Party Control and Responsiveness

How MPs Use Variation in Lower-Level Institutional Design as an Electoral Responsiveness Mechanism

Martin Søyland[1]

[1]University of Oslo, Gullhaug torg 1, 0484 OSLO, Norway

Abstract

Different parliamentary activities allow Members of Parliament (MPs) varying amounts of autonomy. Previous studies have shown that, in parliamentary systems with strong parties and party-centered electoral rules, MPs have limited room for crossing the party line in the legislature both in voting and speech. Further, party-centered systems limit MP's ability to address electoral concerns of their constituency; they are less responsive. In this paper, I combine these findings by showing that even within system variation in party control over institutions affects the levels of responsiveness in parliamentary questions. By linking MP's constituency mentions with different types of questions, my results show that the institutional design in the Norwegian *Storting* affects the level of MP constituency signaling. Specifically, I show that questions with low levels of party control and public attention (written questions and question time) give MPs far more opportunity to raise constituency specific issues than the more party controlled activities (interpellations and question hours). Consequently, I argue that responsiveness does not disappear in party-centered systems; it is located at lower-level institutions. Particularly, some types of questions, where shirking from the party line is less consequential and the party organizations have less control over its members, allow for constituency signaling.

Keywords

parliamentary institutions, parliamentary questions, responsiveness, named entity recognition

1. Introduction

Parliamentary questions offer a tool for Members of Parliament (MPs) and their political parties to monitor the government in a wide range of parliamentary democracies across the world. However, parliamentary questions are also used as a tool for MPs to express their opinions on policy (position signalling), or even as a means to communicate directly with the voters in one's constituency. For example, during an interpellation on transport services for people with disabilities in the Norwegian parliament (*Stortinget*) on the 20th of May 2014, MP Eirin Sundt (Labor Party) stated that:

Digital Parliamentary Data in Action (DiPaDA 2022) workshop, Uppsala, Sweden, March 15, 2022.

martin.soyland@stv.uio.no (M. Søyland)
https://martigso.github.io/ (M. Søyland)
0000-0002-2463-8469 (M. Søyland)

> We are talking about parents, mothers and fathers, who want to participate in their children's activities, for instance football tournaments. You can not get from Ålgård to Kverneland, there is no bus.[1]

The geographical mentions of Ålgård and Kverneland are interesting in this speech, because most MPs (or Norwegians in general) will probably not know these two places unless they are from the area, and certainly not that "football tournament" in this context very specifically refers to a yearly football tournament for kids in Kverneland (Grønt Gras). So, why does the MP use a context most of the audience in the national assembly will not recognize? Numerous previous studies have covered MPs' propensity to highlight problems within the constituency they were elected from, and Eirin Sundt was elected from Rogaland whichis the electoral district for both locations mentioned in the speech. Some studies have also shown that political systems with strong parties strongly dampens the ability to voice constituency concerns [1]. Seeing as Norway has a party party-centered proportional representation electoral system, this should make speeches as highlighted above rare – in contrast to more candidate-centered systems (UK, US, etc) or even mixed-member systems (Germany, Italy, etc).However, yet other studies have shown that the institutional setting of different parliamentary activities can dictate how free MPs are in that specific activity. For example, MPs can have a hard time crossing their party in voting [2], but have more freedom in plenary debates [3] and different types of parliamentary questions [4, 5]. Some studies have even shown that the institutional design of different types of questions are important for MP behavior [6]. Still, there has not been given as much attention to the combination of institutional design and constituency signaling in parliamentary questions.

In this paper, I utilize different question types in the Norwegian parliament to show that lower-level institutional variations matter for the amount of constituency signaling MPs will engage in. In contrast to higher-level institutional designs, such as electoral systems, lower-level institutional designs are defined as the rules of an institution that have little or no influence on incentives and behavior beyond the institution itself. Parliamentary questions are particularly well-suited for the task at hand. First, the institutional design of question types varies within systems. Thus, party control will also vary between the different types of questions. Second, MPs use a substantial amount of time on asking the questions, and questions are regarded by the vast majority – at least in the Norwegian legislature – to serve as an important tool for setting important issues on the agenda and as a control mechanism towards the government [7, pp. 452-453].

I utilize a unique dataset of parliamentary questions and answers coupled with named entity recognition of MP constituency mentions, to show that the relationship between party control and lower-level institutional variation matters for how much MPs focus on their own constituency in the party-centered Norwegian parliamentary system. The variation in different types of parliamentary questions affect how much MPs focus on their constituency. When the party has less control over question types, MPs tend to do more signaling. More specifically, I find that the more party controlled and formally restricted legislative activities (interpellations and question hours) contain substantially less amounts of constituency mentions than less party controlled settings (written questions and question time). MPs refer to their constituency far

[1] Translated from *Vi snakker her om foreldre, altså mødre og fedre, som ønsker å delta i sine barns aktiviteter, som f.eks. en fotballturnering. Du kan ikke komme deg fra Ålgård til Kverneland, det går ikke buss.*

less in the question hour and interpellations than they do in written questions and question time. Further, the limited time frame and increased media attention of question hours seems to give parties even more incentive to control their MPs and push the frontbenchers to the pulpit.

Consequently, my findings give important insights on MP behavior in parliamentary democracies; even though the system under scrutiny here is party-centered, the results show that there is room for MPs to have substantial focus on constituency issues under the right circumstances. Thus, this paper corroborates and supplements previous findings of studies on variation in institutional design and the effects of party control on MP behavior in parliamentary democracies – the different types of parliamentary questions do influence what MPs want to and are allowed to talk about. In sum, both institutional design at the lower-level and, in extension, party control within these institutions are essential to the level of responsiveness in legislative activities.

2. Parliamentary Activities

Institutional design varies significantly between democracies. At the higher level institutions, electoral systems differ between those more party-centered and those more candidate-centered. Some electoral system designs have strict procedures for assigning the prime minister and cabinet, whereas others have less formalized procedures; even appointments of public administration personnel can vary between US style spoils system and merit systems.

