Article

Gatekeeping the Plenary Floor: Discourse Network Analysis as a Novel Approach to Party Control

Caroline Bhattacharya

Department of Political and Economic Studies, University of Helsinki, 00014 Helsinki, Finland;
E-Mail: caroline.bhattacharya@helsinki.fi

Abstract

In the German parliament, the Bundestag, floor time is a scarce resource and is allocated to MPs by leaders of their respective parliamentary party groups. Previous research indicates that highly salient plenary debates tend to be dominated by party leaders and other loyal frontbenchers. Plenary speeches can therefore offer only limited insights into party unity. Any MP can give a so-called 'explanation of vote' (EoVs) to justify their voting decision and/or express their point of view. These written statements provide a more accurate depiction of the range of viewpoints present within legislative parties. In order to assess the effect of party control on observed party unity and parliamentary contestation, discourse network analysis has been employed in this study to compare legislative speech with EoVs in debates on the Greek crisis between 2010 and 2015. Discourse network analysis combines content analysis with an actor-centred approach, and this is the first time this method has been used to study party control and (dis)unity. Bundestag debates on the Greek crisis present an interesting case study, as the issue became increasingly controversial over time, both in the public and the legislature. While this became evident in declining voting unity and individual-level mobilisation through EoVs, the extent to which gatekeeping impedes contestation on the plenary floor needs to be assessed. In terms of representation, it is important that European Union issues not only make it to the plenary agenda but that these debates also reflect the different viewpoints of MPs.

Issue
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1. Introduction

The German parliament, the Bundestag, has generally been characterised by high levels of party unity (Bergmann, Bailer, Ohmura, Saalfeld, & Sieberer, 2016) and a solid cross-partisan consensus in favour of European integration (Lees, 2008; Wimmel & Edwards, 2011). During the euro crisis, both these attributes of German parliamentarism have come under pressure. The increasing contestation of issues revolving around the euro crisis, particularly the situation in Greece, manifested itself in (1) declining voting unity, as above-average levels of voting defection across all parliamentary party groups were witnessed, and (2) heightened parliamentary communication in the form of personal statements known as 'explanations of vote' (EoVs). Contrary to general tendencies in the Bundestag (Bergmann et al., 2016), increasing party disunity was largely driven by the Christian Democrats (Bhattacharya & Papageorgiou, 2019; Degner & Leuffen, 2016).

Voting dissent, especially in government parties, gets media coverage, but the most visible forum and channel of parliamentary communication is the plenary assembly. Plenary debates are often broadcast, and they are "one of

the most important institutional sources from which journalists obtain information about the most important concerns of citizens" (de Ruiter & Vliegenthart, 2018, p. 656). Therefore, it is important that EU matters make it to the agenda of plenary sessions and are publicly debated (e.g., Auel & Raunio, 2014), but the analysis should not stop there. From a discursive perspective, we cannot take it for granted that these debates also reflect the range of viewpoints present across *and within* legislative parties.

In fact, EU politics continue to pose a challenge to party unity: Matters of European integration and EU decision-making often cut across historically established cleavage lines. As party systems have generally been reluctant to adapt, mainstream parties tend to be internally less cohesive on EU issues than other policy issues (Bakker, Jolly, & Polk, 2012; Hix, 1994; Hooghe, Marks, & Wilson, 2002; Marks, Hooghe, Nelson, & Edwards, 2006). This is especially the case for conservative and Christian Democratic parties with a centrist position on European integration. While these parties endorse economic integration on pragmatic grounds, "as defenders of national culture, language, community, and above all national sovereignty" (Edwards, 2009, p. 7) they are much more sceptical towards transnationalism and political integration (Marks & Wilson, 2000).

We would expect that leaders of less cohesive parties would still try to present a united front in plenary debates. Proksch and Slapin (2015, p. 9) argue that in countries like Germany "where the electoral system creates strong incentives for parties to cultivate and protect a single party image to present to voters, party leaders monitor and control their MPs' access to the floor." The extent to which they succeed depends to a significant degree on the (formal and informal) rules of speechmaking, because "party leaders are effective in disciplining legislators only when institutional arrangements enable them to do so" (Giannetti & Pedrazzani, 2016, p. 775). In the Bundestag, parliamentary party groups are allocated a fixed amount of floor time depending on their size, and as in many other legislatures (Giannetti & Pedrazzani, 2016), each group then needs to decide how to distribute the allocated time among its members. In the Bundestag, this power lies with the party leaders, and empirical evidence has confirmed that this leads to the exclusion of critical voices: The more importance parliamentary party group leaders attach to a debate, the more they are inclined to speak themselves and favour the most loyal colleagues who toe the party line over MPs who are ideologically distant from the party leadership (Bhattacharya & Papageorgiou, 2019; Proksch & Slapin, 2012, 2015). Restrictive or party-centred rules of speechmaking are therefore an important instrument in the toolbox that German party leaders use to maintain unity when cohesion is low (Bailer, 2018).

Although in the German case, party-centred rules have the effect of excluding backbenchers in salient EU debates, critical MPs who disagree with their party leadership strongly enough use EoVs as a channel of expression (Bhattacharya & Papageorgiou, 2019). When a debate has concluded, each MP "may make an oral statement on the final vote lasting not more than five minutes or submit a short, written statement, which shall be included in the minutes of plenary proceedings" (German Bundestag, 2014, Rule 31, para. 1). The vast majority of MPs choose to deliver these statements in written form, and they use them for one of three reasons: (1) to voice reservations despite voting along the party line, (2) to explain deviant voting behaviour, or (3) to give statements that demonstrate party loyalty (Becher & Sieberer, 2008; Sieberer, 2015). In the absence of direct access to intraparty preferences, EoVs offer the most meaningful data source in the German context (Zittel & Nyhuis, 2019).

The primary objective of this study is to demonstrate why it matters who speaks for the party and to provide novel empirical insights into parliamentary party unity and unity of government vs. opposition actors. Unity is the "observable degree to which members of a group act in unison" (Sieberer, 2006, p. 151). In line with the recent scholarship that approaches party unity as a dynamic and multidimensional concept (Close & Gherghina, 2019; Zittel & Nyhuis, 2019), I follow the view of Van Vonno, Malka, Depauw, Hazan, and Andeweg (2014), according to which unity is the outcome of the sequential interaction between agreement, loyalty and discipline. In other words, there are several ways to reach unity, and intraparty agreement is only one of them. This article offers a discursive perspective on parliamentary party unity that is currently missing from the literature. It approaches the under-researched question of the impact of party control over floor time on discursive party unity and the government–opposition divide from a new methodological angle: In a comparative research design, I employed discourse network analysis (DNA), which integrates qualitative content analysis with quantitative network analysis (Leifeld, 2016, 2017), in order to examine the impact of party control on parliamentary contestation across communication channels, actors and debates.

The debates on the Greek crisis provide a suitable case study, because public opinion was much more sceptical than party positions in the Bundestag about granting financial aid to Greece. We can observe how this controversial issue has been disputed between (government and opposition) parties and within parties over the time period of five years. Another interesting aspect about these debates is that the President of the Bundestag granted extra time to one or two dissenters from the government parties per debate, for which he was heavily criticised (Proksch & Slapin, 2015, pp. 33–34). The empirical findings show that the government coalition still appeared much more united on the plenary floor than the opposition, whereas the opposite is the case for EoVs. This suggests that party control of floor time is more important for government parties. Confirming cleavage theory, the case study of the Christian Democrats reveals that the party was indeed challenged by considerable internal disagreement.

