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A comparison of British and German parliamentary discourses on science diplomacy over time

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Abstract

How do members of parliament of different political parties discuss 'science diplomacy' - broadly speaking all activities at the intersection of science and foreign policy - on the parliamentary floor over time? We address this question against the backdrop of the Russian invasion of Ukraine in February 2022 and analyse 72 speeches on science and Russia from the German and British parliament between February 2014 and December 2022. Our analysis reveals similarities and differences in how science diplomacy is discussed in the German Bundestag and the British House of Commons, how party views on science diplomacy in relation to Russia differ and how said views change over time. In so doing, our study shows that national science and policy ecosystems with their specific institutions and actors shape science diplomacy debates, including in times of war.

1 | SCIENCE DIPLOMACY ON THE PARLIAMENTARY FLOOR

Interest in science diplomacy, broadly speaking all activities at the intersection of science and foreign policy (Ruffini, 2017, p. 17), has surged during the past few years, among other things, because some prominent policymakers see it as a means to address the grand challenges of our time (Brown, 2009; Clinton, 2009; Moedas, 2015). So far, existing scholarship on science diplomacy has examined how state actors (Flink & Schreiterer, 2010; Rüffin, 2020; Rüffin & Rüland, 2022) and scientists view science diplomacy (Fähnrich, 2017; Proud, 2018; Rüland, 2023). The perspective of members of parliament (MPs) and, more broadly, political parties has not yet been covered. Investigating this perspective is not only important for the sake of attaining a holistic understanding of science diplomacy. In democracies, parliaments and the parties represented in them play a central role in many policymaking processes which affect the general public as well as a state's foreign relations. In addition, parliaments are more than just arenas in which political disputes about public policies like science diplomacy are fought out. They are

also the main venue within which a government has to justify budgets and policies and defend them against claims of the opposition.

Given that political parties are likely to differ in their assessment of whether science diplomacy is a useful foreign policy tool, how it should be employed and in which contexts, their view of science diplomacy makes a difference in the way it is conceptualised and implemented. Such differences can have far-reaching implications in case of a change in government as, for instance, Trump's radical departure from Obama's foreign and science policy approach has shown. We address this blind spot in the science diplomacy literature in two distinct ways. First, we examine how MPs of different parties in Germany and the United Kingdom (UK) discuss science diplomacy on the parliamentary floor. Second, we substantiate a recent debate on the role of science diplomacy in times of war (DAAD, 2022; DiPLO, 2022; Olšáková & Robinson, 2022a, 2022b; Patil & Rentetzi, 2022; Piaget et al., 2022; Stüwe & Flink, 2023) by investigating whether the parliamentary discourse on science diplomacy in Germany and the UK has changed after Russia's invasion of Ukraine. If such a discursive shift is observable, it might indicate

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a change in how science diplomacy is understood and practiced in Germany and the UK.

In our study, we analyse parliamentary speeches from the German Bundestag and from the British House of Commons that explicitly touch on science and Russia between February 2014 and December 2022. In doing so, we uncover important similarities and differences in how science diplomacy is generally discussed in the British and German parliament, how party views on science diplomacy in relation to Russia differ and how said views change over time. First, we find that both in the House of Commons and the Bundestag, most speeches dealing with science and Russia are linked to budgetary sessions. Within these sessions, national idiosyncrasies dictate the framing of rhetorical terms (e.g. soft power in the United Kingdom, 'Auswärtige Kultur- und Bildungspolitik' in Germany) and the use of intermediary organisations for science and foreign policy objectives (e.g. the British Council in the UK, the German Academic Exchange Service [DAAD] in Germany). Second, our analysis reveals that while both in the UK and Germany there is a general consensus across party lines that science diplomacy is a useful foreign policy tool, parties in Germany differ in their assessment of how exactly science diplomacy should be employed in relation to Russia. Third, we find that while the general sentiment towards science diplomacy remains positive during the period under study, party views on science in relation to Russia change over time.

The remainder of this article is structured as follows: In section two, we present a short review of how science diplomacy has been conceptualised and which agents the science diplomacy scholarship has primarily considered so far. In this section, we also detail in what ways we contribute to existing science diplomacy scholarship. Hereafter, in section three, we outline our methods and data. Then, in section four, we present the results of our analysis. First, we outline the science diplomacy discourse in the German Bundestag. Then, we describe how science diplomacy is discussed in the British House of Commons. We compare and contrast our findings from the two case studies in section five. Finally, in section six, we discuss the limitations of our study and conclude by outlining opportunities for future research.

2 | SCIENCE DIPLOMACY: CONCEPTUALISATIONS AND AGENTS

2.1 | Evolving understandings of science diplomacy

While scholars have investigated the relationship of science and politics for decades (Cozzens & Woodhouse, 1995; Ezrahi, 1971; Greenberg, 2001;

Policy implications

- Science diplomacy can be used for competitive and collaborative ends. Policymakers should be aware of the dual logic of science diplomacy and balance it depending on the broader political climate as well as the specific interests, values, risks and principles that are at stake.
- If science diplomacy advocates want the concept to be high on the agenda of parliamentarians, they should more firmly embed the discussion on advantages and disadvantages of using science diplomacy in fora close to parliament.
- Cultural and educational intermediaries play a key role in shaping a country's science diplomacy strategy. Policymakers should be in close and frequent exchange with such intermediaries to streamline and improve their national science diplomacy approach.
- When considering the use of science diplomacy tools, policymakers should bear in mind that the autonomy of science is a valuable asset that can be compromised by excessively instrumentalising it for foreign policy objectives.

