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Looking Eastward: Network Analysis of Czech Deputies and Their Foreign Policy Groups

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This article analyzes a structure of relations among the members of the Chamber of Deputies, the lower house of the Parliament of the Czech Republic, as reported through their memberships in bilateral and multilateral groups of friendship which establish professional contacts between the Chamber of Deputies and foreign parliaments. We approach the structure as a social network of members of parliament and interpret the memberships as proxy indicators of their interests/preferences in foreign affairs. This research shows that interparliamentary groups construct a self-sustained independent structure for parliamentary diplomacy which may significantly differ from the official positions of the government. We find that the studied network has a centralized core–periphery structure, in which deputies who are less prominent and those interested in authoritarian regimes occupy more central positions. This research connects the findings with the current debates on Central European tendencies to look for allies in large authoritarian regimes (Russia and China), for which we argue the interparliamentary groups might play the role of an important communication channel.

INTRODUCTION

Political networks and the structure they represent have raised much attention about interaction patterns of different political actors in the past two decades. Identification of the existing relations, their strengths, and qualities among individuals and institutions have started to be seen as a fascinating testimony about structural patterns of the environment where inherently dynamic interactions take place. National parliaments and their respective chambers have traditionally stood in the center of this interest, being studied as uniquely defined groups where the idea of interaction through confrontation and cooperation stands as a centerpiece of the democratic parliamentary tradition.

This article focuses on a special subcategory of this structure represented by the interparliamentary cooperation as organized on the ground of national parliaments, in this case the Chamber of Deputies, the lower house of the Parliament of the Czech Republic. We approach this structure through a unique level of political preferences that are relevant in terms of understanding the structural features of potential international ties of the Czech members of parliament (MPs) and their foreign counterparts through the interparliamentary groups of friendship.

The recent research on interparliamentary cooperation in Europe has focused primarily on the existing contacts between national parliaments on one hand and the European Parliament on the other, rather than on interparliamentary cooperation on a bilateral or multilateral basis. Crum and Miklin showed that most interparliamentary engagement actually proceeds through political parties rather than through the formal interparliamentary institutions that have been developed (2011; Crum and Fossum 2013). Wagner (2013) and Rommetvedt (2013)

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further argue that similar interparliamentary cooperation might exist with the North Atlantic Treaty Organization (NATO), the Western European Union parliamentary assemblies (WEU), and even the World Trade Organization (WTO). While these findings are insightful, current research has neglected the inherent relational nature of this cooperation, which might be often less formal, individually driven, and independent of official foreign policy. Recent developments in both theory and methodology of political science show that politics and political behavior are intrinsically relational, and by taking their relational aspect into account, much can be learned (Heaney and McClurg 2009; Lazer 2011; McClurg and Lazer 2014; McClurg and Young 2011).

We see the network, in its simplest form, as a set of nodes connected together by edges creating a unique political structure. In order to better understand it, we apply social network analysis (SNA) as an analytical tool for handling the relational nature of interactions in the political arena (Borgatti, Everett, and Johnson 2013; Prell 2011). In this context, we seek to advance the network view on existing ties of the Czech deputies to foreign partners as reported through their engagement in the interparliamentary groups organized by the Chamber of Deputies. This article maps the structure of ties among politicians who are members of bilateral or multilateral groups that establish professional contacts between the Czech Chamber of Deputies and foreign parliaments and may reflect the positions of individual MPs on issues related to foreign affairs and geopolitics. These groups provide legislators the opportunity to interact with colleagues who might share interests, concerns, information, or attitudes or who might help them advance their position in the parliament, a mechanism well documented by the research on political networks in the U.S. Congress (Victor and Ringe 2009).

The goal of this article is to identify and analyze the structure of relations among the members of the Chamber of Deputies, Parliament of the Czech Republic, with potential implication for the official foreign policy of the Czech Republic. We show that interparliamentary groups construct a self-sustained independent structure for parliamentary diplomacy that might significantly differ from the official position of the government. In order to do so, we construct a social network of MPs based on their affiliations with the interparliamentary groups and interpret the memberships as potential proxy indicators of their interests/preferences in foreign affairs. We ask two general questions: (Q1) *What is the structure of this network and which actors and groups are the most important within it?* (Q2) *Which relational mechanisms might explain this structure and the importance of actors within it?*

The theoretical motivations for this study are further supported by the ongoing debate on interests of foreign powers, and their influence in the country is seen by many experts as a security threat. The Security Information Service (BIS), the main counterintelligence service in the Czech Republic, has publicly confirmed the existence of potentially harmful connections between the Czech political scene and the Chinese and Russian political circles that systematically tried to influence the political as well as economic environment of the Czech Republic (BIS 2017). With this effort, it should not be a surprise that Russia is the most popular interparliamentary group with 56 official members (more than one-fourth of the Chamber of Deputies) while China is the second most popular (51 members), leaving the closest allies from the European Union and NATO far behind.

Our analysis shows that the network of deputies has a centralized core–periphery structure in which less prominent MPs and those interested in authoritarian regimes occupy more central positions. We also find that authoritarian-leaning left-wing deputies exhibit homophily and increased activity in the network. We connect our findings to current debates on Central European tendencies to look for allies in large authoritarian regimes (Russia and China), for which we argue the interparliamentary groups might provide an important communication channel. With the recent events in the United States (potential Russian involvement in the 2016 presidential election), Great Britain (Brexit), and other European countries, the analysis of these ties goes far behind the case of the Czech Republic and sheds a light on hidden patterns of international cooperation that might be harmful to the general stability of Western democracies (de Jong 2016; Persily 2017).

FOREIGN POLICY AND THE CZECH MPs

The role of deputies in the process of forming foreign policy is defined by the institutional position of political parties in the Czech political system, which is a parliamentary democracy. As it has long been criticized, parties and their representatives in the Czech Republic neglect foreign policy issues and often do not have the aspiration or capacity to develop a well-supported agenda in foreign affairs, leaving the MPs in a sort of vacuum (AMO 2015; Dančák and Mareš 2000). Although the political parties are occasionally part of the debate on foreign policy priorities, their interests are usually conditioned by the emergence of a specific situation which is, in principle, episodic (in recent years, this has mainly been the refugee crisis and the conflicts in Ukraine and Syria). Traditionally, the most active political party is the one that holds the office of the Ministry of Foreign Affairs and, as such, is politically responsible for the respective agenda (Kořan 2015, 2016; Dančák and Mareš 2000). It is commonly viewed by the public and academia that the rest of the political spectrum, although not indifferent, narrows its official activities through the voices of a few individuals with professional

interests in foreign affairs (Hrabálek and Kořan 2007; AMO 2015).

This general position stands in contrast to the responsibilities and commitments of the individual MPs, who are institutionally designated to be part of the decision-making processes and may affect the foreign policy of the Czech Republic, especially in times of crisis (Waisová 2011; Ústava České republiky 1992; Hrabálek and Kořan 2007). Deputies, although relatively weak in terms of direct responsibilities for foreign affairs (the agenda is reserved for the government and the president), might have an important role in implementing major decisions regarding a specific foreign policy agenda as well as organizing their own parliamentary diplomacy (Fiott 2011).

