

# Divergent Preferences and Legislative Speeches on Brexit\*

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## Abstract

How do legislators deal with having preferences that go against those of the principals that they represent in parliament? This article analyses the debate in the aftermath of the Brexit referendum in the House of Commons to explore the relationship between divergent preferences and legislative speeches. It finds that legislators who defy the will of their country or constituency are rather communicative, and their speeches reveal higher levels of negativity. In contrast, those defying their party refrain from speaking in parliament, but if they speak, they use a significantly less negative language. These findings suggest that legislators behave strategically in deciding whether and how to justify their positions publicly when in conflict with their various principals.

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*‘At this moment of enormous national significance there should be unity here in Westminster, but instead there is division. The country is coming together, but Westminster is not.’*

—*Theresa May*

‘Crush the saboteurs’, reacted the Daily Mail to Prime Minister May’s justification above for her plans to call for a snap election in 2017. Almost a year had passed since the United Kingdom (UK) voted to leave the European Union (EU), but the Brexit referendum required the members of parliament (MPs) in Westminster to act on the result.<sup>1</sup> Those who disagreed were seen as betraying democracy (Shaw, 2017). Elections are one important solution to such agency problems in representative democracies, and for the ‘saboteurs’ in the British House of Commons, the snap election could be the end of their political career.

Yet dissent does occur, due to two forms of divergent preferences. In the first, preferences diverge between MPs on the one hand and their principals on the other. Although some see no place for personal judgements in representation, this model—where MPs act as mere delegates, who follow the will of the represented regardless of their own opinion (Wahlke, Eulau, Buchanan, & Ferguson, 1962)—is only one of many approaches to the role of representatives. At the other end of the spectrum lies the trustee model, where representatives rather rely on their conscience (Burke, 1801 [1774]). When this fails to correspond with their principals’ wishes, preference divergence leads to dissent if MPs choose to act in line with their conscience. Indeed, if MPs are called ‘saboteurs’, their behaviour is often portrayed as a personal choice against their principals.

This dominant language of dissent ignores that, in the second form of divergent preferences, the principals might diverge among themselves in the first place, leaving representatives with no choice but to act against the wishes of some. MPs have multiple—and often competing—principals that they represent in parliament (Carey, 2007). These include not only their specific constituencies and parties that send them to parliament but also the country (i.e., the people) in general (Brack, Costa, & Pequito Teixeira, 2012; Best & Vogel, 2012). Where there is no consensus among their principals over a policy, MPs cannot avoid defying one or more of these principals with their vote in parliament. As a result, they become dissenters by default—

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<sup>1</sup>On 24 January 2017, the UK Supreme Court ruled that the government could not trigger Article 50 of the Lisbon Treaty and start the withdrawal process without prior legislation from the UK Parliament (UK Supreme Court, 2017, para. 101).

irrespective of their own preferences. In the Brexit referendum, for example, although the country voted to leave the EU, it is estimated that over one third of the UK constituencies voted to remain in the union (Hanretty, 2017). It was therefore difficult to define a ‘unified’ principal, at least for the MPs representing these constituencies. Their job becomes even more complicated when we consider the positions of other principals such as party leadership, which again added a further dimension to the Brexit division in Westminster.

While the positions of the actors are not always this clear, the Brexit referendum provides an ideal setting to investigate how MPs deal with voting against the will of the principals that they represent in parliament. This article looks for an answer on the plenary floor, where MPs traditionally spend an important part of their time (Proksch & Slapin, 2014, Chapter 1) trying to rally support for their position in parliament or—at the very least—to justify their votes to their colleagues, parties, and voters (Proksch & Slapin, 2012). Normatively, this serves democracy well because democratic accountability requires that everyone should have an equal right to receive justification for political decisions as well as the equal right to decide (Lord, 2013). In practice, however, MPs might use their speeches strategically, in ways that imply we need to rethink how we traditionally or normatively understand legislative speeches, especially when the preferences diverge.

Specifically, we analyse the debate in the UK House of Commons on the European Union Notification of Withdrawal Bill 2017 (hereafter, the *Notification Bill*). Coupled with the preceding Brexit referendum, this bill provides us with a policy issue where the positions of MPs and their most important principals are known—thus removing the usual obstacle in any attempt to analyse how MPs deal with conflicting mandates. It is also an issue where MPs received conflicting mandates from their principals; at the very least, more than one third of MPs had principals in disagreement with each other, and in most cases the situation was as presented in Figure 1. We find that MPs are rather communicative on the plenary floor when their position diverges from that of the people—in the country as a whole or in their constituency—and their speeches reveal higher levels of negativity. In contrast, MPs defying their party keep relatively quiet in parliament, but if they speak, they use a significantly less negative language. These findings suggest that how MPs manage divergent preferences depends on the principals and that they are strategic in addressing the divergences from party line on the plenary floor.

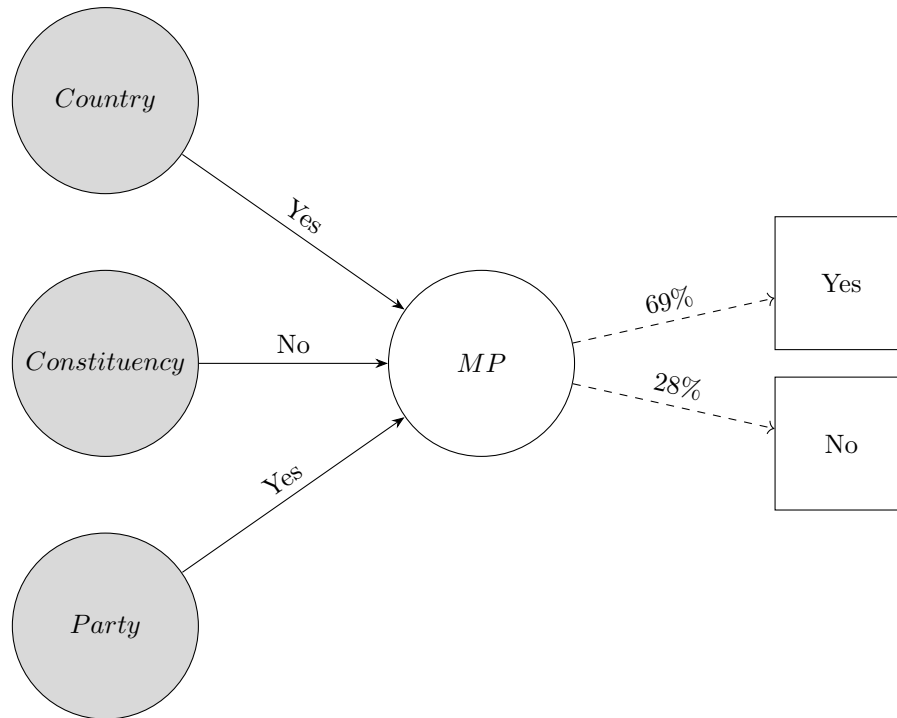


Figure 1: A graphical representation of the principal-agent relationships in the Brexit referendum-Notification Bill example. *Notes:* The Yes/No positions represent only—the most common—one of the combinations that resulted in dissent. One in four MPs received the conflicting mandates above before the vote in the British House of Commons. 69% of these MPs then voted in favour of the bill while 28% voted against it. The remaining 3% abstained.

