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Inaccurate Politicians.

Elected Representatives' Estimations of Public Opinion in Four Countries

Short title: Representatives' Estimations of Public Opinion

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Abstract: Knowledge of what voters prefer is central to several theories of democratic representation and accountability. Despite this, we know little in a comparative sense of how well politicians know citizens' policy preferences. We present results from a study of 866 politicians in four countries. Politicians were asked to estimate the percentage of public support for various policy proposals. Comparing more than 10,000 estimations with actual levels of public support, we conclude that politicians are quite inaccurate estimators of people's preferences. They make large errors and even regularly misperceive what a majority of the voters wants. Politicians are hardly better at estimating public preferences than ordinary citizens. They not only misperceive the preferences of the general public but also the preferences of their own partisan electorate. Politicians are not the experts of public opinion we expect them to be.

Keywords: political representation; public opinion; perceptual accuracy; responsiveness

Data replication statement: Replication files are available in the JOP Dataverse (<https://dataverse.harvard.edu/dataverse/jop>). The empirical analysis has been successfully replicated by the JOP replication analyst.

Online appendix: Supplementary material for this article is available in the appendix in the online edition.

Human participants: The study was conducted in compliance with relevant laws. In Belgium, we first obtained ethical approval from the *Ethische Adviescommissie Sociale en Humane Wetenschappen of the University of Antwerp* (Flanders, Belgium) on 10 Feb 2017, and then ethical clearance from the *Comission éthique de la Faculté de Philosophie et sciences sociales de l'ULB* (Wallonia) in March 2018. In Canada, we obtained ethical approval from the *University of Toronto's Social Sciences, Humanities & Education REB* on 27 Nov 2018. In Switzerland, we obtained ethical approval from the *Ethics Commission of the Geneva School of Social Sciences* (University of Geneva) on 16 April 2018. In Germany, the *Ethics Committee (IRB) of the University of Konstanz* judged that approval by the IRB or any regulatory body was not required for this project (but note that the university more generally enforces the proper adherence to ethics guidelines).

Financial support: The data were collected in the framework of the POLPOP project. POLPOP is a transnational collaboration examining the perceptual accuracy of politicians in five countries, initiated by Stefaan Walgrave. The Principal Investigators [+ funders] per country responsible for data collection were, for Flanders-Belgium: Stefaan Walgrave [FWO, grant number G012517N]; Wallonia and Brussels-Belgium: Jean-Benoit Pilet and Nathalie Brack [FNRS, grant number T.0182.18]; Canada: Peter Loewen and Lior Sheffer [supported by a Social Sciences and Humanities Research Council of Canada Insight Grant and by the Dean of the Faculty of Arts & Science at the University of Toronto]; Germany: Christian Breunig and Stefanie Bailer [funded by AFF 2018 at the University of Konstanz]; Netherlands: Rens Vliegenthart and Toni van der Meer; and Switzerland: Frédéric Varone and Luzia Helfer [SNSF, grant number 100017_172559]. Note that the Dutch data were excluded from the analysis because of the non-representativeness of the citizen data.

Scholars of democratic representation have long argued that knowing what citizens want enables politicians to produce responsive policies (see for instance Miller & Stokes, 1963; Stimson et al., 1995; Mansbridge, 2003). Democratic responsiveness partly depends on the accuracy of elected representatives' perceptions of people's policy preferences. Even if a politician decides to act contrary to public opinion, they still benefit from a good command of public preferences in order to develop an effective explanation for the positions they take (Grose, Malhotra, and Parks Van Houweling 2015). Moreover, politicians being attentive to public opinion and having a good grasp of it is what voters expect of their representatives (Dassonneville e.a. 2020). Hence, for several reasons, we expect elected politicians to be experts in estimating the public's preferences. But are they? Do they possess the basic knowledge of public opinion that allows them to be responsive?

The evidence on politicians' perceptual accuracy is limited. Indirect evidence about observed policy responsiveness (e.g. Soroka and Wlezien 2009), allegedly caused by politician perception, is available but data directly tapping into politicians' perceptions are scant. The relatively few studies (e.g. Broockman and Skovron 2018) provide important insights on perceptual accuracy but a broad, comprehensive and comparable investigation has so far not been undertaken. Extant work typically offers evidence about one country at a time, focuses on one or a few issues, and conceptualizes perceptual accuracy rather narrowly, hampering the generalizability of the findings. Also, whether politicians stand out as experts of public opinion cannot really be concluded from these studies; they lack a benchmark against which to compare politicians' estimations. Moreover, existing work deals with one type of public opinion while democratic representation may imply responsiveness to several public opinions, such as general public opinion or the

opinion of a party's voters. Hence, at this stage, our knowledge of whether politicians hold the necessary perceptual competence needed to be responsive remains incomplete.

This study makes empirical, methodological and conceptual advances. It presents the largest empirical effort to measure politicians' perceptual accuracy drawing on more than 10,000 estimations of public opinion preferences by 866 national and regional elected representatives in four different countries (Belgium, Canada, Germany, and Switzerland). It leverages public opinion estimations with regard to a systematic selection of eight different policies across functionally equivalent issue domains and examines two distinct accuracy measures. The absence of an accuracy yardstick is tackled by comparing politicians' estimation errors against chance and against the estimations of non-experts. As politicians may both represent the general public and also party voters we include politicians' estimates of general public opinion and party electorate opinion.

We find that politicians make substantial errors both when estimating the share of citizens who support a given policy and when identifying where the majority lies. Politicians' estimates outperform random guesses, but they perform hardly better than citizens. Their inaccuracy with regard to one sort of public opinion is not compensated for by a better grasp of another since estimations with regard to the opinion of the general public and the party electorate are similarly inaccurate. We obtain similar results across all of our country cases. All in all, politicians' perceptions do not seem to live up to the standard required of them by theories of representation. Elected representatives do not appear to possess a special expert ability to know what the public wants.

The democratic importance of accurate perceptions

Perceptions of public opinion are a key mechanism producing democratic responsiveness. As initially formulated by Miller & Stokes (1963), there are essentially two main ways in which public opinion may be linked to policy output. If people elect the 'right' politicians—i.e. politicians who share their preferences—then democratic representation comes about when politicians pursue their own preferences. If politicians hold the 'right' perceptions of what the citizens want then democratic representation can be the result of politicians following their perceptions of public opinion. We acknowledge the significance of still other alternative linkage mechanisms, politicians may, for instance, lead public opinion. Note that while this mechanism would generate congruence—an eventual match between popular preferences and policies—it lacks the responsiveness that is central to democratic representation (see for example: Beyer and Hänni 2018).

Politicians' perception of public opinion being one important way in which democratic policy making may come about, the perceptual mechanism has been at the heart of many *theoretical* accounts of democratic responsiveness. Stimson and colleagues (1995), for instance, hold that rational politicians sense the mood of the nation and act accordingly. Their worry for electoral punishment makes them pre-empt electoral sanctions by attentively observing public opinion and investing plenty of resources in getting a good grasp of it. Mansbridge's (2003) theoretical account too considers, what she calls, anticipatory representation to be one of the main ways in which democratic responsiveness comes about. It crucially hinges on representatives' understanding of what the public prefers.

Empirical work as well established that public opinion perceptions affect what politicians actually undertake. This applies, for instance, to the initial study of Miller and Stokes (1963) about

U.S. Congressmen's roll call voting, the study by Converse and Pierce (1986) about the votes of the members of the French *Assemblée Nationale*, the experimental study by Butler and Nickerson (2011) on New Mexico state legislators, and the narrative evidence presented by Kingdon (1973) in his ethnographic study of U.S. Congressmen.

Normatively as well it can be argued that politicians should have a good command of public opinion. This is what citizens expect. Voters prefer politicians who are attentive to public opinion, have a good grasp of it, and vote with it (e.g. Lapinski e.a. 2016; Werner 2019; Dassonneville e.a. 2020). Politicians should master public opinion, citizens maintain.

The expectation that politicians have a good sense for public opinion applies to all politicians, irrespective of their style or focus of representation. Even trustee-style politicians who may—when their own views do not match those of the public—decide to go against public opinion need a good command of what the public wants to be able to design effective communication and avoid negative fall-out (see on explanations, Grose, Malhotra, and Parks Van Houweling 2015). Some politicians aim to represent their district, others are focused on the general public, and still others primarily want to represent the voters of their party (Dudzińska e.a. 2014). In each of those models, having a good grasp of the wish of the public one wants to represent is a key asset.

Public opinion perceptions of politicians matter theoretically, empirically and normatively; and they matter for all politicians irrespective of their style or focus of representation. But do politicians stand up to the expectation that they correctly read public opinion?

What we know about politicians' perceptual accuracy

A small number of empirical studies examines the accuracy of politicians' perceptions of citizens' preferences. Spanning more than 50 years of research, our systematic review finds just *thirteen* published empirical studies (Miller and Stokes 1963; Sigel and Friesema 1965; Hedlund and Friesema 1972; Erikson, Luttbeg, and Holloway 1975; Clausen, Holmberg, and deHaven-Smith 1983; Converse and Pierce 1986; Esaiasson and Holmberg 1996; Holmberg 1999; Norris and Lovenduski 2004; Belchior 2014; Broockman and Skovron 2018; Kalla and Porter 2020; Pereira 2021). There is some adjacent work on the public opinion perceptions, not of politicians, but of their *staffers* (e.g. Miler, 2007; Hertel-Fernandez et al., 2019).

Hardly any of that previous work focuses on the *degree* of accuracy among politicians. No studies concentrate on establishing whether politicians are good raters, for instance by discussing the size of the estimation errors or by comparing politicians' estimation accuracy with a benchmark. Instead, studies focus, for instance, on the *direction* of the bias in perceptions (Broockman & Skovron, 2018), on the *consequences* of the biased perceptions (Norris & Lovenduski, 2004), on how to *correct* for inaccurate perceptions (Kalla & Porter, 2020; Pereira 2021), or they establish individual *variation* in perceptual accuracy (Miller & Stokes, 1963). This leaves the elementary matter of how accurate politicians' perceptions actually are largely unanswered. Few of the referenced authors draw conclusions about politicians' degree of perceptual accuracy—see for example Sigel and Friesema (1965, 888) with pessimistic conclusions about U.S. community leaders and Esaiasson and Holmberg (1996, 139) with optimistic conclusions with regard to Swedish MPs.

Further, the empirical base of extant studies remains limited. None have a comparative design able to overcome the specificities of particular national contexts which leaves us with little

insight into the robustness and external validity of earlier findings. With a few exceptions (e.g. Converse & Pierce, 1986), most studies draw on an instrument including only a few issues, or even just a single issue (e.g. Hedlund & Friesema, 1972). Issue choice is neither systematic nor transparent—it is sometimes even given as scholars looked into existing referendum proposals (e.g. Erikson et al., 1975). Also, operationalizations of ‘accuracy’ are limited. Politicians are given the crude task of placing the majority on the right side or of rating the share of people supporting a given policy. Existing studies use either approach but no study combines both.