This argument is further intensified by the warnings that the political arena is infiltrated by foreign interests and influenced by their actions (BIS 2017). It should not be a surprise to find the interparliamentary groups as a potential center of these interests, as politicians openly reveal their preferences for the foreign countries. As a result, some of the foreign partners might see the MPs as self-selected candidates who, if not keen to actively cooperate, are at least open to dialogue. Looking for partners might, in some cases, become a truly strategic endeavor with potentially harmful implications for the country's interests. The best example of this practice can be demonstrated in the activities of Azerbaijan, known as "caviar diplomacy," which has developed in the past decade all around the world and successfully infiltrated many of the western political systems (Knaus 2015; European Stability Initiative 2012). A recent report of the Organized Crime and Corruption Reporting Project revealed how sophisticated the system was, pouring millions of euros into building good relations with partners in most European countries. Although in the case of the Czech Republic no politicians were accused directly, the practices of caviar diplomacy have had a long history in the region. According to the Czech Center for Investigative Journalism, Azerbaijan spent at least five million euro in the Czech Republic in the past few years as a part of what is called an "Azerbaijani Laundromat" (iDnes.cz 2017). As one former deputy told us, "… it was always very pleasant to go for a dinner party at the Azerbaijani Embassy where a first-class caviar and an expensive champagne was usually served." Investigative journalists even talk about luxury presents including watches, perfumes, or jewelry (Transparency International CR 2017). In the end, it did not matter whether the guests came because of the free food, business, or political interests. They were exposed to basic mechanics of power relations—influence and domination—mastered by the Azerbaijani regime on different fronts in the past two decades (Knaus 2015).

We assume that interparliamentary groups, in general, can be seen as important channels for funneling otherwise hidden interests and motivations of individual MPs. We are not saying that these motivations are necessarily

noble or well-informed; rather, we assume they exist and might be relevant.[1] What we claim is that the observed preferences provide solid evidence on voluntary, nonpaid membership in interparliamentary groups, an organizational structure of the Chamber of Deputies which creates channels for cooperation between the Czech Republic and foreign countries. It is a basis for cultural, economic, and political ties between the Czech parliament and its foreign partners, and it develops diplomatic relations that are in principle not dependent on the official position of the government or the Ministry of Foreign Affairs. In our case, the groups serve as natural contact points for the embassies and foreign delegations as well as the counterparts from the parliaments abroad. As the group membership is voluntary and not financially compensated and the barriers for joining the group are virtually non-existent,[2] motivations to become a member vastly vary (and are often hidden). As a number of MPs confirmed to us during the interviews, the decision to join a group may be conditioned by personal ties, ideology, business interests, geopolitical preferences, or simple tourist curiosity. These groups can be then understood as actual political networks that are analyzed in order to better describe the interactional dynamic of the Czech MPs on the international level as a part of parliamentary diplomacy often neglected by academia as well as practitioners.

A similar approach can be found in the study of the U.S. House of Representatives, where informal ties and diverse motivations affect the establishment and maintenance of more than 400 political caucuses. Victor and Ringe (2009) consider the caucus system to be an informal institution that allows legislators to build and maintain relationships within the House. In their model, not all relationships are created equal, however; being associated with some colleagues is seen as more valuable to individual members than others. Therefore, legislators engage in the caucus system in an effort to maximize the social utility of their relationships. Caucuses thus provide an opportunity structure to create and maintain contacts that cut across parties. Similarly, Desmarais and colleagues (2015) studied the co-participation at press events by U.S. Senators, which they argue expresses collaboration among participating senators as it reflects joint efforts, shared concerns, and shared preferences. Moreover, they found the co-participation at press events to be associated with similarities in voting behavior. Another such example is Fowler's (2006a, 2006b) studies on co-sponsorship networks among U.S. senators and representatives. According to Fowler, co-sponsorship of bills is also indicative of shared attitudes, preferences, and collaboration among co-sponsoring politicians, because it reflects joint effort and time spent together. He also finds an effect of co-sponsorship on legislative influence and voting, even after controlling for partisanship and ideological similarities.

All these studies are concerned with American politicians and some sort of co-participation or co-membership in various events. We aim to add to this stream of research in two ways. First, we study a different political environment than the American. Second, we explicitly aim to study the network as so-called bipartite or two-mode network, which is unique in its nature and dynamics (Agneessens and Everett 2013; Borgatti and Everett 1997). Two-mode networks consist of two types of nodes: usually actors (in our case deputies) in the first mode and events or affiliations in the second (in our case groups). This allows studying not only the politicians but also often neglected groups.

CHAMBER OF DEPUTIES AND POLITICAL NETWORKS

Based on the presented theoretical assumptions, we approach the Chamber of Deputies, the lower house of the Czech Parliament, in order to understand some of the existing ties among the MPs. We focus on potential structures (networks) based on deputies' foreign affairs interests as seen in their affiliations with different interparliamentary groups between the Chamber of Deputies, Parliament of the Czech Republic, and the parliaments of foreign countries that are established based on Inter-Parliamentary Union (IPU) principles. IPU was founded in 1889 with the goal of creating a focal point for worldwide parliamentary dialogue and works for peace and cooperation among peoples and for the firm establishment of representative democracy. The IPU supports the efforts of and works in close cooperation with the United Nations, whose objectives it shares. The IPU also cooperates with regional interparliamentary organizations, as well as with international intergovernmental and nongovernmental organizations that are motivated by the same ideals (IPU 2016). The Czech Republic as a member state has its delegation, which consists of representatives of the lower as well as the upper house of the Parliament.[3] Besides that, the Chamber of Deputies supports establishing interparliamentary groups that focus on specific bilateral or multilateral cooperation between the Czech Republic and respective foreign countries or groups of countries (our network). As such, interparliamentary groups are part of the official international relations of the Czech Republic (PS PČR 2016).[4]

It is important to emphasize that the results of the motivations to join or establish an interparliamentary group—reported as an existing membership—is analyzed as a proxy for the general affections in foreign affairs which, although limited, may reveal otherwise almost entirely hidden and, what is more important, objective inclinations. In other words, although we cannot be sure what the real motivations might be, we can analyze the results of these motivations through the reported membership(s). The bipartite or two-mode network is defined by two types of nodes covering 200 MPs in the mode of actors and 63 interparliamentary groups in the mode of affiliations (cf. Agneessens and Everett 2013; Borgatti and Everett 1997). The Senate (the upper house of the Parliament) is not covered, as there was not any reported interparliamentary group in the seventh term and the senators were not members of the interparliamentary groups established on the ground of the Chamber of Deputies.