Mukerji, 1989; Price, 1965), the term science diplomacy has a relatively short history reaching back to the early 2000s. In 2010, the American Association for the Advancement of Science (AAAS) and the Royal Society (RS) published a report on 'New Frontiers in Science Diplomacy' (The Royal Society and AAAS, 2010), which has popularised the term and concept of science diplomacy in the anglophone world. From there, it spread to Europe (Moedas, 2015, 2016) and has more recently also gained traction in South Asia (Sharma & Varshney, 2019) as well as in Latin America (Ittekot & Bandopadhyay, 2023).

Since the concept of science diplomacy emerged in the early 2000s, practitioners and scholars have advanced different conceptualisations of it. By far the most cited one is the AAAS–RS taxonomy of science diplomacy as *science in diplomacy* (SiD; informing policy objectives with scientific advice), *diplomacy for science* (D4S; facilitating international science cooperation) and *science for diplomacy* (S4D; using science cooperation to improve international relations) (The Royal Society and AAAS, 2010: vi). Although popular and widely used, the AAAS–RS conceptualisation of science diplomacy has not remained unchallenged.

Practitioners like, for instance, Peter Gluckman, the former science advisor to New Zealand's prime minister,

argue that while the AAAS–RS taxonomy might be useful for academic purposes, it is not always easily applicable to real-world politics (Gluckman et al., 2017). Gluckman and his colleagues suggest a 'pragmatic reframing of science diplomacy' in which science diplomacy promotes 'actions designed to directly advance a country's national needs, address cross-border interests, and meet global needs and challenges' (Gluckman et al., 2017).

Another, much earlier formulated, alternative conceptualisation of science diplomacy comes from Flink and Schreiterer (2010). In their seminal paper on national science diplomacy approaches, the authors define science diplomacy in terms of its objectives and rationales (p. 669 ff.). They contend that science diplomacy facilitates accessing researchers and facilities, promoting a country's achievements in research and development as well as exerting influence on other countries' public opinion.

Most recently, Rüffin and Rüland (2022) developed an 'enhanced' science diplomacy framework which builds on and combines existing conceptualisations of science diplomacy as well as their critiques (see Table 1). This enhanced framework covers the meansends dimension of science diplomacy, as we find it in Flink and Schreiterer's as well as in the AAAS-RS conceptualisation of science diplomacy. Rüffin and Rüland's framework furthermore considers science diplomacy's different levels of engagement (national, regional and global) to which Gluckman and colleagues first pointed. Finally, their framework draws on Ruffini's (2020) review of the practitioner-driven science diplomacy literature. In this review, Ruffini argues that science diplomacy practitioners tend to overemphasise the collaborative logic of science diplomacy while neglecting its competitive one. Departing from practitioners' idealistic framing of science diplomacy, Ruffini underlines that science diplomacy is a tool for 'those disposed toward morality and ethics in international affairs and those who see the world in terms of power politics' (Ruffini, 2020: 379; emphasis added). As a result, Ruffini contends, science diplomacy can be used to advance both collaborative and competitive foreign policy ends. Following this reasoning, Rüffin and Rüland's framework also covers the collaborativecompetitive logic of science diplomacy.

In our own analysis, we draw on Rüffin and Rüland's science diplomacy framework because we consider it to be the most comprehensive one to date. It allows us to consider the use of science diplomacy policies and activities for different means (e.g. as advice for policymakers, to foster scientific collaboration and excellence as well as the employment of science in foreign policy) from the viewpoint of national interest, alliances of states up to truly global cooperation to tackle grand challenges. The latter can be described as a level and mode of engagement at which there is actual worldwide consensus on the need and use of science diplomacy, thus rendering this ideal-type level exclusively collaborative. By establishing six categories that can be either collaborative or competitive in addition to the three truly collaborative ones, the 'taxonomy helps identify different facets of SD' (Rüffin & Rüland, 2022, p. 9) as empirical studies have shown that the line between different types of science diplomacy often become blurred (Copeland, 2016; Penca, 2018; Rüland, 2023). This empirical ambiguity also extends to the question of which actors actually play a role in the science diplomacy domain.

2.2 | From state to non-state agents and back

Early science diplomacy scholarship has identified and focused on governmental or guasi-governmental entities, such as ministries of foreign affairs, national funding bodies or embassies, as the main agents of science diplomacy (Flink & Schreiterer, 2010; Gluckman et al., 2017; Rüffin, 2020), especially in cases where high-level political interests are concerned. During the past few years, this has begun to change. More recent science diplomacy scholarship has started to investigate the role of non-state actors such as scientists and scientific managers in science diplomacy (Fähnrich, 2017; Rüland, 2023). Yet, despite this diversification, science diplomacy scholars have paid little attention to institutional political actors that are situated outside the executive branch. In particular, there are no studies which examine how political parties engage with the concept of science diplomacy.

Parties should not simply be taken into account for the sake of a holistic view of science diplomacy. We argue that parties can shape how science diplomacy

TABLE 1Conceptual framework of SD types (based on Rüffin & Rüland, 2022, p. 4).

