Elite Political Discourse has Become More Toxic in Western Countries

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Abstract

Toxic and uncivil politics is widely seen as a growing threat to democratic values and governance, yet our understanding of the drivers and evolution of political incivility remains limited. Leveraging a novel dataset of nearly 18 million Twitter messages from parliamentarians in 17 countries over five years, this paper systematically investigates whether politics internationally is becoming more uncivil, and what are the determinants of political incivility. Our analysis reveals a marked increase in toxic discourse among political elites, and that it is associated to radical-right parties and parties in opposition. Toxicity diminished markedly during the early phase of the COVID-19 pandemic and, surprisingly, during election campaigns. Furthermore, our results indicate that posts relating to "culture war" topics, such as migration and LGBTQ+ rights, are substantially more toxic than debates focused on welfare or economic issues. These findings underscore a troubling shift in international democracies toward an erosion of constructive democratic dialogue.

Keywords: social media, incivility, toxicity, comparative, populism

1 Introduction

Heated exchanges have always been part of spirited political discourse. But toxic and uncivil language seems to have acquired a new role in contemporary politics: scholars, journalists, and citizens have expressed concerns that politics is becoming more and more uncivil [1–5], and an associated literature has pointed to a more general rise in 'toxicity' of online discourse [6–9]. Toxicity and incivility in political debate have both been linked to numerous severe negative consequences, such as reducing trust

in and legitimacy of political candidates, governments, and the democratic process [10, 11], impacting the well-being of targeted individuals [12], undermining reasoned discussion [13, 14], intensifying political polarization, undermining bipartisan compromise on urgent issues, and threatening "democratic values and effective democratic governance" [15, 379]. Hostile discourse can furthermore incite other forms of uncivil, undemocratic behavior – even creating situation in which political violence becomes more conceivable [16, 17].

Incivility among political elites can be understood as the result of a political calculus, weighing possible advantages against several important risks [18, 19]. Research shows that the public dislikes political incivility, and politicians engaging in it may thus risk to become seen in negative light by voters [20]. Incivility hence risks damaging the politicians' reputation and public image, as well as their relationships with leaders of other parties, which can have long-term consequences for their careers and political influence. Incivility is furthermore widely believed to demobilize voters – possibly bringing negative consequences also for the politician that engages in uncivil communication [10, 16].

At the same time, the use of incivility can also come with some political benefits. Toxicity can be an effective way of rallying and energizing the base: while incivility may alienate some voters, it may animate others [4]. Politicians may exploit incivility and toxicity as a means to solidify in-group cohesion and differentiation from out-groups, thereby ensuring a higher turnout among their supporters [21, 22]. The balance of costs and benefits is hence thought to be shaped by the specific situation and political context within which the politician is operating, which determine whether engaging in uncivil discourse is politically beneficial [16]. Parties in opposition, during the intensified competition of election campaigns, and parties belonging to certain party families – such as radical right parties that seek to disrupt conventional politics – are thought to be more incentivized to engage in political incivility [23, 24]. For such parties, voters may see incivility and norm-breaking behavior as a projection of strength or a willingness to "fight" for their ingroup, or as a marker of authenticity and alignment with the frustrations of "ordinary people" [25, 26]. It has moreover been argued that certain political issues are subject to higher levels of political incivility than others, with so-called "culture war" issues – e.g., immigration, LGBTQ+ rights, and racial justice – being more deeply tied to identity, values, and moral convictions compared to economic issues, making them more likely to be framed in existential, more emotionally charged and polarizing terms [27–29].