At the lower-level institutions, there are all the more differences – even between parliamentary democracies and different levels of government. From various parliamentary procedures, through rules for roll-call votes, to seating arrangements, parliamentary systems operate with different (and mostly exclusive) sets of rules. In this section, I will discuss the role of questions in parliamentary systems and explore some of the most important previous findings with regard to parliamentary questions and their effect on MP behavior. Further, I outline the important institutional designs of the Norwegian case both at the higher and lower-level controls, with emphasis on the design of parliamentary questions.

2.1. Parliamentary Questions

Questions are a part of the institutional tool kit for controlling the executive branch in most democratic legislatures. Parliamentary questions are non-legislative in nature because they do not directly produce policy [8, pp. 348], but they nevertheless serve an important purpose as a monitoring mechanism to scrutinize government policy and an instrument for agenda-setting [6, pp. 382]. It is also stressed in the literature on parliamentary questions that this is not a costless effort [4, pp. 263]; parliamentarians invest time into formulating questions and cabinet members usually invest time into answering them. A common criticism of this notion is that MPs have writers prepare their questions and speeches. However, there are no indications in the Norwegian case that this is a valid concern. Indeed, if MPs did have writers, it is highly unlikely that these would act on behalf of the constituency the MP was elected from at the cost of the party. Accordingly, the results of my analysis would be skewed towards the null-hypotheses, which is far better than the opposite. The public awareness of the content in these types of

parliamentary activities, nevertheless, seems to be low, as shown by Soontjens [9]. They also demonstrate that MPs overestimate voter awareness of questions in parliament.

Another concern with using questions as a source of data is the possibility that questions can be used by MPs to "waste" time for the governing parties – either by submitting a lot of questions to increase the workload for the minister or ask *unneccessary* questions (rethorical). This is, of course, a plausible, but pessimistic, assumption to make. It is plausible because it would be naive to assume this never happens, but pessimistic about parliamentary democracy to assume all questions are asked with this motivation. Nevertheless, the formal restrictions of the different types of questions (there is no opportunity to filibuster), discussed below, will limit how much time MPs can waste. Further, the remaining types of time wasting are impossible to control for (unless MPs admit they do this through a survey or similar) and it is not clear how it would affect the results of my analysis. Consequently, this paper will assume that parliamentary questions are sincerely used for monitoring, agenda-setting, or control.

The study of parliamentary questions and responsiveness has had a somewhat split focus between studying the effects of institutional arrangements on the one hand, and responsiveness in specific types of questions on the other hand. Rozenberg and Martin [10] provide a thorough mapping of the different types of parliamentary questions over various parliamentary systems and investigate the consequences of institutional design on how often MPs use different types of questions. They argue that oral question hours and written questions serve different functions. Oral questions are more focused on "general policy issues whereas written questions tend to address more specific and detailed information requests" [10, pp. 395]. Further, written questions are less visible to the public than question hours. Various empirical studies on parliamentary questions have also revealed several interesting insights on how the incentives for participating in different types of these non-legislative activities alter MP behavior.

For example, Proksch and Slapin [11] show how national opposition Members of the European Parliament (MEPs) ask more written questions to Commissioners, arguing that such questions are regarded as an important oversight tool for the opposition. Although this study only utilizes written questions, it "highlights an oversight mechanism previous overlooked in by the EU oversight literature" [11, pp. 73]. Further, Kellermann [12] shows that British MPs ask more questions when their previous electoral victory was smaller. He attributes this to MPs that are more electorally vulnerable want to send stronger signals of effort more than constituency specific issues. And, Whitaker and Martin [5] find that opposition parties strategically focus on asking questions about policies that might uncover intra-coalition tensions in Britain. But parliamentary questions can also be used by coalition partners to control that their collaboration partners do not drift [13].

Even more relevant to the question of this paper, Martin [14] suggests a framework for utilizing parliamentary questions to measure constituency focus through an analysis of how Irish MPs convey responsiveness in written questions. Using data on hand-coded constituency focus in written questions, Martin [14] not only shows that MPs in the Single Transferable Vote (STV) electoral system of Ireland use written questions as a means to ask constituency specific questions, but also that geographic distance from the center (Dublin) is important for MP behavior in these questions. Adjacent to the Martin [14] study, Russo [15, pp. 299] finds that there is variation in written question constituency focus within the Italian parliament, despite the lack of electoral incentive to cultivate personal vote-seeking. Russo [15] argues that,

in contrast to American studies, looking for constituency focus in roll call votes is fruitless in parliamentary systems. MPs in parliamentary systems tend to vote in line with their party. Therefore, parliamentary questions offer some advantages: they give MPs opportunities to defend territorial interests that might cross the party line and tabling a question is a more costly task than the act of giving a yes/no vote [15, pp. 292].

Rasch [6] explores this from a slightly different angle. Looking at the small institutional differences between question types in the Norwegian parliament, he shows that the time constraints between question time and question hours produce large differences in which and how often MPs participate. On the one hand, question hour has developed into more of an activity for frontbenchers because the limited time frame (one hour) gives parties more control over the time allocation [6, pp. 391]. On the other hand, backbenchers are far more active in question time, which lasts longer and is more accessible.

These studies have shown both that the institutional design parliamentary questions is important for MP behavior and that constituency focus is prevalent, even when the electoral gain incentives are small.My approach aims to combine these two branches in the literature: unveil-how constituency focus varies over different types of questions, often with small institutional design differences.

2.2. Stortinget

The particular case of this paper, Norway, has a fairly standard setup with regards to parliamentary activities, with some notable exceptions. The Norwegian electoral system is a closed list proportional representation system, with elections every four years, and the parliament is fixed for four parliamentary sessions between each election (no snap elections). The session lenght does not vary more than a couple of days. Further, parties having a strong position throughout the system; who gets to run for election and their list placement is gated by the party organizations. This does, of course, affect the day to day work in parliament. MPs that want to keep their seat have to follow the party line. As voters vote for parties and not individuals, the electoral gain from crossing the party line will generally be smaller than in candidate-centered systems. For further discussion on the Norwegian electoral system, see Cox et al. [16].