	Level of engagement		
	National	Regional	Global
SiD	Unilateral SiD (competitive/collaborative)	Bi/multilateral SiD (competitive/collaborative)	Multilateral SiD (collaborative)
S4D	Unilateral S4D (competitive/collaborative)	Bi/multilateral S4D (competitive/collaborative)	Multilateral S4D (collaborative)
D4S	Unilateral D4S (competitive/collaborative)	Bi/multilateral D4S (competitive/collaborative)	Multilateral D4S (collaborative)

Note: Columns represent the level of engagement. Rows represent means-ends relations. Modes of science diplomacy are depicted in parentheses.

is conceptualised and implemented because they are likely to differ in their assessment of whether science diplomacy is a useful foreign policy tool and how it should be employed as well as in which contexts. Similarly, there may be differences in exactly which science diplomacy instruments are preferred. The fact that political parties and their voters often hold diverging views on scientific questions supports these assumptions. For instance, we have evidence that populist, and in particular far-right parties, tend to deny climate change and that their voters are generally highly sceptical of scientific findings as well as epistemic authorities (Eslen-Ziya & Giorgi, 2022; Mede & Schäfer, 2020; Staerklé et al., 2022). In case of a change in government, this can have far-reaching implications because even if a certain level of continuity in foreign and science policy can be expected across different administrations, it can also be assumed that a new administration will want to set its own priorities in both policy realms (Haesebrouck & Joly, 2021). Depending on how radically the approaches of outgoing and incoming administrations differ, foreign and science policy can change abruptly. Trump's radical departure from Obama's foreign and science policy is a case in point here (Witze, 2017). The relevance of changing administrations also extends to authoritarian regimes as the example of the People's Republic of China illustrates. After the death of Mao and the ousting of the Gang of Four – a Maoist political faction consisting of four Chinese Communist Party officials - the country considerably reversed its relation to Western countries. During this phase of reorientation, science and technology (S&T) represented an important tool for China's rapprochement with the West (Barrett, 2022; Wagner & Simon, 2022). Finally, there is an additional reason as to why it is worth considering political parties in the context of science diplomacy: Even when political parties are not part of the government, they have the capacity to pursue their own objectives in science and foreign policy. In Germany, for example, the international network of party-affiliated foundations enables parties to set their own priorities when engaging with partners abroad (Dakowska, 2009).

3 | METHODS AND DATA

In our research, we make use of a comparative case study, focusing on the parliamentary discourse on science diplomacy in Germany and the UK. We selected our cases based on the diverse case method, according to which cases are chosen because they are maximally diverse (Gerring & Cojocaru, 2016: 396). This applies first to the political systems of Germany and the UK, as they represent two very distinct political cultures. For instance, while the UK has a two party system (Lundberg, 2017), German politics are characterised by a plural multi-party system (Gabriel & Keil, 2005). In the UK, representatives are further elected according to the first past the post electoral system (Lundberg, 2017). Germany, in contrast, has a system of personalised proportional representation (Patzelt, 2005). Second, Germany and the UK are diverse cases in terms of their relations to Russia. For the past 20 years, German–Russian relations have been described as 'stable and close' (Spanger, 2012) as well as 'pragmatic' (Götz, 2007). Before it had left the European Union (EU), the UK Parliament, in contrast, stated that the UK had 'the most difficult relations with Russia among the EU Member States' (UK Parliament, 2023).

A qualitative content analysis of parliamentary speeches forms the backbone of this article. We are thus basing our research on the discursive level of talk rather than action and are aware that not all speeches directly translate into policies. Nevertheless, for the arguments outlined in section 2.2, we consider this discursive level as vital to understand the modes in which science diplomacy is discussed and acted upon in the legislative branches of governments.

To obtain a manageable corpus of documents for our analysis, we proceeded in four steps. First, we narrowed the time frame of our analysis down to the period of 2014 until 2022. We further divided the period under study into two phases: The first phase extends from the annexation of Crimea in March 2014 up until the invasion of Ukraine in February 2022. The second phase stretches from the start of the Russian invasion of Ukraine on February 24, 2022 to December 2022. The rationale for this division was to establish a baseline of parliamentary sentiments concerning the nexus of science diplomacy and Russia against which possible changes after the invasion of 2022 can be assessed. The events of the first months of 2014 are a sensible starting point to establish such a baseline as the annexation of Crimea represents the last event that put intense strain on the relations between the West and Russia before the Kremlin's full-blown invasion of Ukraine in February 2022. Given the timeliness of our research topic, there are fewer speeches in the second phase which is a limitation we recognise. At the same time, we argue that although there are fewer speeches to examine after February 2022, the ones that are available still allow us to carefully explore possible changes in party understandings and applications of science diplomacy. Second, making use of the software R, we extracted speeches touching on the issue of science and research as well as Russia from the ParlSpeech V2 data set (Rauh & Schwalbach, 2020). This freely available data set comprises full-text corpora of 6.3 million parliamentary speeches in the key legislative chambers of nine representative democracies, including the House of Commons and the Bundestag (Rauh & Schwalbach, 2020). We used a variety of search terms to ensure that we extract all potentially

relevant speeches (see Appendix S1). Third, since the ParlSpeech V2 data set only provides data points up until 2020, we manually searched for speeches that were given between 2020 and December 2022 in the House of Commons and Bundestag archives. With one exception, we used the same search terms as we did for the ParlSpeech V2 data set. For the period between February and December 2022, we added the term 'sanctions' as the sanctions regime that was imposed on Russia after February 2022 also affected activities pertaining to science diplomacy. Fourth, once we had assembled a preliminary corpus of documents (N = 470), we manually checked whether the extracted speeches not only mentioned the search terms and Russia independent of each other, but actually put them into context. At the end of this procedure, we were left with 72 speeches, 38 of which were delivered in the German Bundestag and 34 of which were given in the British House of Commons.