Existing work did not provide a benchmark to compare politicians’ perceptual accuracy against. Rating public opinion is a difficult task and a certain degree of error is unavoidable. How good should estimations be to be considered as ‘accurate’? One way to provide such benchmark is to test how much better than random the estimates of politicians actually are. Another yardstick is comparing politicians’ ratings with those of ordinary citizens. The competitive environment in which politicians operate (Sheffer e.a. 2018), their predominant re-election motivation (e.g. Mayhew 1974) and the type of personality many politicians exhibit (e.g. Best 2011) should make them good raters of public opinion. They are incentivized to care about what people want. With low levels of political interest, for most citizens there is nothing at stake and engaging in rating public opinion is not something they frequently do or invest resources in (in contrast to politicians, see: Maestas 2003). Hence, if we find that citizens do not exhibit lower perceptual accuracy than politicians, then this presents strong evidence that politicians are not experts of public opinion.

All work in the U.S. examines perceptions with regards to *district* opinion. Some of the studies in Sweden (Clausen et al., 1983; Esaiasson & Holmberg, 1996; Holmberg, 1999) and Portugal (Belchior, 2014) assessed MPs' perception of their *party* electorate opinion. One Swedish study looks at perceptions of what the *general* population wants (Esaiasson and Holmberg 1996). None of the studies compared politicians' perceptions of different public opinions allowing to conclude whether politicians are proficient at rating at least one type of public opinion. For broad programmatic policy making it is, in particular, general public opinion that is supposed to be the guide, in district-based systems (see e.g. Kalla & Porter, 2020) but even much more so in proportional systems with large districts. Cues of nation-wide public opinion are what politicians arguably obtain most easily through polling and news coverage.

In sum, the work on politicians' estimates of public opinion remains limited. It does not provide a satisfactory answer to the elementary question of whether politicians' public opinion perceptions are generally accurate.

Methods and data

STUDY DESIGN — We test perceptual accuracy of elected representatives in four countries. In each, we collected two types of data: (1) elite survey evidence measuring politicians' estimations of where the general public and their party electorate stand on various policies; (2) general population survey data about real public and party electorate preferences with regard to the same proposals. Between March 2018 and September 2019, politicians were survey-interviewed face-to-face—they completed the questionnaire themselves on a computer brought by an interviewer present in the room, ensuring that the politicians themselves answered the questions.

We include politicians from Canada, Belgium (Flanders and Wallonia), Germany, and Switzerland. These countries are different and range from hybrid systems like Switzerland with relatively weak parties to parliamentary systems with strong parties (e.g. Belgium, Germany). They present substantial variation in electoral systems as well with Canada exhibiting a majoritarian first-past-the post system, and the three other countries sharing a proportional system (with varying district sizes). Switzerland stands out because of its frequent referendums which may affect perceptual accuracy (see: Helfer, Wäspi, and Varone 2021). Systemic differences can provide politicians with varying incentives to learn about public opinion. We know from the literature that electoral systems can shape politicians' incentives to gauge public opinion. Earlier research has especially shown that more candidate-centred electoral systems would push individual politicians to invest more in building a good personal connection with voters in order to get re-elected, while politicians in party-centred systems are less dependent on voters' evaluation and should primarily be concerned with maintaining good ties with their party (Carey and Shugart 1995). When it comes to perceptual accuracy, we could expect that politicians in more candidate-centred systems like Canada or Switzerland would be more likely to invest resources in gauging public opinion correctly than in more party-centred systems like Belgium or Germany. Yet, we would rather argue that in all systems politicians have an interest in holding a fair assessment of popular preferences. Even in party-centred systems and with individual politicians mostly toeing the party line, politicians should have good connections with voters to consolidate the public image of their party. Moreover, differences in electoral systems are more likely to affect politicians' incentives to invest in connecting with their district voters, and not so much with the electorate at large. In

this study, we focus on perceptual accuracy with regard to general public opinion and party electorate opinion. The impact of the electoral system would be more limited—this would have been different had we focused on perceptions with regard to district opinion. Therefore, we postulate that, in all countries, politicians are at least somewhat incentivised to think about what the public at large and what their electorate wants. Still, our country sample maximizes—within Western democracies—inter-country diversity yielding a tough test of the generalizability of our findings.

All countries in our sample are federal countries. In Belgium, Canada and Switzerland we target both members of the national parliaments and of (some) regional parliaments (see Appendix 1). Also party leaders are targeted (in so far that they do not sit in parliament) and, in Belgium, also ministers (who were initially elected in parliament). Belgium is a special case, since its two major parts—the Dutch-speaking part (Flanders) and the French-speaking part (Wallonia)—form two distinct political systems with entirely separate party systems, with Dutch-speaking parties competing only in Flanders and French-speaking parties only in Wallonia; the media systems are also fully distinct and so is public opinion (see e.g. Deschouwer 2009)¹. Due to this separation, we asked Flemish and Walloon politicians from the regional but also from the national level to estimate general public opinion of their own region—which is the relevant level for them—and we

¹ A third region, Brussels, is bilingual but with a large Francophone majority. All national MPs elected in Brussels are Francophone, so are three quarter of regional MPs. We only interviewed French-speaking politicians in Brussels and treated them as part of the French-speaking system since they are affiliated to Walloon parties. For the sake of simplicity, we refer to 'Flanders' and 'Wallonia'.

treat them separately in the analysis. Canadian politicians, both national and regional (Ontario), were asked to assess national public opinion². In Germany we only surveyed national politicians, who estimated national public opinion. Swiss politicians were not asked about national opinion. All politicians in all countries were asked to estimate their own party electorate opinion.

In total, we completed 866 survey interviews, representing a response rate of 45%. Response rates vary considerably between countries: they were high in Flanders (77%), Wallonia (75%) and Switzerland (74%); but lower in Canada (17%) and Germany (15%). In the latter two countries it was much harder to get political elites to cooperate. Still, these response rates are acceptable for elite research (see for example: Deschouwer and Depauw 2014; Bailer 2014). Most importantly, in each country, respondents are almost fully representative of the entire population of politicians on gender, age and seniority, and nearly all parties are represented well (with the exception of some very small parties). Confidentiality obligations prevent us from disclosing response rates per party as they allow for identifying individual politicians participating in the study.

² We recognize that asking national and regional politicians to estimate national or regional public opinion could disadvantage the politicians who were asked to rate a less relevant public opinion. In Appendix 7 we examine this and find that, in Canada, there is no difference in the accuracy (in their assessment of national opinion) between national and regional politicians. In Flanders and Wallonia we see that national politicians are even slightly better at assessing regional opinion than the regional politicians are. Level of election matters slightly, but it is not the case that more 'applicable' estimations are better.

However, there is no strong ideological response bias in the dataset. We substantiate this in Appendix 1.

ISSUE SELECTION — Central to our research design is the selection of the policies for which politicians are asked to estimate public opinion. We followed a systematic and detailed procedure uniformly implemented in each country to arrive at one or two sets of eight (or in Switzerland: nine) policy issues per country. Since the political context and the current debates in each country varied, we did not seek to query the exact same policy issues in every country. Instead, we designed sets of policy proposals to be *equivalent*. In Appendix 2 we detail the exact steps we took to select the issues. In summary, we have, in each country, a batch of issues that is not technical, but is current, salient, thematically diverse, with varying opinion distributions, and with varying electorate positions. That the issues we selected in each country are salient reduces the risk that our questions would be measuring non-opinions and grasp latent rather than manifest opinion. All issues are of import in the countries at stake.

SURVEY PROTOCOL — Politicians were asked to estimate general public opinion and then, separately, party electorate opinion. As an exception, in Switzerland, politicians were only asked to estimate party electorate opinion not general public opinion. Here is the question wording: *Were we to present [policy proposal] to a representative sample of [country citizens], what would be your expectation with regard to their answers? What percentage of [country citizens] you think is undecided (neutral or no opinion) about this policy proposal? Please give us your best guess by dragging the bar to the correct percentage (answers are given by dragging a slider on a 0-100% scale). And, what percentage of those citizens who have an opinion rather agrees or totally agrees with this*

policy proposal? (answers are given by dragging a slider on a 0-100% scale)³. Note again that our question explicitly asking politicians to rate public opinion as measured through a poll further reduces the risk that politicians would be thinking about latent opinion, or opinion as expressed after a public debate.

POPULATION SURVEY — In each country, an online survey among citizens at voting age was conducted at about the same time. We hired survey companies to collect data from at least 1,000 (and typically more) respondents in each country. The data were collected to be representative for age, gender, and education (mostly through quotas, though in Switzerland we drew a random sample from the population register). Weights by age, gender and education are used to correct for remaining deviations from the population (despite the quota/random sample). We additionally weight the citizen samples by previous party vote (against the results of the last national election). For more information about the surveys and the weighing procedure, we refer to Appendix 3.

Citizens were asked about their own opinion about the same eight proposals. These data are used to make estimations of how the general public and each party electorate thinks about a

³ Politicians did not rush through the estimations. In the countries where the survey software kept time stamps (Belgium, Switzerland), we can see that politicians took nearly half a minute per policy proposal. If politicians were to do badly, it is unlikely due to haste or lack of effort.

policy proposal. Given the large national samples, we have sufficient voters to make reliable estimations for most parties⁴. No weights are used when calculating the opinion of the party electorates, because we do not know how other factors (e.g. gender or age) are distributed within party electorates.

Finally, following the exact same procedure and wording as described above, citizens were also asked to estimate general public opinion support for each proposal. We use citizens' estimations (for N per country, see Appendix 3) as a benchmark for politicians' estimations.

TWO PERCEPTUAL ACCURACY MEASURES — Politicians likely make crude public opinion estimations when making decisions. They mostly care about whether the majority is on one or the other side of a policy debate—irrespective of its exact size. Therefore, *Incorrect majority placement* identifies whether an estimation is placed on the correct side of the majority. Estimates of 50% support are always classified as correct—this leads to a conservative estimate of inaccuracy. We calculate how many incorrect identifications of the majority each politician makes, resulting in a metric running from 0-8. We compare the number of incorrect majority placements with randomness: at random, on average four out of eight policies would be estimated correctly (the random chance of an incorrect majority placement is fifty-fifty). To do any better than sheer luck and to exhibit any real knowledge about public opinion, politicians should average a score above four.