As the main aim of this paper is to explore the relationship between responsiveness and institutional design, it is also important to highlight some of the lower-level institutional arrangements in the Norwegian parliamentary system; specifically how day to day work in parliament is controlled by various formal and informal rules. Here, I will discuss the formal rules of interpellations, question hours, question time, and written questions, with emphasis on how free the MPs are to raise constituency specific concerns within these settings (see also Rasch [6]). There are, of course, also opportunities for MPs to voice constituency concerns in other types of parliamentary activities, such as plenary debates or even voting (voting against party because of constituency concerns). However, this paper will focus exclusively on the question types discussed in order to keep the institutional setting of the data as equal as possible.

For the four types of questions allowed in *Stortinget*, there are a fair amount of similarities in the rules guiding the questions and answers. First, the Presidency can dismiss questions that do not fall under the jurisdiction of the cabinet. This is a limitation for raising constituency concerns by itself, because a lot of constituency specific issues are under the jurisdiction of the

municipalities. The questions, nevertheless, give opportunities for the opposition (or in some cases MPs from cabinet parties) to ask the sitting cabinet about their policies. However, the MPs can circumvent this restriction by asking broader questions but refer to their constituency as an example. Second, all MPs have equal access to the different types of questions. This means that the party organizations do not have any formal power in these institutions; if they want to influence what issues are taken up in the questions, they will have to do so informally. Third, cabinet members can always refuse to answer a parliamentary question, but might be required to justify why. Finally, the Presidency can reject the question if it goes against the etiquette of the parliament (foul language, inappropriate questions, etc).

Interpellations are regarded as the formally most strict type of questions in *Stortinget*. In addition to the limitations discussed above, interpellations can not be about legislation or questions already active in the parliament, which will enable MPs to use this question type as an agenda-setting arena. The interpellation has to be held within one month after it was asked. This gives the relevant cabinet ministers a lot of time to prepare for the question, even though they can refuse to answer and even provide justification for not answering. The time frame for interpellations are 10 minutes for the interpellant and minister to put forward/answer the question and 3 minutes to close the discussion for both at the end. The particular thing for interpellations is that the floor is also opened for the other MPs to debate after the introductions. Each interpellation can last for up to one and a half hours, giving MPs quite a bit of room to voice their opinion.

Question hours are less strict than interpellations, but also these kinds of questions have some formal limitations. The questions in the question hour are meant to be short, and each MP can only ask one question per week. Cabinet members do not get to prepare for the questions before question hours. The questioner can ask follow up questions in the question hour, and the minister can answer these. The floor is then opened up for other MPs to ask follow-up questions. Time wise, each question in the question hour is restricted to six minutes. This gives question hours a feeling of *debate battles* between the opposition and cabinet, which is also the reason for why these types of questions are more popular to follow by the media and public than other forms of parliamentary debates and questions (even though they do not produce any policy) [6, pp. 384]. The President decides when to stop the question hour.

Question time is less strict in terms of time limits. Here, questions are restricted to a maximum of seven to eight minutes. Question time is similar to question hour, but the floor is not opened for debate after the questioner and cabinet member have had their say, but follow up questions by the questioning MP are allowed. Cabinet members are, however, prepared for the questions in the question time; MPs have to submit their question almost one week beforehand. The less spontaneous nature of question time also makes this less interesting for the frontbenchers in the *Storting*. The question time used to be extremely time consuming because MPs used it "for partisan or self-serving electoral purposes" [6, pp. 387], and studies showed that electoral incentives were important for why MPs used the institution extensively [17].

The solution to limit the time pressure produced by question time was to introduce written questions in the mid 1990s. Written questions are different from the other question types in that they are asked and answered in written form and require no face-to-face dialogue. Further, MPs can ask two written questions per week, which is very lenient in comparison to the other question types. Because the question time, question hour and interpellations are presented in

the plenary, this in itself limits the number of questions that can be asked. Written questions are required to be very short (with an optional elaboration of max one page), and cabinet members have six days to answer or justify why they do not want to answer a written question.

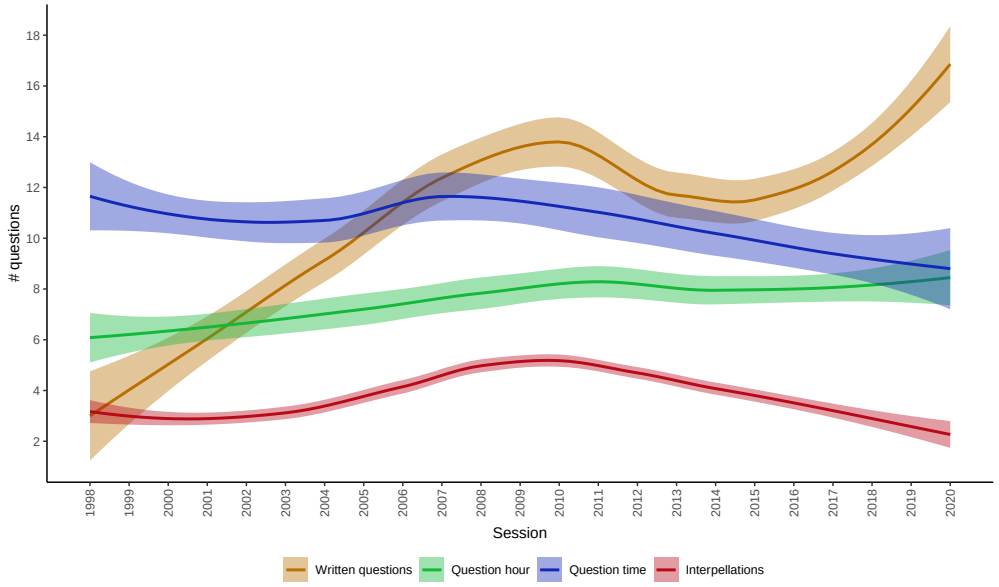

Figure 1: Average participation by MPs in different question types and over time.