We analysed all speeches using the software MAXQDA and a coding scheme (see Appendix S2) which draws on Rüffin and Rüland's science diplomacy framework. Using this framework bears the advantage that its analytical categories are broad enough to be applied to both the German and British parliamentary setting. Based on Rüffin and Rüland's framework, a set of deductive codes was derived to determine the extent to which the formulations used in the speeches are of a cooperative or competitive nature, whether they deal with unilateral actions of one's own government or touch on multilateral aspects, and the extent to which certain objectives were linked to science diplomacy policies (e.g. 'foster peace' or 'promote Western values'). This analytical differentiation makes sense, as several of these facets can conflate and occur in different configurations in parliamentary speeches. The enhanced framework renders it easier to capture different elements of science diplomacy that appear in the speeches. At the same time, it allows to detect recurring combinations of codes (e.g. collaborative, multilateral diplomacy for science in large-scale research collaborations) or, in other words, to identify typical rhetorical figures and topics on the parliamentary floor.

In addition, through an iterative process, we drew up inductive codes which helped us identify specific science diplomacy mechanisms as well as agents and learn about MPs' general position on and understanding of science diplomacy (see Appendix S2).

4 | SCIENCE DIPLOMACY DISCOURSE IN PARLIAMENTARY SPEECHES

In the following two sub-sections, we present our findings. We begin by outlining the science diplomacy discourse in the German Bundestag and then go on to describe how science diplomacy is discussed in the British House of Commons. In doing so, we first highlight several general observations concerning each national science diplomacy discourse. Hereafter, we explore the role of science diplomacy in German– Russian and British–Russian relations.

4.1 | German Bundestag

4.1.1 | Framing, context and speakers

There are three interesting general observations concerning the parliamentary discourse on science diplomacy in Germany. First, in the period under study, German MPs almost never refer to the actual term science diplomacy or its literal German translation 'Wissenschaftsdiplomatie'. A MAXQDA text search of all 38 speeches in fact revealed that MPs only mention each term twice between 2014 and 2022. The related German term 'Außenwissenschaftspolitik' (foreign science policy) likewise only appears three times in the period under study. When speaking of activities at the intersection of science, research and foreign policy, German MPs much more frequently use the term 'Auswärtige Kultur- und Bildungspolitik' (foreign cultural and educational policy), which is commonly abbreviated as 'AKBP' in German. All four terms are positively connotated in parliamentary speeches and are seen to have an important role to play in building bridges and mitigating conflict as the following two statements illustrate:

> AKBP is a value-led approach to foreign policy which targets individuals because it wins hearts and minds. [...] AKBP has a bridge-building function, can restore trust and is thus a prerequisite for traditional diplomacy.

(Claudia Roth, Bündnis 90/die Grünen, Green Party, September 29, 2016)¹

In cases where negotiations falter or threaten to fail, in cases where conflicts thwart diplomacy, AKBP keeps channels of communication open.

(Frank Müller-Rosentritt, Freie Demokratische Partei, FDP, January 31, 2020)

Second, most speeches touching on the intersection of science, research and foreign policy are delivered by MPs whose party was part of the government when the speech was given. It thus does not come as a surprise that MPs of SPD (Sozialdemokratische Partei Deutschland) and CDU/ CSU (Christlich Demokratische Union Deutschlands and Christian Social Union in Bavaria) – closely followed by the Green Party – refer to AKBP most frequently. Green MP Kai Gehring and MP Thomas Erndl of CDU/CSU feature particularly prominently among those that discuss science and foreign policy (each with four or five speeches on the topic). This visibility can be explained by the fact that, at the time under study, both MPs held prominent positions in parliamentary bodies that are relevant to science and foreign policy (Gehring being his parliamentary group's spokesperson for research and a deputy member of the AKBP subcommittee; Erndl being a member of the foreign affairs committee, its AKBP sub-committee and a deputy member of the research committee).

Third, AKBP is most often referred to in parliamentary sessions that deal with budgetary issues of the foreign ministry, which in turn funds Germany's cultural and educational intermediaries, such as the DAAD, the Goethe Institutes or the Alexander von Humboldt Foundation (AvH). What is noteworthy in this context is that in their speeches, several MPs indicate that there is a general consensus across the (mainstream) political spectrum that cultural and educational intermediaries like the radio station Deutsche Welle do important work that needs and deserves sufficient funding. For example, when MP Maria Böhmer (CDU/CSU) took up her role as state secretary at the foreign ministry in 2014, she commented:

> People told me: There is a grand coalition [between SPD and CDU/CSU, the governing coalition at the time] for AKBP. I would say: There is support across the entire political spectrum.