The structure of the studied network reveals how the politicians share certain interests and what structural characteristics they have. As we do not know what the exact nature of these preferences/interests are (they can be positive as well as negative), we can just assume they exist and analyze them as such. The centrality of actors, as a measure of their prominence and importance within the network, is one of the most important indicators in this relational structure that can help us to answer the first research question, focusing specifically on structural aspects of the network and the importance of actors and groups within it (Q1). Central actors have access to information and resources and are seen as informal leaders with greater influence on the network than their more marginal peers (Borgatti 2005; Freeman 1978). In two-mode networks, central actors are those who are highly active in attending events and central events are those that are frequently attended by MPs. Central actors may rise to their positions for a variety of reasons such as possessing some advantageous attribute, thanks to which they are more active in the case of actors or more popular in the case of events, or because centrality triggers the cumulative self-reinforcing effect. Centralized networks are such networks, in which ties are concentrated around a smaller number of central actors. Centralization is a common feature in many social networks, where a few actors are disproportionately more central than the rest. A special case of the centralized network is a core–periphery network with two classes of nodes: core and periphery (Borgatti and Everett 2000). The core consists of central actors densely connected to other actors in the core, while actors located in the periphery are sparsely or not at all connected to each other and they have ties only to the core. Centralized and core–periphery structured networks arise in numerous empirical contexts such as organized crime, animal societies, international trade, or coauthorship studies (Borgatti and Everett 2000).

The identification of central actors and description of the overall structure of the network begs the question of what micro-level mechanisms brought it about (Fowler et al. 2011; Hedström 2005). This refers to the second research question, which focuses on identification of relational mechanisms explaining the structure of the network and the importance of actors within it (Q2). One of the most well-known mechanisms that explains the formation and

patterning of ties across a variety of different types of networks is homophily, a tendency for similar individuals to share ties (McPherson, Smith-Lovin, and Cook 2001). In terms of homophily, we follow Verbrugge's (1977) notion through which the occurrence of social networks is seen as a "meeting and mating" process where several forces (exogenous as well as endogenous) form opportunities for people to meet and interact. In this context, the mechanism of homophily refers to a structure where social ties are more commonly shared by similar individuals than dissimilar ones (Huckfeldt and Sprague 1995; Ikeda and Huckfeldt 2001; McPherson et al. 2001). Their behavior, as well as form of interaction, may vastly differ depending on different political connections among which the most salient might be the party affiliation, the political seniority, or the formal position of the MPs (Victor and Ringe 2009). We assume that party affiliation creates a prestructural condition for shared interests, as the individual MPs share basic ideological and political preferences coming from their partisanship. Seniority, in this context understood as activity in the highest level of politics for more than one term, refers to another form of prestructural feature creating a notion of experience potentially important for future political activities of the individual MPs. The last of these prestructural characteristics refers to the level of busyness as a feature shared by those who hold a formal position either in the government or the structures of the Chamber of Deputies (ministers, leadership of the Chamber of Deputies, [vice]chairmanship of committees, party leadership, etc.).

Another potential explanation for the emergence of central actors in the network may be different activities of actors depending on their individual attributes. This reflects the mechanism of generalized social selection, which means that actors possessing certain qualities seek certain network positions such as central or peripheral (Robins 2009). For those in power, the tendency to participate in more groups may reflect the aim to further strengthen their position. This would mean that deputies of powerful (governing) parties have stronger tendencies to attend interparliamentary groups or that more senior or formally positioned deputies exhibit such behavior. Activity may also act as a compensating mechanism for those who are not in power. If that is the case, we would expect stronger tendencies to create ties among opposition MPs, less senior MPs, and those not formally ranked (Victor and Ringe 2009). This would mean that interparliamentary groups serve as channels to power for those who may otherwise have no opportunity to execute it. This way, we can also see to what extent the informal prominence based on the position within the network corresponds with the prominence based on the structure of formal positions such as ministers and (vice)chairmen, as these two dimensions of prominence may not necessarily correspond.

To develop the empirical relevance of this article, we further address the concerns presented in the introduction and connect them to the ongoing debate about Czech politicians drifting to more tolerant positions toward authoritarian and repressive regimes. We approach the political network as a virtual map of preferences and interests and test whether there is a difference in the popularity of interparliamentary groups based on qualities of democracies as reported by Freedom House. We address the concerns of the Security Information Service about the ongoing infiltration of the Czech political scene by foreign powers and test whether the authoritarian inclination is reflected in the popularity of the interparliamentary groups (Fendrych 2015; BIS 2017).

METHODS FOR STUDYING POLITICAL NETWORKS

Our analytical strategy is first to describe the network as a whole and identify key nodes within in order to get a clear picture of the structure of relations between deputies and their groups. Structure described this way begs the question of what its building blocks are; that is, what micro-level mechanism gave rise to the observed macro-level network structure? This approach is known from analytical sociology (Manzo 2014; Hedström 2005), and it is similar to process tracing in political science (Beach and Pedersen 2013; Mazák 2017). We draw upon available data and previous research in political networks to find candidate explanations for mechanisms that might have brought about the structure of the network.

As has already been stated above, we analyze a two-mode or bipartite network, which markedly differs from the usual one-mode networks. In one-mode networks, there is just one type of node (e.g., only politicians or only groups), while in two-mode networks, there are two distinct sets (modes) of nodes analyzed simultaneously (in our case, deputies and interparliamentary groups), and it is important to note that ties are permitted only between the modes, not within them (i.e., a deputy can be a member of a group and not of another deputy). This difference implies the use of different methods and measures for the analysis of two-mode networks (Borgatti et al. 2013; Prell 2011; Borgatti and Everett 1997).

For the first task, the description of the network, we use descriptive measures suited for two-mode data. Specifically, we use density, average degree, standard deviation of degree, and transitivity. Density is the ratio of ties present in the network to the maximum possible number of ties (which equals the product of the number of deputies and the number of groups). Degree is the number of ties a node has; that is, the number of groups a deputy is a member of or the number of deputies a group is attended by. The larger the value of

particular configuration is extremely low or extremely high in the distribution, we may infer that it is unlikely to arise by chance and thus the configuration is statistically significantly present more (extremely high frequency) or less (extremely low frequency) in the network. For our tests, we simulated a distribution of 10,000 networks. For all these computations, we used the MPNet software (Wang, Robins, and Pattison 2009).

DATA ON NETWORK RELATIONS

Data for the analysis were collected on September 11, 2017, more than a month before the legislative elections held on October 20–21, 2017. As the administrative burden for joining or leaving the groups is virtually nonexistent (cf. note 4), the memberships in them are rather a snapshot in time than a stable constellation. It does not, however, mean that the whole groups change in time but rather that minor alternations are common. We decided to collect the data in the end of the term as the groups appeared to be mostly stabilized and no administrative populating of the groups with ceased memberships took place.[6] We used the *rvest* R package for automated data mining and scraped the lists of the MPs in all the interparliamentary groups from the official website of the Chamber of Deputies (Wickham 2016). In the seventh term, seven political parties were elected and entered the Chamber of Deputies (see summary in Figure 3), whose MPs were active in 63 interparliamentary groups (see Figure 4 with ten most popular groups). Besides the already discussed attributes assigned to MPs (party affiliation, seniority, and busyness), we further code the established groups according to democratic performance of their constituting states as reported by Freedom House in its "Freedom in the World" report (Freedom House 2017). We use the sum of civil liberties index and political rights index as an indicator of quality of democracy in a specific country (the Freedom House Index [FHI] can get a value from 0 [not free] to 100 [free]). In case the interparliamentary group is established with more than one country, mean FHI was calculated. Figure 5 summarizes the quality of democracy in the ten most popular groups.