⁴ For some very small Swiss and Walloon parties, less than 40 voters were surveyed and we cannot calculate meaningful electorate opinion; these politicians (n=33) are dropped from the party electorate opinion estimation analyses.

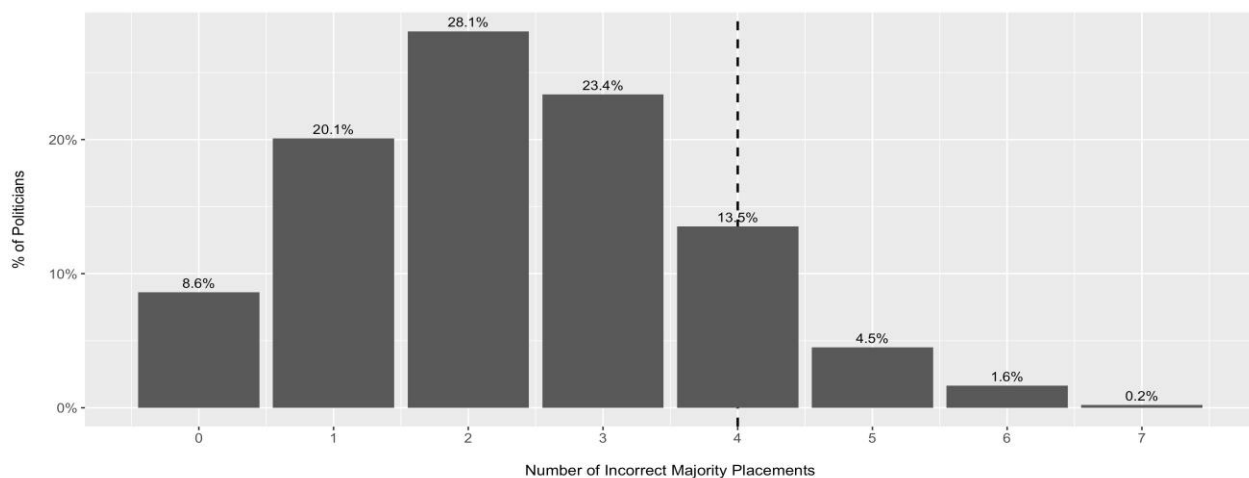
Percentage error score represents the size of the error in politicians' estimations of the share of the population supporting the policy (Sigel & Friesema, 1965; Erikson et al., 1975; Converse & Pierce, 1986; Esaiasson & Holmberg, 1996). It is the absolute distance (in percentage points) between real public opinion and the estimation thereof. The average error across all eight estimations a politician makes results in a 0-100 score, the mean inaccuracy in percentage points per politician. We compare politicians' inaccuracy with the inaccuracy of random guesses here as well. The exact random base rate of accuracy is impacted by the real-world distribution of public opinion on a given issue. If public opinion is perfectly divided (50% of citizens in favor), a random guess (between 0 and 100% agreement) is, on average, about 25 percentage points off. When public opinion leans to one side (e.g. 90% of citizens in favor), the average error of a random guess becomes larger: about 41 percentage points. Hence, the average random error across a set of estimations is different in each country as it depends on the specific composition of policy proposals (and more specifically on the related public opinion distributions) (see Appendix 4). Appendix 5 shows descriptives of both accuracy measures.

Before moving on to the results, we acknowledge that there is uncertainty in our general public opinion estimates and, even more so, in our estimates of party electorate opinion. As a consequence, there is uncertainty in our accuracy measures too. In Appendix 6, we present calculations of accuracy based not on point estimates but on the confidence intervals of these estimates. We show that the inaccuracy in politicians' estimations remains substantive even in the most optimistic scenario when we give politicians the benefit of the doubt and are lenient with what we consider to be an error. In the most pessimistic scenario, inaccuracy is even larger than what we report below.

Results

INCORRECT MAJORITY PLACEMENT OF GENERAL PUBLIC OPINION — **Figure 1** shows the number of incorrect majority placements across all countries⁵.

Figure 1 – Distribution of the number of incorrect majority placements of general public opinion estimations by politicians (n=488)



Most politicians (80.1%) make mistakes less than half of the time, but fewer than 10% of the politicians have error-free estimations. The average politician incorrectly places the majority for 2.3 policies or, in other words, politicians' majority placements are incorrect 29% of the time. So, many politicians clearly do better than random: there seems to be information in their ratings. Still, for a sizeable share of policies, politicians have inaccurate perceptions of the preferences of the majority of citizens. They not only get it wrong when the public is divided and hard to read

⁵ From all politicians (N=866), the 368 Swiss did not estimate general public opinion, 7 skipped the estimations, and 3 are left out because of missing values (rating less than 6 out of the 8 (or 9) policy proposals. This brings the n to 488. Some politicians rated only 6 (n=4) or 7 (n=16) items. Their number of incorrect placements is re-scaled to match the 8-point scale.

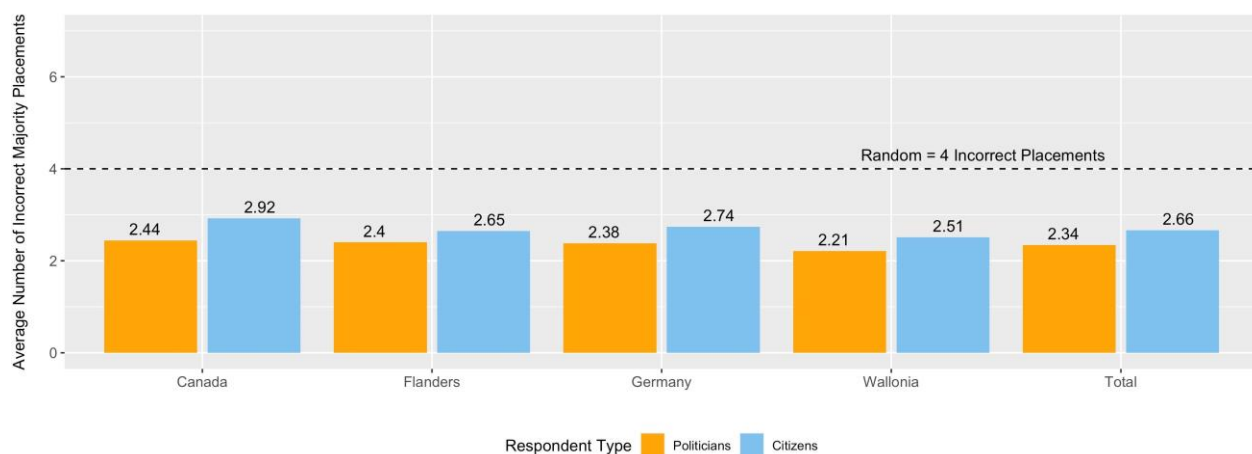
(e.g. when there is a 51%-49% distribution). Seventy percent of the misplacements occurs for policies with a relatively clear distribution of at least 60% (dis)agreeing citizens. In other words, politicians regularly get the most basic of things a representative in a democracy should know wrong. If they were to follow their perceptions of public opinion, *trying* to be responsive, these politicians would actually steer policies *away* from real public preferences in a substantial number of cases. Moreover, some politicians (13.2%) do as badly as a random guess (marked with the dotted line) with four out of eight incorrect placements and a small group (6.4%) does worse than random and makes five mistakes or more. So about one fifth of all politicians make estimates that equal or are worse than chance. Although doing better than random does not appear to be a particularly high bar to pass, especially when it comes to the crude and natural task of rating on which side the majority is, a sizable share still performs no better than a coin flip.

As a second benchmark, we compare politicians with ordinary citizens charged with the same task. **Figure 2** presents the evidence in the separate countries. First, comparing politicians' scores across countries shows that the number of wrong majority placements is strikingly similar everywhere, notwithstanding the fact that we study different countries and employ different policy proposals in the different countries. We find a strong common pattern here with the average number of incorrect majority placements ranging only from 2.2 (Wallonia) to 2.4 (Canada) (differences not significant; ANOVA-test of country differences: $F=.68$; $p=.57$).

Comparing politicians with citizens, politicians do a bit better than citizens. When rating eight policies, the average politician makes 2.3 incorrect majority placements, while the average citizen makes 2.7 such mistakes. T-tests show that the difference between politicians and citizens is statistically significant in Canada ($t=-3.11$; $p<.01$), Germany ($t=-2.10$; $p<.05$), and Wallonia ($t=-$

2.14; $p < .05$), but not in Flanders ($t = -1.64$; $p = .10$). Even though some of these differences are statistically significant, however, they are not substantively large. A difference of .32 (on a scale from 0 to 8 possible misplacements) does not support a claim that politicians are clear experts compared to ordinary citizens.

Figure 2 – Average number of incorrect majority placements of general public opinion by politicians (n=488) and citizens (n=6,653)



PERCENTAGE ERROR SCORE OF GENERAL PUBLIC OPINION — The task of estimating the exact percentage of citizens supporting a given policy is unquestionably much harder than merely assessing the majority side. And, it is something politicians probably less commonly engage in. **Figure 3** shows the distribution of this more precise accuracy measure across all politicians, while **Figure 4** summarizes the evidence per country, comparing it with citizen errors and random errors.