Figure 1 shows the number of questions MPs on average have engaged in over the different question types throughout the period covered in this paper.[2] What sticks out first is the sharp and steady increase in the amount of written questions. In the earlier sessions, individuals on average submitted between 2 and 6 questions per session. Whereas in the later sessions, they submitted up to almost 18 written questions. Seeing as written questions were introduced to dampen the time pressure of question time, it is interesting that, although participation in question time is getting steadily lower over the period, the decrease does not mirror the increase in written questions. MPs participated just under 12 times per session in question time over the first half of the period, but the decrease in amounts of this question type only slowly decreased, reaching an average just above 8 questions in the latter part of the period. As for interpellations, this is consistently the question type utilized least frequently, averaging between 2 and 4 questions per MP per session throughout most of the period. Last, question hour has seen a slight increase in usage, going from an average of around 6 questions per MP in the early periods to around 8 in the later periods.

In sum, the different types of parliamentary questions have unique sets of formal rules guiding the MPs. Although all questions are restricted to stay within policy areas under the jurisdiction of the cabinet, other factors such as preparation time and the form of debate differ substantially.

[2]Minister participation is excluded in this plot because ministers will naturally participate more often in questions; they are fewer in number and at least one will always have to participate.

The expectations for the analysis are listed in Table 1.

Table 1
Topics focused on in the analysis, with expected effect direction and short description.

Question Type	Expectation	Summary
Interpellations	Less responsiveness	Long, prepared, open, and plenary
Question Hour	Less responsiveness	Short, unprepared, open, and plenary
Question Time	More responsiveness	Long, prepared, closed, and plenary
Written Questions	More responsiveness	Short, prepared, closed, and not plenary

3. Methods and Data

In this section, I describe the methods and data used for this paper. I start by giving a short rundown of the data, before I proceed by outlining the dependent, main independent, and control variables used in the analyses. Finally, I detail the choice of the undersampled binary logistic regression model for the analyses.

3.1. Data

The main part of the data for this paper is built on all parliamentary questions, their answers, and following debates in the period from 1998 to 2021. As outlined above, the institutional rules across questions vary, which also means that what actors are allowed to participate in the different types vary.

The parliamentary questions were gathered from the Storting's API (data.stortinget.no), using the *stortingscrape* package for R [18]. Even though this makes for a more seamless gathering of the data, the transcripts from the plenary are largely not standardized and include a fair amount of errors that were somewhat time-consuming to rectify.

In total, the data consist of 155098 questions produced by Norwegian MPs in the 1998-2021 period. For the main analysis, however, I exclude questions held by MPs from parties not represented in all periods (*Kystpartiet*, *Miljøpartiet De Grønne*, *Rødt*, and *Tverrpolitisk Folkevalgte*). Additionally, some variables have missing values because of some inconsistencies in the API, giving a total of 129348 observations in the full model of the analysis (see the online appendix).

3.2. Dependent Variable

The dependent variable for the main analysis is whether MPs or ministers mention a place within their constituency in the question, answer, or following debate. Because the paper has its main focus on exploring whether constituency signalling is used under different institutional settings, rather than the amount of constituency signalling in these settings, I have opted to use a binary variable. More specifically, the variable is coded as 1 if one or more places were mentioned and 0 if not.

Although this coding seems uncomplicated at first sight, operationalizing this variable is not trivial. There are several ways to identify constituency signaling, or *localism*, in parliaments. Martin [14, pp. 476] lists six ways for identifying localism in questions:

1. Did the MP mention her constituency directly?
2. Did the MP mention a location within the constituency?
3. Did the MP mention a case or individual attached to the constituency?
4. Did the MP mention a building or structure within the constituency?
5. Did the MP mention an organization or business geographic arrangements within the constituency?
6. Did the MP mention an event that occurred within the constituency?

There are, however, methodological challenges in actually identifying constituency mentions through these six ways. For example, identifying direct constituency mentions seems straightforward. But in the Norwegian case specifically, the constituencies can be defined by MP's electoral districts, which are counties. However, electoral districts are quite large and MPs do not necessarily have strong ties to their entire electoral district. They will, most likely, have strong connections to specific locations within the constituency, such as hometowns, childhood homes, and so on, which taps into the second type of constituency signalling listed above. But, reliably identifying places within constituencies can be difficult for a variety of reasons: there are an almost endless amount of place names, the names often overlap between electoral districts, and their type differs substantially (mountains, towns, lakes, etc). Similar problems occur with the remaining four types of localism identifiers. In general terms, a lot of these indicators can measure localism, but they can also measure other things. Specific organizations, for example, might be mentioned by all MPs, regardless of constituency. In that case, counting only mentions of the organization by the MPs from the constituency where that organization is located would bias the measure, because MPs could mention the organization based on other factors than constituency specific concerns.

My approach is limited to the second point on the list: whether the MP mentions a location within the constituency. As discussed, this approach is not flawless, but I try to limit the amount of false positives as much as possible. The first step of my approach is to automatically extract named entities from each text in the corpus using *spacyr*, which is a *spaCy* wrapper for R [19, 20]. Named entities are, in short, named real-world objects, such as persons, geographical locations, titles, and so on. After the texts are tagged with *spaCy*, I subset only the named entities tagged as locations, either in single token entities (*Ytterøy*) or multi-token entities (*Wessels plass*). The entities are then matched with geographical data from *Kartverket* (Norwegian map data agency). These data lists all place names in Norway with an indicator for county and municipality for each place. Seeing as MPs are elected on the county level, if the named entities from a speech match one or more places in the map data for the MPs constituency (county), my dependent variable gets a value of 1, and 0 if not.