Some scholars have suggested that the political calculus of toxicity has changed over recent years [30, 31]. The rise of social media has meant that loud and outrageous behavior has become an effective means of controlling attention and setting the media agenda [32, 33]. In a media environment where the gatekeepers of traditional media have been supplanted by algorithms that optimize for engagement and attention rather than conventional journalistic standards, toxic and conflictual messages tend to receive more likes, shares, and attention [34], thereby encouraging content that elicit strong and immediate reactions [35]. While voters may not like violent political rhetoric, such rhetoric may still be politically advantageous – empowering politicians to set the political agenda and the most valuable political commodity of the current era: attention.
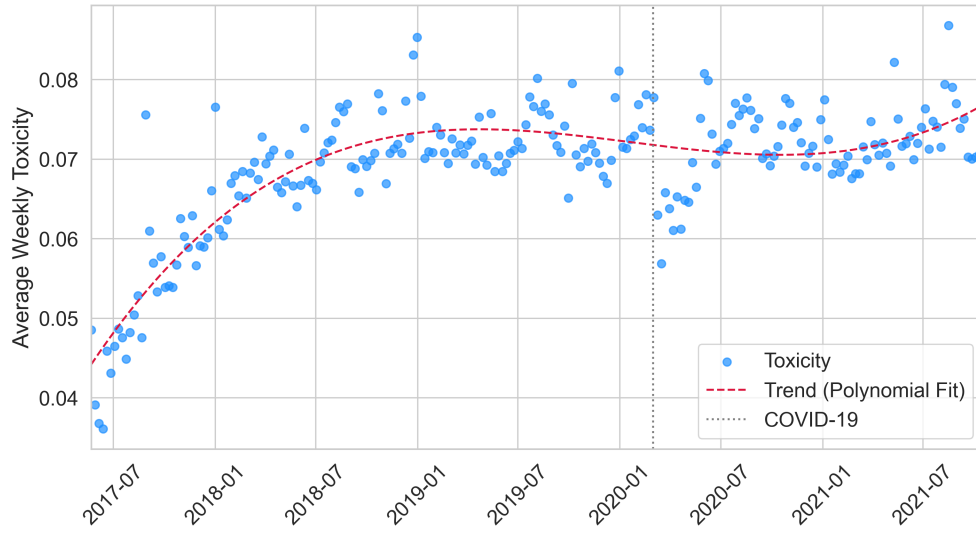
However, while there is a broad sense among both scholars and the public that politics has become more uncivil in recent years, empirical research has yet to systematically investigate whether this intuition is in fact true. There is limited evidence for *when* and *why* politicians employ uncivil or toxic discourse, and what political issues are most driving its use. Existing research has been limited by challenges of data availability, often focusing on relatively limited time-periods or specific regions. Theocharis et al. [3] examined trends in elite political incivility over a 2-year period on Twitter, failing to detect any overall trend. Klinger et al [36] compare sentiment in election campaign posts in the European Parliament, finding a rise in negativity between the 2014 and the 2019 election. Frimer et al [30] focus on members of the US congress on Twitter, and find growing levels of political incivility. Falkenberg et al [37] examine patterns of elite toxicity in eight countries over the span of a single day. However, studies drawing on the type of cross-national data over longer-time period needed to allow a comprehensive study of the international temporal dynamics of toxicity is still lacking.