Figure 3 – Distribution of percentage error scores (in percentage points) of general public opinion estimations by politicians (n=488)

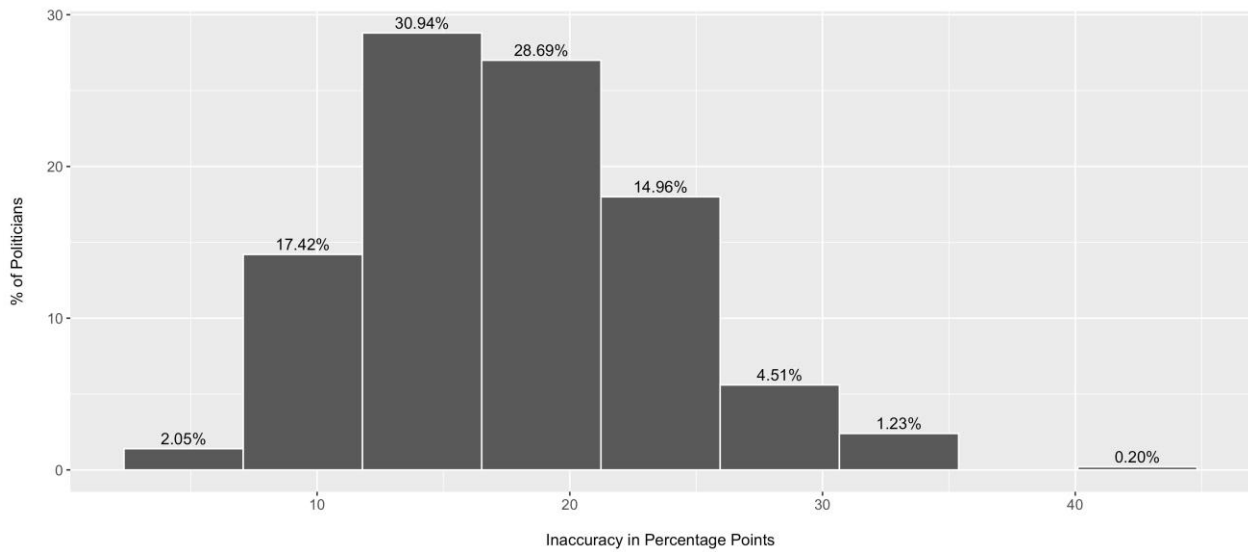


Figure 4 – Average percentage error scores (in percentage points) of general public opinion estimations by politicians (n=488) and citizens (n=6,653)

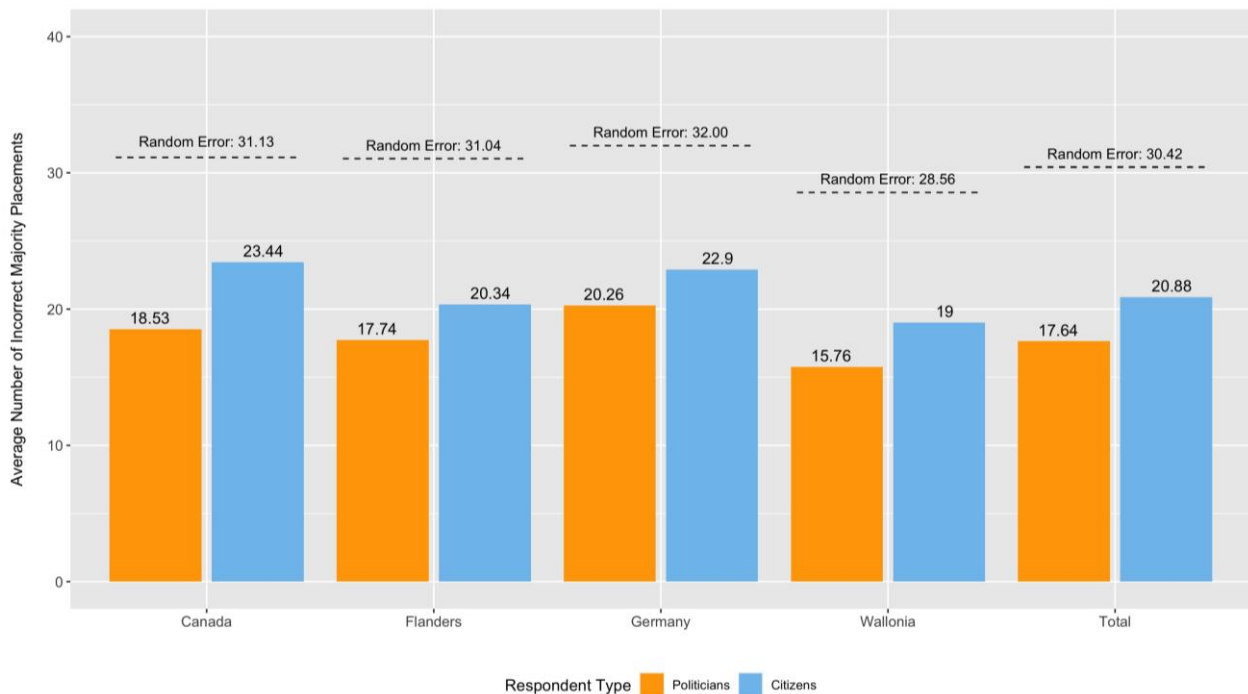


Figure 3 shows the variation in inaccuracy between politicians—like there was for the majority placements. Few politicians make spot-on estimations. The best rater has an average inaccuracy

of five percentage points—and only 10% of the politicians have an average error below ten percentage points. On average, the error politicians make is 17.6 percentage points. The interpretation of this mean error is not straightforward. Is it large or small? We believe it is big, especially when one thinks about it in substantive terms: politicians probably deal differently with a policy proposal when they think that, for instance, 68% of the population supports it compared to when they only perceive 50% support. An 18 percentage point error presumably has substantial implications for what politicians do, the initiatives they take, the positions they adopt, and the policies they support.⁶

Again, we use random guesses and estimations of citizens as benchmarks. Clearly politicians do better than random. As shown in Figure 4, depending on the specific set of policies chosen in a country, the random error varies between 28.6 percentage points (in Wallonia) and 32.0 percentage points (in Germany) (see Appendix 5). The 18 percentage point error of the average politician clearly outperforms chance. Only three percent of all politicians do worse than random.

Comparing the results with citizens, however, sketches a more pessimistic picture. Politicians score better than citizens, but not very much: across all countries, politicians are on average 17.6 percentage points off; citizens 20.9 percentage points. So, politicians are typically about three percentage points better (note that the difference is slightly larger in Canada, around five percentage points). The difference in error between politicians and citizens is significant in each

⁶ Note that our measures of inaccuracy are related: estimations of politicians are, on average, further off in percentage points when they misplace the majority (average error of 33 percentage points) than when their majority placement is correct (average error of 11 percentage points).

of the countries (T-tests not reported here). That the difference is statistically significant, however, does not necessarily mean that it is substantive in size. We believe the difference is surprisingly small, especially when considering the likely indifference of some citizens to making accurate estimations and the much higher stakes politicians have. Notwithstanding the different interview context, the very different environment politicians are operating in, and the (likely) frequency with which politicians estimate public opinion, they only do a few percentage points better than the disinterested, amateur citizens.

Another way to put these results into perspective is comparing them with recent results with regard to politicians in the U.S. using similar measures (but assessing district opinion and not national public opinion). In their recent study of U.S. legislators, Kalla and Porter (2020) report an almost identical mean error of eighteen percent and Broockman and Skovron (2018) as well find similar error sizes. Our results with regard to error size seems to travel beyond the five cases we study here, suggesting that they are not exceptional or idiosyncratic.

Interestingly, we *do* observe some country differences for the percentage estimation errors. The mean estimation error among politicians varies between 15.8 percentage points (Wallonia) and 20.3 percentage points (in Germany). These differences are significant (ANOVA; $F=11.50$; $p<.000$). Walloon politicians are the most accurate and differ significantly from Flemish and Canadians. Germans score lower than each other country. As these differences could be driven by institutional factors, but also by differences in the policies politicians had to rate (see the variation in random inaccuracy), we cannot give a definite answer on what explains these differences. What we take from this is that accuracy appears to be low across the board. All in all,

although we compare countries with different systems and employ different instruments, we find relatively similar accuracy levels.

PARTY ELECTORATE ESTIMATIONS — Thus far, our results suggest that politicians are not really good at estimating the opinion of the general public. It might be the case, though, that responsive politicians instead focus on knowing the opinions of their party voters. Some models of representation, for instance the responsible party model (e.g. Pierce 1999), imply that responsive policies come about primarily by the close association between voters and their party. In most multi-party countries and in the countries under study here, politicians tend to declare that they care about their party voters more than about the general public (see: Dudzińska e.a. 2014). In that case, there may be no need for accurate estimates of general public opinion as long as politicians get it right when rating their own voters' preferences. We revisit both measures—incorrect majority placement and percent error score—but this time look at how good politicians are able to predict their party voters' stance. Switzerland is now included in the analysis. We still use random ratings as a benchmark but not citizens: we did not ask citizens to make party electorate estimations. **Figure 5** presents the evidence for incorrect majority placements while **Figure 6** presents percentage error⁷.

⁷ From all politicians (N=866), 33 come from very small parties from which we did not survey enough voters (see earlier footnote). Another 6 politicians are independents without partisan electorate. Seventeen skipped the second estimation module entirely, and (analogously to the procedure for general public opinion estimations) 10 are left out of the analysis because of missing values: they rated less than 6 out of the 8 policy proposals. This brings the n to 800.

Figure 5 – Average number of incorrect majority placements of party electorate opinion (n=800) and general public opinion (n=488)

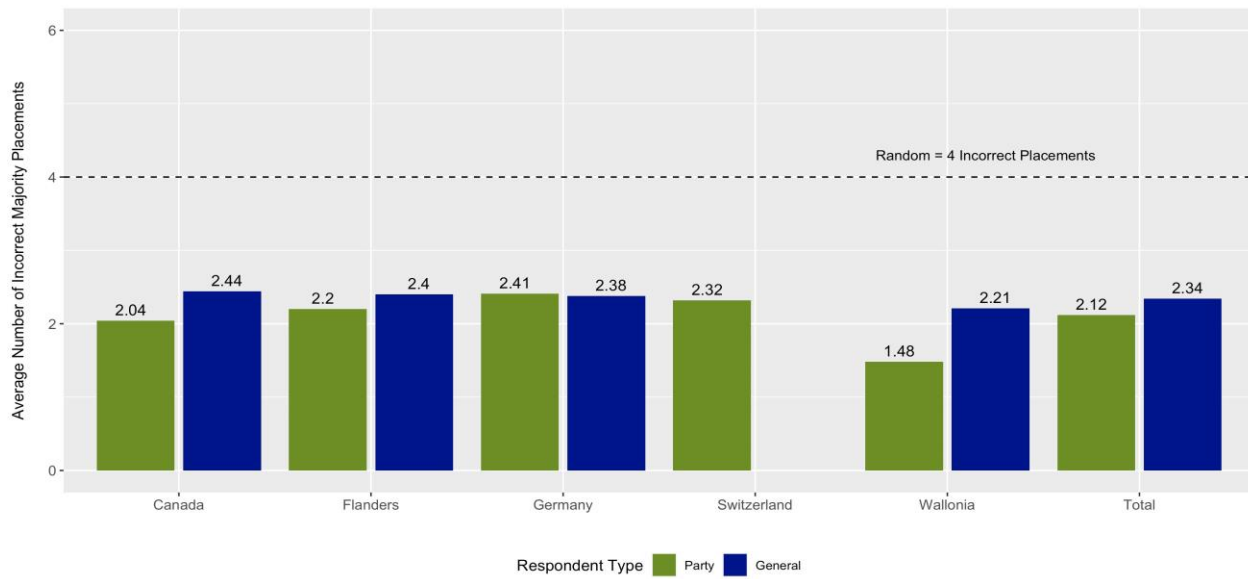
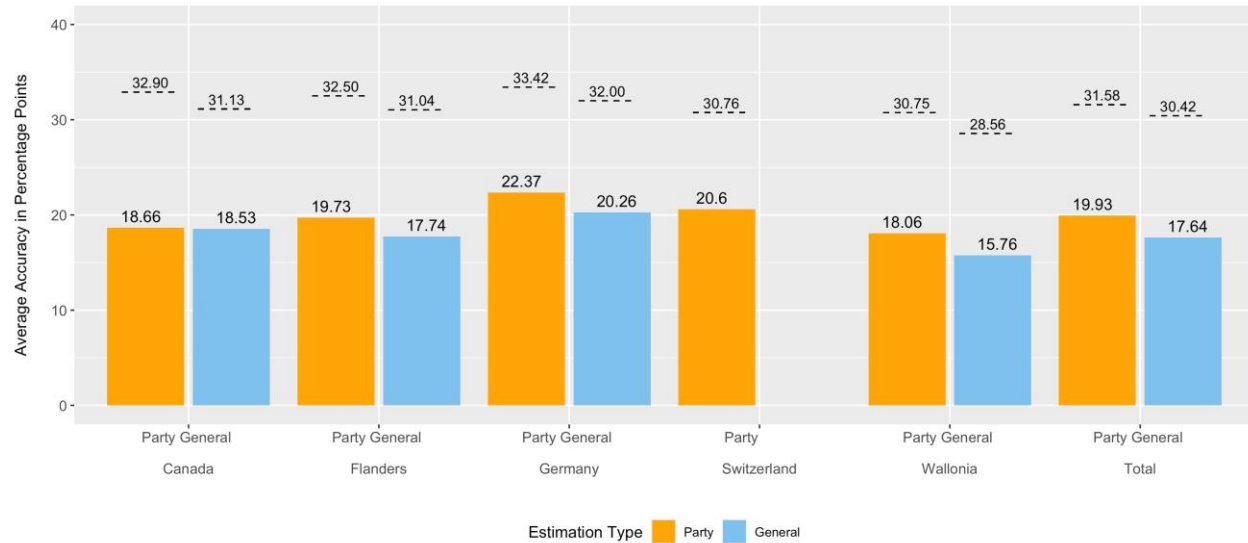