Figure 2 shows the average amount of constituency mentions for each question per 1000 words of that question over question types and sessions within the range of the data. Written questions are relatively stable, although with a slight downwards going trend, at between 0.50 and 0.34 average mentions throughout the period. Question hours have low amounts of mentions in the first half of the period, but has a moderate increase in the latter part of the period, peaking at 0.35 mentions per 1000 words on average. Question time shows the highest amount of variation between sessions (0.40 to 0.71), but also higher amounts of mentions over all periods. The amount only drops below 0.50 mentions in six of the 23 sessions covered

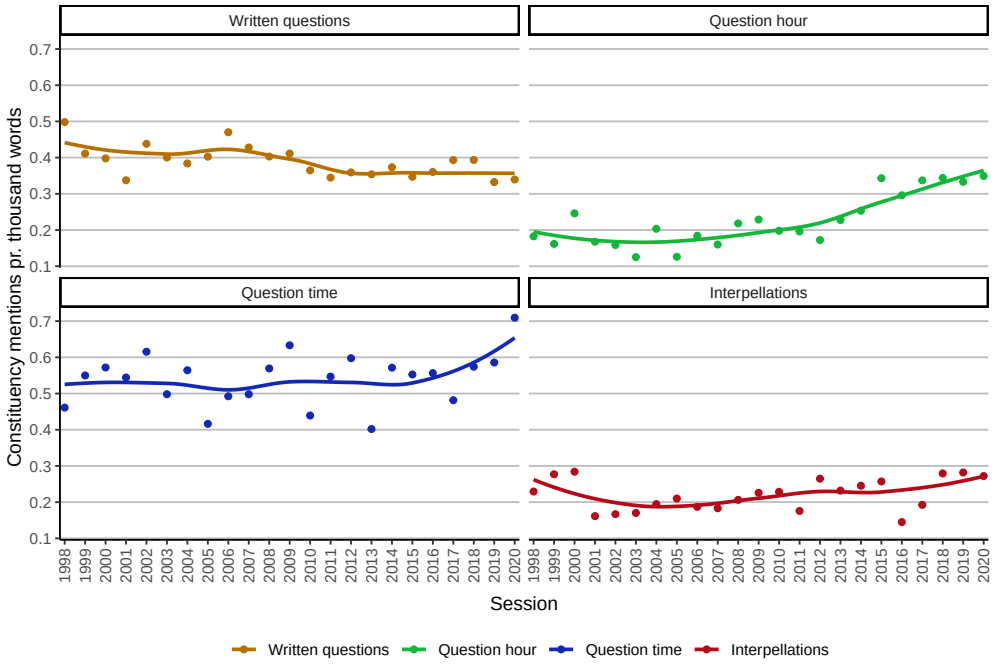

Figure 2: Average constituency mentions per 1000 words in different types of questions. Covers all sessions from 1998-1999 to 2020-2021. The line shows trends over time using local fitting (LOESS).

here. Interpellations show very low and stable numbers of constituency mentions on average, spanning between 0.14 and 0.28 mentions.

This seems unsurprising, as we expect interpellations and question hour questions to generate less constituency focus than written questions and question time. Interpellations are on average, however, substantially longer than other types of questions.

3.3. Independent Variables

The main independent variable of interest for this paper is the institutional setting of the texts. The variable is split into the four institutional settings discussed above: 1) written questions (reference category), 2) question hour, 3) question time, and 4) interpellations.

However, I expect the role of the participant – MP or minister – to alter the effect of institutional variation. More precisely, on the one hand, ministers are expected to mention constituency very rarely in all types of questions, as they seldom have jurisdiction over local matters (that is usually the responsibility of municipalities) and the minister does not set the agenda for the question – they only respond to the MP. MPs, on the other hand, are expected to utilize the variation in institutions over the different types of questions to mention their constituency when possible.

Importantly, in order to make sure that the effect of setting can be attributed to personal MP preference, I include a control for MP party alignment. This variable is constructed by

calculating the cosine similarity between the text produced by an MP in plenary debates during a parliamentary period with the text produced by all other MPs of the same party in the same period. Thus, the measure gives a similarity score between an MP's plenary debates and fellow party members in parliament. The resulting score will be higher when the MP is closer to the party average and lower when the MP is further away from the average. There are some missing values for the similarity measure – see Table 2 – because not all MPs participate enough in debates to calculate the cosine score.

Next, I also include personal characteristics for each MP in the analyses. Gender and age have been shown to drive behavioral differences in a variety of studies on parliaments (for example see the Bäck and Debus [21] study on the effect of gender on debate participation). The general findings in this literature is that men speak more than women and that higher age leads to more participation. Additionally, I include the number of words in a given text in the regressions. As mentioned above, the longer a text is, the more room an MP or minister has for mentioning her constituency within the text.

As for further controls, I use fixed effects for the party of the MP and parliamentary period in order to isolate variation over time and parties: new MPs are elected after elections, which might drive debates in more or less constituency focused directions, and some parties have local matters as more salient issues than others. Last, I control for whether the text was produced in an election year or not. If electoral concerns are the main reason for signaling to the constituency, we would expect there to be a spike in mentions whenever there is an election coming up.

Table 2 shows descriptive statistics for the full dataset over the variables used in the analyses. Note that the mean for the binary variables are the proportion of positive (1) outcomes on that variable. For example, there are constituency mentions in 9% ($0.09 * 100$) of the cases in the data.

Table 2
Descriptive stats for variables used in the analyses

	Mean	Sd	Min	Max	N missing
Constituency mentions	0.09		0.00	1.00	0
Question hour	0.20		0.00	1.00	0
Question time	0.27		0.00	1.00	0
Interpellations	0.09		0.00	1.00	0
Written questions	0.44		0.00	1.00	0
Institutional role (minister)	0.48		0.00	1.00	0
Ideological distance (cosine)	0.66	0.09	0.12	0.91	23861
Gender (male)	0.60		0.00	1.00	0
Age	47.69	9.17	19.27	76.48	40
Word count	250.83	267.15	1.00	12601.00	0
Election year (yes)	0.26		0.00	1.00	0

3.4. Models

With a binary variable, showing whether MPs mention their constituency or not, logistic regression is the best fit. Because the dependent variable is skewed towards zero – there are

a lot more texts without constituency mentions than with – I use an undersample simulation approach through the *ROSE* package for R in the main analysis [22]. In short, this approach entails balancing the data (undersampling) by randomly removing majority class units. I also do the undersampling over 1000 iterations in order to make sure the results are stable (see Menardi and Torelli [23] for a thorough discussion).