> > (February 12, 2014)

4.1.2 | German–Russian relations and science diplomacy

The parliamentary discourse on AKBP in the context of German–Russian relations evolves throughout the period under study, though this change varies across the party spectrum. Before 2022, MPs from Germany's centre-right and centre-left parties – CDU/ CSU and SPD – have ambivalent attitudes about Russia. On the one hand, they denounce the severe repressions that members of the Russian opposition are regularly subjected to. The poisoning of Alexei Nawalny, for example, is perceived as a 'heinous crime' (Johann Saathoff, SPD, September 11, 2020). MPs of SPD and CDU/CSU also condemn Russia's annexation of Crimea in 2014 and the country's covert operations on German territory, such as the assassination of a Georgian national by a Russian secret agent in Berlin in August 2019. On the other hand, they underline that it is important to preserve good relations with Russia. Some highlight that this is 'a central lesson learned from history' (Thomas Erndl, CDU/CSU, June 9, 2021). MPs from the Green Party, in contrast, are more sceptical towards the Russian government and its intentions throughout the entire period under study. Their approach to AKBP towards Russia reflects this sceptical attitude. Not only Green MPs, but also most MPs from SPD and CDU/CSU, seem to perceive Russia's civil society as the main focus of German AKBP:

> In more than 60 states, activities of civil society actors, artists, scientists, and journalists are criminalized through restrictive NGO laws. This does not only happen in authoritarian regimes like Egypt or Russia. [...] We must really intensify our efforts to strengthen civil society, especially through AKBP.

(Claudia Roth, Green Party, September 29, 2016)

Political parties at the extreme left and right (Alternative für Deutschland, AfD and Die Linke), in contrast, have a much more positive view of the Kremlin. Both call for an end of the economic sanctions that were imposed on Russia after its annexation of Crimea, arguing that the sanctions contradict the collaborative nature of science diplomacy initiatives (Götz Frömming, AfD, December 14, 2018; Heike Hänsel, Die Linke, March 2, 2018).

After Russia's invasion of Ukraine, German-Russian relations hit an all-time low, which is also clearly reflected in the analysed parliamentary speeches. MPs of SPD, CDU, the Green Party and, to a certain extent, Die Linke agree that it was appropriate and necessary to cut all institutional scientific ties with Russia on February 25, 2022. It is also during this period that MPs, particularly those from parties that are part of the government (SPD, Green Party and FDP), and the largest opposition party CDU, begin to more clearly highlight the competitive logic of AKBP. Speaking on Russia's influence on the African continent and Germany's role in containing said influence through, for example, AKBP, Thomas Erndl (CDU) laments:

> To push Russia's influence back – and that should be our goal – we need a coherent strategy and, above all, the political will to bear the costs of implementing this strategy. [...] Other countries offer tens of thousands of scholarships every year, but we are cutting back in this area, driving young,

motivated people into the hands of China and Russia.

(October 20, 2022)

Prior to 2022, there are not only fewer references to competitive science diplomacy, but statements also differ qualitatively. First, before its invasion of Ukraine, Russia is typically one among several countries that is mentioned as a target of competitive science diplomacy. Second, the competitive dimension of science diplomacy does not concern differences in political norms, values or systems. Instead, science is perceived as a race in which Europe is falling behind. For example, in 2015, Stefan Kaufmann (CDU/CSU) warns:

> We need more investments into research in Europe. After all, countries like China, Turkey, Israel or Russia will not wait for us. (March 26, 2015)

After November 2022, parliamentary speeches touching on science and Russia increasingly focus on the integration of the many students and researchers that had to flee Ukraine as a consequence of Russia's invasion. MPs, especially from the governing coalition (FDP, SPD and Green Party), specifically discuss which actions have been taken to facilitate the integration of Ukrainian students as well as researchers and outline which actions could and should be taken in future crises of comparable magnitude and severity.

In view of the future of science diplomacy with Russia, some MPs stress that it is crucial to engage with Russian scientists that have publicly condemned the war as these could be prospective entry points for science diplomacy after the war has ended (e.g. Gesine Lötzsch, Die Linke). In his speech in March 2022, Ruppert Stüwe (SPD), for example, directly addresses scientists in Russia 'who have courageously spoken out against the war' and underlines:

We see your commitment. We see your courage. You are going to be the ones we will turn to in the future.

(March 23, 2022)

4.2 | British House of Commons

4.2.1 | Framing, context and speakers

In the House of Commons, the discourse on topics associated with science diplomacy is primarily propelled by MPs from the Conservative (Con) and the Labour (Lab) Parties. On fewer occasions, members of the Scottish National Party and the Liberal Democrats add to the debate. Considering the characteristics of the Westminster system (e.g. the way, speaking time on the floor is distributed among parties) and the parliamentary power structures prevalent in the analysed period (the Conservative party being in office), this observation is not surprising. MPs involved in the debates tend to hold positions in committees on foreign and commonwealth affairs; fewer MPs are involved in committees on research or education.