## Legislative Speech

For an activity that takes up an important part of legislators’ time (Proksch & Slapin, 2014, Chapter 1), speaking in legislatures has received relatively little scholarly attention until recently (Bächtiger, 2014). Proksch and Slapin (2012) suggest that this might be due to how we came to understand legislative speeches. Initially viewed as a way to improve legislation through deliberation and the superiority of arguments put forward, debating in parliament did not live up to its potential. Early studies saw debates as cheap talk with little meaningful effect on the important decisions made in legislatures (Austen-Smith, 1990). More recently, however, scholars have started to see legislative debates as forums where legislators take calculated positions and communicate them strategically to others within and outside the legislatures (Maltzman & Sigelman, 1996; Martin & Vanberg, 2008; Proksch & Slapin, 2014; Lin & Osnabrügge, 2018). For example, Martin and Vanberg (2008) show how coalition parties use parliamentary debates to justify their policy compromises in government to their electorate. As such, legislative debates offer ‘a prime opportunity for MPs to explain their votes’ (Slapin, Kirkland, Lazzaro, Leslie, &

O’Grady, 2018, p.18) and an equally important opportunity for scholars to analyse legislative behaviour.

One strand of the literature on legislative speeches informs us about who speaks in the debates. With the premise that certain legislator characteristics determine the likelihood to appear on the floor, these studies focus primarily on individual legislators. For instance, we know that female MPs give fewer speeches than their male colleagues, especially on policy issues such as the economy or energy policy (Bäck, Debus, & Müller, 2014; Bäck & Debus, 2018b). Having a higher position in party or parliament also makes a difference: we are more likely to see the party leadership than backbenchers speak in parliament (Slapin & Proksch, 2010; Giannetti & Pedrazzani, 2016; Bäck & Debus, 2018a). Similarly, there is also a mounting evidence that committee members are significantly more likely to speak when the debates are about an issue of their expertise (Bäck et al., 2014; Giannetti & Pedrazzani, 2016; Alemán, Ramírez, & Slapin, 2017; Schwarz, Traber, & Benoit, 2017; Bäck & Debus, 2018a). In fact, experience in parliament alone might have the same effect, as tenure correlates positively with the speech-making behaviour in legislatures (Alemán et al., 2017; Bäck & Debus, 2018a).

Another strand of the literature provides us with evidence about who may not be allowed to speak. Here the premise is that institutional, and especially party-related, dynamics affect participation in legislative debates, largely to the disadvantage of those MPs who do not share policy positions with their party leadership. Most notably, Proksch and Slapin (2012, 2014) show that there is a strong relationship between electoral systems and access to the plenary floor: in systems where the party label matters more than the personal reputation of legislators for electoral outcomes, parties develop rules and procedures that limit the speaking time to those who toe their line. This is why, for example, we are more likely to hear MPs speaking against their party line in the British House of Commons than in the German *Bundestag*, where the party leadership has a high level of control over who speaks in debates (Proksch & Slapin, 2012, 2014). Indeed, German MPs are kept off the floor by their leadership when they are likely to deviate from the party line (Bäck & Debus, 2018a). Similarly, in Italy, Giannetti and Pedrazzani (2016) find that rebellious MPs give fewer legislative speeches only when the speaking time is distributed among the parties, but not when it is allocated directly to individual MPs.

Deviations from party line features prominently the literature on legislative speech, mainly because it is usually the only principal that we know about with regard to preference divergence. Perhaps, one exception is a study by Slapin and Proksch (2010), who analyse the debates in the

European Parliament (EP) to see how the members (MEPs) behave when there is a divergence between two of their parliamentary principals—national parties and EP groups. They show that MEPs give more speeches when they side with their national party and fewer when they side with their EP group. These results suggest that parliamentary agents try to please—or avoid upsetting—the principal that is important for their career advancement and re-election prospects, which is, for MEPs, the national party rather than the EP group.

With regard to the content of legislative debates (for a review of this strand of the literature, see Slapin & Proksch, 2014), there is an emerging scholarly interest in the sentiments that legislators reveal in their speeches. In their analysis of the British House of Commons over the course of the last century, for example, Rheault, Beelen, Cochrane, and Hirst (2016) show that the emotional tone of the debates has been improving, with the negative sentiments of the past turning overall positive three decades ago. However, negativity still manifests itself in gloomy times such as recessions (Rheault et al., 2016) or as a result of the conflict between government and opposition parties in parliament (Rheault et al., 2016; Rudkowsky et al., 2018; Proksch, Lowe, Wäckerle, & Soroka, 2018), unless legislators hold back their emotions strategically. Indeed, Rudkowsky et al. (2018) find in the Austrian *Nationalrat* that the least likely members to use negative sentiments are the cabinet members, who have an incentive to smooth over divisions with the opposition to pass their bills through the parliament.

Our study moves beyond these studies in important ways. First, it includes an analysis of the legislators' relationship not only with the actors inside legislatures (e.g., parties and party groups) but also with the principals outside. Given that legislators see the country and their constituency as well as their party among their main principals (Brack et al., 2012; Best & Vogel, 2012), expanding the usually exclusive focus on the party as the only principal deepens our understanding, in line with the consideration of public opinion as a factor that may shape legislative behaviour (see, for example, Hanretty, Lauderdale, & Vivyan, 2017). Second, unlike Slapin and Proksch (2010), we remove the condition that legislators rebel against one principal to side with another, as they could simply be following their own preferences. Indeed, legislators' personal positions are often ignored in the literature on multiple principals, but they are crucial to understanding the effect of principals on legislative behaviour (Hix, 2002, p.690). Third, we bring together the analyses of speakers and speeches, with evidence from the content as well as the act of speeches. As such, we contribute to the underdeveloped area of expressing emotions as legislative behaviour (Brader & Marcus, 2013).

## Theory

Our understanding of the plenary floor is in line with the recent literature on legislative speech: a formal platform for legislators to express policy positions. Against this background, below we develop two hypotheses on how going against the will of their principals might affect (1) legislators' behaviour to participate in debates on the plenary floor and (2) the sentiments that they express in their speeches. We refer to legislators whose positions follow the will of their principals as *compliers* and to legislators whose positions go against it as *dissenters*.

First, we expect dissenters to participate more actively in legislative debates than compliers. This is because—if legislative behaviour is primarily motivated by good public policy, influence in, and re-election to the house (Fenno, 1978)—legislative speeches can be instrumental especially for dissenters in achieving their legislative goals. Let us start with the goal of good public policy. Shaping policy outcomes is one of the main reasons why legislators give a speech in legislature (Proksch & Slapin, 2012): if legislators put explanations for their position forward, this might change the minds in parliament—including that of their leadership—to enact better legislation. Moreover, their speeches are not addressed only to those inside the parliament (Lin & Osnabrügge, 2018), legislators also try to persuade outside actors with their arguments, as any good policy requires social acceptance beyond legislatures. They also take the floor out of democratic norms: it is the duty of representatives to justify their positions in front of the represented (Bäck & Debus, 2016, p.26). When legislators' policy positions are not shared by their principals, the need to make a case for their position and/or for themselves, and thus the need to take the plenary floor, increases.

Not all is left to goodwill in representative democracies, where principals can sanction legislators for undesirable behaviour by limiting their prospects of having political influence and/or getting re-elected. In fact, the possibility of dissent is one of the main reasons why such sanctioning mechanisms exist in the first place (Brehm & Gates, 1997). These mechanisms should increase the incentives to give a speech in parliament for legislators who do not share the will of their principals because 'they can use their speaking time to explain their vote to [their principals] in hopes of mitigating possible punishment' (Slapin & Proksch, 2010, p.337). In comparison, those sharing their principals' will do not have this incentive; they can let their vote speak for their agreeable position, and devote their limited resources elsewhere.