ANALYSIS OF POLITICAL NETWORKS IN THE CHAMBER OF DEPUTIES

The first step in our analysis is an examination of the overall structure of the network. This also serves the purpose of answering the first research question (Q1). In terms of descriptive overview, there are 200 deputies and 63 groups (visualized in Figure 6). The network descriptive measures are summarized in Table 1. As the figure of density indicates, of all the possible ties between deputies and groups, there are 9% actually present in the network. This may not seem to be much, but given the high
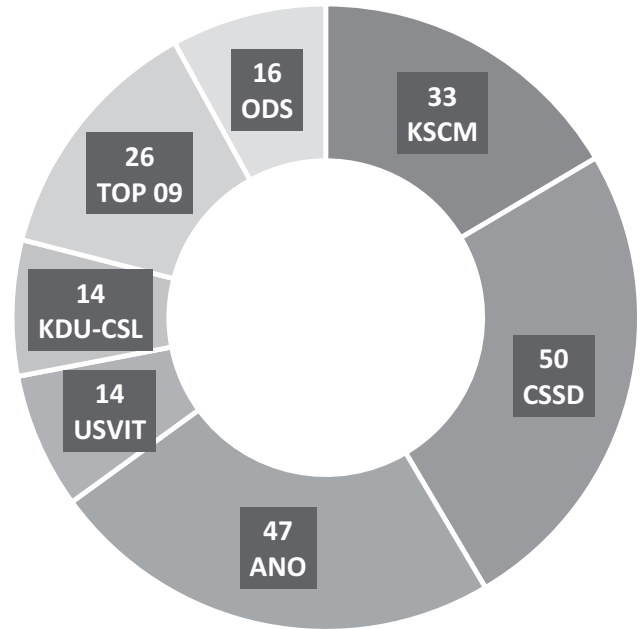
FIGURE 3.   Political parties elected to the Chamber of Deputies in 2013 and number of seats they got.

Note: The Czech Social Democratic Party (CSSD) was the main center-left political party in the Czech Republic. During the seventh term, the party was part of the government together with a centrist and anti-establishment movement ANO and the Christian and Democratic Union–Czechoslovak People's Party (KDU-CSL). CSSD held the positions of the prime minister and the minister of foreign affairs. The Communist Party of Bohemia and Moravia (KSCM), the successor of the Communist party of Czechoslovakia, was the biggest opposition party. After the fall of Communism, it has never been part of the governing coalition and always acted as the main opposition party in the foreign affairs. The party is very critical toward the European Union and NATO. Usvit (Dawn) was a right-wing populist and Eurosceptic political party campaigning for the implementation of direct democracy at all levels. The party was established in May 2013 and succeeded in the following election in October 2013 with 6.88%. Due to internal struggles, the party split in 2015 and renamed itself Usvit–Narodní koalice (Dawn–National Coalition). The former members remained in the Parliament and established a new political party called Freedom and Direct Democracy. Civic Democratic Party (ODS) and TOP09 are seen as traditional right-wing political parties with conservative and liberal-conservative ideological bases.

number of nodes and the high number of isolates (36 deputies who are members of no group), it makes for quite a dense network. The average degree of deputies is 5.66, which means they are on average members of five to six interparliamentary groups. This indicates that the Czech MPs are rather frequently engaged in terms of existing memberships, which seems to be at least partially counterintuitive to the general belief about their lack of interest in foreign affairs. However, there are large interindividual differences among the individual MPs. The actual degree ranges from zero groups to as much as thirty-two (the standard deviation is 5.75). On average, the groups have almost eighteen members (17.95). Again, there is a relatively great variance among the groups as well, with the
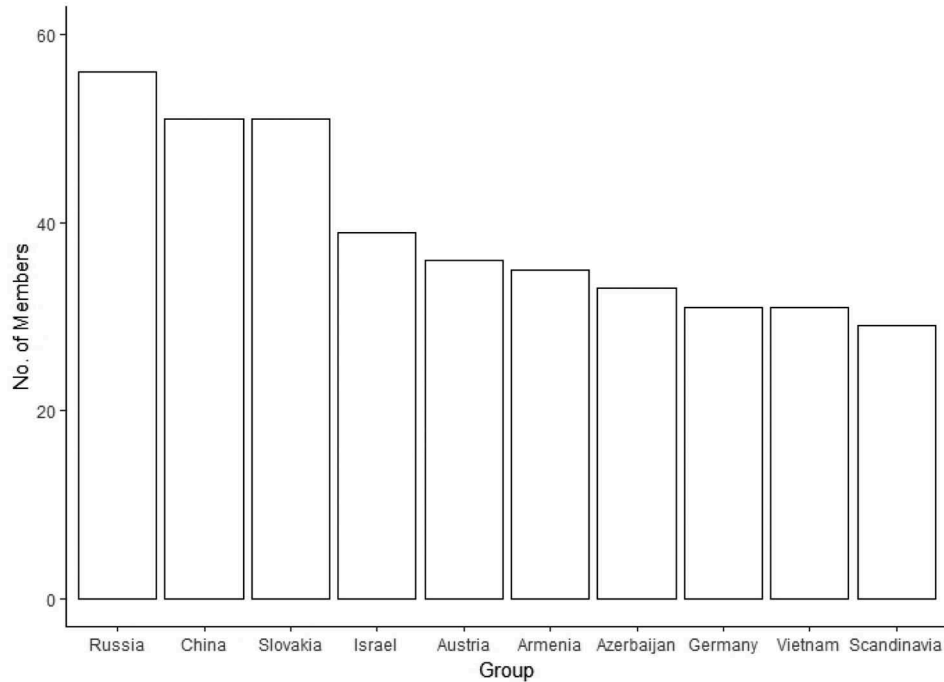
FIGURE 4. Size of the ten most popular groups.
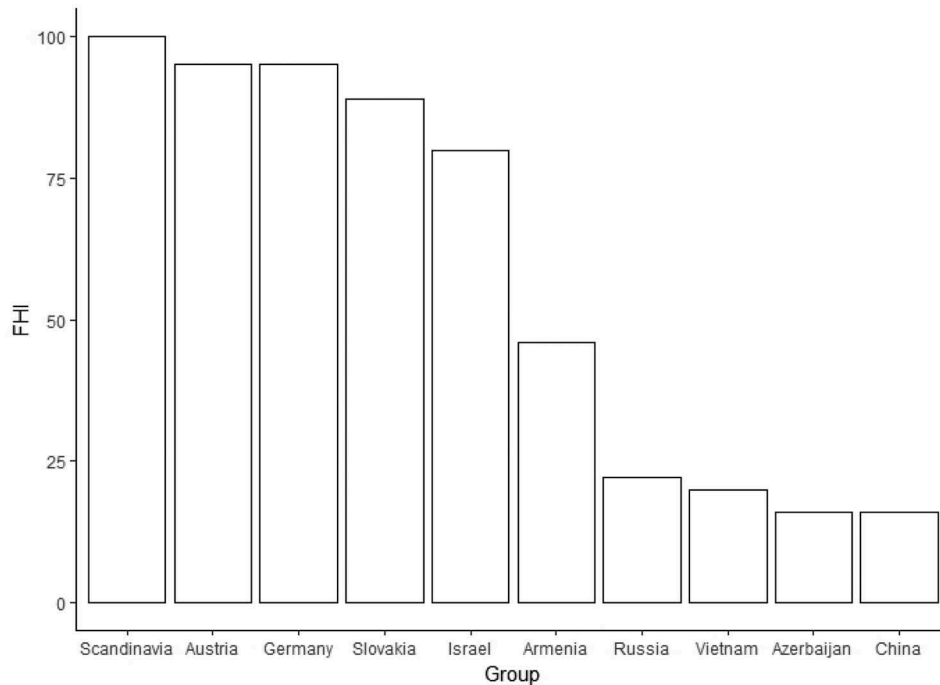
FIGURE 5. Quality of democracy in the ten most popular groups.