Figure 6 – Average percentage error scores (in percentage points) of party electorate estimations (n=800) and general public opinion estimations (n=488)



The figures show an intriguing pattern. Compared to the number of incorrect *majority placements* of general public opinion (Figure 5), the mean inaccuracy for party electorate estimations is slightly *lower* in most countries—suggesting that politicians seem to be a bit better at estimating

what the majority of their party electorate wants than at estimating what the majority of all citizens in the country want. Yet, the difference is only statistically significant in Wallonia ($t=-4.70$; $p<.000$) and Canada ($t=-2.08$; $p<.05$); elsewhere, politicians are not more successful in situating the majority of their voters correctly. More generally, in most countries politicians still misplace the majority for a bit more than two in eight policies. So, all in all, differences in majority placements are slight.

When we look at the percentage error (Figure 6), however, a different picture emerges. Politicians are not better at pinpointing the exact proportion of their electorate that is in favor of a proposal than at estimating this for the full population. Their estimations are even *worse*: they are typically about two or three percentage points *further* off target when rating their own party electorate. The difference is significant in Flanders ($t=2.76$; $p<.01$), Wallonia ($t=3.25$; $p<.01$), and Germany ($t=1.97$; $p=.05$). Only in Canada, is there no statistically significant difference between the two. This means that when it comes to their own voters, politicians make rather inaccurate guesses: overall, they over- or underestimate support for policies by twenty percentage points.

That politicians, in comparison to estimating general public opinion, are slightly *better* at rating the majority of their voters does not necessarily contradict that they are *worse* at rating the exact share of support among their voters. Compared to country populations party electorates have relatively homogenous political preferences—they are less divided about policies—and this makes estimating majority viewpoints easier. This being said, electorates may often be less homogenous than politicians think they are, leading to larger mistakes when it comes to specifying the exact share of support for policies. Also, the average random error is a little larger with more homogenous publics (see Figure 6).

A few more observations deserve attention. First, for electorate ratings as well, politicians do better than random. On average they do twelve percentage points better than random, which is similar to what we found for general public estimations (13 percentage points better).

Second, country differences are, again, limited. Walloon politicians stand out a little for both majority misplacements and percentage error scores: they do significantly better in estimating their electorates. Germany, by contrast, does worse, but only for percentage inaccuracy. These patterns are not explained by existing arguments that we are aware of. That Walloon politicians work in the exact same institutional set-up as Flemish ones suggests that the differences are rather due to differences in the difficulty of the estimation task (e.g. some policy proposals may have gotten more media attention in some countries than in others; and note that the proposals are equivalent but not identical) rather than to system differences. The other four systems do not differ from each other. Overall, inaccuracy in assessing one's own electorate seems a generic phenomenon materializing in different systems.

Finally, are politicians who are better than their colleagues at estimating general public opinion, also better at estimating their electorate? Or is the pattern reversed, and do politicians focus *either* on the general public or on their electorate? From a normative point of view the latter scenario might be the most desirable: it is understandable that politicians do not, or cannot, focus on the general population *and* on their electorate—they probably consider themselves as a representative of one group more than of the other. But a 'good' politician should get it right for at least one group. There is a positive correlation between the two estimations ($n=470$; for majority misplacements Pearson $r=.30$; $p<.000$; for percentage error scores Pearson $r=.36$; $p<.000$). So, there is a tendency for those who rate general public opinion accurately to also be

better electoral opinion estimators. Politicians who are bad at rating one type of public do not compensate by being better at rating the other. Politicians who cannot properly assess general opinion are also less likely to correctly assess their own electorate.

Discussion

The central finding in this paper is that politicians do not seem to be particularly good estimators of public opinion. This result calls for more analyses and, especially, for an exploration of potential explanations of what makes some politicians more accurate than others, and when. Our aim here is to provide, for the first time, a comparative, descriptive account of the accuracy of politicians' perceptions of general public opinion and party electorate opinion, while at the same time offering sensible benchmarks. Our results raise numerous questions on the type of inaccuracy we measured, how it could be explained, and what the democratic implications of the presented measures of perceptual inaccuracy could be. We discuss these in this section.

First, we focused on sheer inaccuracy and not on the direction of the error. Inaccuracy tells us something about the expertise of politicians but it does not tell us about possible biases. Recent work by Broockman & Skovron (2018) found that American state legislators systematically overestimate the conservativeness of the voters. U.S. politicians do not make the random estimation errors, but are instead systematically biased towards one ideological side in their perception of public opinion. Our work shows that the precondition for finding such an ideological perceptual bias in other countries too is met: politicians make sizeable perception mistakes. Examining whether a conservative bias in perceptual accuracy exists among elites outside of the U.S. is a natural synthesis and extension of our study and the work of Broockman and Skovron.

In a similar vein, the ‘positional’ accuracy this paper set out to measure only grasps part of politicians’ public opinion perceptions. Apart from knowing how many people support a given policy, politician also have an interest in knowing to what extent people *care* about an issue. Hence, there seems to be promise in measuring the accuracy of politicians’ public salience perceptions (see Converse and Pierce, 1986). The consequences of wrong salience perceptions could be equally worrisome. Instead of steering a policy away from popular preferences politicians could erroneously not consider an issue to be a priority while it actually should be, or vice versa. Here too, we encourage follow-up work to explore this phenomenon.

Our findings speak to politicians’ inaccuracy in assessing the state of public opinion at an arbitrary point in time—that is, their perception of a static level of support for a policy. But politicians may be better attuned to registering *changes* in public opinion. Our design does not allow for capturing politicians’ sensitivity to dynamics of opinion change, a crucial concept when thinking about many aggregate level policy studies who do not so much focus on congruence but rather on policy responsiveness over time (e.g. Soroka and Wlezien 2009). This is a theoretically important, but from a methodological perspective very challenging avenue for further work as well.

Second, we did not speculate about possible *explanations* for the found inaccuracy. Factors on different levels could determine accuracy. On the individual level, for instance, one might imagine that politicians in leadership positions would have a better sense for public opinion. It could be that this quality is what may have helped them become top politicians in the first place, or that they gained expertise in it while working their way up in politics (see suggestions by Merriam 1950; Clausen 1977; Norris and Lovenduski 2004; Belchior 2014). Evidence on whether leaders are more accurate assessors of public opinion is, to the best of our knowledge, nonexistent.

The same applies to politicians who are issue specialists: representatives who specialize in a policy topic are maybe better at gauging public opinion with regard to their issues of specialization (e.g. Varone and Helfer 2021). This could be owing to having better public opinion sources at their disposal and/or investing more effort to stay abreast of public opinion. Another likely individual-level determinant of inaccuracy is politicians' own opinion. The innate human tendency to consider people to be similar to oneself—social psychologists term this 'social projection' (e.g. Krueger and Acevedo 2005)—may make politicians overrate support for their own policy preference (for an application to politicians, see: Esaiasson and Holmberg 1996). Also, it could be that politicians, when answering the rating questions thought about what public opinion *would* be if they got the chance to engage in persuasion. The inaccuracy of politicians could be due, then, to their confidence in their ability to actively shape public opinion.

The specialization expectation can be applied to parties too. It could be that parties who 'own' an issue (Petrocik 1989) invest more resources in public opinion on it and, hence, hold more correct perceptions with regard to people's preferences on that issue (Varone and Helfer 2021). Other party features could matter as well, such as the size of the party (that in turn allows more politicians to specialize on issues) or whether it is a government or opposition party. Explanations could also lay at the country level, with institutions that incentivize more individual accountability fostering more accuracy (although our results—albeit with only a handful of countries—did not point in that direction). In sum, there is plenty of work to be done on explaining different degrees of accuracy across individuals, parties, issues, and entire political systems. We believe our findings lay the foundation for a research agenda focused on explaining why so many politicians espouse inaccurate public opinion perceptions, why some are better than others, and when.

Third, in the early part of the paper, we argued that faulty perceptions of politicians may have implications as they lead to politicians being less responsive to public opinion than they could be (and maybe even *want* to be). One could argue, though, that the external validity, and thus the real-world consequences, of the high levels of inaccuracy we found are rather limited. When issues are really controversial, the counter argument would go, politicians *do* know what the public wants as they rely on other, and better, sources of public opinion that only become available when issues are pressing and a policy decision must be taken (poll data, for instance, or media attention, or lobbying cues; for lobbying: see: Eichenberger, Varone, and Helfer 2021). We cannot exclude that politicians, before they actually vote in parliament for instance, do double check and make sure the public is on their side, and that more and better information about public opinion is available then. Yet, the issues we selected for this study (see Appendix 2) are inherently salient and politicized, meaning that plenty of high quality signals about public opinion were likely available to the politicians we studied. We also note that the representational work of politicians extends far beyond voting on legislation. Politicians are required to lobby for their substantive positions within their party, to ask questions in parliament, to speak publicly on their positions—often with the goal of persuading voters—and they engage in other activities that also benefit from knowledge of what people want, such as giving media interviews or directly speaking with constituents (e.g. Esaiasson and Narud 2013). Politicians constantly do all these things even on issues without reliable public opinion. We therefore believe that perceptual accuracy (or, rather, its absence) is a likely candidate for explaining the selectivity of policy responsiveness found in aggregate-level studies (Lax and Phillips 2012).

