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Communicating in an eventful campaign: A case study of party press releases during the German federal election campaign 2021

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Communicating in an eventful campaign: A case study of party press releases during the German federal election campaign 2021

Christoph Ivanuscha,*, Lisa Zehntera, Tobias Bursta

Abstract

Party competition during the German federal election campaign 2021 was marked by major external events and remarkable shifts in poll ratings. Existing literature argues that parties adjust their communication to such changing contexts and proposes three strategies: parties can respond to other parties, voter concerns or external events. In addition, these salience strategies are potentially moderated by further factors (e.g., poll ratings). The dynamic setting of the German federal election campaign 2021 provides an ideal case to bring together and test the outlined theories. We train a state-of-the-art model (BERT) on labelled manifestos and apply it for cross-domain topic classification of party press r eleases. The analysis shows that the parties used press releases for different purposes during the campaign and adjusted their issue communication to other parties and external events, but not to voter concerns. The use of different salience strategies was thereby unaffected by p oll t rends. These findings emphasize the influence of contextual changes on election campaigns and add important evidence to prominent theories of party competition.

Keywords: party competition, salience strategies, German federal election, press releases, BERT

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1 Introduction

The German federal election campaign in 2021 brought considerable changes to the political arena and was marked by a very special dynamic and context. First, the campaign was significantly shaped by external events. In addition to the Covid-19 pandemic, which was still in full swing, two major external events came to the fore just weeks before the election. While a large-scale flood disaster hit several regions of Germany in July, the Taliban launched a successful summer offensive in Afghanistan with NATO troops withdrawing in chaotic fashion from the country. Both external events attracted a lot of attention during the election campaign. Second, a remarkable comeback by the Social Democratic Party (SPD) led to a dynamic election race and rapid shifts in poll ratings. At the start of the campaign, the SPD was far behind the Christian Democratic alliance (CDU/CSU) and the Greens (Grüne) in polls, but improved continuously and ended up being the strongest party at the ballots.

Such changing circumstances pose a challenge to political parties, especially during campaign periods. Parties usually aim for a coherent campaign and want to stay 'on message' by campaigning on a previously defined issue agenda, the so-called 'ideal agenda' (Norris et al., 1999). This 'ideal agenda' is most closely laid out in election manifestos at the start of the campaign and represents the parties' issue preferences. However, unexpected developments and contextual changes, such as major external events or significant shifts in poll ratings, may force parties to adjust their communication strategies during the campaign.

In the existing literature, three strategies that parties can use to respond to contextual changes are commonly discussed: parties can respond to the communication of other parties through 'issue engagement' (e.g., Kaplan et al., 2006; Meyer and Wagner, 2016; Sigelman and Buell Jr., 2004), to voter concerns by 'riding-the-wave' (e.g., Klüver and Sagarzazu, 2016; Klüver and Spoon, 2016; Spoon and Klüver, 2014) or to external events such as crises or catastrophes (e.g., Dalmus et al., 2017; Gessler and Hunger, 2021). To what extent parties employ these different salience strategies is thereby potentially moderated by further factors. Here, poll ratings are particularly important during campaigns as they allow parties to monitor the success of their campaign and salience strategies. Thus, poll trends are a potentially important factor moderating salience strategies of parties in election campaigns (e.g., Tresch et al., 2018).

This overview of theories discussed in the literature suggests that parties can adopt different - sometimes competing - strategies to respond to contextual changes during election campaigns. In this paper, we provide an in-depth case study that brings together and tests the outlined theories and explores whether their use is moderated by poll trends. Therefore, we analyse party competition during the German federal election campaign in

2021 and argue that it is an ideal case for this endeavor. First, the German case allows for the analysis of party competition in a typical Western European multi-party system. There are usually five to six parties represented in the German Bundestag, covering different party families, ideological orientations and organizational characteristics (e.g. size, resources). Second, during the campaign in 2021, the parties had to deal with a changing public and media agenda, as the flood disaster and the Taliban summer offensive brought new issues to the fore. Third, the dynamic shifts in poll ratings that marked the 2021 election campaign confronted the parties with an unexpected turn of events and may have prompted or forced them to adjust their strategies accordingly. This arrival of new issues on the agenda as well as the dynamic election race provide a well-suited setting to examine which salience strategies parties pursued and to test the discussed theories of party competition.