smallest group having only five members and the largest fifty-six (more than a quarter of all the deputies), standard deviation being 11.54. Taken together, the standard deviations, ranges, and skewed degree distributions (Figures 7 and 8) show that the structure of the network is considerably centralized. Among deputies as well as among groups, the ties are concentrated around a handful of important nodes (we examine them closely below). If we take a look at transitivity (a ratio of closed
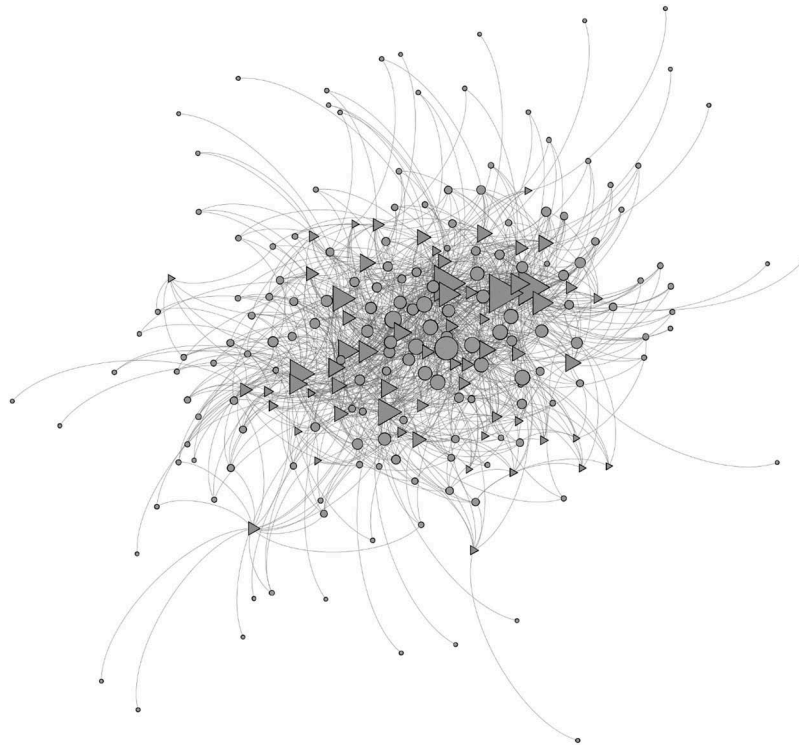
FIGURE 6.   Visualization of the network with node size proportionate to their degree.

Note: Triangles refer to groups and circles refer to deputies. Isolates are removed from the graph. The plot captures the core of central deputies and groups in the middle.

TABLE 1
Descriptive Measures of the Network

Node counts	
Number of deputies	200
Number of isolated deputies	36
Number of groups	63
Cohesion measures	
Density	0.09
Transitivity	0.34
Average degree: deputies	5.66
SD degree: deputies	5.75
Average degree: groups	17.95
SD degree: groups	11.54
Core–periphery measures	
Core–periphery fit: deputies	0.85
Core–periphery fit: groups	0.83

quadruples to non-closed but connected quadruples), we find that in more than one-third of the cases (0.34), if two deputies share a common group, they are also members of another common group. This is a sign of a relatively strong tendency of deputies to create closed structures.

High centralization and high transitivity together are indicative of core–periphery structures. Networks segmented into core and periphery are centralized around the core nodes, which are strongly interconnected resulting in a high closure.