However, much like in the Bundestag, the exact term science diplomacy does not surface in the debates. Instead, MPs discuss matters of S&T, international collaboration, influence and access via the liberal use of the term 'soft power' which international relations scholar Joseph Nye defined as the power of 'getting others to want what you want' through cultural attraction, ideology and international institutions (Nye, 1990: 166). This gives the discourse a more competitive stance and aligns with the view of S&T and education as an instrument that can be used to pursue national (i.e. British) interests abroad. For instance, science diplomacy - in a broad sense - is mentioned in the speeches as a way of gaining influence in the civil society of foreign countries, as an element in a strategy to counter foreign propaganda, but also as an instrument of innovation that fosters national prosperity. It is noteworthy that there is little nuance in the way government and opposition are employing the term soft power, as the following two statements illustrate:

> In addition to spending more on defence, I believe we should increase our spending on our soft power capabilities. In this information age, winning the story will be just as important as winning the battle. Our soft power assets, such as the British Council and the BBC [British Broadcasting Corporation] World Service, tend to be (sic!) excellent value, out of all proportion to their positive effect; yet, they are under-resourced.

> > (John Baron, Con, June 1, 2016)

The way in which we use our soft power is key to ensuring our security in the modern world. That particularly applies to maintaining peace in eastern Europe following the annexation of Crimea and to the role Russia has played in destabilising Ukraine. (Dan Jarvis, Lab, July 2, 2015)

The soft power motive does not emerge regularly, but rather in connection with specific issues. For instance, it appears in debates on the space sector or the governance of Antarctica. Both are well-known and often referenced areas that science diplomacy is associated with (e.g. Berkman et al., 2011; Chuffart et al., 2022; Pekkanen, 2023). Similar to the Bundestag debates, the topic of soft power surfaces in parliamentary sessions that deal with the governmental budget. Speeches particularly often touch on the funding of two agencies that are seen as primary tools of British soft power: the BBC and the British Council. Across the aisle, MPs underline the importance of both institutions in propelling British narratives and values, particularly in relation to authoritarian regimes and adversaries as can be illustrated by the speech of conservative MP Hugo Swire:

> Even at that most critical moment, we knew the value of cultural relations and the role the British Council could play in our longterm security and prosperity. [...] I welcome the efforts of Sir Ciarán Devane, the new chief executive [...] to align more closely the council's purpose with our objectives: to make Britain safer; to build prosperity; and to expand the UK's influence overseas. (November 10, 2015)

Finally, soft power is discussed in the aftermath of the poisoning of the Russian ex-military intelligence agent Sergei Skripal in Salisbury in March 2018 which represents a low point in Russian–British relations.

4.2.2 | British–Russian relations and science diplomacy

Already before 2014, British–Russian relations were shaped by alternating phases of rapprochement and distancing (David, 2011). In the period under investigation, the relations are seen as complicated in many of the analysed speeches. However, the use of soft power and the option for reconciliation with Russia – in particular vis-à-vis the Russian civil society – is advocated by several MPs such as, for instance, the Conservative Daniel Kawczynski:

> [...] myself and others are looking to the Government to show an interest in the ability to engage with the Russians, to support greater cultural and scientific exchange with them, and to show us that they are doing everything possible to lower tensions at the same time as showing strength towards the Russians.

> > (May 4, 2015)

Again, the British Council and the BBC are mentioned as primary tools of public diplomacy to advance the British view and values like freedom of the press within Russia. However, after the Salisbury incident, there is a significant change in rhetoric. This attack on British soil put considerable pressure on Theresa May's government to impose a strong reaction on the suspected initiator, Russia. In the aftermath of the incident, both the Russian and the British government imposed a series of reciprocal sanctions which were also reflected upon in the House of Commons debates. As part of these actions, the Russian government expelled the British Council from the country, rendering one of the primary tools of British soft power projection ineffective. This act attracted attention right up to the leadership level of the parties, as the reaction from Jeremy Corbyn, the leader of the Labour opposition at the time, shows:

> We can therefore draw no other conclusion than that Russia has a direct or indirect responsibility for this [meaning the Salisbury incident]. We have supported actions taken. We have also condemned the Russian Government for including in their tit-for-tat retaliation a totally unnecessary and counterproductive decision to close the British Council offices in Russia which have done so much to promote better understanding and closer relationships between our two countries. It is a matter of deep regret to all of us that on issue after issue, and not of our making, UK–Russian relations now stand at such a low ebb.

> > (March 26, 2018)

After the Salisbury incident, MPs mention the topic of science diplomacy rarely in relation to Russia, with few exceptions where collaboration in space and in the governance of Antarctica come up. With the advent of Russia's invasion of Ukraine, the discussion on the use of soft power instruments almost completely vanishes from the House of Commons debates. What can be observed, in contrast, is a dispute between government and parliament over the funding of institutions that appear central to the projection of British soft power. In this respect, Russia is now being held up by parliamentarians as an example of an adversary to be countered with the help of instruments such as the BBC or the British Council. This discourse indicates a competitive use of science diplomacy to counter foreign influence and narratives of antagonistic, authoritarian countries. Once again, in the House of Commons, there seems to be a consensus on the importance of strengthening British soft power between Conservatives and Labour as the exemplary remarks of the MPs John Baron and Jeff Smith show:

> There is, however, growing competition for influence. We cannot stand still. Individual states, many of them not democratic, are looking to invest and are investing to enhance their soft power around the world. Cultural institutes such as the British Council

are an effective way of doing so, and one which truly global nations all employ. (John Baron, Con, March 16, 2022)

The BBC is one of the most powerful aspects of our soft power. Around the world the BBC is trusted and respected for its impartiality, professionalism and skilled reporting. Nowhere has that come more to the fore than in its reporting on Russia's criminal invasion of Ukraine.