Further, I run a series of additional robustness models, shown in the online appendix.[3] First, I run a model with the same model specification as the main analysis, but using the full dataset for the estimation. Second, I estimate a model restricting the data to only texts between 50 and 500 tokens long. Third, I run a model excluding mentions of the four biggest cities in Norway – Oslo (capital), Bergen, Trondheim and Stavanger – from the dependent variable. This is done because all MPs mention these cities often, regardless of their constituency, which could inflate the effect for MPs actually from the constituencies where these cities are located (since I do not count mentions for MPs not in the constituency). The results of these robustness models and how they differ from the main analyses is discussed more in detail in the online appendix, but the general take is that the general findings of the main analyses also holds in these alternative models.

4. Analyses

In this section, I present the results for answering the question outlined earlier: Does lower party control in various institutional settings increase MP autonomy? The first analysis shows that MPs do indeed utilize the liberty of decreased party control in certain settings, namely in written questions and question time, to raise constituency concerns to the government.

4.1. Constituency Mentions

For the results of the main model, shown in Figure 3. The figure shows the mean logit coefficients (points) over all undersampled simulations with the 5% to 95% quantiles over the simulations as confidence bands. We can immidiately observe that constituency focus is higher, when all else is equal, in written questions and question time, than in question hour and interpellations (reference category) for MPs (reference category). Also, notice that there is a large negative effect for going from MPs to ministers; the expected probability for ministers mentioning their constituency is substantially lower than for MPs in all types of questions. This is in line with expectations. The interaction between question type and institutional role will be discussed in detail below.

As for the remaining controls, I will discuss these individually, holding all other variables constant at 0. First, ideological distance has a relatively strong negative effect (-0.781). This means that the further an MP (or minister) is from the party mean in the cosine measure, the more likely that MP is to mention her constituency in speeches. Because the cosine measure has a range of 0.119 to 0.910 and a mean of 0.660 in the data, the effect is less strong than it might appear at first glance. Going from the lowest cosine value to the highest, decreases the expected

[3]The online appendix can be found at: https://github.com/martigso/party_control_responsiveness

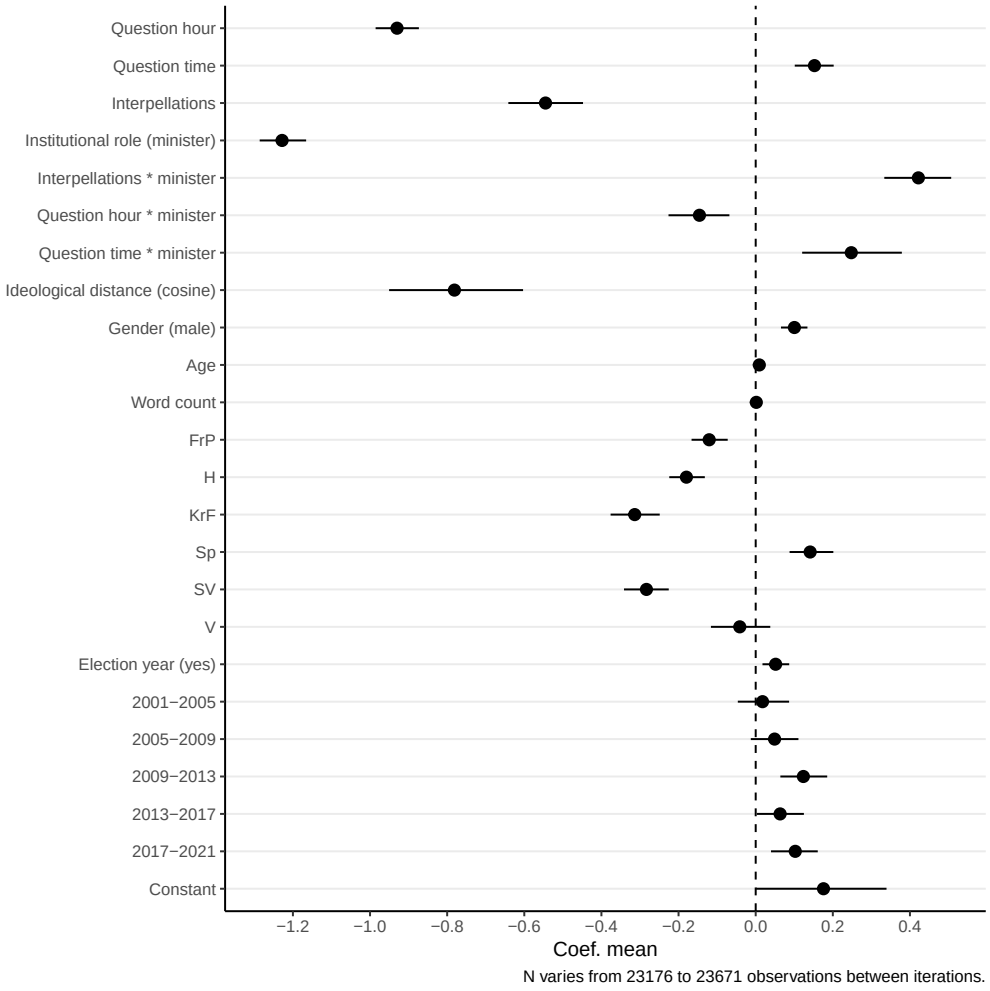

Figure 3: Results of undersampling simulations. The points in the figure shows the average logit for each variable over all simulations. Uncertainty bands show the interval between 5% and 95% of the estimates over simulations.

probability of mentioning one's constituency from 52.1% to 36.9%[4]. This is still a substantial effect and in line with the expectations for the variable in question.