The correlation between our observed network and an ideal core–periphery structured network with the same number of nodes is 0.85 for deputies and 0.83 for groups. It suggests that the network as a whole indeed exhibits clear signs of core–periphery structure. Thus, there is a group of 72 highly active deputies interconnected via 12 highly central groups according to the core–periphery procedure. Based on the descriptive measures and results of core–periphery model fitting, we can answer the first research question (Q1): The network is centralized and core–periphery structured. There are clusters of highly central MPs as well as highly central groups. The most central deputies together with their party membership are displayed in Table 2. The most central actor is Pavlina Nytrova, whose degree is 33, meaning she was a member of 33 groups. She is infamously known for her homophobic attacks on the gay community and her utterly naïve acceptance of propaganda from media and social networks (Slonková 2016). The rest of the ten most central deputies' degrees range from 22 to 15 (Table 2). The list of 72 highly central deputies (identified as the core of the network) is dominated by the MPs from CSSD and KSCM, followed by Usvit and ANO. Except for the Communist party represented by publicly known figures like chairman Vojtech Filip and hard-liner adoring dictator Josip Stalin Marta Semelova, most of the MPs are almost invisible with limited or even insignificant positions within their parties. In fact, some of the MPs
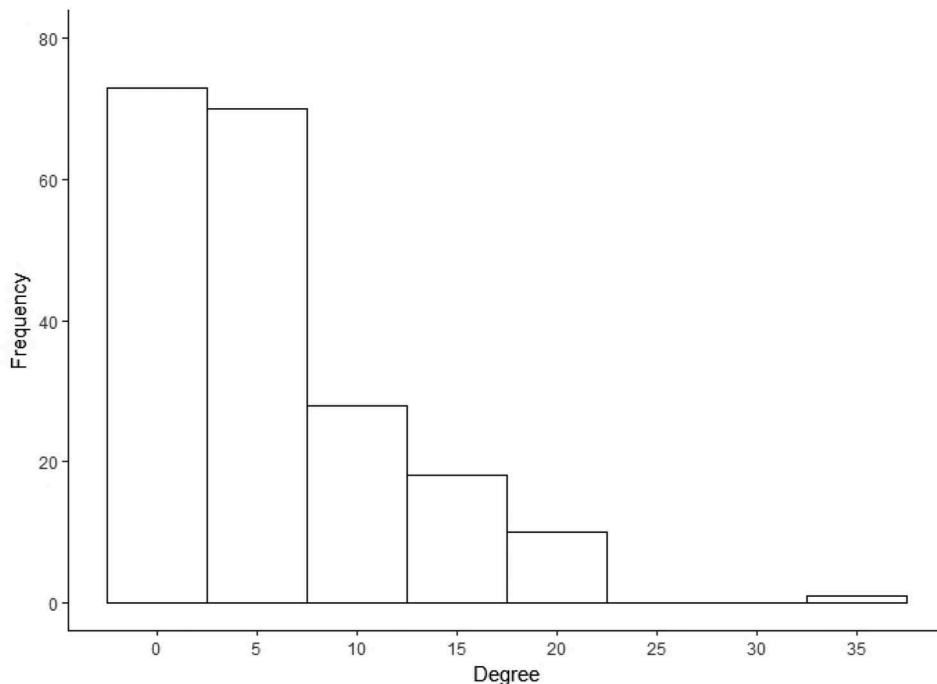
FIGURE 7.   Degree distribution among deputies displaying considerable centralization.
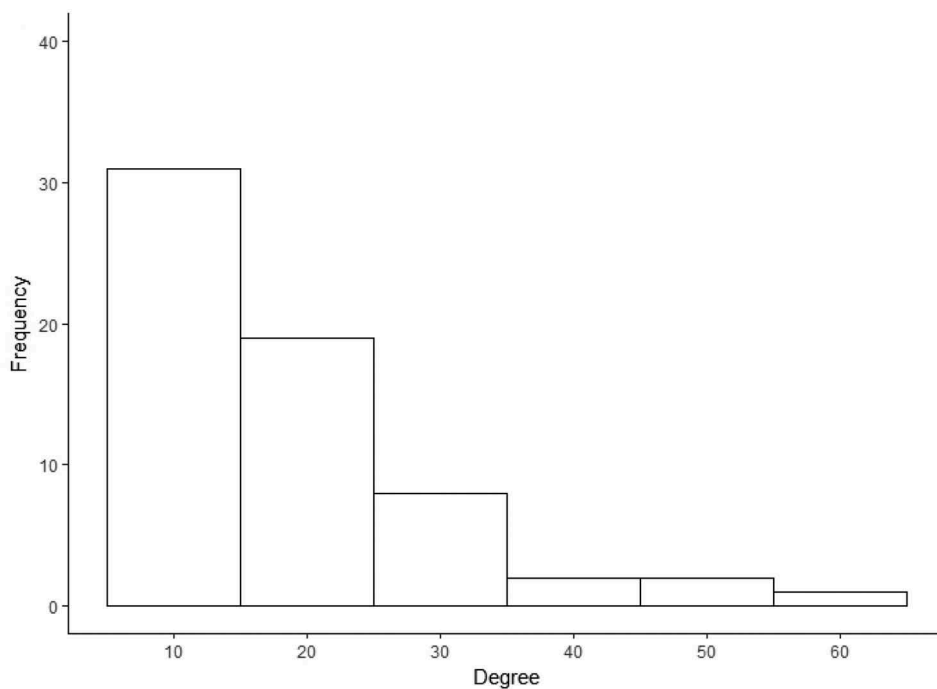
FIGURE 8.   Degree distribution among groups displaying considerable centralization.

are known to the public mostly through their controversies. A good example is the case of Stanislav Berkovec and Milan Sarapatka, who participated in an unofficial monitoring mission of Crimean referendum and afterward defended it as rightful and valid, actively questioning the conclusions of international organizations as well as the official position of the Czech Republic (Aktualne.cz 2014). Berkovec, together with Vaclav Zemek and Vaclav Snopek, did the same thing

TABLE 2
Ten Most Central Deputies and Their Degrees

Deputy	Party	Coreness	Degree
Pavlina Nytrova	CSSD	0.27	33
Antonin Seda	CSSD	0.18	22
Vojtech Filip	KSCM	0.18	18
Vaclav Snopek	KSCM	0.17	17
Dana Vahalova	CSSD	0.16	18
Jana Hnykova	Usvit	0.16	19
Rene Cip	KSCM	0.16	19
Vaclav Klucka	CSSD	0.15	15
Marta Semelova	KSCM	0.15	15
Lukas Pleticha	CSSD	0.15	20

with the unofficial electoral monitoring mission to Azerbaijan in 2015 (Prague Daily Monitor 2017). Although not all of the listed politicians are keen to assert their own foreign policy preferences, some of them seem to be very active and willing to openly challenge the official positions of the Czech Republic. The fact that the representation of political parties in the central portion of the network is not balanced is certainly interesting. We assume that this imbalance is not accidental and reflects a real existing structure of power relations in the Chamber of Deputies. We further theorize that access to more prestigious channels of foreign policy does affect the activity of individual MPs as well as political parties.

In terms of interparliamentary groups, the core consists of 12 groups among which the most central are those focused on Russian Federation, People's Republic of China, and Slovakia, each with more than fifty members (the ten most central groups are shown in Table 3). The popularity of these groups can be interpreted through different perspectives combining the ideological affinity (Cuba, China, Vietnam), geopolitical preferences (Russia, China), common history (Slovakia), economy ties (Russia, China, Azerbaijan, Armenia) but also regional proximity (Austria, Poland, Slovakia). Most of the countries are not exactly first-tier partners of the Czech Republic, as one

TABLE 3
Ten Most Central Groups and Their Degrees

Group	Coreness	Degree
Russia	0.35	56
China	0.30	51
Slovakia	0.29	51
Azerbaijan	0.22	33
Vietnam	0.21	31
Cuba	0.20	28
Armenia	0.18	35
Poland	0.17	26
Austria	0.16	36
Israel	0.16	39

could expect based on memberships in the European Union and NATO. Especially the popularity of Russia and China resonates with the warnings repeatedly articulated by the Security Information Service in the past few years (BIS 2017).

We understand the overall centrality of the groups as a reflection of party-led coordination combined with individual motivations where drivers like ideology, economy, history, and culture are most probably at play. Similarly to the core–periphery model focused on MPs, the centrality of countries not seen as natural allies of the Czech Republic shows that interparliamentary groups might constitute an independent channel of diplomatic ties and organize its own parliamentary diplomacy. We may even claim that the interparliamentary groups complement the official priorities of foreign policy in terms of representation and geographical coverage. It even seems that interparliamentary groups play the role of a tunnel for those preferences that cannot be fully represented on the official governmental level.