(Jeff Smith, Lab, July 12, 2022)

However, both statements also demonstrate that the conflict is more of a budgetary dispute between the government and parliament than a clash between the government and the opposition. In this context, Russia is used in argumentative support of critiquing the government's spending priorities.

5 | DISCUSSION

The comparative analysis of our two case studies reveals several important insights concerning the role of science diplomacy in the parliamentary debate. In the following, we structure the discussion of our findings along three dimensions: we first conduct a more general comparison of national discourses; second, we carve out differences in how parties view science diplomacy in relation to Russia; and finally, we touch on how said views change over time (compare also Table 2).

5.1 | Comparing national discourses

First, the British and German parliamentary discourse on science diplomacy shows similarities in some

respects, while it exhibits differences in others. In both parliaments, the issue is discussed primarily with a view to budgetary decision making. This applies above all to those agencies which parliamentarians see as instruments of state-centred science diplomacy. In Germany, this concerns a very diverse set of organisations with educational, scientific and cultural mandates, including but not limited to the DAAD, AvH, the Goethe Institutes, Deutsche Welle and the Max Weber Foundation. Discussions in the UK primarily revolve around the BBC and the British Council. Considering that in Germany organisations like the DAAD receive the bulk of their funding from two ministries (Foreign Affairs as well as Education and Research) and the British Council is working closely with the Foreign and Commonwealth Office, this finding indicates that the discussions in both parliaments focus on agencies whose work MPs can influence. In contrast, universities, which in both countries enjoy considerable autonomy in shaping their international contacts and collaborations, feature less prominently as instruments of state-driven science diplomacy in speeches. In Germany, universities are institutions of tertiary education and, as a result, first and foremost the responsibility of the 16 federal states (Edler et al., 2010). Thus, the speeches reflect idiosyncrasies that relate to the structure of each country's institutional science policy ecosystem. Moreover, considering that one of the original functions of parliaments is to control the government's budget, it is not surprising that science diplomacy makes frequent appearances in budgetary sessions (Lienert, 2013). This simply shows that MPs discuss things they can control, including the national budget.

While both national discourses generally express a positive sentiment towards ideas connected to science diplomacy, another noteworthy finding is the almost complete absence of direct references to the term science diplomacy in both parliaments. This indicates that

TABLE 2 Comparison of the British and German parliamentary discourse on science diplomacy.

TABLE 2 Comparison of the British and German parliamentary discourse on science diplomacy.			
House of Commons	Bundestag		
Similarities			
Science diplomacy often discussed in budgetary sessions			
Almost no direct reference to the term 'science diplomacy'			
Governmental parties refer to science diplomacy most frequently			
Differences			
Science diplomacy framed as soft power	Science diplomacy framed as AKWP		
Science diplomacy objectives: counter foreign influence; increase national prosperity	Science diplomacy objectives: Ease political tensions; build long- lasting partnerships		
Science diplomacy agents: British Council, BBC	Science diplomacy agents: DAAD, AvH, Deutsche Welle, Goethe Institute, MaxWeberFoundation, political foundations, Archäologisches Institut		
Rather stable discourse on science diplomacy; Few references to science diplomacy in relation to Russia after expulsion of British Council in 2018	Shift in science diplomacy discourse after Russia's invasion of Ukraine; More references to the competitive use of science diplomacy in relation to Russia		

there are distinct national perceptions and framings of science diplomacy in Germany and the UK. While the framing in both parliaments sees S&T as part of a broader - and blurrier - portfolio of education, culture and knowledge, the British debates are more focused on harnessing these topics for foreign policy objectives, especially competitive ones. They also align with a soft power-centred discourse that was advanced outside parliament by think tanks and academic institutions during the period under consideration (e.g. Blond et al., 2017; Hill & Beadle, 2014). It is, however, interesting to note that the label of science diplomacy did not have a major impact on discussions in the House of Commons despite being a term that was coined by an eminent British organisation, namely the Royal Society. At the same time, the term science diplomacy certainly is present on the parliament's working level. Two policy briefs on science diplomacy that the Parliamentary Office of Science and Technology published in 2018 and in 2022 illustrate this (Bunn & Ledgerwood, 2018; Ledgerwood & Bunn, 2022). Still, it seems that British MPs feel more familiar and comfortable with the term soft power than they do with the term science diplomacy. In Germany, the concept of AKWP - while also encompassing a broad portfolio of cultural exchanges, language training, collaboration in higher education and S&T - is a product of the historically grown institutional structures of the German science policy ecosystem, which comprises educational, scientific and cultural agencies, as discussed earlier. In contrast to the more competitive use of soft power in the UK, in Germany's Bundestag, activities pertaining to the intersection of science and foreign policy are talked about in a more idealistic way in the period between 2014 and February 2022. Many of the pre-2022 speeches emphasise the importance of science and cultural exchange as a tool for better understanding and peaceful coexistence.