In the next two sections, I discuss the relevance of plenary debates and introduce the main concepts such as party unity, party cohesion and party control. Furthermore, I review the literature on national party unity with regards to EU politics. Section 4 describes the original dataset and highlights how DNA and social network statistics are applied in this study to enhance our understanding of party unity and group coherence in the parliamentary setting. Section 5 presents the analytical results, showing how contestation patterns vary between plenary speeches and EoVs as well as between parties. In a case study of the Christian Democrats, I explore the potential of DNA to provide empirical insights into party dissent. The conclusion summarises the main methodological contributions of this article.

2. Parliamentary Contestation: The Significance of Party Control

Communication and contestation in the parliamentary setting are largely structured by executive–legislative relations and party politics. Debates in the plenary assembly serve two main purposes: (1) to publicly hold the executive to account (i.e., government-related function) and (2) to communicate issue interpretations and solutions to the electorate (i.e., citizen-related function). Since the publication of the seminal report *Toward a More Responsible Two-Party System* (American Political Science Association, 1950), the Responsible Party Model has been subject to critical reviews, but the basic notion that the electorate must be given a choice between at least two parties offering different policy proposals has prevailed. This presumes a certain level of party unity, because voters need to be aware of differences in policy preferences and issue emphases, and when elected, parties need to be able to bring about the policy changes and problem solutions they advocated (Schmitt & Thomassen, 1999, pp. 113–116).

However, legislative parties are not unitary actors. They are heterogeneous, hierarchical organisations with internal norms and rules. Variance in parliamentary party unity has been explained by system-level factors, especially the form of government and the electoral system (e.g., Carey, 2007; Kailitz, 2010), and party characteristics (e.g., Borz, 2009; Little & Farrell, 2017). More recently, party unity in the parliamentary setting has been approached as a multidimensional and dynamic concept (Close & Gherghina, 2019; Zittel & Nyhuis, 2019). Firstly, we need to make a distinction between (1) *party unity* observable in terms of legislative behaviour, (2) intra-party agreement or preference homogeneity, that is, *party cohesion*, (3) *party discipline*, meaning the internal rules and norms that make legislators act in certain ways (Hazan, 2014; Little & Farrell, 2017), and (4) *party control*, that is, the extent to which parliamentary party groups and their leaders, rather than individual MPs themselves or other legislative actors (e.g., the Speaker, the procedure committee or committee chairs), determine parlia-

mentary proceedings, legislative activity and debating activity. What we generally observe is the extent to which members of a parliamentary party group "act in unison" (Sieberer, 2006, p. 151), that is, party unity, and the most common empirical indicator for party unity is voting unity, measured through roll-call analysis (e.g., Carey, 2007, 2009; Sieberer, 2006). But roll calls by themselves do not tell as much about MPs' preferences, and thereby party cohesion. As Carroll and Poole (2014, p. 116) highlight, "for researchers aiming to obtain a measure of preferences, roll-call votes are only as useful as the underlying process by which they are generated," because voting unity is an outcome of the interaction between cohesion and discipline (Van Vonno et al., 2014), and as we generally lack direct access to study discipline, we cannot easily infer cohesion from unity.

A similar point can be made about party unity in parliamentary debates. It is questionable the extent to which legislative debates serve a genuine deliberative function (Bächtiger, 2014), representing the range of viewpoints present among legislators across and within legislative parties. Legislative speech has been used to analyse MPs' positions (e.g., Lauderdale & Herzog, 2016; Laver & Benoit, 2002), but we need to take into account that MPs face strategic incentives to deliver speeches: Depending on the electoral system and the candidate selection process, MPs may either be inclined to demonstrate party loyalty or to build an independent profile ahead of elections (Hazan, 2014). Furthermore, Proksch and Slapin (2012, p. 522) have highlighted the centrality of intra-party politics and party control in the organisation of plenary floor debates, particularly in party-based systems: "To maintain the party's brand, party leaders must monitor their elected members and prevent them from undertaking activities that contradict the party's primary message." Accordingly, parliamentary party group leaders should be reluctant to allocate speaking time, which is a very scarce resource, to dissenting MPs.

3. Party Unity in the Context of EU Affairs

Before we direct our attention to the German parliament, it is important to discuss what we know about the particular challenges that EU matters pose to party unity at the domestic level. Issues related to European integration and immigration gave rise to a transnational cleavage, and the euro crisis in conjunction with the migration crisis was a critical juncture in this development. Historically, political parties in Europe have been established on the basis of the economic left/right division and the social libertarian/authoritarian divide, and they have been slow or even unable to adapt to the emergence of this new conflict dimension. As a result, party systems have witnessed the rise of challenger parties and dissent within mainstream parties (Edwards, 2009; Hooghe & Marks, 2017).

According to cleavage theory, conservative parties with a centrist position on European integration are

most prone to intra-party tensions because they support economic integration but are keen to defend national sovereignty and the nation state against further political integration and the sociocultural effects of transnationalism at the same time. Christian Democratic parties tend to fall in this category as well (Edwards, 2009; Marks & Wilson, 2000). This theoretical argument has been backed up by recent empirical evidence (Hobolt, 2016; Hooghe & Marks, 2017). National legislators might thus increasingly find themselves in a position in which they have to decide between party loyalty, on the one hand, and constituency interests or their personal conviction, on the other hand. However, contrary to conscience or value-driven issues (e.g., abortion rights or genetic modification) that also cause tensions particularly within Christian Democratic parties (Euchner & Preidel, 2017), the party whip is rarely lifted with regards to EU politics.

The Bundestag, the lower house of the German parliament, is a mixed-member legislature, in which 299 MPs are elected from single-member constituencies and the other half via regional party lists. In theory, this presents German legislators with different incentive structures based on their mandate and reelection strategy. In practice, empirical evidence has been inconclusive as to whether MPs holding a district mandate are less loyal to the party (Ohmura, 2014; Sieberer, 2010), but with regards to the domestic contention of the euro crisis, electoral mandate did not seem to have a significant impact on legislative behaviour (Bhattacharya & Papageorgiou, 2019; Degner & Leuffen, 2016). But other individual-level characteristics such as rank, experience and even gender seem to matter, and the exclusion of critical backbenchers, newcomers and women MPs from plenary debates on the future of the Economic and Monetary Union (Bhattacharya & Papageorgiou, 2019) carries implications for parliamentary discourses and political representation.

The debates on the Greek crisis provide an interesting case study, because Germany was the largest creditor country (contributing around 27% to the euro crisis measures) and public opinion was much more sceptical about granting Greece financial aid than the party positions in the Bundestag. Consistently, between 45% and 70% of citizens rejected the bailout programmes for Greece (see e.g., Forschungsgruppe Wahlen, 2010, 2012a, 2012b). In addition, public opinion polls (Forschungsgruppe Wahlen, 2011a, 2011b) suggest that in autumn 2011 every second citizen viewed the euro crisis as the most important political issue, but 4 out of 10 citizens either did not know which party best represented their interests in managing the crisis (28%) or felt that none of the parties did (14%).