Table 4 summarizes the results of conditional uniform graph tests for all the theorized effects answering the second research question (Q2). These effects represent potential relational mechanisms that may explain the emergence of centralized and closed core–periphery structure among deputies and interparliamentary groups. First, the activity effect of seniority is not significant, which means that senior deputies are not more active than we would expect by chance. However, the effect of formal positions such as chairman or minister is significantly negative. This supports the notion that the membership in interparliamentary groups is sought more by less formally influential deputies, perhaps as an alternative way to gain legislative influence. In terms of activities of deputies across parties, there are marked differences between left-wing and right-wing parties. While both the left-wing parties (social democratic CSSD and communist KSCM) have significant and positive activity effects, both the right-wing parties (ODS and TOP09) have significant and negative effects. Deputies of the two centrist parties (Christian KDU-CSL and anti-political movement ANO) display no difference in their network activity in comparison to chance. Last, the deputies of the extremist party Usvit create significantly more ties than we would expect by chance. From the government/opposition point of view, there is no clear-cut pattern: Deputies of one governing party (CSSD) are significantly more active, whereas the activity of deputies of the two remaining governing parties (KDU-CSL and ANO) is not significantly different from chance and there are similarly differences among the opposition parties.

The second group of effects in Table 4 regards homophily tendencies among deputies. Deputies holding formal positions do not exhibit statistically significant tendency toward shared membership to a common interparliamentary

TABLE 4
Results for the Conditional Uniform Graph Tests Conditioning on the
Number of Nodes and Density of the Network

Statistic	Observed	Simulated mean	Simulated SD	Z score
Activity effects				
Formal position	185	226.82	13.16	−3.18**
Seniority	513	509.58	15.60	0.22
CSSD	340	283.09	13.78	4.13***
KDU-CSL	66	79.31	8.36	−1.59
ANO	206	266.10	13.57	−4.43***
TOP09	96	146.72	11.12	−4.56***
Usvit	47	34.01	5.51	2.36*
KSCM	266	186.53	11.88	6.69***
ODS	60	89.64	8.45	−3.51***
No party	50	45.61	6.38	0.69
Homophily effects				
Formal position	770	634.08	77.19	1.76
Seniority	2530	1418.74	93.55	11.88***
CSSD	2293	788.44	80.95	18.59***
KDU-CSL	192	221.16	48.14	−0.61
ANO	824	741.79	79.31	1.04
TOP09	342	407.23	63.78	−1.02
Usvit	282	94.92	31.92	5.86***
KSCM	1423	517.46	69.00	13.13***
ODS	60	89.64	8.45	−3.51***
No party	298	127.80	37.34	4.56***
Attractivity effect				
QoD: attractivity	72797	75469.90	911.97	−2.93**

Note: *p < .05, **p < .01, ***p < .001.

group. The opposite is true for senior deputies who create homophilic ties much more frequently than they would have if the ties in the network are assigned randomly. In terms of partisanship and homophily, we see a picture similar to the "activity" effects. The left-wing parties again have significantly more homophilic deputies, and this pattern is especially strong for the Communists. For right-wing and centrist parties, we see no significant effects with the exception of pro-Western and pro-EU right-wing party TOP09: Its deputies share less interparliamentary group memberships than we would expect by chance. Again, deputies of the right-wing populist party Usvit display significantly strong tendencies toward homophily. The homophily effect is also statistically significant and positive for deputies not affiliated with any party, which may further support the notion that membership in interparliamentary groups creates an alternative channel to gain legislative influence, as nonpartisan deputies have no party through which to coordinate and promote their agendas.

As we see certain affinity toward countries with a communist history and a tradition of authoritarian rule, we test the attractivity of each interparliamentary group based on the value of FHI of country(ies) the group represents. This effect can be thought of as a correlation between the degree of the group and its FHI conditioned by the size of the network and its

density. As the corresponding Z score indicates, this effect is significant and negative. In other words, the more democratic a country a group represents, the fewer members it tends to have. In other words, groups connected to the countries seen as being on the other side of the democratic spectrum are seemingly more attractive than those constituting natural allies. This is surprising and certainly counterintuitive to what one would expect from a western-oriented country with relatively consistent priorities in foreign policy.

DISCUSSION: POLITICAL NETWORKS AND THEIR POTENTIAL IMPLICATIONS

The usual narrative heard from the Chamber of Deputies defends interparliamentary cooperation as a form of diplomacy based on dialogue with all sorts of partners not discriminating those not fulfilling the highest expectations of western democracies. It, however, cannot explain why the core part of the model does not include any of the old democracies except the immediate neighbors. This brings us to a provoking speculation about a relatively hidden but potentially active group of MPs who have different priorities in foreign affairs contradicting the official position of the Czech government. Although we still cannot say what the motivations to become a member of a specific group are, this unbalanced parity should not be overlooked. The interesting idea we try to present here comes from a suspicious setting under which the most engaged MPs are often those critical to the current political setting and foreign political orientation.

Support for this line of argument can be found in the annual reports of the Security Information Service (BIS), the main counterintelligence service in the Czech Republic. BIS publicly confirms the existence of potentially harmful connections between the Czech political scene and the Chinese and Russian political circles, which are active, effective, and potentially influential. In its 2015 report, BIS informed about the vast activities of China and Russia in the Czech Republic focused on influencing the political and economic environment, an effort critically acknowledged also in the following year (BIS 2016, 2017). According to the reports, Chinese diplomatic, intelligence, and economic entities focused on drawing on their success from previous years and actively worked on extending and maintaining Chinese influence in Czech politics and the economy. Russian activities, on the other hand, focused on the information war regarding the Ukrainian and Syrian conflicts and on political, scientific, technical, and economic espionage (Fendrych 2015; BIS 2016). In its 2014 annual report, BIS informed that *"Chinese intelligence services focused on gaining influence in Czech political and state*

structures and on political intelligence. These activities were actively aided by several Czech citizens, including politicians and civil servants." In the case of Russia, the report mentions that "*[...] Russian and pro-Russian propaganda in the Czech Republic and other EU member states is aimed not only against the integrity of the EU and NATO. It is assessed that Russia is creating a structure in Europe drawing on the concept of the Comintern (the Communist International; the Third International) founded by the Soviet Union*."

We are not saying that the popularity of non-democratic regimes among the Czech MPs has to strongly correlate with these activities, but it certainly should not be ignored. We find it highly suspicious, as it may indicate different priorities and preferences of certain groups of MPs who might follow their own political goals. This might be relevant for the overall geopolitical orientation of the country in the future but also to its political stability, as the major changes in the region almost never happen smoothly. It shows that although the majority of political parties seem to have a lack of interest in foreign affairs, at least some of the deputies see it differently. We have to stress again that it does not mean that they must understand the agenda under scrutiny or they must be experts on it; rather, we claim that they have certain preferences which, as a combination of ideological, political, economic, cultural, or personal motivations, might be relevant in the decision-making process of the Czech Republic.