Hypothesis 1: *Dissenters participate in plenary debates more than compliers.*

Second, we expect dissenters to sound more negative in legislative debates than compliers. Our expectation follows from the divergent preferences between dissenters and their principals. Normatively, at least for those who believe in the delegate model of representation, this is a conflict that should not emerge at all.<sup>2</sup> As a result, dissenters find themselves under normative pressure (Shaw, 2017), which could only reflect negatively on their sentiments. What is more, practically, this is a conflict that puts dissenters in a position to criticise the will of their principals to show them why it would not make a good policy. In this sense, their behaviour is similar to that of legislators from opposition parties, whose tasks include criticising government proposals and arguing for alternatives (Helms, 2008). Studies repeatedly show that opposition MPs use significantly more negative language in legislative debates than government MPs (Rheault et al., 2016; Rudkowsky et al., 2018; Proksch et al., 2018). This suggests that, when preferences diverge between actors, those in a position to oppose reveal higher levels of negative sentiments in their speeches. This is likely to hold for dissenters as well.

Hypothesis 2: *Dissenters give more negative speeches than compliers.*

## Data and Design

For the empirical analysis, we draw on the British House of Commons and the debate therein on the Notification Bill. Following the decision by the UK Supreme Court (2017, para. 101), the government introduced the Notification Bill to enable Prime Minister May to notify the EU of the UK’s decision to withdraw from the Union—as previously expressed by the people in the advisory Brexit referendum. The House held the debate on the main principles of the bill—the second reading—over two days on 31 January and 1 February 2017.<sup>3</sup> There are two reasons that make this case selection particularly fitting to analyse the relationship between divergent preferences and behaviour of legislative speech-making.

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<sup>2</sup>This is especially true in the case of advisory referendums where the voters were given the explicit opportunity to express their will.

<sup>3</sup>We analyse the second reading stage due to our interest in MPs’ justifications of their policy positions. The other stages of the bill focus on different, often technical, aspects under different rules of debate. For the same reason, we exclude five MPs who chaired the debates on the bill—who remain strictly non-partisan in their participation—from the analysis. Also excluded are the single ‘give-way’ interventions, where MPs signal their desire to speak by asking ‘Will my honourable friend give way?’ or one of its alternative versions.



First, we need a parliament where the decision to speak in the plenary is up to the members themselves—as opposed to, for example, party leaders. The British House of Commons ticks this box because, unlike in many other parliaments, here the party leaders have no formal—and little *de facto*—control over which MPs speak in the debates (Proksch & Slapin, 2012, 2014; Rogers & Walters, 2015). British MPs can take to the floor in three main ways. Formally, they can either submit their name to the speaker in advance or indicate their intention to speak by rising from their seat to ‘catch the eye’ of the chair (Proksch & Slapin, 2014). The chair is free to choose which MPs to call upon, but will usually attempt to ensure a balanced discussion by alternating between government and opposition speakers. In addition, MPs can rise during other members’ speeches to make an intervention. In this case, it is up to the speaking MPs to decide whether to ‘give way’ by sitting down. Due to the importance of the Notification Bill, there were also special efforts to allow for a comprehensive debate with contributions from all willing MPs, including an extension of the plenary debate until midnight on the first day of the second reading. All these increase our confidence that all MPs who wanted to speak were given the opportunity to do so in the debate that we analyse.

Second, we need an issue where we know the positions of not only the MPs but also their principals. The Notification Bill satisfies this criterion as well. It involves (a) a debate on which constituents and the people in general made their position known in the Brexit referendum and (b) a division where MPs were under strict instructions by the party leaders to vote in a certain way. The combinations of these positions allow us to identify where MPs comply with or defy the mandates from their three main principals—country, constituency, and the party.

For MPs and parties, we coded their position on the Notification Bill, i.e. whether they voted—or instructed their members to vote—for ( $x = 1$ ) or against ( $x = 0$ ) triggering the Brexit negotiations. For the country and constituencies, we coded their position in the referendum, i.e. whether they voted to leave ( $x = 1$ ) or remain in ( $x = 0$ ) the EU. Coding the country was straightforward as 52% of the people voted to leave the EU in the referendum. However, as the results were announced by local authority area, there is no official data on how most constituencies voted, and the actual results are available only for 128 constituencies (Rosenbaum, 2017). For the remaining areas, therefore, we use the probabilities calculated by Hanretty (2017).<sup>4</sup>

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<sup>4</sup>These estimations were widely shared in the (social and print) media and made available on the parliamentary website (Dempsey, 2017). Many MPs mentioned how their constituents voted in the referendum in their speech, several of them in precise percentage terms. These percentages closely match our dataset, increasing our confidence in the validity of our coding. See the Supporting Information for a detailed codebook of all variables.

The debate on the Notification Bill is the source of our dependent variables. The first four of these variables relate to the act of speaking. Here we measured (a) whether MPs spoke or kept quiet in addition to the number of (b) times, (c) days, and (d) words that they spoke during the debate. In applying these four measures, we aim to provide results that are robust to alternative operationalisations of speaking in parliament. The last dependent variable relates to the substance of speeches. By using the NRC Word-Emotion Association Lexicon (Mohammad & Turney, 2013), we quantified the words associated with negative and positive sentiments in the MPs’ speeches. This allowed us to calculate a fifth dependent variable as<sup>5</sup>

$$Negativity = \log \frac{\# \text{ Negative Words} + 0.5}{\# \text{ Positive Words} + 0.5}$$

at the level of individual MPs, after pooling their speeches if they took the floor more than once during the debate. Based on these dependent variables, the article analyses the relationship between divergent preferences and legislative speeches—specifically, MPs’ participation in the debate, and among the MPs who did participate (by giving at least one speech), their sentiments in the debate.

## Results

During the Notification Bill debate spanning two days, 224—or about 35% of—MPs gave at least one speech. Figure 2 shows how speakers and sentiments differed between two broad categories of MPs; compliers, who voted in line with their principals, and dissenters, who voted against one or more of them. In the upper graph of Figure 2, we see that the majority of the compliers chose not to speak in the debate. In fact, speakers were outnumbered by about 3 to 1 among this group. The bars almost level each other among the dissenters, with nearly half of them taking the floor. In the lower graph, we see that the debate had an overall positive tone, in line with the long-term analysis of the sentiments in the House of Commons (Rheault et al., 2016). Nevertheless, there was again a visible difference between compliers and dissenters as the speeches of the latter group were on average less positive.

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<sup>5</sup>Here we use the scaling method that Lowe, Benoit, Mikhaylov, and Laver (2011) propose to measure positions from political texts. For its application to sentiment analysis of legislative speech, see Proksch et al. (2018).

These results provide some descriptive support for our overall assumptions that there is a relationship between divergent preferences on the one hand and more expressive MPs as well as more negative speeches on the other. Below, dividing the dissenters into three—the country, constituency, and party dissenters—we test our expectations first on the debate participation and then on the sentiments expressed in speeches.