The paper addresses the lack of longitudinal comparative data within the literature by drawing on a database of 18M messages sent by parliamentarians in 17 Western countries over five years, on Twitter/X – the most widely used communication platform by politicians. These messages were individually labelled using well-established methods for measuring toxicity in social media messages, and linked to established comparative databases of political parties, including V-Dem and Manifesto Database.
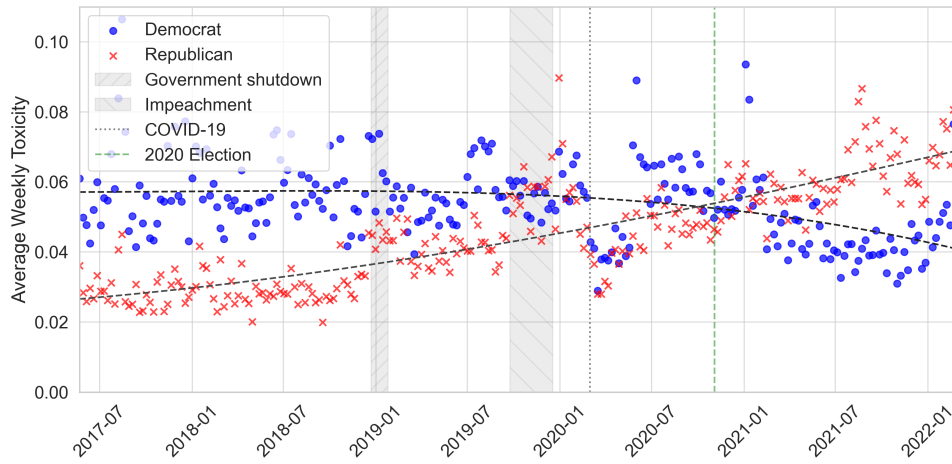
Drawing on this data, we examine the temporal patterns in the level of incivility in elite political discourse and examine its determinants, focusing on patterns across countries as well as drawing on the specific case of the United States to zoom in on the micro-level dynamics. First, we test the wide-spread notion that politics has become more uncivil by looking at temporal patterns over the five years of data. Second, we examine patterns in the specific political issues that are most associated to incivility, examining whether so-called "culture war" issues are more toxic than economic issues [4]. Third, we examine whether particular political parties and ideologies are associated to higher levels of toxicity. Fourth, we examine whether parties engage in more toxic discourse when they are in opposition, as opposition parties may be incentivized to use toxicity to underscore the government's failures or unfulfilled promises, and to gain visibility in public discourse [24]. Fifth, we test whether toxicity increases during election campaigns, as these periods intensify competition may encourage politicians to use polarizing language to fire up their bases voters. Finally, we examine whether the COVID-19 crisis reduced toxicity of political discourse, as scholars believe that a shared crisis can temporarily reduce polarization and political conflict.