In the absence of direct measures of intra-party preferences (i.e., party cohesion) and in light of the lack of scholarship on the inner workings of parliamentary party groups and the mechanisms through which their leaders impose discipline on their members and exercise control of floor time, the aim in this study is to shed new light on

the significance of party control in legislative debate by drawing on multiple data sources and introducing DNA as a novel approach.

4. Discourse Network Analysis: A Novel Approach to Party Control and Unity

Analyses focussing on individual-level determinants of party unity have produced valuable insights, but they pay insufficient attention to the interconnectedness of individual activities and social relations. MPs' individual agency is both enabled and constrained by institutional provisions, party rules and norms (i.e., structure), and network analysis can provide new empirical insights into this structure/agency dynamic. Strikingly, network analysis has so far only been applied to analyse co-sponsorship in the U.S. Senate and Congress (e.g., Bratton & Rouse, 2011; Fowler, 2006). DNA can be used to examine actor coalitions from a discourse angle, and furthermore, the method allows us to look at claims through a network perspective in order to identify frames. This study employs DNA in the parliamentary setting as a novel approach to discursive unity within groups.

4.1. Data

Between 2010 and 2015, the Bundestag debated and voted on the Greek crisis five times (see Table 1). The time period of observation stretches over two legislative terms. As a result of the 2013 elections, the Free Democratic Party dropped out of the government and the Bundestag, and the Social Democrats left the opposition and joined Angela Merkel's Christian Democrats and their Bavarian sister party, the Christian Social Union, for a 'grand coalition' government. The dataset comprises 454 documents: 74 plenary speeches, 146 EoVs delivered by individual MPs and 234 joint EoVs. As the primary focus of this analysis is intra-party networks and agreement, it made most sense to code co-authored EoVs for each signatory, because if a group of MPs issue an EoV together, they all agree on the statements, and this information would be lost otherwise.

I imported the documents into the open-source software tool Discourse Network Analyzer (Leifeld, 2019), and I built the coding frame in an iterative process in which each document has been hand-coded at least twice. During the data cleaning stage, I removed all duplicates per document and ended up with 9,048 statements. Although not necessary for conducting DNA, in this original dataset, each individual MP's speech or EoV is stored in a separate document. Thus, one document contains only statements by the same MP, and several mentions of the same concept do not add any empirical value. I have coded all claims that express an opinion or preference with regards to (1) the causes, management or solution of the euro crisis, (2) the political actors involved, and (3) the wider institutional framework or political system(s) within which the MPs operate (examples

of highly contested concepts can be found in Figure 7). I identified 348 concepts and assigned each one to one of three categories:

- 'Policy' (N = 146) refers to the content of decision (past, present or future) and measures to solve problems. This category includes concepts related to the aid measures for Greece, other crisis measures adopted by the EU and Eurozone, proposals for financial regulation, austerity and fiscal consolidation. The most frequently mentioned 'policy' concepts were 'debt relief for Greece' (224 mentions), the 'conditionality of aid' and 'social fairness of aid' (each 189 mentions).
- 'Polity' (N = 93) is liberally used for references to structural, formal and institutional features of the political order and community. To give some examples, this category entails concepts about the political and economic order of the EU and the Economic and Monetary Union, Germany as a political system and EU member state, and institutional causes of the crisis. However, the most frequent claims concern 'solidarity with Greece' (116 mentions) and 'European solidarity' (103 mentions).
- 'Politics' (N = 109) describes the procedural aspects of decision-making. In this category, we find statements about the EU-level negotiations and crisis management of different actors, as well many party-political remarks and (rhetorical) arguments about the existence or lack of alternatives. Most commonly, MPs discussed the 'political will of Greek political actors' (215 mentions) and 'crisis management by the Troika' (129 mentions).

As discussed in the previous section, parliamentary party group leaders act as the gatekeepers to the plenary floor in the Bundestag. The more salient the debate, the more they try to ensure that speakers represent the party line. MPs who do not get an opportunity to speak but want to express their viewpoint or justify their voting decision can use EoVs as a channel of communication, and Table 1 illustrates that a considerable number of them have indeed done so.

4.2. Method

DNA was developed by Leifeld (2016, 2017) to combine qualitative text analysis with quantitative social network analysis, that is, a content-oriented method with an actor-centred approach, in order to examine the interactions and coalition-building activities of political actors through a discursive lens. So far the method has been used predominantly to understand and explain policy change by investigating coalitions between different kinds of political actor (such as political parties, non-government organisations, business representatives and other stakeholders) in public debates on pension policy (Leifeld, 2013, 2016), climate change (e.g., Fisher, Waggle, & Leifeld, 2013; Kukkonen et al., 2018) or the sugar tax (Buckton, Fergie, Leifeld, & Hilton, 2019). Most commonly, these studies used newspaper articles or other media content to gather stakeholders' statements. A couple of studies (Fisher, Leifeld, & Iwaki, 2013; Fisher, Waggle, & Leifeld, 2013) used DNA in the legislative context but focussed on the wider debate between parliamentary and non-parliamentary actors. To the best of my knowledge, this is the first systematic attempt to use DNA to study unity and coherence of legislative parties and actors.

I exported the raw data for data preparation, cleaning and analysis in Python. In the next step, I generated the actor congruence and conflict networks following the DNA manual (Leifeld, 2019). Congruence means that actors co-support or co-reject a concept, and in conflict networks, edges are counted when actors mention the same concept but their agreement, which is a dummy variable, differs. As I want to know whether two actors agree or disagree with each other overall, I used the subtract method (Leifeld, 2019, p. 7) to generate a new matrix in which "a tie weight between two actors is expressed as the number of concepts on which these actors have identical opinions minus the number of concepts on which these actors have diverging opinions" (Buckton et al., 2019, p. 3). From this matrix we can then generate subtract networks to visualise 'net' congruence (agreement in excess of disagreement) and 'net' conflict (disagreement in excess of agreement) in one graph. For the analysis of legislative debates, this is a useful tool for

Table 1. Overview of the documents in the dataset.

Date	Debate	Speeches	EoVs	
			Individual	Joint/MPs
07.05.2010	First aid programme for Greece	14	35	4/34
27.02.2012	Second aid programme for Greece	13	32	6/49
27.02.2015	Extension of second aid programme for Greece	12	51	9/86
17.07.2015	Government mandate for negotiations with Greece on third aid programme	18	1	6/49
19.08.2015	Third aid programme for Greece	17	27	3/16
	Total	74	146	28/234

assessing the degree and patterns of contestation. The potential bias of highly active actors is addressed by applying average normalisation to all 'net'-works and additional network analysis presented below. In order to improve the interpretation and visualisation of (less noisy) actor coalitions, a threshold value of 2 has been applied to network graphs and additional network analysis (except for modularity). Node sizes and edge widths reflect the degrees (i.e., number of connected edges) and edge weights, respectively. I have archived the dataset and code for public access (Bhattacharya, 2020).

I drew on a variety of social network statistics on the congruence relation to aid my interpretation of cohesion and contestation patterns over time and across groups. In order to detect communities of discursive similarity, I applied the Louvain method (Blondel, Guillaume, Lambiotte, & Lefebvre, 2008), which measures modularity, meaning the degree to which a network contains separate clusters. The analysis yields the number of partitions (i.e., communities) that gives the highest modularity score (i.e., closest to 1). To tap into cohesion, I applied the E-I index (Krackhardt & Stern, 1988), which measures the ratio of links with external actors to within-group links, giving a score between −1 and +1. As cohesion is associated with a dominance of internal ties over external ties, I swapped the plus and minus signs so that positive values indicate a higher density of internal connections. Another measure that captures cohesion is the Global Clustering Coefficient, which is the number of closed triplets of nodes over the total number of triplets. Thus, a high coefficient indicates coherence between legislators.