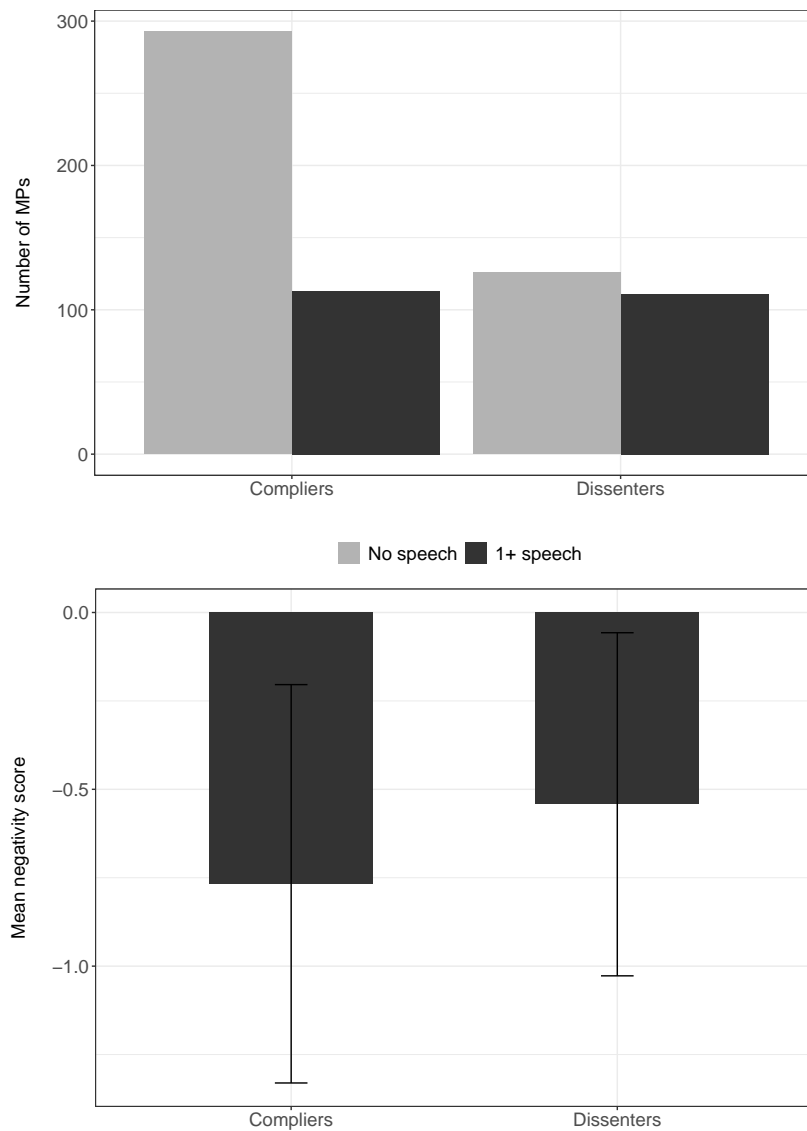


Figure 2: Descriptive differences between compliers and dissenters. *Notes:* For *Negativity*, higher scores indicate more negative speeches. Error bars represent standard deviations.

## Participation in the debate

With regard to the participation in legislative debates, our dependent variables are either binary (whether MPs spoke or not) or count (the number of speeches, days, and words) measures. Using

Table 1: Regression models of debate participation—summary results.

	Model 1 (Binary)	Model 2 (# Speeches)	Model 3 (# Days)	Model 4 (# Words)
Country Dissenters	3.43*** (0.61)	2.09*** (0.30)	2.12*** (0.20)	1.69*** (0.41)
Constituency Dissenters	0.34*** (0.07)	0.25** (0.09)	0.18*** (0.05)	0.28*** (0.05)
Party Dissenters	-1.14* (0.52)	-1.35** (0.43)	-1.00*** (0.24)	-1.30** (0.48)
Controls	✓	✓	✓	✓
Constant	-2.48*** (0.49)	-1.50*** (0.37)	-3.13*** (0.24)	5.12*** (0.72)
Observations	595	595	595	595

*Notes:* This table reports the results from a logistic regression (Model 1) and negative binomial regressions (Model 2–4). In parentheses are the robust standard errors, clustered by parliamentary party membership. The control variables are *Age*, *Brexit Committee*, *Changed Mind*, *Female*, *Front Bench*, *Majority*, *Overall Rebellion*, *Party Size*, and *Seniority*. In addition, Model 3 controls for the exposure time—the number of debating days. See the Supporting Information for more on the data and variables, the descriptive statistics (Table S1), and for the complete results (Table S2). \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

a logistic regression for the former and negative binomial regressions for the latter, here we present a summary of the results in Table 1, with complete models available in the Supporting Information (Table S2). To facilitate the interpretation of these results, Figure 3 plots the adjusted predictions from all four models. Overall, although our dependent variables measure the speech-making behaviour in different ways, the results are very consistent across the models.

We find significant and positive correlations between the MPs’ position against the country or constituency and their speech-making behaviour in all four specifications. To begin with, among the MPs who comply with the people’s will to leave the EU, the probability to give at least one speech during the debate is one in five. Model 1 shows that this probability increases significantly with dissent, and in about nine out of ten cases, the country dissenters speak in the related debate. The differences are even larger in the other models. On average, a switch from compliance to dissent is associated with a five-fold increase in the number of words and

eight-fold increases in the number of speeches and in the rate<sup>6</sup> of days. For example, while MPs in compliance with the country are estimated to use about 132 words in their speeches, this average increases to about 719 words among the dissenters.

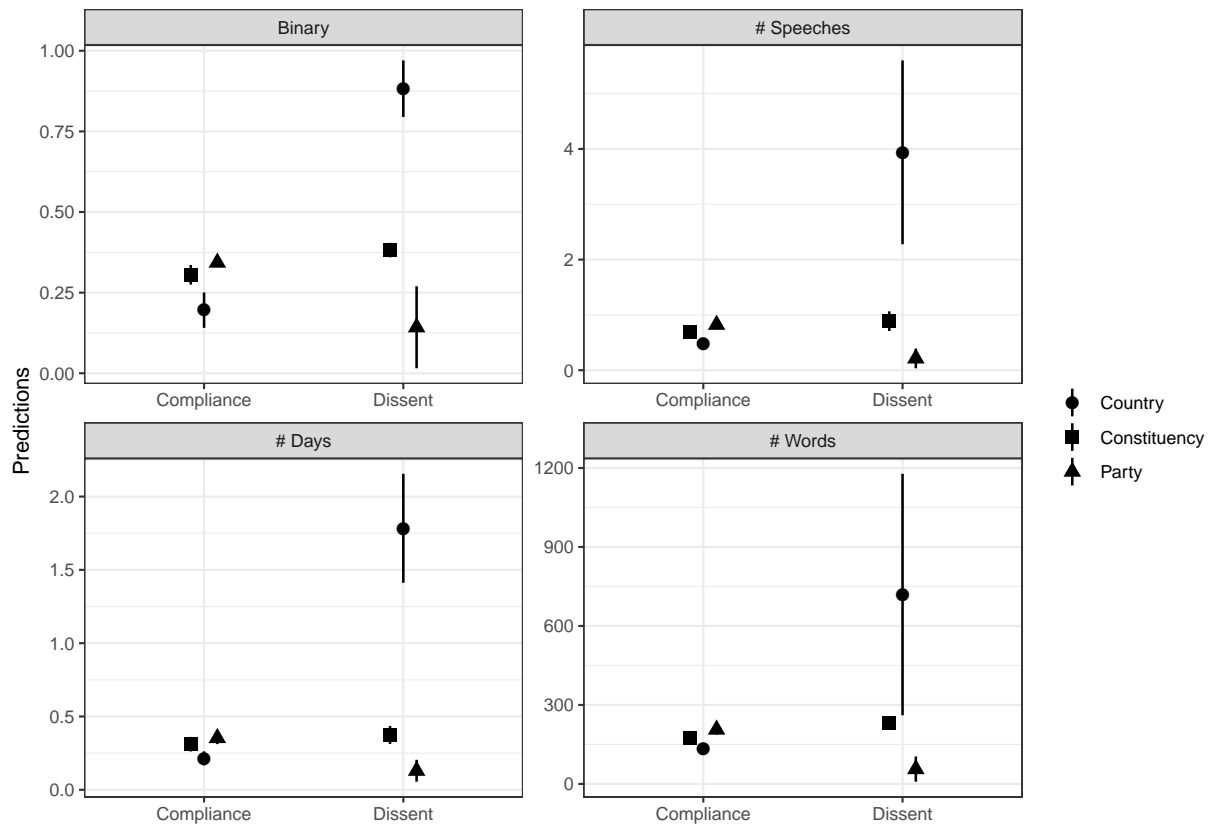


Figure 3: Adjusted predictions with 95% confidence intervals. *Notes:* This figure is based on the models reported in Table 1. In the upper-left box, estimations refer to the predicted probability of giving at least one speech (*Binary*); in the others, clockwise, they refer to the predicted number of speeches, words, and days. All other variables are kept at their mean value.