2 Results

We first turn to the central question of whether toxicity has increased among political elites. Polls have suggested that 88% of Americans are concerned over the uncivil and rude behavior of politicians, indicating public frustration with the current state of political discourse [38]. However, such perceptions may be the result of shifting biases of media representation, rather than an actual increase in the level of toxicity in the

Fig. 1: The evolution of the average level of toxicity by party across all included countries. The figure shows a clear rise in the level of toxicity, nearly doubling from the initial levels. The figure also shows a clear impact of the COVID-19 pandemic, resulting in a brief but substantial fall in the level of toxicity.

Fig. 2: Focusing on the United States, showing the weekly average toxicity by party, highlighting the impact of relevant events such as the impeachment, COVID-19 pandemic, and the 2020 election. The figure reveals shifting inter-party dynamics of toxicity, driven both by external events, and which party is in power.

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discourse of political elites. Moreover, there is a lack of international studies that can cast light on whether such a rise is specific to the United States, or whether rising political incivility is a global phenomenon.
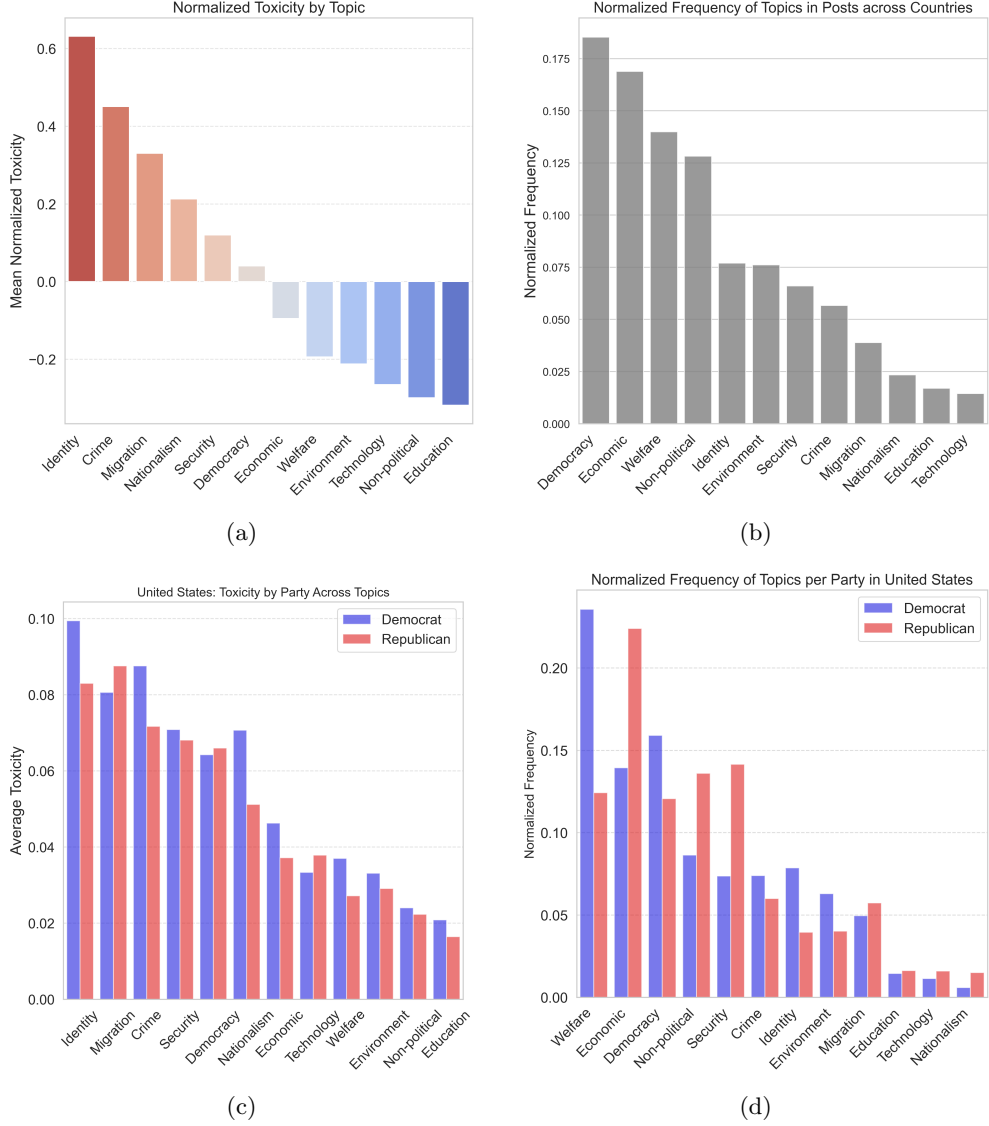
Figure 1 shows the average weekly level of toxicity for all countries over the time period. As can be seen, the average weekly toxicity sees a clear rise over time, confirming the sense that political elites in Western countries are increasingly leveraging harsher rhetoric. The sharp incline stabilizes after 2019 and appears to see a substantial but brief drop following the COVID-19 pandemic. The brief but substantial drop following the onset of the COVID-19 pandemic hints at a temporary recalibration – possibly driven by the shared sense of crisis that momentarily subdued the usual competitive antagonism.