5. Inter- and Intra-Party Contention in Bundestag Debates on the Greek Crisis

The speaking time during plenary debates is allocated in accordance with the size of the parliamentary party group and of the government majority, and this is reflected in the number of statements made by each party in speeches. Christian Democratic MPs and the Greens were particularly active in using EoVs as a communication tool, while the Social Democrats communicated less after joining the government (see Appendices 1 and 2 of the Supplementary File). While more than half of state-

ments are 'policy' claims, written explanations tend to be more 'policy'-centred and contain fewer statements on 'politics' than speeches. It is not surprising that (party) political contests are more central to plenary debates than EoVs. Table 2 reveals that the Christian Democrats and the Left are most concerned about 'policy' matters. The Greens focus least on 'policy' issues but most on 'politics.' The Free Democratic Party is the most active party with regards to 'polity' statements, which the Christian Democrats are least concerned about.

5.1. Channels of Contestation

Because floor time is the scarcest resource in the Bundestag and parliamentary party group leaders act as gatekeepers to the plenary floor, the number of speeches is low and it is questionable to what extent they provide an accurate depiction of the range of viewpoints and preferences present within legislative parties. As we would expect and as illustrated in Figure 1, plenary speeches on the Greek crisis reflect the government–opposition divide. Overall, speakers from the government parties co-support and co-reject many concepts, and when the Social Democrats became part of the government (debate 3–5), they became more congruent with the Christian Democrats and assumed a middle position between the Christian Democrats and the Christian Social Union, on one side, and the Left and Greens, on the other side. We rarely see conflict between government actors, and when we do, it usually involves those 'rebels' (marked with R) that were allocated extra floor time by the President of the Bundestag. When executive actors, such as the Chancellor (C), Finance Minister (Fi), Foreign Minister (Fo) or Minister for Economic Affairs (Ec) appeared on the floor, they did not attract more dissent than other majority speakers. The leader of the Bavarian Christian Social Union (blue L) has often been one of the more central actors in the government coalition, while the leader of the Christian Democratic group (grey L) addressed some of the concerns of more critical backbenchers within the party in the last two debates and therefore takes a more peripheral position. The analysis of modularity (Figure 3) confirms that contestation on the plenary floor has constantly clustered into two coalitions over the five-year period.

Table 2. Statement frequency by party and concept category.

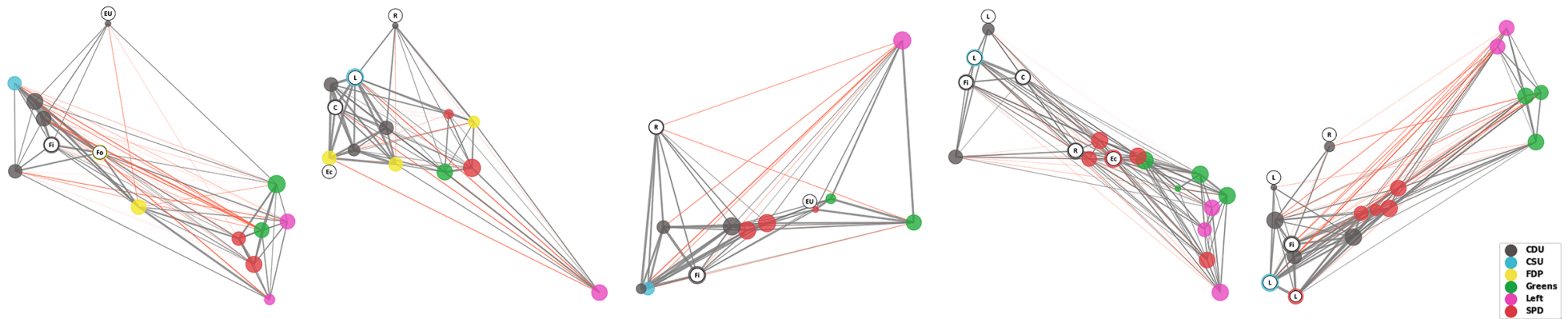| Party	Policy		Polity		Politics		Total
	N	%	N	%	N	%	
Christian Democrats	1,722	58.0	375	12.6	871	29.3	2,968
Christian Social Union	255	50.9	84	16.8	162	32.3	501
Social Democrats	978	48.9	408	20.4	612	30.6	1,998
Free Democratic Party	175	50.3	84	24.1	89	25.6	348
Left	629	54.9	208	18.2	309	27.0	1,146
Greens	975	46.7	436	20.9	676	32.4	2,087
Total	4,734	52.3	1,595	17.6	2,719	30.1	9,048

Figure 1. Actor subtract networks for speeches in chronological order (left to right). Notes: Congruence ties are grey and conflict ties are red. Some key actors have been marked.
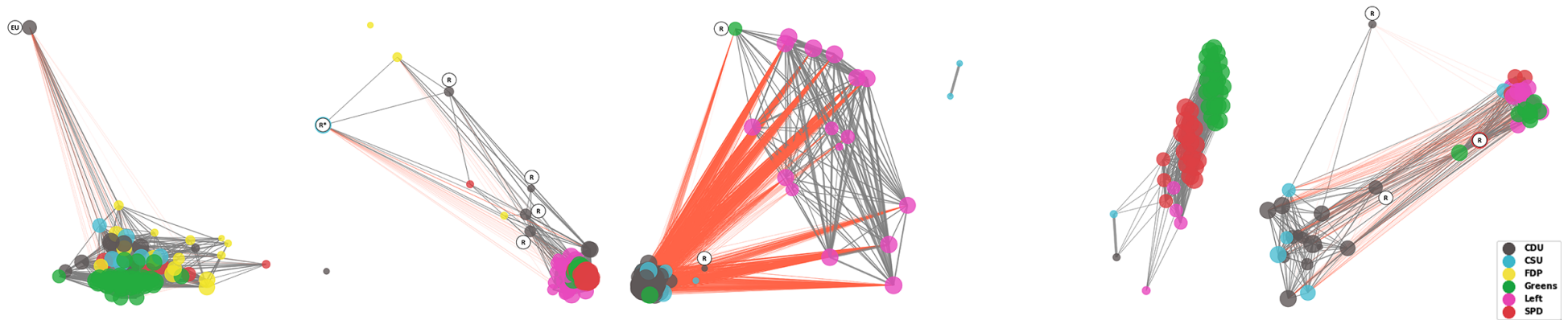

Figure 2. Actor subtract networks for EoVs in chronological order (left to right). Notes: Congruence ties are grey and conflict ties are red. Some key actors have been marked.

If we look at contestation patterns in EoVs in Figure 2, the most striking observations are that (1) more actors are involved, that (2) although there are distinct coalitions, they cannot be easily explained by the government–opposition divide. The findings from Figure 3 also highlight that EoVs are clustered into three groups, which became more internally cohesive from the third debate onwards. The networks indicate relatively high levels of cohesion for the Greens and the Left, both of which were in opposition during the entire period. Both Figure 1 and 2 suggest that the Left Party has conflictual relations with all parties. Contrary to plenary speeches, EoVs from the Social Democrats are more congruent with those from the opposition than the government parties also after joining the government coalition in 2013. Those MPs who diverge most from their party colleagues are often 'rebels' (R) who voted against the party line, future rebels (R*) or members of the EU Affairs Committee (EU).