For the constituency dissenters, the results are similar: there are statistically significant, positive relationships between going against the wishes of constituents and speaking in parliament. Here we find relatively smaller effects in practical terms, where dissent is associated on average with about 20 to 30 per cent increases in predictions. For example, we estimate that the probability of giving at least one speech is 0.31 if MPs align with their constituents, which increases to 0.38 if they do not. As evident in Figure 3, the effect sizes are smaller for the constituency dissenters than for the country dissenters in all four specifications. Having said

<sup>6</sup>As the maximum number of days on which MPs could speak was limited to two, we add this number to Model 3 as exposure time—an offset variable used in count models (Hilbe, 2011). The exposure variable turns this specific model into a rate model, allowing us to analyse the proportional differences in speaking days.

that, the constituency dissenters behave very much like the country dissenters such that they are significantly more willing than compliers to express themselves on the plenary floor.

The party dissenters, quite the contrary, are not. Again we find significant, but this time negative, correlations between divergent preferences and participating in debates in parliament. According to our estimations in Model 1, the speaking probability is reduced to less than half if MPs defy their party whip, from 0.34 to 0.14 on average. Similarly, a switch from toeing the party line to going against it is associated with a three-fold decrease in the rate of speaking days and four-fold decreases in the number of speeches given in parliament or words used in these speeches. These results are the complete opposite of our expectation.

### **Sentiments in the debate**

With regard to the sentiments in these speeches, our dependent variable is *Negativity*, where positive values indicate a speech that is actually more negative than positive. Here our analysis is based on an ordinary least squares (OLS) model, as reported in Table 2. Overall, the results are strikingly parallel to our findings on different dissenters' participation in the debate.

There are significant increases in negative sentiments associated with having a position against the country or constituency preferences in parliament, and these increases are substantively larger in the former case. We estimate that the ratio of negative to positive words is roughly 27% higher for country dissenters than for country compliers. In comparison, this difference is about 6% for MPs defying the will of their constituents than for MPs following it. These results support our expectation that dissenters give more negative sentiments than compliers.

Again, we find that party dissenters do not follow this pattern of behaviour: there is a significant correlation between MPs' position against their party and the sentiments that they reveal in their speeches, but in the opposite direction. These MPs are not only less likely to speak, as we showed above, but also, if they do choose to express themselves, their speech has a significantly less negative tone. According to our calculations, the ratio of negative to positive words is about 39% lower for MPs who vote against their party line than for MPs who follow it. In terms of differences, this is larger than the case for both the constituency and country dissenters.

Table 2: Regression models of negativity in speeches—summary results.

	Coefficient	Std. Error
Country Dissenters	0.24*	0.09
Constituency Dissenters	0.06*	0.02
Party Dissenters	-0.33**	0.05
Controls	✓	
Constant	-0.10	0.06
Observations	207	
$R^2$	0.17	

*Notes:* This table reports the results from an OLS regression. The dependent variable is *Negativity*, where higher values indicate more negative speeches. Standard errors are clustered by parliamentary party membership. The control variables are *Age*, *Changed Mind*, *Female*, *Front Bench*, *Government*, *Majority*, and *Seniority*. See the Supporting Information for the complete results (Table S3). \*  $p < 0.05$ , \*\*  $p < 0.01$ .

## Discussion

There is one particular reason why party dissenters may behave contrary not only to our theoretical expectations, but also to the behaviour that we observe among country and constituency dissenters on the plenary floor: differences in the level of threat that principals pose to the aspirations of legislators. Parties are the most important principals in representative democracies because of the crucial role that they play (Müller, 2000) and the resources that they control (Carey, 2007) for legislators. This gives party leaders, in contrast to other principals, more extensive and more immediate powers to reward those who follow their will and punish those who defy it.

Preferring to keep quiet or otherwise putting a positive spin on their position in parliament can be thus strategic behaviour that party dissenters develop to avoid punishment by their party. There are electoral consequences for parties that appear divided in parliament (Kam, 2009), and MPs publicly trying to explain their position against the party line might do more harm than good for the party image. Indeed, voting against the party line is one thing, but publicly advertising that vote is quite another. Therefore, if party dissenters take the plenary floor and use a negative language in their speech, they risk upsetting the principal in charge of not only the re-selection of candidates, but also, among those who are elected, the allocation of

higher offices, from committee to ministerial positions. Leaders can then withhold these crucial benefits from the dissenters in their ranks.

Although we cannot test this reasoning in this article, evidence elsewhere supports it. The literature reviewed above, for example, shows that MEPs give fewer speeches before they vote against the position of their national party, in complete contrast to the case when they are to vote against the will of the principal with significantly less control over their aspirations—the political groups of the EP (Slapin & Proksch, 2010). It is also fitting that cabinet members are the most positive speakers in the government-opposition divide (Rudkowsky et al., 2018; Proksch et al., 2018) because, as Rudkowsky et al. (2018) suggest, they have the incentive to avoid upsetting not only their own party but also the parties in opposition for the sake of their own ministerial agenda.

There is also evidence specifically from the British House of Commons to suggest that party dissenters strategically refrain from going public with their controversial position. Both Norton (1999) and Cowley (2002) argue that British MPs prefer to address the differences with their party behind closed doors. Similarly, Auel and Umit (2018) show that British MPs voting against the party line invest less in communication with their constituents. We see these behaviours as strategic choices, driven by the high level of threat that the parties pose to their dissenters.

In comparison, neither country nor constituency can match this level of threat. This is perhaps more the case for the people as a whole. Outside the systems with a nation-wide electoral district, as for example in Israel or the Netherlands, the ability of the country to punish a legislator is limited at best. In the UK's single-member districts, MPs have an electoral link only with the constituents living in the district that they represent, and 'the people' do not have a say in who gets elected in the remaining 649 districts. In fact, the strength of the electoral link between constituents and MPs in the Westminster systems itself is a question open for debate (see, for example, the discussion in Hanretty et al., 2017, pp. 238–240), and parties loom large as the principal with the highest level of control over legislators. Importantly, neither constituents nor the country as a whole have any influence over the selection of candidates. Moreover, once they are elected, it is almost exclusively the parties that control how much influence MPs have while in parliament. Therefore, it may be the relative absence of an immediate threat to their aspirations that allows country and constituency dissenters to explain their controversial position freely in parliament.



## Conclusion

Plenary floor provides legislators with an important platform where they can publicly take policy positions, with explanations as to why their position is better than the alternatives. This is a normatively valuable exercise in any representative democracy, which requires representatives to justify their actions in front of the represented. Indeed, in line with our expectations, we find that when legislators prefer a position that defies the will of the people in general or of the voters in their constituency, they make use of the platform to express themselves. These legislators are not only more likely to speak, but they also take the floor repeatedly and give lengthier speeches in the related debates. In terms of substance, their speeches reveal higher levels of negative sentiments.

Yet when legislators defy the will of their party, they keep relatively quiet in parliament, and in the unlikely event that they do take the floor, we hear significantly less negative speeches. These contradictory results could emerge due to the differences in the level of threat that different principals pose to the aspirations of legislators. As embodied in Prime Minister Theresa May's call for early 2017 elections in the UK, party leaders rule over the legislators' career advancement and re-election prospects—well beyond the capacity of the other principals analysed in this article. Here our results suggest an inverse relationship between *principals' threat over agents* and *agents' readiness to explain* their positions on the plenary floor. When their position goes against a principal with immediate power to punish them, legislators strategically deviate from the democratic norm (that representatives should argue for their divergent preferences) and the parliamentary norm (that such arguments have a negative tone).