Conclusion

Students of representation argue that policy responsiveness is, at least partly, a matter of politicians' perception of public opinion: elected representatives read public opinion and then follow their perceptions of what the people want. Some forms of democratic representation do not require representatives to have a good command of what the people want, but it stands to reason that, all other things being equal, the chance that policies will be congruent and/or responsive increases with the accuracy of the public opinion perceptions of policy-makers.

Drawing on the richest evidence so far—covering four countries (and five political systems), 866 subjects, and a variety of policies in each country—we find that politicians' perceptions do not live up to democratic expectations. Whether one looks at incorrect majority placement or percentage error, estimations of general or of party electorate opinion, or comparison with random ratings or random raters (citizens), the conclusion basically remains the same: politicians are not very good at estimating public opinion. In the defense of politicians, one could argue that placing the majority correctly for (almost) six out of eight policies points to a *good* command of public opinion; that, if politicians were to follow their perceptions, a solid majority of policies would be responsive and in line with what the majority of the public wants. However, our reading of the results is more pessimistic. Politicians' estimations are situated only half way between randomness (4 out of 8) and perfect accuracy (8/8). For democracy to function properly, policy responsiveness should be the consequence of deliberate actions of political actors and not of sheer luck. Also, most do better than chance but not by an awful lot and, as a group, they barely do better than ordinary citizens. Perhaps most importantly, many politicians misperceive where the majority of citizens are even on issues the public is not divided about and with a clear majority on

one side. In sum, in more than two out of the eight cases, following up on their perceptions of what the majority wants would steer politicians in the opposite direction, *away* from what the people actually want. We think it would be hard to maintain that such a system works properly. Also, compared to general public opinion estimations, accuracy is not higher for party electorate estimations and inaccuracies with regard to one public opinion are not compensated for by higher accuracy with regard to another public opinion. By and large, differences between countries are small. Notwithstanding the countries in our study had different systems and notwithstanding our use of different sets of policies in each country, systemic factors do not seem to matter much. Everywhere we looked, representatives made quite large errors when gauging public opinion. This probably means that individuals are not selected into politics because of their perceptual accuracy. Politicians do not have an exceptional 'nose' for public opinion. Their frequent encounters with voters and party members, their high motivation to be re-elected by displaying responsiveness, or the dependency of their careers on voters do not make them better at estimating public opinion.

In closing, we find that one of the crucial preconditions for politicians to be responsive representatives is often not fulfilled. Even if politicians wanted to follow public opinion, their erroneous perceptions of popular preferences would in many instances hinder them. Our study demonstrates that scholars of political representation should do more to understand the perceptions of elected representatives. If the perceptions of politicians matter—and much of the work on democratic representation says they do—it is important to scrutinize how politicians think about the people they are supposed to represent. What politicians say in public and the formal actions they take in parliament are obviously important, but they do not tell the whole story about

the exact mechanisms through which representation is realized. Only by carefully examining what politicians think and believe about the public can we lay bare how representation comes about and how politicians' own perceptions impact it.

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Inaccurate Politicians.

Elected Representatives' Estimations of Public Opinion in Four Countries

Online Appendices

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Online Appendix 1 – Elite survey: Response rates and representativeness of the data

In the framework of the POLPOP project, we surveyed members of parliament (MPs) from Belgium (Flanders and Wallonia separately), Canada, Germany and Switzerland. In each country, *national* MPs were surveyed. In Belgium, Canada and Switzerland, we also surveyed *regional* MPs. In Belgium, exceptionally, we also targeted ministers and party leaders.¹

In Belgium, Canada and Switzerland, *all* MPs from the targeted populations were invited to participate in the study. In Germany, a slightly different procedure was followed because of the large size of the German Bundestag (19th legislative period), which consists of 709 members. A stratified sampling procedure was used and groups of politicians were contacted in several rounds. Sampling and contacting were terminated after 79 interviews were done— at that moment, 511 politicians had been contacted.

Table A1.1 below reports the cooperation rates per country and level (national/regional). And Table A1.2 shows the representativeness of the data on several key characteristics: gender, age and seniority. The table shows that, some (substantively small) deviations notwithstanding, our data are representative for the full population.

Further information about the data collection is available from the authors upon request.

¹ In contrast to many other countries, ministers in Belgium are not members of parliament. Party leaders *can* be MPs at the same time, but some are not. In Flanders, ministers and party leaders were invited to participate in the study. In Wallonia, only party leaders were invited.

Table A1.1 - Population of targeted politicians, sample, and response rates

		Population	Sample	Response rate (%)	Timing of interviews
Canada	National MPs	334	50	15.0	March – Sep 2019
	Regional MPs Ontario	124	30	24.2	
	TOTAL Canada	458	80	17.3	
Flanders	National MPs, ministers and party leaders	98	77	77.0	March – July 2018
	Regional MPs, ministers and party leaders	135	102	76.7	
	TOTAL Flanders	233	179	76.8	
Germany	National MPs	511	79	15.5	Sep 2018 – Feb 2019
	TOTAL Germany	511	79	15.5	
Switzerland	National MPs	236	151	64.0	Aug – Oct 2018
	Regional MPs Berne and Geneva	259	217	83.8	
	TOTAL Switzerland	495	368	74.3	
Wallonia	National MPs and party leaders	65	43	62.3	March – July 2018
	Regional MPs and party leaders	149	117	79.6	
	TOTAL Wallonia	214	160	74.8	
GRAND TOTAL		1,911	866	45.3	

Table A1.2 Representativity of MPs who cooperated compared with the MP population for gender, age and political experience.

	Flanders		Canada		Germany	
	<i>Cooperated</i> (<i>N</i> = 179)	<i>Population</i> (<i>N</i> = 233)	<i>Cooperated</i> (<i>N</i> = 80)	<i>Population</i> (<i>N</i> = 458)	<i>Cooperated</i> (<i>N</i> = 79)	<i>Population</i> (<i>N</i> = 709)
Female	66 (37%)*	97 (42%)	31 (39%)	140 (31%)	20 (25%)	219 (31%)
Age in years (SD)	48.0 (8.7)	48.6 (9.1)	52.3 (12.3)	52.2 (11.9)	50.2 (10.8)	49.4 (10.1)
Political experience in years (SD)	10.1 (6.9)	10.5 (7.5)	6.3 (8.7)	6.0 (6.7)	4.9 (5.8)	6.0 (6.7)

(continued)

	Switzerland		Wallonia	
	<i>Cooperated</i> (<i>N</i> = 368)	<i>Population</i> (<i>N</i> = 495)	<i>Cooperated</i> (<i>N</i> = 160)	<i>Population</i> (<i>N</i> = 214)
Female	116 (31%)	158 (32%)	54 (34%)	73 (34%)
Age in years (SD)	51.3 (11.3)*	52.1 (11.0)	51.2 (10.4)	51.6 (10.3)
Political experience in years (SD)	9.9 (7.9)*	11.0 (8.6)	10.9 (7.9)	11.5 (8.5)

Note. * Means that the characteristic is a significant predictor of whether a politician participated in the survey (result from logistic regression analysis; $p < .05$). This is the case for only two characteristics (gender in Flanders and age in Switzerland) and the bias is, in substantive terms, negligible. On all other aspects, the elite sample is fully representative.

We also assess the data based on cooperation rates per party. Because full confidentiality was promised to the participating politicians and parties regarding their participation in the project, Table A2 lists the cooperation rates in anonymized form. It becomes clear that participation varied somewhat between parties. There is, however, no strong ideological bias in the dataset. We analyzed, for the full population of respondents, whether the ideological position of a politician (left-right score, taken from the Chapel Hill Expert Survey 2014) is related to their participation. The correlations are overall low and insignificant (see bottom of Table A1.3). Only in Switzerland is the correlation ($r = .15$) significant (right-wing politicians participated slightly less) but note that even for the least-cooperating party, the response rate was 58% here. All in all, we find proof that all main parties and ideologies, in all countries, are represented in substantive numbers in the dataset.

Table A1.3 Cooperation rates per party

	Canada	Flanders	Germany	Switzerland	Wallonia
Party A	40%	93%	18%	90%	93%
Party B	25%	89%	17%	83%	85%
Party C	16%	84%	13%	83%	75%
Party D	16%	82%	12%	83%	73%
Party E	0%	74%	10%	78%	67%
Party F		67%	7%	78%	63%
Party G			4%	73%	
Party H				69%	
Party I				63%	
Party J				60%	
Party K				58%	
Others (parties with max. 3 seats + independents)	0%	20%	0%	86%	75%
Correlation between left-right score and cooperation	-.07	-.12	.03	-.15	.00
N (cooperated)	80	179	79	368	160

Note. Letters allocated to parties randomly to ensure anonymity; party A in one parliament is not the same party (family) as party A in another parliament. For Germany, cooperation rates based on the parliament with 709 MPs (although only 511 were contacted).

Online Appendix 2 – Selection and batch of policy proposals in each country

Our first criterion for issue selection was that issues should not be overly technical. Even without much prior knowledge, citizens (and politicians) should be able to understand what the proposals entail. Second, all proposals are topical or relevant in the sense that, at the time of the survey, they were present in the public realm in the country at stake; we did not invent new proposals but drew on existing debates. Third, aiming to get politicians' estimations with regard to salient and less salient issues, the salience of the proposals and of the underlying issues varies systematically. To select proposals with varying salience but, at the same time, having a minimum salience level, in some countries, a broader list of many more policy proposals was pretested on a random sample of country nationals. Basically, pretest respondents were asked whether they agreed, disagreed or were simply undecided about a larger number of policies—undecided both including people who said they did not have an opinion and those placing themselves in the middle of the scale. We considered the share of undecided citizens as an indicator of the salience of the policy and only policies above a certain minimum threshold of salience were retained (e.g. in Flanders only the proposals of which less than 30% said they were undecided about). Policies with higher shares of undecided were considered to be non-salient and/or too technical-unknown for people to have a sensible opinion about (and for politicians to estimate these opinions). Still, as one can glance from the full list of policies below in **Table A2.1**, among the retained eight policies in each country, there still is much wanted variance in salience (measured by the share of undecided). Fourth, in each country, the eight policies represent a good deal of issue variation. They include policy proposals situated on the traditional socio-economic left-right axis (e.g. retirement age, right to strike, taxes...) as well as proposals that belong to the cultural left-right

divide (e.g. immigration, environment) while some proposals do not belong to any of the two main cleavages (e.g. defense, democracy). Fifth, based on pretest data, we sought policy proposals varying in their distribution of public opinion support. The clarity of a public opinion signal probably depends to a large extent on the share of people (dis)agreeing with a policy. For instance, 50%-50% distributions may be more difficult to estimate correctly than 80%-20% distributions. Accordingly, the eight policies were chosen in each country conditional upon showing variation in distributions. This is documented in Appendix 2 as well. Sixth and finally, the eight policies we employ in each country vary in the sense that for some of them party electorates hold different opinions while for other policies all party electorates converge on the same side of the debate. If politicians get contradictory signals from their own electorate and from general public opinion, this may confuse and decrease the accuracy of their estimations. Based on all these six criteria, in each country, a set of eight policy proposals was selected. We cannot prove that the set of policies in each country is perfectly functionally equivalent, but we selected balanced and comparable sets of policies as carefully as possible.