5.2. Party-Level Dynamics and the Government–Opposition Divide

In this section, I explore the cohesiveness of government coalition and opposition parties across different communication channels further by presenting two relevant network statistics that tell us more about the unity of groups identified in the network. First, I use the E-I index, which captures how many ties a parliamentary party group or the government/opposition parties have with external MPs in relation to internal connections. Second, another indicator of internal unity is the Global Clustering Coefficient, which measures the density of ties within a group, in other words, the extent to which members of a group mention and agree on the same concepts.

Figure 4 illustrates that government parties appeared much more united on the plenary floor. In fact, the op-

position often displayed more ties with the government majority than internal ties. But we see a very different picture for EoVs: Statements by opposition MPs tend to display higher unity than those from the government majority. The only exception is the third debate, in which almost a quarter of MPs from the Christian Democrats and the Christian Social Union, but none from the Social Democrats, issued an EoV. These findings highlight that for the government coalition it is more important to display a united front and send a coherent message in plenary debates. Since government parties are not necessarily more cohesive, their leaders need to exercise tight control over speechmaking.

At the party level (see Figure 5), we find that parties generally have a lot of external links, which indicates that there is a shared understanding on some issues. Furthermore, there appears to be a correlation between the number of actors and the E-I index: Agreement within a party becomes more visible if their MPs communicate more. However, it would also be plausible to assume that internal dissent rises as well, and the insights from clustering analysis suggest indeed that having more internal than external connections does not automatically constitute party unity. If we compare the Global Clustering Coefficient across parties, we find that the Christian Democrats display lower discursive coherence than the Social Democrats and the Greens, even though the E-I indices did not point to such a pattern. In the next section, I take a closer look at intra-party contestation among Christian Democrats and Christian Social Union MPs to gain a better understanding of the multi-faceted phenomenon of party unity.

5.3. Christian Democrats in Disunity?

The Christian Democrats are not only the largest parliamentary party group but in theory, also the party that is
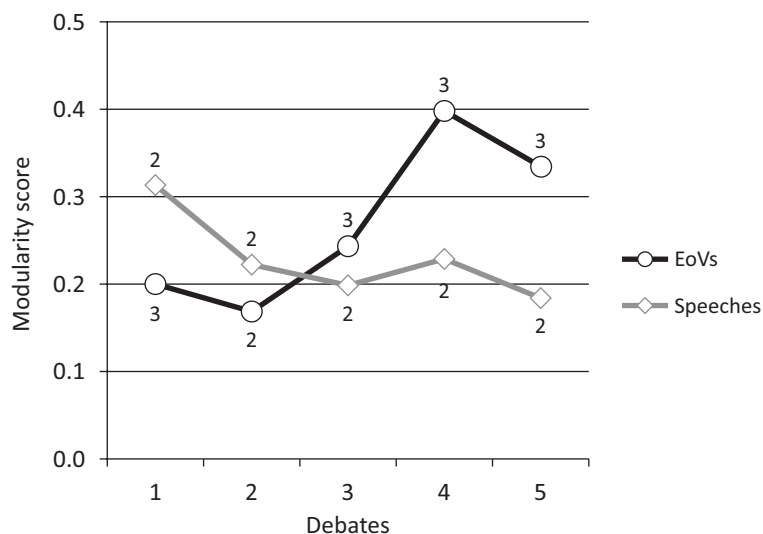

Figure 3. Louvain modularity scores for actor congruence networks for speeches and EoVs. Notes: The labels indicate the number of partitions.
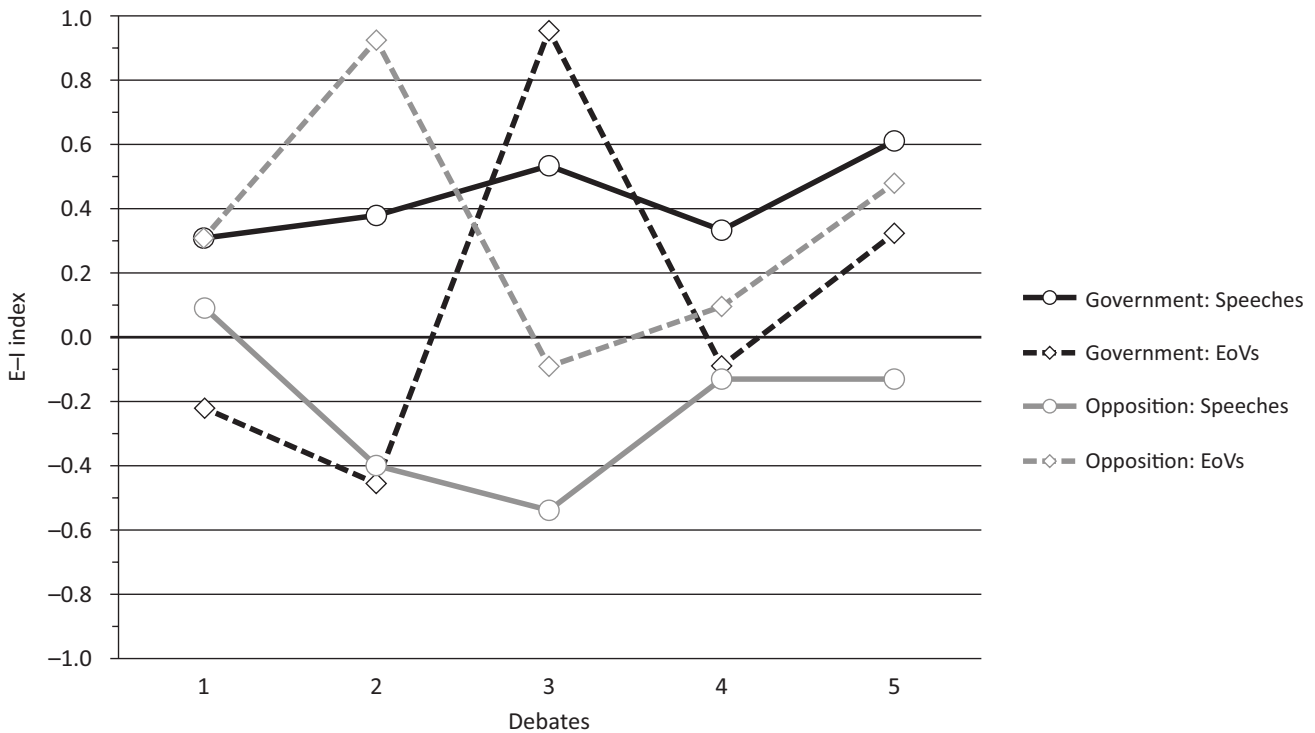
Figure 4. E-I index for speeches and EoVs by the government coalition and opposition parties. Notes: Plus and minus signs have been swapped so that higher values indicate more internal than external ties.

most vulnerable to intra-party dissent. Voting unity has gradually declined over the period of observation. In the fourth and fifth debates, almost one-third of MPs voted against the party line. This is very unusual for a government party and received a lot of media attention at the time. Interestingly, Figure 6 shows that intra-party dissent was highest in the second debate, when the number of dissenters was still relatively small, and the last debate, but as discussed above, this hardly became visible on the plenary floor, because only one dissenter was allowed to speak (and not by his own party). Elsewhere we show that not only are MPs who cast a deviant vote much more likely to defect in the subsequent vote, but those MPs who issued an EoV are also more likely to defect, though less likely to deliver a statement, in the next debate (Bhattacharya & Papageorgiou, 2019, pp. 438–440). In other words, MPs who have once explained their deviant voting behaviour or issued a critical statement despite voting with the party do not keep issuing dissenting statements. This would explain why (1) despite declining voting unity, conflict does not steadily increase in the party's parliamentary communication, and why (2) party rebels (R) belonged to the most central actors especially in the earlier debates.