An influential literature shows how parties develop rules and procedures to keep rebellious MPs off the parliamentary floor. Our contribution to this literature is that, even in MP-centred parliaments like the British House of Commons, where such rules do not exist, legislators might strategically hold back from speaking as well as revealing their sentiments in parliament to avoid punishment by their party.

Yet our contribution comes with an important caveat concerning the generalisability of these results. Our claims rest on evidence from the aftermath of the Brexit referendum, when MPs positioned themselves with regard to an issue on which their principals had had their say. On the one hand, this provides us with the crucial piece of information on the convergence or divergence of preferences between MPs and their three principals. On the other hand, this

means that we have to rely on a single debate over a highly salient issue. This unavoidable feature means that there is a need for further research. Would our results hold for ordinary issues on the parliamentary agenda? Indeed, the salience of Brexit might have biased the results in both directions: upwardly if MPs are more likely to explain their position in salient issues, but downwardly if principals are more likely to punish them for divergence in high-salience issues. Analysing the relationship between divergent preferences and legislative speeches over a large number of issues is one way how further research could broaden our understanding.

## References

- Alemán, E., Ramírez, M. M., & Slapin, J. B. (2017). Party strategies, constituency links, and legislative speech. *Legislative Studies Quarterly*, *42*(4), 637–659.
- Auel, K. & Umit, R. (2018). Explaining MPs' communication to their constituents: Evidence from the UK House of Commons. *British Journal of Politics and International Relations*, *20*(3), 731–752.
- Austen-Smith, D. (1990). Information transmission in debate. *American Journal of Political Science*, *34*(1), 124–152.
- Bächtiger, A. (2014). Debate and deliberation in legislatures. In S. Martin, T. Saalfeld, & K. Strøm (Eds.), *The Oxford handbook of legislative studies* (pp. 145–166). Oxford: Oxford University Press.
- Bäck, H. & Debus, M. (2016). *Political parties, parliaments and legislative speechmaking*. Basingstoke: Palgrave Macmillan.
- Bäck, H. & Debus, M. (2018a). Representing the region on the floor: Socioeconomic characteristics of electoral districts and legislative speechmaking. *Parliamentary Affairs*, *71*(1), 73–102.
- Bäck, H. & Debus, M. (2018b). When do women speak? A comparative analysis of the role of gender in legislative debates. *Political Studies*, 1–21. doi:[10.1177/0032321718789358](https://doi.org/10.1177/0032321718789358)
- Bäck, H., Debus, M., & Müller, J. (2014). Who takes the parliamentary floor? The role of gender in speech-making in the Swedish Riksdag. *Political Research Quarterly*, *67*(3), 504–518.
- Best, H. & Vogel, L. (2012). The emergence and transformation of representative roles. In M. Blomgren & O. Rozenberg (Eds.), *Parliamentary roles in modern legislatures* (pp. 37–65). Oxon: Routledge.
- Brack, N., Costa, O., & Pequito Teixeira, C. (2012). Attitudes towards the focus and style of political representation among Belgian, French and Portuguese parliamentarians. *Representation*, *48*(4), 387–402.
- Brader, T. & Marcus, G. E. (2013). Emotions and political psychology. In L. Huddy, D. O. Sears, & J. S. Levy (Eds.), *The Oxford handbook of political psychology* (pp. 165–204). Oxford: Oxford University Press.
- Brehm, J. O. & Gates, S. (1997). *Working, shirking, and sabotage: Bureaucratic response to a democratic public*. Ann Arbor: University of Michigan Press.
- Burke, E. (1801 [1774]). *Speech to the electors of Bristol: The works of Edmund Burke*. London: F. and C. Rivington.

- Carey, J. M. (2007). Competing principals, political institutions, and party unity in legislative voting. *American Journal of Political Science*, 51(1), 92–107.
- Cowley, P. (2002). *Revolts and rebellions: Parliamentary voting under Blair*. London: Politico's.
- Dempsey, N. (2017). Brexit: Votes by constituency. Retrieved June 1, 2018, from <https://commonslibrary.parliament.uk/parliament-and-elections/elections-elections/brexit-votes-by-constituency/>
- Fenno, R. F. (1978). *Home style: House members in their districts*. Boston: Little, Brown and Company.
- Giannetti, D. & Pedrazzani, A. (2016). Rules and speeches: How parliamentary rules affect legislators' speech-making behavior. *Legislative Studies Quarterly*, 41(3), 771–800.
- Hanretty, C. (2017). Areal interpolation and the UK's referendum on EU membership. *Journal of Elections, Public Opinion and Parties*, 27(4), 466–483.
- Hanretty, C., Lauderdale, B. E., & Vivyan, N. (2017). Dyadic representation in a Westminster system. *Legislative Studies Quarterly*, 42(2), 235–267.
- Helms, L. (2008). Studying parliamentary opposition in old and new democracies: Issues and perspectives. *The Journal of Legislative Studies*, 14(1-2), 6–19.
- Hilbe, J. M. (2011). *Negative binomial regression*. Cambridge: Cambridge University Press.
- Hix, S. (2002). Parliamentary behavior with two principals: Preferences, parties, and voting in the European Parliament. *American Journal of Political Science*, 46(3), 688–698.
- Kam, C. J. (2009). *Party discipline and parliamentary politics*. Cambridge: Cambridge University Press.
- Lin, N. & Osnabrügge, M. (2018). Making comprehensible speeches when your constituents need it. *Research & Politics*, 5(3), 1–8.
- Lord, C. (2013). No representation without justification? Appraising standards of justification in European Parliament debates. *Journal of European Public Policy*, 20(2), 243–259.
- Lowe, W., Benoit, K., Mikhaylov, S., & Laver, M. (2011). Scaling policy preferences from coded political texts. *Legislative Studies Quarterly*, 36(1), 123–155.
- Maltzman, F. & Sigelman, L. (1996). The politics of talk: Unconstrained floor time in the US House of Representatives. *Journal of Politics*, 58(3), 819–830.
- Martin, L. W. & Vanberg, G. (2008). Coalition government and political communication. *Political Research Quarterly*, 61(3), 502–516.
- Mohammad, S. M. & Turney, P. D. (2013). Crowdsourcing a word–emotion association lexicon. *Computational Intelligence*, 29(3), 436–465.