Table A2.1 – Policy proposals per country

Flanders		Issue	% citizens undecided	% citizens agree	Maximum party electorate difference % agree*
1	National armies should be replaced by one European army.	EU	22.1	60.9	44.2-66.7
2	Voting should remain compulsory.	Political system	15.4	70.0	52.9-76.4
3	The most polluting cars should be forbidden in cities.	Environment	11.2	68.5	50.6-81.9
4	Company cars should be more heavily taxed.	Taxes	16.2	66.4	58.7-84.4
5	The right to strike should be restricted	Labor	12.0	58.7	27.0-72.5

6	Belgium should never expel someone to a country where human rights are violated.	Migration	12.4	69.0	32.3-85.6
7	The full income of all parliamentarians should be published yearly.	Political system	6.8	91.2	91.6-94.2
8	The retirement age may not exceed 67 years.	Social policy	3.8	91.1	89.3-95.1
Wallonia					
1	National armies should be replaced by one European army.	EU	17.0	48.7	37.0-66.7
2	Voting should remain compulsory.	Political system	6.3	57.1	50.4-68.5
3	The most polluting cars should be forbidden in cities.	Environment	8.3	66.6	53.4-81.9
4	Company cars should be more heavily taxed.	Taxes	14.9	59.4	60.1-76.9
5	The right to strike should be restricted	Labor	7.3	55.8	39.6-76.4
6	Belgium should never expel someone to a country where human rights are violated.	Migration	11.5	64.7	59.2-85.1
7	The full income of all parliamentarians should be published yearly.	Political system	7.1	82.0	82.4-89.8
8	The retirement age may not exceed 67 years.	Social policy	3.2	81.4	80.1-88.8

Switzerland					
A1	Switzerland needs to buy new fighter jets.	Defense	10.7	39.8	16.8-66.9
A2	Jobs in my Canton need to be reserved for people residing my Canton.	Political system	8.7	60.0	27.7-68.6
A3	The concerned Cantons need to allow the hunt of wolves that attack flock.	Environment	10.1	43.1	15.3-60.4
A4	Hospitals need to have a "Babyklappe" where parents can leave their infant anonymously.	Ethics	8.7	70.7	69.4-79.8
A5	Sexual harassment at work needs to be punished more severely.	Ethics	6.1	89.2	80.9-94.2
A6	Switzerland should only accept well-educated immigrants.	Migration	11.2	33.6	9.8-57.5

A7	Citizens should be able to participate in federal elections via internet.	Political system	10.4	69.6	57.0-76.6
A8	Taxes on high-income should be raised while taxes on low-income should be reduced.	Taxes	7.2	78.3	47.4-90.0
A9	The pension age needs to be raised to 67.	Social policy	4.7	20.6	18.2-44.7
B1	Civil defense facilities that are not in use need to be closed for good.	Defense	19.2	30.1	27.2-41.5
B2	Elderly employees need to be protected better from dismissal.	Labor	4.3	91.5	81.5-95.6
B3	Private households should be able to freely choose their electricity provider.	Economy	18.1	77.0	65.5-78.5
B4	Same-sex couples who have registered their partnership should be allowed to adopt children.	Ethics	9.0	58.9	36.8-76.1
B5	The police needs to prevent unauthorized demonstrations at all costs.	Rights	9.8	64.8	36.8-86.2
B6	My Canton should spend more for the integration of asylum seekers.	Migration	11.3	31.5	7.9-77.2
B7	Foreigners who have lived in Switzerland for at least ten years should be able to participate in Cantonal elections and referenda.	Migration	6.9	45.7	14.9-82.6
B8	Wedded people need to be assessed separately for taxation.	Taxes	17.4	55.8	58.4-70.0
B9	My canton should create a cantonal health insurance institution for its residents.	Social policy	15.0	55.5	41.3-78.7
Germany					
A1	The cooperation between EU member states should be strengthened.	EU	13.3	80.7	61.7-97.7
A2	Video surveillance in public spaces should be expanded.	Crime	8.1	74.2	57.8-84.8
A3	Citizens with higher incomes should be taxed more heavily than today.	Taxes	11.1	78.3	63.9-88.9
A4	There should be referendums on the federal level.	Political system	13.5	79.3	72.9-95.2

A5	There should be more driving restrictions in cities suffering from air pollution.	Environment	10.0	46.4	31.7-79.5
A6	The retirement age should be raised step by step.	Social policy	4.6	21.4	4.0-25.8
A7	If equally qualified women should be privileged on the labor market.	Labor	17.7	34.8	26.4-40.0
A8	Foreign citizens' children that were born and raised in Germany should be allowed to keep their parent's citizenship in addition to the German citizenship.	Migration	11.9	36.4	7.8-51.2
B1	There should be no further EU enlargement.	EU	21.5	73.4	57.1-90.4
B2	Delinquents should be punished more severely.	Crime	7.9	93.2	79.5-98.8
B3	Income and wealth should be redistributed in favor of poorer people.	Social policy	12.5	72.1	60.0-91.5
B4	The electoral age should be lowered to 16 years for federal elections.	Political system	10.1	23.8	18.6-27.6
B5	Activities with high CO2 emissions such as air travel should be taxed more heavily.	Environment	12.9	66.8	42.2-85.1
B6	There should be a right to full-time child care until the end of elementary school.	Social policy	12.7	79.5	74.4-91.5
B7	There should be an "opt-out" system for organ donations. Everyone that does not decline explicitly would be organ donor.	Social policy	13.4	63.3	50.0-67.9
B8	Declined asylum seekers should be more consequently deported.	Migration	9.1	91.2	75.6-98.3
Canada					
1	Canada should increase the number of immigrants it admits each year.	Migration	14.5	37.5	24.3-49.6
2	The government should provide a guaranteed annual income.	Social policy	12.5	74.7	55.0-84.3
3	The federal government should support the building of oil pipelines in Canada.	Energy	17.2	69.3	49.1-90.1
4	The federal government should have more powers to combat terrorism, even if it means that citizens have to give up more privacy.	Crime	13.8	57.8	42.0-69.0

5	A carbon tax is a good policy to help reduce greenhouse gas emissions.	Environment	13.2	48.1	16.0-67.6
6	The retirement age to receive Canada Pension Plan benefits should be raised to 70.	Social policy	8.2	15.5	14.5-17.1
7	The Goods and Services Tax (GST or HST) should be increased.	Taxes	9.8	16.4	10.1-19.8
8	Individuals who are terminally ill should be allowed to end their lives with the assistance of a doctor.	Ethics	12.9	85.1	73.5-92.4

* 'Maximum party electorate difference % agree' refers to any of the party electorates in the country at stake with the lowest share of support of the proposal (first figure) and with the highest share of support for the proposal (second figure). It demonstrates the heterogeneity of support among party electorates.

Online Appendix 3 – Population survey: Response rates, representativeness and weights

Table A3.1 – Survey company, timing and sample size by country

	Survey company	Survey timing	Sample size	Minimum number of citizens who gave own opinion on policy proposal ^b	Number of citizens who estimated general public opinion for at least 6 out of 8 policy proposals
Canada	Qualtrics	June 2019	1,012	876	1,012
Flanders	Survey Sampling International (SSI)	Feb-March 2018	2,389	2,058	2,209
Germany	YouGov	Oct 2018	1,520	746	1,298
Switzerland	FORS ^a	May-July 2018	4,677	2,260	n.a.
Wallonia	Survey Sampling International (SSI)	Feb-March 2018	2,371	1,966	2,134

^a In Switzerland, a probability sample of 10,261 citizens was drawn and contacted to participate by FORS (response rate: 45.6%). In all other countries, an online survey panel was used and possible respondents were contacted until quota were met.

^b Due to missing values on the variables used to create weights and/or missing values on the policy opinions themselves, the number of ratings per policy proposal (on which we base our public opinion numbers) is typically a bit lower than the sample size. Moreover, in Germany and Switzerland citizens rated only one out of the two batches of policy proposals so the sample is divided into halves.

Information about weights:

To calculate the general public opinion on a policy proposal in a country, weights are used. This is only necessary in Belgium, Canada and Germany; politicians in Switzerland did not estimate the general public opinion and hence we do not need to calculate public opinion at the country level.

We weigh by age, gender, education and previous party vote. (Note that for age, gender and education, quota were used; but the weights allow to account for small remaining deviations). The weighing is done with the `ipfraking` command in Stata. The weights are trimmed to avoid that individual respondents count too heavily on the outcome; an upper bound of 5 is used. Any respondent who has a missing on one of the four weighing factors, does not get a weight and is hence not included in the calculation of public opinion at the country level.

No weights are used to calculate the opinion of a specific partisan electorate, because we do not know how other factors (e.g. gender or age) are distributed within party electorates.

Online Appendix 4 – Calculation of the error of a random guess

Imagine that 60% of the citizens in a country agree with a policy proposal. The absolute error e of a random estimation of the percentage support (which can take 101 values, namely all numbers from 0 to 100) is, on average:

$$e = \frac{|0-60| + |1-60| + |2-60| + \dots + |99-60| + |100-60|}{101}$$

$$e = \frac{60+59+58+\dots+0+\dots+39+40}{101}$$

So, it is the sum of the first 60 natural numbers plus the sum of the first 40 natural numbers, divided by 101.

More generically, when $n\%$ of citizens agree with a policy, the average error of a random guess is the sum of the first n natural numbers, plus the sum of the first $(100 - n)$ natural numbers, divided by 101.