Figure 2 zooms in on the US context and shows the level of toxicity split by political party. The figure shows an intraparty dynamic: during the first Trump administration, Democrats exhibited a persistently higher level of toxic language. The results also illustrate how sensitive the level of incivility is to external events. The 2019 impeachment and the 2019 government shutdown see Republicans increase substantially in incivility during brief periods. We also see a strong drop in toxicity of both parties following the COVID-19 crisis. Strikingly, the levels of toxicity of the two parties converge in the weeks before the 2020 election. Following the Democratic election victory, the Republicans overtake the Democrats in terms of toxicity, suggesting that parties in opposition will tend to show a higher level of toxicity than parties in power.
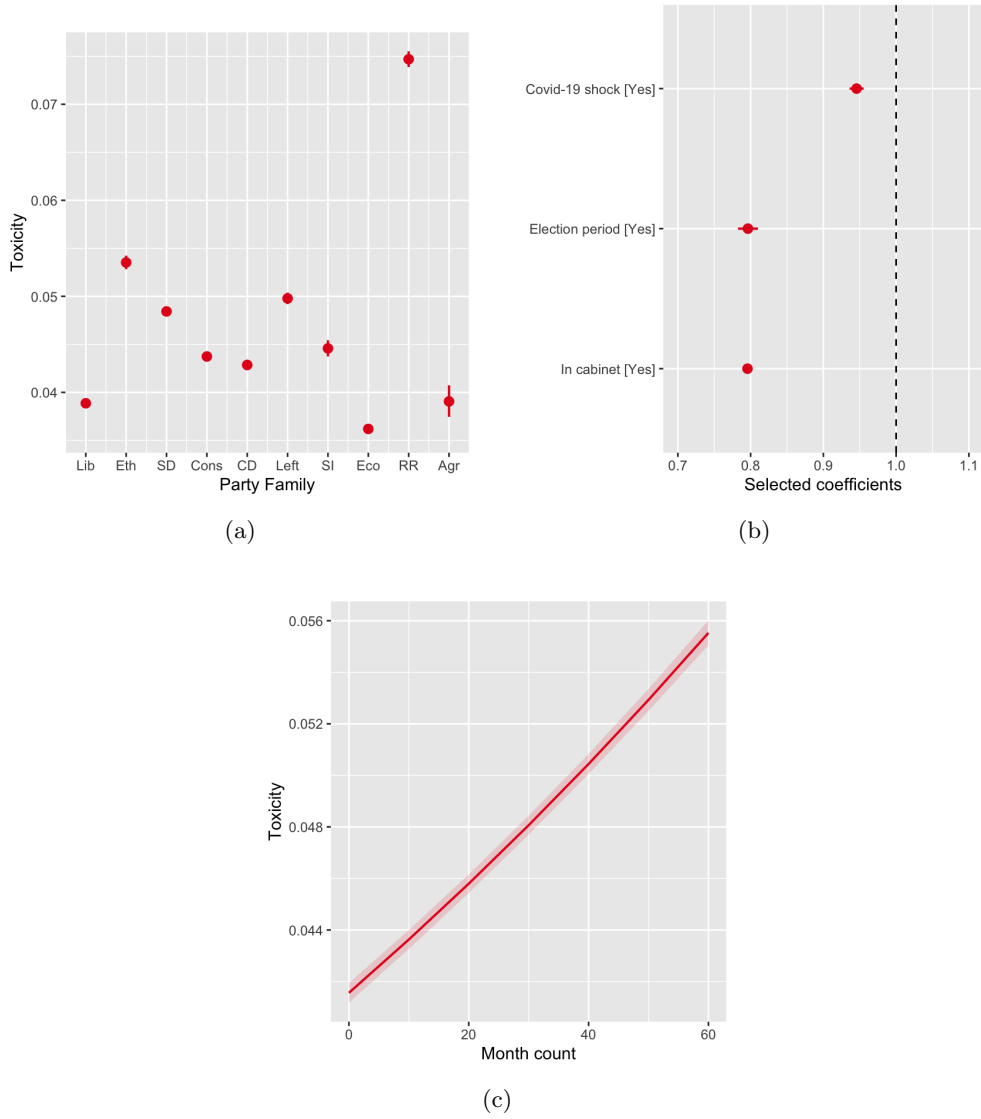
Turning to the question of the relationship between political topics and toxicity, figure 3a shows the normalized average incivility across political topics of discussion, revealing substantial differences. While the boundaries of what can be considered culture war issues vary across regions, the results are highly aligned with the notion that culture war issues are subject to the most toxic and uncivil discourse. Debates related to identity, crime, migration and nationalism are among the most uncivil, whereas more material issues such as welfare, economy, education, and technology are most civil. Figure 3b shows that the topics that dominate debate tend to be less toxic, and more focused on democracy, economics, and welfare.

We now again zoom in on the case of the United States to examine the relationship between parties, political issues, and the level of incivility. Figure 3c shows the relationship between political parties and the normalized toxicity of discussions by issue, suggesting that there are some small differences in the level of toxicity on the same issues between the two parties. Democrats are more uncivil than Republicans in discussions focusing on identity, crime, and democracy, whereas Republicans are more toxic when it comes to discussions of migration.

Figure 3d reveals substantial differences across parties in the frequency of topics of debate. Differences in the level of incivility between parties may hence in part be explained by one party focusing more on a more conflictual issue than the other. Democrats focus more on *welfare* and *democracy*, and Republicans focusing on *economics*, *security*, as well as *non-political* issues. Notably, all the issues that are among the most discussed belong to the low-polarization categories, while toxic culture war issues are substantially less frequent and tend to be dominated by Democrats.