A detailed content analysis of the debates is beyond the scope of this study, but I have presented an overview of the concepts that were most disputed among the Christian Democrats. I have ranked all the concepts that have been mentioned at least once in both a positive and negative way using a score that measures contestedness:

$$S_c = \sqrt[3]{\left(1 - \frac{|a_c - d_c|}{a_c + d_c}\right) \times \frac{a_c + d_c}{D_{max}(a_i + d_i)} \times \frac{min(a_c,\, d_c)}{min(D_{max}(a_i),\, D_{max}(d_i))}}$$

The contestedness score (S_c) is computed by multiplying the normalised scores of the following three factors: (1) closeness, meaning the balance between positive and negative mentions, (2) salience, i.e., how often the concept has been mentioned within the debate in relative terms, and (3) minimum salience ratio, which takes the smaller frequency (i.e., either agreement or disagreement) of the concept and compares it with the maximum frequency in the debate. The last factor is included to give more importance to frequently-mentioned concepts. Cube root transformation has been applied to reduce left skewness. a_c and d_c denote the frequency of agreement and disagreement with the concept respectively, while D_{max} is the maximum frequency for agreement (a_i) or disagreement (d_i) across the dataset. The range of each factor is between 0 and 1, and therefore the overall score is also between 0 and 1.

The top five concepts for each debate are presented in Figure 7. The first observation is that dissent within the Christian Democrats and the Christian Social Union occurred predominantly with regards to 'policy' and 'politics' claims. Critical backbenchers questioned whether the aid programmes comply with EU law and would accomplish their objectives, and in later debates whether they have proved to be successful in creating economic
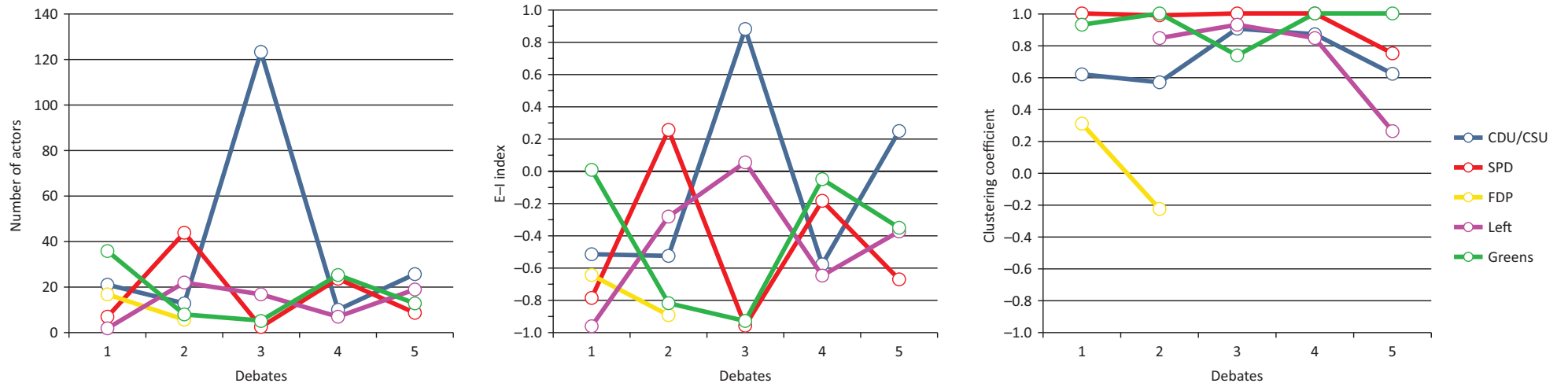
Figure 5. Number of actors (left), E–I index (centre) and Global Clustering Coefficient (right) for each party.
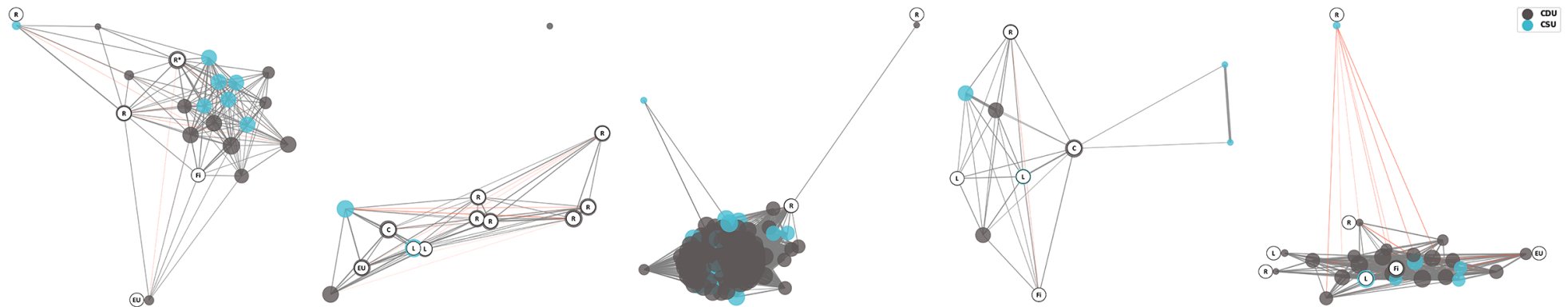

Figure 6. Actor subtract networks for the Christian Democrats/Christian Social Union in chronological order (left to right). Notes: Some key actors have been marked.

Figure 7. Most contested concepts in the Christian Democrats/Christian Social Union by debate. Notes: The bar color indicates whether the concept belongs to the 'policy' (green), 'polity' (blue) or 'politics' (orange) category.

growth in Greece. With regards to politics, most disagreement revolved around the question of whether the political decision-makers in Greece demonstrated enough political will or not. On the 'polity' dimension, there was no open dissent regarding the EU's political order. However, Chancellor Angela Merkel's mantra 'there is no alternative' (to the bailout programmes) has consistently been challenged, and backbenchers began to talk about Greece potentially leaving the Eurozone, voluntarily or not, before the Finance Minister publicly discussed the 'Grexit' option. For many observers, the Euro Summit on 12–13 July 2015 marked a turning point in Germany's pro-European commitment and consensus in mainstream politics. Jürgen Habermas (Oltermann, 2015) said:

When finance minister Schaeuble threatened Greek exit from the euro…the German government…made

for the first time a manifest claim for German hegemony in Europe…and have gambled away in one night all the political capital that a better Germany had accumulated in half a century.

This analysis illustrates that this was not merely a single-handed, tactical move by Schäuble, but can also be interpreted as an expression of a wider sentiment in his party against a 'transfer union' and more political integration.