The formula to calculate the sum of the first n natural numbers is as follows:

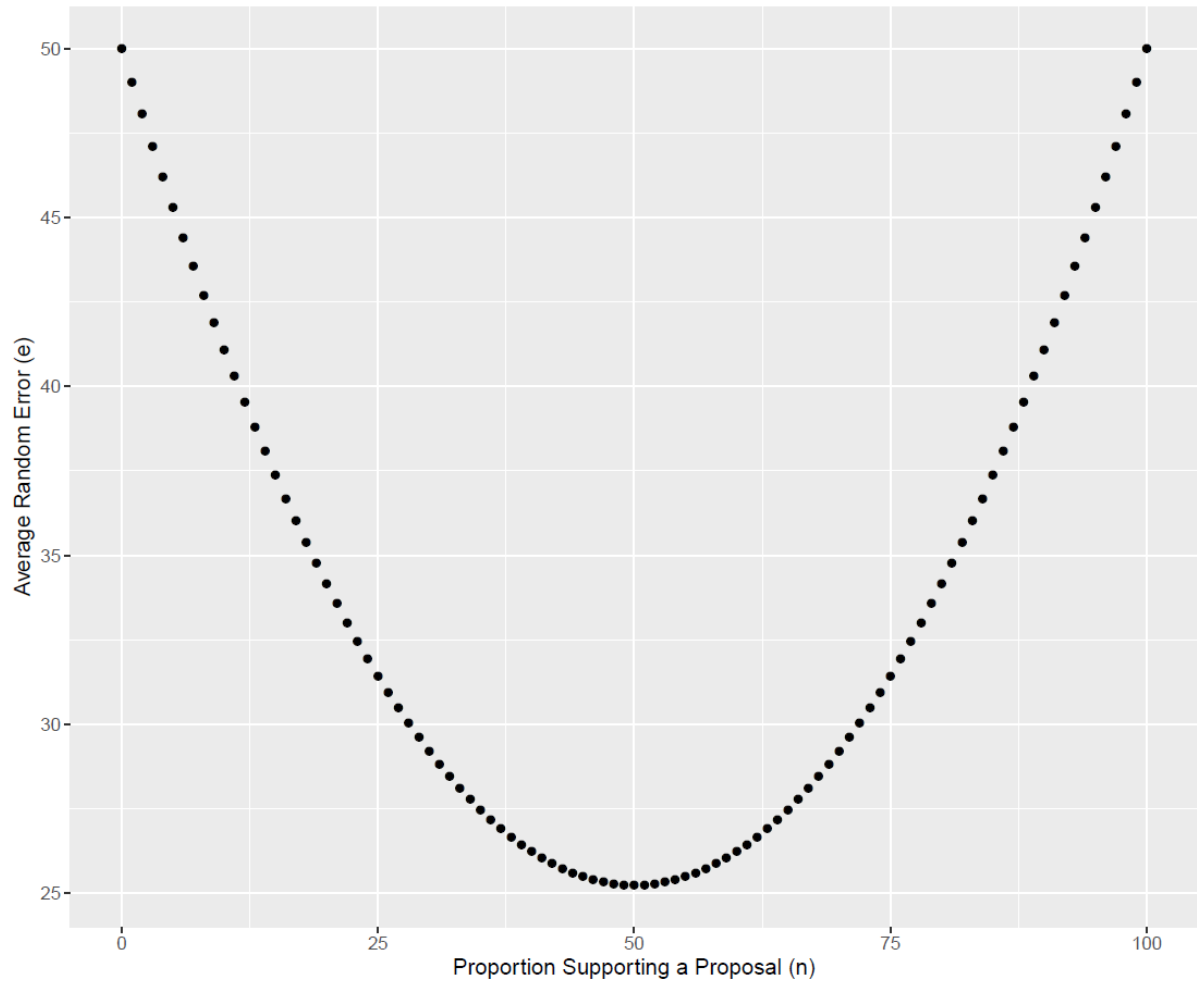
$$1 + 2 + \dots + n = \frac{n(n+1)}{2}$$

So, for a policy with which $n\%$ of the citizens agree, the average random error e is:

$$e = \frac{\frac{n(n+1)}{2} + \frac{(100-n)((100-n)+1)}{2}}{101}$$

To facilitate interpretation of this formula, below is a plot showing the mean random error for each value of n (x axis is 0 - 100, y axis is the value of e for that n).

We calculate this average random error for each policy proposal in our sample. Then, as a benchmark for the error that an individual politician makes across the eight (or nine) policy proposals in the batch, we take the average random error across the same proposals. This results in a different number for each country, as the proposals (and related public opinion distributions) are country-specific.



Online Appendix 5 – Descriptive statistics

Table A5.1 – Descriptive statistics of dependent variables

<i>Name variable</i>	<i>Coding</i>	<i>Mean</i>	<i>S.D.</i>	<i>Min-max</i>	<i>N</i>
<i>Incorrect majority placement</i>	Number of incorrectly placed majorities				
General public opinion		2.34	1.39	0-7	488
Party electorate opinion		2.12	1.44	0-7	800
<i>Percent accuracy score</i>	Mean absolute error (in percentage points) of estimations				
General public opinion		17.64	5.97	5-43	488
Party electorate opinion		19.93	7.16	6-51	800

Online Appendix 6 - Taking into account the CI around the public opinion estimates

It is fair to acknowledge that our estimates of public opinion (and electorate opinion), which are based on voter surveys, are uncertain. As a consequence, our calculations of the inaccuracy in politicians' estimations thereof are uncertain as well. To deal with that uncertainty, we report results here of analyses where we rely on the confidence intervals of the estimates—instead of the point estimates—to calculate perceptual accuracy.

On the one hand we calculate the **minimal error** in politicians' estimations. In other words, we give politicians the benefit of the doubt and assume that actual public opinion (or electorate opinion) is systematically closer to their estimations than our point estimates. This is operationalized as follows:

- A *majority placement* is now always correct when a confidence interval contains value 50% (and thus when it is uncertain whether the majority of citizens agrees or disagrees with the issue). As a consequence, a majority placement is now only incorrect when the full confidence interval is situated below 50 (e.g. lower bound is 33%; upper bound is 38%) while the politician's estimation is above 50—or vice versa.
- The *percentage error score* now equals 0 when a politician's estimation falls within the confidence interval—the estimation is then considered to be entirely accurate. When a politician's estimation is lower than the lower limit of the confidence interval, the error score is the absolute distance between the estimation and the lower limit. When a politician's estimation is higher than the higher limit of the confidence interval, the error score is the absolute distance between the estimation and the higher limit. In other words, politicians' error score represents the distance to the nearest limit of the confidence interval.

On the other hand we calculate the **maximal error** in their estimations. This is the error in a scenario where actual public opinion (or electorate opinion) would systematically be further away from their estimations than our point estimates.

- A *majority placement* is now *incorrect* when a confidence interval contains value 50% (and thus when it is uncertain whether the majority of citizens agrees or disagrees with the issue). As a consequence, a majority placement is now only correct when the full confidence interval is on the side where the estimation of the politician is.
- The *percentage error score* now represents the distance to the most distant limit of the confidence interval.

Note that there is no reason to assume that there is an actual systematic bias in our citizen survey. In the most likely scenario, our calculations based on point estimates (as reported in the main paper) are closer to reality than the minimal and maximal values reported below.

We first look at politicians' estimations of the general public opinion. The results are in Table A6.1. We see that—taking the confidence intervals around our public opinion estimates into account—the average number of incorrect *majority placements* must be somewhere between 2.1 and 2.6 (out of eight estimations). The error score in percentage points must be somewhere between 14.6 and 21.0. It makes sense that the margin of uncertainty is somewhat larger in Canada and Germany because

this is where our population samples were smaller (see Appendix 3) and the confidence intervals of the public opinion estimates are therefore larger.

Table A6.1 – Inaccuracy in general public opinion estimations

	Minimal error, based on CI limits	Error, based on point estimates (= main paper results)	Maximal error, based on CI limits
Average number of inaccurate majority misplacements (total)	2.1	2.3	2.6
Canada	1.9	2.4	2.9
Flanders	2.4	2.4	2.4
Germany	2.3	2.4	2.8
Wallonia	1.7	2.2	2.5
Average percentage error score (in percentage points) (total)	14.6	17.6	21.0
Canada	14.9	18.5	22.4
Flanders	15.2	17.7	20.5
Germany	16.4	20.3	24.4
Wallonia	12.8	15.6	19.0

Making the same exercise for the estimations of the party electorate positions, we see that the uncertainty becomes larger. This is logical as our estimates are based on smaller samples and the confidence intervals are therefore wider. Taking the uncertainty of the estimates into account, these results show that the average number of *incorrect majority placements* of the party electorate must be somewhere between 1.6 and 2.7 (out of eight statements). The average *percentage error score* must be between 14.7 and 25.8.

Table A6.2 – Inaccuracy in party electorate opinion estimations

	Minimal error, based on CI limits	Error, based on point estimates (= main paper results)	Maximal error, based on CI limits
Average number of inaccurate majority misplacements (total)	1.6	2.1	2.7
Canada	1.2	2.0	2.6
Flanders	1.7	2.2	2.5
Germany	1.9	2.4	3.2
Switzerland	1.9	2.3	2.9
Wallonia	1.1	1.5	2.1
Average percentage error score (in percentage points) (total)	14.7	19.9	25.8
Canada	13.3	18.7	24.7
Flanders	15.2	19.7	24.8
Germany	14.7	22.4	31.4
Switzerland	15.4	20.6	26.3
Wallonia	13.1	18.1	23.7

Online Appendix 7 – National vs. regional politicians

As explained in the main paper, in Belgium, both national and regional politicians were asked to estimate regional public opinion. In Canada, however, both were asked to estimate national public opinion. We test here whether this had implications for their accuracy.

In Canada, there is no difference. In Belgium, however, national politicians appear to be slightly better at estimating (regional!) public opinion, both in Flanders (majority placements and percentage accuracy score) and in Wallonia (only percentage accuracy score). We have no ready explanation for this. Maybe, operating in a more conflictual and more competitive environment (less seats per party), national MPs in Belgium might simply be more insecure and, hence, invest more in getting to know public opinion in general compared to their regional counterparts.

Note that we did not interview German regional politicians; and in Switzerland politicians were not asked to estimate general public opinion; so the comparison is not relevant there.

Table A7.1 – Differences in accuracy (general public opinion) between national and regional politicians (t-tests)

	Average of national politicians	Average among regional politicians	t
Average number of incorrect majority placements			
Canada	2.4	2.5	-.50
Flanders	2.1	2.6	-2.40*
Wallonia	2.1	2.3	-.81
Average percentage error score			
Canada	17.8	19.9	-1.64
Flanders	16.7	18.5	-2.02*
Wallonia	14.2	16.3	-2.13*

Note * $p < .05$