5.2 | Differences in party views

Second, the party dimension adds more nuance to the national idiosyncrasies of the science diplomacy discourse in the UK and Germany. In the British Westminster system, there is generally less divergence across parties in statements on issues of science diplomacy, including in relation to Russia. Instead, conflicts arise more along the fault line between government and parliament. MPs from the major parties agree in general that science diplomacy is a worthwhile endeavour that deserves to be funded sufficiently to advance British goals abroad. In the German Bundestag, a similar consensus exists across the party spectrum. However, when it comes to the particular nexus of science diplomacy and relations to Russia, the German

case exhibits more nuances. Statements by MPs indicate that the party spectrum from centre-right to centre-left sees the Russian government as a problematic partner because of its authoritarian tendencies which already surfaced in the first period under study. As a result, German MPs largely stress that programmes and activities associated with science diplomacy should be carried out in cooperation with non-governmental organisations, individuals or should generally be focused on the Russian civil society. In contrast, MPs from the far-right AfD and the far-left Die Linke maintain a more positive view of Russia, both before and after February 2022, and promote a less differentiated science diplomacy approach towards the country. A broader reading of parliamentary debates after February 2022 further reveals that following Russia's invasion of Ukraine, the priority for speakers from these parties is to start negotiating a truce between Russia and Ukraine (Amira Mohamed Ali, Die Linke, October 20, 2022; Gregor Gysi, Die Linke, November 30, 2022) and to end the sanctions regime against Russia (René Springer, AfD, November 24, 2022). This split in views between centre parties and the political fringes illustrates the importance of taking the variance in party positions into account.

5.3 | Changing party views over time

Third, party positions do not necessarily remain static over time. While policymakers seem to retain a positive attitude towards science diplomacy during the period under study, party views on science diplomacy in relation to Russia change over time. In the British case, this can be described as a general downward trend that is gaining momentum as a result of the Salisbury poisoning and the subsequent spiral of sanctions. In the wake of the full-scale invasion of Ukraine, the soft power aspect in relation to Russia completely disappears. The focus now shifts to the global level, with some MPs describing a competition of political systems in which the UK must use soft power to stand up to a rival and pariah like Russia. In the Bundestag, a deterioration in relations with Russia is also apparent, with the Green Party in particular being more sceptical of the Russian government as a partner over the entire period studied than the centre-right and centre-left parties CDU and SPD. After the Russian invasion of Ukraine, MPs of parties that form the governing coalition (SPD, Green Party and FDP) and from CDU begin to promote the competitive use of science diplomacy and to shift their focus to the domestic consequences of Russia's aggression, such as the accommodation and training of Ukrainian students and researchers. The case of bilateral relations with Russia thus shows that science diplomacy - even if it is generally seen as a positive

idea – is subject to discursive changes in the concrete discussion of policies and their applications.

6 | CONCLUSION, LIMITATIONS AND OUTLOOK

In this article, we set out to examine similarities and differences in how science diplomacy is discussed in the British and German parliament, how party views on science diplomacy in relation to Russia differ and how said views change over time. To do so, we analysed 72 speeches from the German Bundestag and the British House of Commons in the period between February 2014 and December 2022. Our study shows that, depending on the time, country and party affiliation, science diplomacy is discussed in different ways in parliaments. In particular, and consistent with previous research, our findings show that national science and policy ecosystems with their specific institutions and actors structure science diplomacy debates (cf. Flink & Schreiterer, 2010). At the same time, our study opens a new level of analysis to the established ones in the science diplomacy scholarship by including intra-national politics and parties' views of science diplomacy. This generates connections to the debate on the democratic legitimacy of science and science diplomacy - as discussed particularly during the COVID-19 pandemic (Weingart et al., 2022) - and to theories of two-level games in international relations that take domestic politics into account (Putnam, 1988).

Two particular findings from our analysis could open new gateways for research on science diplomacy. First, our analysis indicates that party positions on science diplomacy change over time. Although our set of data is skewed towards the phase before Russia's invasion of Ukraine and we thus need additional research to confirm this finding, we contend that a change in government is likely to impact national science diplomacy approaches. Future studies could delve deeper into this topic and investigate the effects that changing governments have on national science diplomacy agendas and practices. In doing so, scholars should draw on additional sources, for example minutes and reports of different parliamentary committees, party publications and expert interviews, as parliamentary speeches show but one, yet important, aspect of the political discourse on science diplomacy. Second, our analysis shows that national foreign policy objectives and international political developments influence how science diplomacy is discussed in parliament and conducted on the ground. In the case of Britain's science diplomacy approach in relation to Russia, the Salisbury incident increased political tensions between the two countries and led to the expulsion of the British Council from Russia, which effectively put an end to British-Russian science

diplomacy engagement. In Germany, Russia's invasion of Ukraine had a similar effect. After February 24, 2022, the German government was one of the first to cut all scientific institutional ties with Russia, severely limiting intermediaries' ability to engage in science diplomacy with Russian counterparts. We read this first as an indication that science diplomacy practices change during times of war and second as tentative evidence that intermediaries have few options but to bend to broader foreign policy directives. Future studies could examine if national governments and intermediaries are generally caught in a principal-agent relationship (Guston, 1996) and if so, how this relationship plays out in different political systems. In general, it appears worthwhile to investigate the precise mechanisms of planning, discussing and implementing science diplomacy policies in multi-stakeholder systems, not least to understand how these oftentimes seemingly technocratic actions are legitimised in democratic political systems.

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CONFLICT OF INTEREST STATEMENT

The authors have no competing interests to declare.

DATA AVAILABILITY STATEMENT

All data generated or analysed during this study are included in this published article and its supplementary information files.

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ENDNOTE

¹All quotes were translated by the authors.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

Data S1.

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