6. Conclusion

The main objective of this study was to demonstrate why party control of speechmaking is key to understanding the unity of parliamentary party groups and of government vs. opposition parties as observed on the plenary floor. In order to advance the scholarship on party

unity as a dynamic and multidimensional phenomenon, we need to think of underexplored data sources and innovative methodological approaches to add a discursive angle to the literature. This article introduces DNA as a novel approach to discursive party unity. DNA helps us to bridge the "gap between content-oriented and actor-centred approaches to political discourse" (Leifeld & Haunss, 2010, p. 4) by tapping into the interconnectedness of individual speech acts and allowing us to explain and visualise changes in public discourses through shifts in actor constellations. So far DNA has been used predominantly for studying coalition building between political organisations and stakeholders through media content analysis, but here I demonstrate that it is well suited also for the analysis of coherence *within* political organisations and groups. This study illustrates how DNA, complemented by additional social network measures, can be used in the parliamentary context to examine inter- and intra-party contestation and changes in discursive coherence within groups over time.

In highly salient debates, especially government parties exercise tight control over floor time to convey a unified message. Government representatives, parliamentary party group leaders and experts on budgetary and financial affairs have dominated plenary debates on the Greek crisis in the German Bundestag. This analysis highlights how critical backbenchers and EU experts have challenged discursive party unity through written statements, known as EoVs. While EoVs seem to be a particularity of the Bundestag, the Portuguese parliament (Leston-Bandeira, 2009) and the European Parliament, with some creativity we should be able to find equivalent data sources in other legislatures. Such data sources could be any type of individual communication found from MPs' committee work, press interviews, press releases, personal websites or social media. This would certainly be a worthwhile endeavour, as we need to advance our understanding of the effects of party control and parliamentary rules and procedures on political discourse.

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Conflict of Interests

The author declares no conflict of interests.

Supplementary Material

Supplementary material for this article is available online in the format provided by the authors (unedited).

References

American Political Science Association. (1950). Toward a more responsible two-party system: A report of the committee on political parties. *American Political Science Review*, *44*(3).

Auel, K., & Raunio, T. (2014). Debating the state of the Union? Comparing parliamentary debates on EU issues in Finland, France, Germany and the United Kingdom. *Journal of Legislative Studies*, *20*(1), 13–28.

Bächtiger, A. (2014). Debate and deliberation in legislatures. In S. Martin, T. Saalfeld, & K. W. Strøm (Eds.), *The Oxford handbook of legislative studies* (pp. 145–166). Oxford: Oxford University Press.

Bailer, S. (2018). To use the whip or not: Whether and when party group leaders use disciplinary measures to achieve voting unity. *International Political Science Review*, *39*(2), 163–177.

Bakker, R., Jolly, S., & Polk, J. (2012). Complexity in the European party space: Exploring dimensionality with experts. *European Union Politics*, *13*(2), 219–245.

Becher, M., & Sieberer, U. (2008). Discipline, electoral rules and defection in the Bundestag, 1983–1994. *German Politics*, *17*(3), 293–304.

Bergmann, H., Bailer, S., Ohmura, T., Saalfeld, T., & Sieberer, U. (2016). Namentliche Abstimmungen Im Bundestag 1949 bis 2013: Befunde aus einem neuen Datensatz [Roll call votes in the Bundestag, 1949–2013: Results from a new dataset]. *Zeitschrift für Parlamentsfragen*, *47*(1), 26–50.

Bhattacharya, C. (2020). Discourse network analysis and party unity (dna-party). *Github*. Retrieved from https://github.com/CarolineBha/dna-party

Bhattacharya, C., & Papageorgiou, A. (2019). Are backbenchers fighting back? Intra-party contestation in German parliament debates on the Greek crisis. *Parliamentary Affairs*, *72*(2), 425–444.

Blondel, V. D., Guillaume, J.-L., Lambiotte, R., & Lefebvre, E. (2008). Fast unfolding of communities in large networks, *Journal of Statistical Mechanics: Theory and Experiment*. https://doi.org/10.1088/1742-5468/2008/10/P10008

Borz, G. (2009). *Determinants of party unity in Europe: A comparative study of parliamentary parties in twenty-three countries* (Doctoral dissertation). Central European University, Budapest, Hungary.

Bratton, K. A., & Rouse, S. M. (2011). Networks in the legislative arena: How group dynamics affect cosponsorship. *Legislative Studies Quarterly*, *36*(3), 423–460.

Buckton, C. H., Fergie, G., Leifeld, P., & Hilton, S. (2019). A discourse network analysis of UK newspaper coverage of the 'sugar tax' debate before and after the announcement of the Soft Drinks Industry Levy. *BioMed*

Central Public Health, *19*(1), 490.

Carey, J. M. (2007). Competing principles, political institutions, and party unity in legislative voting. *American Journal of Political Science*, *51*(1), 92–107.

Carey, J. M. (2009). *Legislative voting and accountability*. New York, NY: Cambridge University Press.

Carroll, R., & Poole, K. (2014). Roll-call analysis and the study of legislatures. In S. Martin, T. Saalfeld, & K. W. Strøm (Eds.), *The Oxford handbook of legislative studies* (pp. 103–125). Oxford: Oxford University Press.

Close, C., & Gherghina, S. (2019). Introduction: Towards a better understanding of parliamentary unity. *Parliamentary Affairs*, *72*(2), 379–386.

de Ruiter, R., & Vliegenthart, R. (2018). Understanding media attention paid to negotiations on EU legislative acts: A cross-national study of the United Kingdom and the Netherlands. *Comparative European Politics*, *16*(4), 649–668.

Degner, H., & Leuffen, D. (2016). Keynes, Friedman, or Monnet? Explaining parliamentary voting behaviour on fiscal aid for euro area member states. *West European Politics*, *39*(6), 1139–1159.

Edwards, E. E. (2009). *Products of their past? Cleavages and intra-party dissent over European integration* (Political Science Series, No. 118). Vienna: Institute for Advanced Studies.

Euchner, E.-M., & Preidel, C. (2017). Politicisation without party discipline: A new perspective on Christian Democracy in modern times. *Parliamentary Affairs*, *70*(3), 465–488.

Fisher, D. R., Leifeld, P., & Iwaki, Y. (2013). Mapping the ideological networks of American climate politics. *Climatic Change*, *116*(3/4), 523–545.

Fisher, D. R., Waggle, J., & Leifeld, P. (2013). Where does political polarization come from? Locating polarization within the U.S. climate change debate. *American Behavioral Scientist*, *57*(1), 70–92.

Forschungsgruppe Wahlen. (2010). Politbarometer March II 2010. *Forschungsgruppe Wahlen*. Retrieved from https://www.forschungsgruppe.de/Umfragen/Politbarometer/Archiv/Politbarometer_2010/Maerz_II

Forschungsgruppe Wahlen. (2011a). Politbarometer September II 2011. *Forschungsgruppe Wahlen*. Retrieved from https://www.forschungsgruppe.de/Umfragen/Politbarometer/Archiv/Politbarometer_2011/September_II

Forschungsgruppe Wahlen. (2011b). Politbarometer October I 2011. *Forschungsgruppe Wahlen*. Retrieved from https://www.forschungsgruppe.de/Umfragen/Politbarometer/Archiv/Politbarometer_2011/Oktober_I

Forschungsgruppe Wahlen. (2012a). Politbarometer August 2012. *Forschungsgruppe Wahlen*. Retrieved from https://www.forschungsgruppe.de/Umfragen/Politbarometer/Archiv/Politbarometer_2012/August_2012

Forschungsgruppe Wahlen. (2012b). Politbarometer November I 2012. *Forschungsgruppe Wahlen*. Retrieved from https://www.forschungsgruppe.de/Umfragen/Politbarometer/Archiv/Politbarometer_2012/November_I_2012

Fowler, J. H. (2006). Connecting the Congress: A study of cosponsorship networks. *Political Analysis*, *14*(4), 456–487.