Fig. 3: (a) The average toxicity of each topic across the included countries. Toxicity values are normalized within each country by computing the z-score of toxicity within each country. After normalization, we calculate the mean normalized toxicity for each topic. (b) The total frequency of topics across all countries in the dataset, normalized by the total number of tweets in the respective country, to ensure that countries with a larger number of tweets do not disproportionately influence the results. (c) Focusing on the case of the United States to examine differences across parties in the level of toxicity associated to specific political issues. The figure shows the mean toxicity of posts by their associated topic for the respective parties. (d) Focusing on the fraction of posts associated to each topic by party in the United States. The figure suggests that less polarized issues tend to be subject of more frequent discussion, and shows substantial differences in the focuses of discussion between the two parties.

(a)

(b)

(c)

Fig. 4: Figures drawn from a single beta regression model, with monthly average toxicity levels by political party as the dependent variable. The model includes party family, party participation in government, election periods, the impact of the COVID-19 shock, a time trend as independent variables. It also includes country fixed effects. (a) reports the predicted level of toxicity by party family, (b) reports the coefficients of the variable government participation, COVID-19 shock and election period, and (c) reports the predicted level of toxicity by month of analyses.

We now turn to the the party determinants of political incivility, Figure 4a shows the predicted level of incivility by party family, controlling for other factors. The figure reveals that politicians belonging to radical right populist parties are far more toxic than politicians belonging to other party families. We can moreover observe significant differences among other party families, with the left being significantly more uncivil than other parties. Liberal and Green parties show the lowest levels of incivility.

Figure 4b displays selected coefficients from the beta regression model. Note that coefficients above one indicates a positive effect on the dependent variable, while coefficients below one indicate a negative effect. The figure shows that, controlling for other factors, political parties in government tend to be substantially less uncivil than parties in opposition. Electoral campaigning also has a negative impact on the overall level of toxicity. Finally, the plot shows the effect of the COVID-19 pandemic, focusing on the period of the first pandemic wave. As the figure illustrates, during this period, we observe a significant reduction in political toxicity following the pandemic.

Finally, returning to the question of rising toxicity, we examine whether the observed longitudinal increase in toxicity remains even when controlling for the other factors, such as the pandemic, electoral periods, and party families. Figure 4c shows that we still see a significant rise in the level of toxicity over the period. This suggests that the increase is not solely driven by external events like the pandemic or electoral cycles, but may reflect a broader trend in political discourse, potentially linked to deeper global structural changes such as shifts in media ecosystems, political polarization, or evolving political norms.

3 Discussion

Our comprehensive analysis of nearly 18M messages from parliamentarians across 17 Western democracies reveals a troubling trend: political toxicity is indeed rising among political elites across countries, confirming widespread perceptions. This rise persists even when controlling for factors such as the growing influence of radical right parties, suggesting a fundamental shift in political communication norms that transcends specific ideological movements. This suggests that rising toxicity in politics is not merely an expression of national political conflicts, but part of broader global shift in political dynamics.

The identified patterns are compatible with the notion of a strategic deployment of toxicity by political actors responding to changing incentives in the global media environment. The association between toxicity and opposition status demonstrates how incivility functions as a tactical resource, enabling opposition parties to gain visibility, challenge incumbents, and energize their base supporters. This finding connects to broader theories of political communication that view incivility not merely as a breakdown of norms but as a calculated approach to attention management in an increasingly crowded information ecosystem [32, 39].

We furthermore found that political posts focusing on "culture war" issues – e.g., identity, migration, and nationalism – consistently represented the most toxic discourse across national contexts. These issues share a common characteristic: they engage with questions of belonging, threat, and group boundaries, making them more fertile as

ground for emotional appeals and outgroup derogation than for rational debate and negotiation. Economic debates – while often contentious – allow for more pragmatic bargaining and compromise, as they are typically framed in material rather than existential terms. Culture war issues are hence fundamentally interlinked with incivility, as they are similarly strategically exploited by politicians to energize their base, mobilize emotions, and reinforce partisan divisions.

The COVID-19 pandemic's dampening effect on political toxicity demonstrate that even entrenched patterns of incivility can be temporarily disrupted when external conditions shift the political calculus. This aligns with research on the "rally-around-the-flag" effect during national crises [40] and illustrates how external threats can temporarily reduce partisan animosity [41].