Put together, results of our analysis show that the interparliamentary groups may truly constitute an alternative channel for communicating Czech foreign policy and establish a clearly independent branch of parliamentary diplomacy. It does not mean that these structures must be effective, but their existence shows that some political parties, as well as individuals, might pursue different priorities than the government has. The identified structure is largely shaped by left-wing and/or eastern-oriented deputies, who are disproportionately more active and homophilic with regard to the membership in interparliamentary groups. Moreover, the central groups toward which these deputies are oriented represent less democratic or outright authoritarian countries. These analytical findings can be supported by long-standing anti-EU and anti-NATO attitudes promulgated by KSCM and Usvit and their open sympathies to Russia, China, and their allies (Novinky.cz 2016; KSČM 2016). In terms of practical implications, these differing inclinations were most visible during the peak of the Ukraine crises when part of CSSD, KSCM, and Usvit presented conciliatory and even sympathetic attitudes toward Russian interests in Ukraine and blamed the West for the chaos and escalation of civil war (Novinky.cz 2014). Communist MPs Zdenek Ondracka and Stanislav Mackovik in 2016 even independently visited Donetsk People's Republic and, together with local Minister of Foreign Affairs Alexander Kofman, appeared on local television and on friendly agreement discussed the situation in the region (Echo24.cz 2016). This was in stark contrast with the official foreign policy and position of the Czech government, which is pro-Western, pro-NATO, and pro-EU (MZV ČR 2015). Such independent behavior is not rare, although systematic evidence on parallel channels of diplomacy is not publicly available. Interparliamentary groups may be interpreted as one of these rare channels that we know about and can be studied.

CONCLUSIONS

In past years, the priorities of Czech foreign policy have become a broadly discussed subject and a matter of tense political debate (Drulák 2014; iDnes.cz 2014). Besides the publicly known figures active in the discussion, there was little evidence on who creates political alternatives in foreign affairs on the level of the Parliament and what the actual priorities are. This research addresses this gap in order to better understand the multidimensional nature of the seemingly unified foreign policy of a unitary state which is fully integrated into Western political and security structures. It should be read as an analytical study of priorities of members of the Chamber of Deputies, Parliament of the Czech Republic, who may constitute alternative communication channels as a part of what is known as parliamentary diplomacy.

We have applied a unique approach to the study of preferences of the Czech MPs as reported via their memberships in the Interparliamentary Groups of Friendship. The memberships were analyzed as proxied interests in a political network which is unique in its logic (voluntary groups) and nature (foreign policy orientation). As our results show, the network is highly centralized around groups and MPs not typically associated with the declared priorities of Czech foreign policy. The five most central groups are Russia, China, Slovakia, Azerbaijan, and Vietnam and not traditional partners from the European Union or NATO. Parties and individual MPs most active in the interparliamentary groups are those without access to forming the official foreign policy of the country (KSCM, Usvit) or representing insignificant or dissenting voices in their own parties (CSSD). Those who are actively engaged in the process of forming foreign policy agendas on the governmental level are seemingly not interested in interparliamentary cooperation at all. Furthermore, those active within the network are strongly cooperating with each other based on their partisanship and seniority, with predominantly left-wing MPs being more active and more cooperative. This structural picture is even more important if we take into account the empirical context and

existing warnings of the BIS about a systematic effort of the Russian Federation and China to strategically infiltrate the Czech political scene. In its 2016 report, BIS even informed that the activities and the intensity of Russian intelligence services rose in the Czech Republic in comparison to 2015. In the context of classic intelligence gathering, Russian interests in the Czech Republic were dominated by political espionage and hybrid strategies for dissemination of political influence (BIS 2017).

We argue that the identified patterns should not be ignored, as they represent a relevant structure allowing the existence of a communication channel complementary to the official narratives of the Czech foreign policy. Moreover, it shows the priorities of those MPs who do not have access to forming the core values of the foreign policy agenda. It should not be a surprise to conclude that the identified patterns are complementary with the recent efforts questioning the EU membership or NATO presence in the region by a number of political parties and individual MPs (Kořan 2017). Based on the presented evidence, parliamentary diplomacy can be seen as an independent pillar of foreign policy potentially questioning other parts of the system of foreign policy priorities. In the context of the Parliament of the Czech Republic, the Chamber of Deputies between 2013 and 2016 was indeed looking East.

Although important at their core, our results are limited only to cross-sectional data. Longitudinal data could provide us with a richer picture and the possibility to trace the network structure and the mechanisms underlying it over time. This effort could be methodologically enhanced with the use of longitudinal models such as stochastic actor-oriented models (Snijders, van de Bunt, and Steglich 2010). These models allow for testing structural as well as individual effects and their co-evolution over time and thus help to understand which mechanisms longitudinally shape the network. This could deepen our understanding on the interplay between formal positions and membership in the interparliamentary groups, as if the groups indeed serve as an alternative channel to promote one's agenda, we should see that those who become more formally prominent also become less involved in the groups over time and vice versa. This is impossible to analyze without longitudinal data. In addition, as we have already noted above, similar interparliamentary groups operate in other countries as well and thus there is a possibility for international comparison. Are there structural similarities across different countries, and how does that relate to their foreign political orientation?

Study of political networks offers new possibilities for understanding a dynamic system of interactions that are not possible to comprehend with nonrelational approaches. Recent methodological advancements have allowed us to study different networks and to observe

patterns that would be otherwise hidden. The presented results are not relevant solely to the discussion in the Czech Republic, but potentially to the whole region where different geopolitical, ideological, and financial priorities are constantly in conflict.

NOTES

1. An example of suspicious activities by the "Friends of Azerbaijan" can be the effort to block the resolution on violation of human rights in Azerbaijan in the Chamber of Deputies or willingness to come and monitor internationally criticized and clearly rigged elections while proclaiming the competition to be free and fair (iDnes.cz 2017).
2. The groups are established based on initiatives taken by MPs. Joining the group is just an act of willingness to sign up for the membership in the group (no consultations, political approvals, or confirmations are needed).
3. The Senate delegates its representatives to IPU but usually does not establish its own interparliamentary groups of friendships. Although there is evidence on establishing groups in the past, in the seventh term there were none reported.
4. For the description of procedures for establishing the interparliamentary groups of friendship and their responsibilities, see official status (PS PČR 2017).
5. Note that configurations are also in the core of so-called exponential random graph models (Lusher, Koskinen, and Robins 2013; Robins et al. 2007), which has also been extended to two-mode networks (Wang, Pattison, and Robins 2013). While they are seen as methodologically superior to conditional uniform graph tests, exponential random graph models frequently run into problems with achieving convergence, even more so with two-mode networks. We initially tried to fit such a model to our data, but the model failed to achieve convergence despite numerous trials and different settings. For this reason, we resorted to a simpler yet sufficient method to answer our research questions that avoids problems with convergence.
6. Overview of the group memberships after the end of the term differs from the snapshot approach we applied in this article, as it includes all the members of a respective group through time no matter whether they actually had a chance to meet in a group or not. Therefore, the numbers might slightly differ.

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