Next, gender has a weak positive effect. Using the same formula as above, the model estimates a probability for women to mention their constituency 54.4% of the time, whereas men are expected to do this in 56.9% of their speeches. Further, the effect of age is close to 0, but has a wider range in the data (about 19 to 77 years old). Nevertheless, the effect is weak: going from a 40 year old MP to a 60 year old MP only increases the probability of constituency mentions by 4.3 percentage points (63.4% and 67.7%).

[4] $\frac{exp(0.176-0.781*0.119)}{1+(exp(0.176-0.781*0.119))} * 100 = 52.1\%$ and $\frac{exp(0.176-0.781*0.910)}{1+(exp(0.176-0.781*0.910))} * 100 = 36.9\%$

The word count variable effect is positive, as expected, and moderately strong (due to the wide range of the variable). A speech with 87 words (25 quantile) has an expected probability of 57.8% for an MP mentioning her constituency and a speech with 323 words (75 quantile) 66.5%, which is a 8.7 percentage point increase.

As for the party fixed effects, the magnitudes are relatively small. Unsurprisingly, the Center Party (Sp) has the highest expected probability of mentioning a constituency. An MP from the Center Party is expected to have a 11.3 percentage point higher probability than an MP from the Christian Democrats (KrF), which is the party with lowest estimated probability for a positive dependent variable, of using constituency signaling in their speeches (57.9% for the Center Party and 46.6% for the Christian Democrats).

Election year also has a positive, albeit very weak, effect. In a non-election year any given speech is estimated to have a constituency mention probability of 54.4%, whereas the same probability in an election year is 55.7% – a meager 1.3 percentage point increase. The same goes for the period fixed effects: there is some variation, but the differences are relatively small. The biggest gap in expected constituency mention is between 1997-2001 (reference category) to 2009-2013 is 3.0 percentage points.

4.2. Question Types

Looking more carefully on the effect magnitude of the main independent variables, Figure 4 highlights the expected probabilities for MPs and ministers mentioning their own constituency in the different types of questions.

The figure clearly shows that there are large amounts of differences between ministers and MPs in how often they mention their constituency over all types of questions. Interestingly, the variation between question types for ministers is also substantially smaller than for MPs: holding all other variables constant, a minister will be expected on average to mention her constituency about 35% of the time in question time and written questions, 28.5% in interpellations, and 24.4% in the question hour. The uncertainty bands for these estimates are also mostly overlapping, except for the difference between question hour and question time together with written questions. The point estimate differences are, nevertheless, ordered as expected for ministers.

For MPs, the differences in expected constituency mentions between question types is larger, although the ordering of the point estimates remains the same. Question time is the most likely place to see a constituency mentioned among MPs, clocking in at an average of 68.1%. Also for MPs, overlapping the confidence band with question time, written questions have an expected probability for mentioning constituencies of 64.7%. Further, in question hours, MPs are expected to mention their constituency far less often at a probability of 41.9%, and between this estimate and the two others, interpellations give an average probability of 51.5%

In substance, these findings are, uncertainty aside, along with expectations throughout. The question types that are less party controlled for all MPs (also backbenchers), see the most amount of constituency signaling. On the one hand, the gated form in question hours leads to this being the least constituency focused question type, both for ministers and MPs. On the other hand, the more accessible question time and written questions are the most constituency focused types of questions. It is also unsurprising that question time and written questions are so similar in effect size, seeing as written questions were designed to offload the pressure on

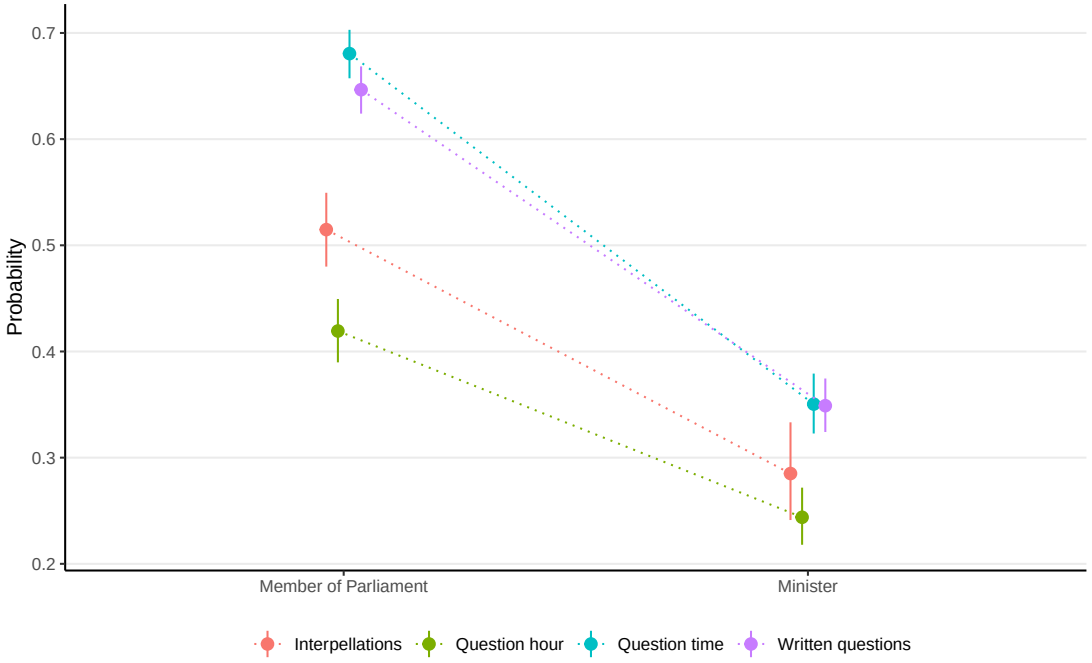

Figure 4: Predicted probabilities for the different types of questions and between MPs and ministers (undersampled model).

question time. Further, the variation across question types is much higher for MPs than for ministers. In sum, the analysis shows that when the party leadership has an opportunity or incentive to take control over an institution, constituency focus diminished greatly.