German Bundestag. (2014, May). *Rules of procedure of the German Bundestag*. Berlin: German Bundestag. Retrieved from https://www.btg-bestellservice.de/pdf/80060000.pdf

Giannetti, D., & Pedrazzani, A. (2016). Rules and speeches: How parliamentary rules affect legislators' speech-making behavior. *Legislative Studies Quarterly*, *41*(3), 771–800.

Hazan, R. Y. (2014). Candidate selection: Implications and challenges for legislative behaviour. In S. Martin, T. Saalfeld, & K. W. Strøm (Eds.), *The Oxford handbook of legislative studies* (pp. 213–230). Oxford: Oxford University Press.

Hix, S. (1994). The study of the European community: The challenge to comparative politics. *West European Politics*, *17*(1), 1–30.

Hobolt, S. B. (2016). The Brexit vote: A divided nation, a divided continent. *Journal of European Public Policy*, *23*(9), 1259–1277.

Hooghe, L., & Marks, G. (2017). Cleavage theory meets Europe's crises: Lipset, Rokkan, and the transnational cleavage. *Journal of European Public Policy*, *25*(1), 109–135.

Hooghe, L., Marks, G., & Wilson, C. J. (2002). Does left/right structure party positions on European integration? *Comparative Political Studies*, *35*(8), 965–989.

Kailitz, S. (2010). *Like day and night? Party unity in legislative voting in parliamentarism and presidentialism*. Paper presented at the APSA 2010 Annual Meeting, Washington, DC.

Krackhardt, D., & Stern, R. N. (1988). Informal networks and organizational crises: An experimental simulation. *Social Psychology Quarterly*, *51*(2), 123–140.

Kukkonen, A., Ylä-Anttila, T., Swarnakar, P., Broadbent, J., Lahsen, M., & Stoddart, M. C. J. (2018). International organizations, advocacy coalition, and domestication of global norms: Debates on climate change in Canada, the US, Brazil, and India. *Environmental Science & Policy*, *81*, 54–62.

Lauderdale, B. E., & Herzog, A. (2016). Measuring political positions from legislative speech. *Political Analysis*, *24*(3), 374–394.

Laver, M., & Benoit, K. (2002). Locating TDs in political spaces: The computational text analysis of Dáil speeches. *Irish Political Studies*, *17*(1), 59–73.

Lees, C. (2008). The limits of party-based Euroscepticism in Germany. In P. Taggart & A. Szczerbiak (Eds.), *Opposing Europe? The comparative party politics of Euroscepticism* (Vol. 1, pp. 16–37). Oxford: Oxford University Press.

Leifeld, P. (2013). Reconceptualizing major policy change in the advocacy coalition framework: A discourse network analysis of German pension politics. *Policy Studies Journal*, *41*(1), 169–198.

Leifeld, P. (2016). *Policy debates as dynamic networks: German pension politics and privatization discourse*. Frankfurt and New York, NY: Campus Verlag and University of Chicago Press.

Leifeld, P. (2017). Discourse network analysis: Policy debates as dynamic networks. In J. N. Victor, A. H. Montgomery, & M. Lubell (Eds.), *The Oxford handbook of political networks* (pp. 301–325). Oxford: Oxford University Press.

Leifeld, P. (2019). Discourse Network Analyzer: Version DNA 2.0 beta 24. *Github*. Retrieved from https://github.com/leifeld/dna

Leifeld, P., & Haunss, S. (2010). *A comparison between political claims analysis and discourse network analysis: The case of software patents in the European Union* (MPI Collective Goods Preprints, No. 2010/21). Bonn: Max Planck Institute for Research on Collective Goods.

Leston-Bandeira, C. (2009). Dissent in a party-based parliament: The Portuguese case. *Party Politics*, *15*(6), 695–713.

Little, C., & Farrell, D. M. (2017). Party organization and party unity. In S. E. Scarrow, P. D. Webb, & T. Poguntke (Eds.), *Organizing political parties: Representation, participation, and power* (pp. 285–306). Oxford: Oxford University Press.

Marks, G., Hooghe, L., Nelson, M., & Edwards, E. (2006). Party competition and European integration in the East and West: Different structure, same causality. *Comparative Political Studies*, *39*(2), 155–175.

Marks, G., & Wilson, C. J. (2000). The past in the present: A cleavage theory of party response to European integration. *British Journal of Political Science*, *30*(3), 433–459.

Ohmura, T. (2014), When your name is on the list, it is time to party: The candidacy divide in a mixed-member proportional system. *Representation*, *50*(1), 69–82.

Oltermann, P. (2015, July 15). Jürgen Habermas's verdict on the EU/Greece debt deal: Full transcript. *The Guardian*. Retrieved from https://www.theguardian.com/commentisfree/2015/jul/16/jurgen-habermas-eu-greece-debt-deal

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. (2015). *The politics of parliamentary debate: Parties, rebels and representation*. Cambridge: Cambridge University Press.

Schmitt, H., & Thomassen, J. (1999). Distinctiveness and cohesion of parties. In H. Schmitt & J. Thomassen (Eds.), *Political representation and legitimacy in the European Union* (pp. 111–128). Oxford: Oxford University Press.

Sieberer, U. (2006). Party unity in parliamentary democracies: A comparative analysis. *Journal of Legislative Studies*, *12*(2), 150–178.

Sieberer, U. (2010). Behavioural consequences of mixed electoral systems: Deviating voting behaviour of district and list MPs in the German Bundestag. *Electoral Studies*, *29*(3), 484–496.

Sieberer, U. (2015). Using MP statements to explain voting behaviour in the German Bundestag: An individual level test of the competing principals theory. *Party Politics*, *21*(2), 284–294.

Van Vonno, C. M. C., Malka, R. I., Depauw, S., Hazan, R. Y., & Andeweg, R. B. (2014). Agreement, loyalty and discipline: A sequential approach to party unity. In K. Deschouwer & S. Depauw (Eds.), *Representing the people: A survey among members of statewide and sub-state parliaments* (pp. 110–136). Oxford: Oxford University Press.

Wimmel, A., & Edwards, E. (2011). The return of 'Social Europe': Ideas and positions of German parties towards the future of European integration. *German Politics*, *20*(2), 293–314.

Zittel, T., & Nyhuis, D. (2019). Two faces of party unity: Roll-call behavior and vote explanations in the German Bundestag. *Parliamentary Affairs*, *72*(2), 406–424.

About the Author

Caroline Bhattacharya is a PhD Candidate at the Department of Political and Economic Studies, University of Helsinki. In her doctoral dissertation, she analyses the significance of party control in the contestation and decontestation of the Eurozone crisis in the German parliament. Her research interests include legislative behaviour, EU politics and democratic theory. Her previous work has been published in *Parliamentary Affairs*.