The prominence of radical right parties in driving toxicity deserves particular attention. These parties have leveraged emotional appeals and anti-establishment positioning to disrupt conventional politics, with their communication strategies subsequently influencing the broader political field. This suggests that incivility may be "contagious" within political systems, with mainstream parties adopting more aggressive rhetoric in response to radical right challenges, even as they reject their policy positions [42].

In summary, the findings of this paper demonstrate empirically what many have suspected: political discourse in Western countries is becoming more toxic, with potential long-term consequences for democratic governance. There may here be the risk for a self-reinforcing cycle: as toxicity becomes normalized in political discourse, the electoral costs of incivility may decrease, further incentivizing its use. Meanwhile, the attention economy of social media – with algorithms that privilege engagement over deliberation – creates structural conditions that reward inflammatory rhetoric. The strategic nature of toxicity suggests that addressing it will require more than appeals to civility – it will necessitate addressing the structural incentives that make incivility politically advantageous in contemporary democracies. As social media continues to transform the public sphere, understanding and countering these dynamics becomes essential for preserving the deliberative foundations of democratic politics [43, 44]. Without intervention, these dynamics may continue to erode the norms that underpin democratic functioning.

4 Methods

For data on the political communication of politicians, we use Twitter (now X) messages sent by parliamentarians in Belgium, France, Canada, Spain, United States, United Kingdom, Australia, Ireland, Italy, Germany, Switzerland, Austria, Luxembourg, Netherlands, New Zealand, and Poland. Twitter/X was among the primary modes by which politicians communicate with one another and the public during the time-period under study. To acquire tweets, we draw on the Twitter Parliamentarian Database [45], which was collected by following each individual politician and collecting all their messages. This database is combined with existing data on political parties and countries, from V-Dem and the Manifesto database [46].

The measurement and operationalization of incivility have been the focus of a long-standing debate in political science. Within social media research, however, the definition and measurement of civility is both more well-established and narrower – often described under the label 'toxicity.' While 'incivility' tends to be used for milder forms of norm violation and is studied in relation to elite political discourse, and 'toxicity' implies harsher language and is studied in relation to social media, often relating to harassment studies or psychological well-being, our study brings the two literatures together, as we examine elite political discourse online and focus on the full spectrum from moderate incivility to outright toxicity. We hence employ 'toxicity' and 'incivility' interchangeably throughout the paper.

Within social media research, measurements of toxicity have become well-established for identifying uncivil and hostile language. A large number of influential studies draw on machine learning tools designed to identify and measure incivility in social media messages, initially with the aim of supporting moderation on online social media platforms [37]. We draw follow this literature by drawing on the Perspective API, developed by Google and Jigsaw, and representing one of the most established such frameworks. This API uses machine learning models to identify incivility in comments, scoring a message based on the perceived impact the text may have in a conversation. The measure is created by training a machine learning algorithm on the basis of a large number of messages that have been manually labelled. The score captures the extent to which a message is rude, disrespectful, or unreasonable, and likely to make someone leave a discussion – and thus speaks with existing definitions of toxicity. The measure has the benefits of allowing a comparative approach to incivility in political discourse. The languages supported by the API include Czech, Dutch, English, French, German, Italian, Polish, Portuguese, and Spanish. It should be noted that Perspective API does not guarantee comparability across languages and cultural contexts, meaning that the resulting measure should not be used to compare the levels of toxicity between countries. To avoid this affecting our analysis, we normalized by country, and applied fixed controls for country effects in the models.

To identify political topics, we use a zero-shot Large Language Model [47, 48]. We follow established best practices for reliable and ethical use of LLMs [49], in particular validating the results against manual coding. The SI provides detailed information of the coding and validation procedures.

In the statistical analysis, we use the mean level of toxicity over the messages of a political party in a given month as the dependent variable. We include only parties whose politicians have tweeted at least 10 times during the month in this calculation. Since this dependent variable is a fraction, we rely on beta regression models with country-fixed effects. We ran a single model that includes party family, participation in government, whether the communication occurred during an electoral period, whether it occurred during the first COVID-19 shock, and a time trend as independent variables.

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