- Müller, W. C. (2000). Political parties in parliamentary democracies: Making delegation and accountability work. *European Journal of Political Research*, 37(3), 309–333.
- Norton, P. (1999). The individual member in the British House of Commons: Facing both ways and marching forward. *Journal of Legislative Studies*, 5(3–4), 53–74.
- Proksch, S.-O., Lowe, W., Wäckerle, J., & Soroka, S. (2018). Multilingual sentiment analysis: A new approach to measuring conflict in legislative speeches. *Legislative Studies Quarterly*, 1–35. doi:10.1111/lsq.12218
- Proksch, S.-O. & Slapin, J. B. (2012). Institutional foundations of legislative speech. *American Journal of Political Science*, 56(3), 520–537.
- Proksch, S.-O. & Slapin, J. B. (2014). *The politics of parliamentary debate: Parties, rebels, and representation*. Cambridge: Cambridge University Press.
- Rheault, L., Beelen, K., Cochrane, C., & Hirst, G. (2016). Measuring emotion in parliamentary debates with automated textual analysis. *PloS ONE*, 11(12), 1–18.
- Rogers, R. & Walters, R. (2015). *How parliament works* (7th ed.). London: Pearson.
- Rosenbaum, M. (2017). Local voting figures shed new light on EU referendum. Retrieved June 1, 2018, from <http://www.bbc.com/news/uk-politics-38762034>
- Rudkowsky, E., Haselmayer, M., Wastian, M., Jenny, M., Emrich, Š., & Sedlmair, M. (2018). More than bags of words: Sentiment analysis with word embeddings. *Communication Methods and Measures*, 12(2–3), 140–157.
- Schwarz, D., Traber, D., & Benoit, K. (2017). Estimating intra-party preferences: Comparing speeches to votes. *Political Science Research and Methods*, 5(2), 379–396.
- Shaw, J. (2017). The quintessentially democratic act? Democracy, political community and citizenship in and after the UK’s EU referendum of June 2016. *Journal of European Integration*, 39(5), 559–574.
- Slapin, J. B., Kirkland, J. H., Lazzaro, J. A., Leslie, P. A., & O’Grady, T. (2018). Ideology, grandstanding, and strategic party disloyalty in the British Parliament. *American Political Science Review*, 112(1), 15–30.
- Slapin, J. B. & Proksch, S.-O. (2010). Look who’s talking: Parliamentary debate in the European Union. *European Union Politics*, 11(3), 333–357.
- Slapin, J. B. & Proksch, S.-O. (2014). Words as data: Content analysis in legislative studies. In S. Martin, T. Saalfeld, & K. Strøm (Eds.), *The Oxford handbook of legislative studies* (pp. 126–144). Oxford: Oxford University Press.

UK Supreme Court. (2017). R (on the application of Miller and another) (Respondents) v Secretary of State for Exiting the European Union (Appellant). Retrieved February 6, 2017, from <https://www.supremecourt.uk/cases/docs/uksc-2016-0196-judgment.pdf>

Wahlke, J. C., Eulau, H., Buchanan, W., & Ferguson, L. C. (1962). *The legislative system: Explorations in legislative behavior*. New York: John Wiley and Sons, Inc.

SUPPORTING INFORMATION

“Divergent Preferences and Legislative Speeches on Brexit”

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**S1 Codebook of Variables**

Before we proceed to define the variables in the multivariate analyses in the article, Table S1 presents the descriptive statistics.

Table S1: Descriptive statistics.

	N	Mean	Median	SD	Min	Max
Binary	643	0.35	0	0.48	0	1
# Speeches	643	0.87	0	1.76	0	15
# Days	643	0.38	0	0.55	0	2
# Words	643	239.19	0	411.13	0	2393
Negativity	224	-0.66	-0.62	0.54	-2.40	1.95
Country Dissenters	620	0.20	0	0.40	0	1
Constituency Dissenters	606	0.20	0	0.40	0	1
Party Dissenters	617	0.09	0	0.28	0	1
Front Bench	648	0.35	0	0.48	0	1
Brexit Committee	648	0.06	0	0.23	0	1
Overall Rebellion	648	0.63	0.30	1.15	0	10.40
Party Size	647	253.86	329	98.30	1	329
Changed Mind	611	0.55	1	0.50	0	1
Age	648	50.24	50	10.39	22	86
Female	648	0.30	0	0.46	0	1
Government	643	0.51	1	0.50	0	1
Majority	648	24.17	24.25	14.12	0.10	81.10
Seniority	648	10.47	7	8.91	1	47

## Dependent Variables

As explained in the main text, the data for the dependent variables comes from the debate on the European Union Notification of Withdrawal Bill 2017, held on 31 January–1 February 2017 in the British House of Commons. We started with scraping the debate from [www.theyworkforyou.com](http://www.theyworkforyou.com)—a website that re-publishes the debates in the Hansard. We then removed the MPs chairing the debates on the bill as well as the single-sentence interventions asking for others to give way. Based on the remaining data, we first created a set of four dependent variables—alternative operationalisations of legislative speech-making—to explain the relationship between divergent preferences and speeches:

*Binary.* Whether MPs gave at least one speech during the debate ( $x = 1$ ) or not ( $x = 0$ ).

*# Speeches.* The number of times that MPs spoke during the debate.

*# Days.* The number of days on which MPs gave at least one speech during the debate.

*# Words.* The total number of words in MPs' speeches in the debate.

Then, to explain the relationship between divergent preferences and sentiments in speeches, we created a measure of speech negativity. Considering that the negative tone of a speech can be affected by the counts of not only the negative but also the positive words, this dependent variable takes the difference between the two counts before normalising the scores with the number sentimental words in the speeches.

*Negativity.* The logit scale of sentiments. As proposed by Lowe, Benoit, Mikhaylov, and Laver (2011), this is calculated as

$$\text{Negativity} = \log \frac{\# \text{ Negative Words} + 0.5}{\# \text{ Positive Words} + 0.5}$$

## Independent Variables

To create the three key variables of interest, measuring MPs' compliance with or dissent to their principals, we first coded the referendum results (in individual constituencies (Hanretty, 2017; Rosenbaum, 2017) and in the whole country) and the following parliamentary vote on



the Notification Bill (for MPs and parties, in the division on 8 February 2017). Based on this scheme, we then coded the dissenters as follows:

*Country Dissenters.* As the country voted to leave the EU, this variable is coded as 1 for MPs who voted against the Notification Bill, 0 for those who voted for it.

*Constituency Dissenters.* For constituencies that voted to leave the EU, this variable is coded as above. In constituencies that voted to remain, the coding scheme is reversed—that is, it is coded as 0 for MPs who voted against the Notification Bill, 1 for those who voted for it.

*Party Dissenters.* This variable is coded as 1 for MPs who voted against their party whip on the Notification Bill, 0 for those who voted with it. Except for Kenneth Clarke (Rushcliffe, Conservative), all party dissenters were Labour MPs.

Data for the remaining control variables comes from the UK Parliament website, [www.parliament.uk](http://www.parliament.uk), unless otherwise noted for individual variables below:

*Front Bench.* A binary variable, coded as 1 for party spokespersons as well as for cabinet and shadow cabinet members, or as 0 for MPs without any of these roles. Previous research shows that the backbencher–frontbencher difference correlates with the parliamentary speech-making behaviour (Slapin & Proksch, 2010; Bäck, Debus, & Müller, 2014; Giannetti & Pedrazzani, 2016; Bäck & Debus, 2018a), including the positive sentiments revealed in legislative speeches (Rudkowsky et al., 2018; Proksch, Lowe, Wäckerle, & Soroka, 2018).

*Brexit Committee.* A binary variable, coded as 1 for the members of the committee in charge of overseeing Brexit—*Exiting the European Union Committee*—or otherwise as 0. Members of the committee in charge of a policy area are more likely to speak when the parliament debates a related policy (Bäck et al., 2014; Giannetti & Pedrazzani, 2016; Alemán, Ramírez, & Slapin, 2017; Schwarz, Traber, & Benoit, 2017; Bäck & Debus, 2018a).

*Overall Rebellion.* The percentage of the occasions that MPs voted against their party line over a long time, between the start of the parliamentary term and the vote on the Notification Bill. The data for this variable comes from [www.publicwhip.org.uk](http://www.publicwhip.org.uk)—a website that publishes the voting history of MPs and Lords in the UK. MPs with an established history of rebellion might behave differently than the dissenters in any particular vote.

*Party Size.* The absolute number of parliamentary seats that parties had in 2017. As the chair tries to find a balance among the parties in any debate in the British House of Commons (Slapin, Kirkland, Lazzaro, Leslie, & O’Grady, 2018; see also Slapin & Proksch, 2010, Bäck et al., 2014, Giannetti & Pedrazzani, 2016, and Bäck & Debus, 2018a), party size is likely to affect who speaks in parliamentary debates.