5. Discussion

The content of questions are an underutilized source of data in the literature on parliaments and the behavior of the actors within these systems. Not only are parliamentary questions an important arena in the day-to-day work of parliament, but the different types of questions also offer unique opportunities for investigating behavioral differences caused by institutional design.

In this paper, I have shown how party control and lower-level institutional settings matter for how much MPs focus on their own constituency in a party-centered parliamentary system. By utilizing the variation in different types of parliamentary questions in the Norwegian parliament, I have demonstrated that MPs focus on their constituency more often when the party has less control over their agenda. Particularly, my results show that the more party controlled and formally restricted legislative activities, such as interpellations and question hours, contain substantially less amounts of localism than more party controlled settings, such as written questions or question time; MPs refer to their constituency far less in question hours and

interpellations than they do in written questions and question time. Further, the limited time frame and increased attention given by the media to oral question hours seems to attract the party to control what their MPs talk about even more than the other types of legislative activities. An alternative explanation for why question time and written questions see more signaling is that these types of questions are closed off for other MPs to participate in. It is a strict dialogue between the MP asking the question and the minister answering. Thus, the MP asking a question has all the agenda-setting power in the dialogue, which could make it easier to steer the debate towards that MPs constituency concerns.

Nevertheless, even in a party-centered electoral system, I show that there is room for MPs to have substantial focus on their constituency under the right circumstances. Building on this point, this paper corroborates and supplements findings in studies on institutions within parliamentary democracies; the different types of parliamentary questions do influence what MPs want to and are allowed to talk about. Constituency signaling does not disappear when going from a candidate-centered to a party-centered system; it is just located in different places.

Acknowledgments

Earlier versions of this paper has been presented at research seminars at the University of Oslo. I thank the audiences for valuable and constructive comments. I also thank the reviewers and participants of the Digital Humanities in the Nordic and Baltic Countries 6th Conference for helpful feedback. Special thanks to Bjørn Høyland, Zoltán Fazekas, Jon H. Fiva, and Bjørn Erik Rasch for useful comments and suggestions on previous iterations of the paper.

References

[1] A. André, S. Depauw, M. S. Shugart, Oxford Handbook of Legislative Studies, Oxford University Press, 2014, pp. 231 – 249.

[2] H. Rosenthal, E. Voeten, Analyzing Roll Calls with Perfect Spatial Voting: France 1946-1958, American Journal of Political Science 48 (2004) 620–632.

[3] S.-O. Proksch, J. B. Slapin, The Politics of Parliamanetary Debate: Parties, Rebels and Representation, Cambridge University Press, 2015.

[4] S. Martin, Parliamentary Questions, the Behaviour of Legislators, and the Function of Legislatures: An Introduction, The Journal of Legislative Studies 17 (2011) 259–270.

[5] R. Whitaker, S. Martin, Divide to conquer? strategic parliamentary opposition and coalition government, Party Politics (2021). arXiv:https://doi.org/10.1177/13540688211042859, early access.

[6] B. E. Rasch, Behavioural Consequences of Restrictions on Plenary Access: Parliamentary Questions in the Norwegian Storting, The Journal of Legislative Studies 17 (2011) 382–393.

[7] B. E. Rasch, Opposisjonen, in: H. M. Narud, K. Heidar, T. Grønlie (Eds.), Stortingets historie 1964–2014, Fagbokforlaget, 2014, pp. 439–454.

[8] C. Green-Pedersen, Bringing Parties Into Parliament: The Development of Parliamentary Activities in Western Europe, Party Politics 16 (2010) 947–369.

[9] K. Soontjens, The Awareness Paradox: (Why) Politicians Overestimate Citizens Awareness of Parliamentary Questions and Party Initiatives, Representation 57 (2021) 75–94.
[10] O. Rozenberg, S. Martin, Questioning parliamentary questions, The Journal of Legislative Studies 17 (2011) 394–404.
[11] S.-O. Proksch, J. B. Slapin, Parliamentary questions and oversight in the european union, European Journal of Political Research 50 (2010) 53–79.
[12] M. Kellermann, Electoral Vulnerability, Constituency Focus, and Parliamentary Questions in the House of Commons, The British Journal of Politics and International Relations 18 (2016) 90–106. URL: https://doi.org/10.1111/1467-856X.12075.
[13] D. Höhmann, U. Sieberer, Parliamentary questions as a control mechanism in coalition governments, West European Politics 43 (2020) 225–249.
[14] S. Martin, Using Parliamentary Questions to Measure Constituency Focus: An Application to the Irish Case, Political Studies 59 (2011) 472–488.
[15] F. Russo, The Constituency as a Focus of Representation: Studying the Italian Case through the Analysis of Parliamentary Questions, The Journal of Legislative Studies 17 (2011) 290–301.
[16] G. W. Cox, J. H. Fiva, D. M. Smith, Parties, Legislators, and the Origins of Proportional Representation, Comparative Political Studies 52 (2019) 102–133.
[17] B. E. Rasch, Question Time in the Norwegian Storting, in: Parliamentary control in the Nordic countries: forms of questioning and behavioural trends, The Finnish Political Science Association, 1994, pp. 247–275.
[18] M. Søyland, stortingscrape: An R package for accessing data from the Norwegian parliament, 2021. URL: https://github.com/martigso/stortingscrape.
[19] K. Benoit, A. Matsuo, spacyr: Wrapper to the 'spaCy' 'NLP' Library, 2020. URL: https://CRAN.R-project.org/package=spacyr, r package version 1.2.1.
[20] M. Honnibal, I. Montani, spaCy 2: Natural language understanding with Bloom embeddings, convolutional neural networks and incremental parsing, 2017. To appear.
[21] H. Bäck, M. Debus, Political Parties, Parliaments and Legislative Speechmaking, Palgrave, 2016.
[22] N. Lunardon, G. Menardi, N. Torelli, ROSE: a Package for Binary Imbalanced Learning, R Journal 6 (2014) 82–92.
[23] G. Menardi, N. Torelli, Training and assessing classification rules with imbalanced data, Data mining and knowledge discovery 28 (2014) 92–122.