -0.052 |
| | (0.094) | (0.035) | (0.033) | (0.037) | (0.173) |
| Vote share 1st round | 0.264 | | | | -0.061 |
| | (0.309) | | | | (0.418) |
| Moderation*Vote share 1st round | 0.005 | | | | 0.184 |
| | (0.253) | | | | (0.392) |
| Incumbent | | 0.091** | | | 0.083 |
| | | (0.046) | | | (0.050) |
| Moderation*Incumbent | | 0.002 | | | 0.004 |
| | | (0.039) | | | (0.043) |
| Predicted vote gain | | | 0.587 | | 0.442 |
| | | | (0.380) | | (0.440) |
| Moderation*Predicted vote gain | | | -0.109 | | 0.080 |
| | | | (0.199) | | (0.347) |
| Election margin | | | | 0.319 | 0.080 |
| | | | | (0.242) | (0.310) |
| Moderation*Election margin | | | | 0.095 | 0.134 |
| | | | | (0.183) | (0.210) |
| Observations | 2909 | 2909 | 2909 | 2909 | 2909 |
| Number of elections | 9 | 9 | 9 | 9 | 9 |
| Mean outcome | 0.031 | 0.031 | 0.031 | 0.031 | 0.031 |
| Party*Year FE | X | X | X | X | X |
| Department*Year FE | X | X | X | X | X |

*Notes:* The outcome is the legislative activity (standardized) mean Z-score. Dummies indicating if each measure of electoral advantage is missing are included. Other notes as in Tables 5 and 7.

Table A16: Discourse moderation and legislative activity within candidate

| | Mean Z-score (1) | Bill proposals (2) | Interventions (3) | Reports (4) | Oral questions (5) | Written questions (6) |
|---|---|---|---|---|---|---|
| Moderation | -0.006 | -0.025 | -0.009 | -0.070 | 0.072 | -4.779 |
| | (0.045) | (0.075) | (0.113) | (0.080) | (0.048) | (5.022) |
| Observations | 1576 | 1576 | 1576 | 1576 | 1576 | 274 |
| Number of elections | 9 | 9 | 9 | 9 | 9 | 3 |
| Mean outcome | 0.035 | 0.696 | 3.139 | 0.472 | 0.843 | 29.296 |
| Party*Year FE | X | X | X | X | X | X |
| Department*Year FE | X | X | X | X | X | X |
| Candidate FE | X | X | X | X | X | X |

*Notes:* Standard errors are clustered by candidate. I control for candidate fixed effects over time. The sample includes candidates who run in both election rounds and whose two manifestos are available, for multiple consecutive years. Other notes as in Table 7.