*Changed Mind.* A binary variable, coded as 1 for MPs who had changed their position on Brexit since their campaign for the referendum, 0 for those who had not. MPs made their position public before the referendum, and the data for this variable comes from an extensive news report BBC (June 22, 2016).

*Age.* A continuous variable measuring the age of MPs in 2017.

*Female.* A binary variable based on the gender of the MPs, coded as 1 for the females, 0 for the males. Previous research suggests that gender is an important determinant of the speech-making behaviour in parliament (Bäck et al., 2014; Bäck & Debus, 2018b).

*Government.* A binary variable coded as 0 for the MPs from opposition parties or as 1 for the MPs from the government party—Conservatives. Government MPs are likely to be more positive in their speeches than opposition MPs (Rheault, Beelen, Cochrane, & Hirst, 2016; Rudkowsky et al., 2018; Proksch et al., 2018).

*Majority.* A continuous variable measuring the difference between the vote shares of the incumbent MP and the candidate who came second in the most recent elections—the 2015 general election. Their margin of electoral safety is likely to correlate with whether and against whom MPs voice dissent in parliamentary speeches (Proksch & Slapin, 2014, Chapter 6) and with the sentiments in their speeches (Proksch et al., 2018).

*Seniority.* A continuous variable measuring the number of years that MPs had served as parliamentary representatives in 2017. Senior MPs are likely to give more speeches in parliament (Alemán et al., 2017; Bäck & Debus, 2018a).

## **S2 Regression Estimates in Full**

This section provides the complete models for the results summarised in the main text, specifically in Table 1 and Table 2.

Table S2: Regression models of debate participation—complete results for Table 1.

	Model 1 (Binary)	Model 2 (# Speeches)	Model 3 (# Days)	Model 4 (# Words)
Country	3.43***	2.09***	2.12***	1.69***
Dissenters	(0.61)	(0.30)	(0.20)	(0.41)
Constituency	0.34***	0.25**	0.18***	0.28***
Dissenters	(0.07)	(0.09)	(0.05)	(0.05)
Party	-1.14*	-1.35**	-1.00***	-1.30**
Dissenters	(0.52)	(0.43)	(0.24)	(0.48)
Front	-1.46*	-0.83	-0.89	-1.63
Bench	(0.72)	(0.47)	(0.54)	(0.88)
Brexit	0.86*	0.46***	0.27	0.51
Committee	(0.37)	(0.12)	(0.16)	(0.29)
Overall	0.18*	0.12	0.08**	0.31
Rebellion	(0.09)	(0.09)	(0.03)	(0.39)
Party	0.01***	0.00***	0.00***	-0.00
Size	(0.00)	(0.00)	(0.00)	(0.00)
Changed	0.46***	-0.26***	0.15*	-0.17
Mind	(0.11)	(0.04)	(0.07)	(0.18)
Age	-0.00	0.00	0.00	0.01
	(0.01)	(0.01)	(0.01)	(0.01)
Female	0.02	-0.10	0.06	0.05
	(0.17)	(0.13)	(0.15)	(0.08)
Majority	-0.00	0.00	-0.00	-0.00
	(0.01)	(0.01)	(0.01)	(0.01)
Seniority	-0.00	0.01**	-0.00	-0.00
	(0.01)	(0.00)	(0.01)	(0.01)
Constant	-2.48***	-1.50***	-3.13***	5.12***
	(0.49)	(0.37)	(0.24)	(0.72)
Observations	595	595	595	595

*Notes:* This table presents the complete results for Table 1, where Model 1 is a logistic regression and Models 2–4 are negative binomial regressions. In parentheses are the robust standard errors, clustered by parliamentary party membership. In Model 3, the exposure time is set to two—the number of debating days. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

Table S3: Regression models of negativity in speeches—complete results for Table 2.

	Coefficient	Std. Error
Country Dissenters	0.24*	0.09
Constituency Dissenters	0.06*	0.02
Party Dissenters	-0.33**	0.05
Front Bench	-0.23	0.11
Changed Mind	-0.09***	0.01
Age	-0.01**	0.00
Female	-0.03	0.07
Government	-0.41***	0.04
Majority	0.00	0.00
Seniority	0.01	0.00
Constant	-0.10	0.06
Observations	207	
$R^2$	0.17	

*Notes:* This table presents the complete results for Table 2. The dependent variable is *Negativity*, where higher values indicate more negative speeches. Standard errors are clustered by parliamentary party membership. \*  $p < 0.05$ , \*\*  $p < 0.01$ .

## References

- Alemán, E., Ramírez, M. M., & Slapin, J. B. (2017). Party strategies, constituency links, and legislative speech. *Legislative Studies Quarterly*, *42*(4), 637–659.
- Bäck, H. & Debus, M. (2018a). Representing the region on the floor: Socioeconomic characteristics of electoral districts and legislative speechmaking. *Parliamentary Affairs*, *71*(1), 73–102.
- Bäck, H. & Debus, M. (2018b). When do women speak? A comparative analysis of the role of gender in legislative debates. *Political Studies*, 1–21. doi:10.1177/0032321718789358
- Bäck, H., Debus, M., & Müller, J. (2014). Who takes the parliamentary floor? The role of gender in speech-making in the Swedish Riksdag. *Political Research Quarterly*, *67*(3), 504–518.
- BBC. (June 22, 2016). EU vote: Where the cabinet and other MPs stand. Retrieved June 1, 2018, from <http://www.bbc.com/news/uk-politics-eu-referendum-35616946>
- Giannetti, D. & Pedrazzani, A. (2016). Rules and speeches: How parliamentary rules affect legislators' speech-making behavior. *Legislative Studies Quarterly*, *41*(3), 771–800.
- Hanretty, C. (2017). Areal interpolation and the UK's referendum on EU membership. *Journal of Elections, Public Opinion and Parties*, *27*(4), 466–483.
- Lowe, W., Benoit, K., Mikhaylov, S., & Laver, M. (2011). Scaling policy preferences from coded political texts. *Legislative Studies Quarterly*, *36*(1), 123–155.
- Proksch, S.-O., Lowe, W., Wäckerle, J., & Soroka, S. (2018). Multilingual sentiment analysis: A new approach to measuring conflict in legislative speeches. *Legislative Studies Quarterly*, 1–35. doi:10.1111/lsq.12218
- Proksch, S.-O. & Slapin, J. B. (2014). *The politics of parliamentary debate: Parties, rebels, and representation*. Cambridge: Cambridge University Press.
- Rheault, L., Beelen, K., Cochrane, C., & Hirst, G. (2016). Measuring emotion in parliamentary debates with automated textual analysis. *PloS ONE*, *11*(12), 1–18.
- Rosenbaum, M. (2017). Local voting figures shed new light on EU referendum. Retrieved June 1, 2018, from <http://www.bbc.com/news/uk-politics-38762034>
- Rudkowsky, E., Haselmayer, M., Wastian, M., Jenny, M., Emrich, Š., & Sedlmair, M. (2018). More than bags of words: Sentiment analysis with word embeddings. *Communication Methods and Measures*, *12*(2–3), 140–157.
- Schwarz, D., Traber, D., & Benoit, K. (2017). Estimating intra-party preferences: Comparing speeches to votes. *Political Science Research and Methods*, *5*(2), 379–396.

- Slapin, J. B., Kirkland, J. H., Lazzaro, J. A., Leslie, P. A., & O'Grady, T. (2018). Ideology, grandstanding, and strategic party disloyalty in the British Parliament. *American Political Science Review*, *112*(1), 15–30.
- Slapin, J. B. & Proksch, S.-O. (2010). Look who's talking: Parliamentary debate in the European Union. *European Union Politics*, *11*(3), 333–357.