For this case study, we examine all press releases published by the six major parties and their parliamentary party groups (PPGs) ahead of the German federal election in 2021. Press releases are an especially important tool to keep the public and journalists informed on a daily basis (Ennser-Jedenastik et al., 2022; Norris et al., 1999) and therefore well-suited to track and study potential changes in salience strategies during election campaigns. Overall, our case study covers press releases between April 1, 2021 and election day on September 26, 2021 (N = 2,276), with a particular focus on the last three months before the election (N = 823). We employ an advanced text-as-data technique - a supervised cross-domain topic classification - to analyze issue communication in the party press releases. First, we train a transformer-based BERT model on labelled manifestos. BERT is a stateof-the-art language model pre-trained on large volumes of text and capable of capturing complex contextual relationships between words. During the training procedure, the model learns to classify political texts into 20 specified categories. Then, we apply the manifesto trained model cross-domain to the press releases. This allows us to identify the political issues discussed in the press releases. The achieved performance thereby demonstrates the potential of transformer-based models for research in the area of computational social science.

The analysis provides in-depth insights into party competition and salience strategies during the German federal election campaign in 2021. In a first step, we report descriptive results on the use, purpose and content of press releases by the parties during the campaign. In terms of purpose, we find distinct differences between the parties. While the SPD made heavy use of non-policy-related press releases (i.e., information about campaign events), all other parties mainly distributed policy-related content. With regard to

¹The category scheme used in this study consists of 18 policy-related issue categories and two additional non-policy-related categories.

issue salience, the results show substantial overlap, but also clear differences between the press releases and manifestos indicating that parties deviated from their 'ideal agenda' during the campaign. Therefore, in a second step, we test the discussed salience strategies that parties can pursue to adjust their communication to changes in campaign context: issue engagement, riding-the-wave and responding to external events. In conjunction with data from the Manifesto Project (MARPOR) and the German Longitudinal Election Study (GLES), we show that parties adjusted their campaign communication in press releases to the communication of their competitors (other parties) and to external events, but not so much to voter concerns. Thus, we find that issue engagement and external events provide considerable explanatory power in the case of the German federal election campaign in 2021, while this is not the case for the riding-the-wave strategy. Furthermore, our results indicate that the use of the different strategies remained largely unaffected by poll trends.

The remaining paper is structured as follows. First, we discuss in more detail how and why parties can adjust their issue communication to changes in campaign context. Then, we describe our data set and methodological approach. Finally, we present the results of our case study and conclude by reflecting on the broader implications of our findings.

2 Theoretical framework

During election campaigns, political parties engage in intensive communication efforts. They make use of multiple communication channels, such as manifestos, press releases or social media to highlight their issue preferences and positions. Which issues are discussed in the political debate is an important factor for voting decisions and election outcomes (e.g., Alvarez and Nagler, 1995; Bélanger and Meguid, 2008; Green and Hobolt, 2008). Therefore, parties compete to increase the salience of their preferred issues in the political debate, particularly during election campaigns (e.g., Budge and Farlie, 1983; Green-Pedersen, 2007; Petrocik, 1996). Here, a common argument in the literature is that parties should strive for a coherent campaign and stay 'on message' by focusing on their issue preferences ('ideal agenda') throughout the campaign (e.g., Norris et al., 1999). This 'ideal agenda' is best reflected in election manifestos. Manifestos are extensive documents that are negotiated at length inside parties and are a 'uniquely representative and authoritative characterization of party policy at a given point in time' (Budge et al., 1987, p.18). Therefore, manifestos serve an important function in campaigns. Although they are not primarily used by parties to reach out to voters directly and some differences between parties exist, manifestos provide valuable campaign information for candidates and activists to answer questions by voters, journalists or interest groups. Furthermore, the content of manifestos is regularly mirrored in party leader statements in the media (Dolezal et al., 2012). In this way, the public communication of political parties during campaigns is closely linked to their respective election manifestos.

However, campaign contexts can change and may incentivize or even force parties to deviate from their so-called 'ideal agenda' laid out in manifestos. The few existing studies that compare party manifestos and daily communication during campaigns (e.g., press releases) indeed find considerable differences in issue salience between communication channels (Elmelund-Præstekær, 2011; Norris et al., 1999; Tresch et al., 2018; but see Green and Hobolt, 2008). These findings indicate that parties do not strictly follow their 'ideal agenda' throughout a campaign, but rather adjust it to contextual changes. When it comes to the exact mechanism of such adjustments to their issue agenda, parties have different options. Three salience strategies are particularly prominent in the literature.

First, parties can react to other parties and pick up issues communicated by their competitors. While the dominant perspective in the literature for a long time was that parties first and foremost focus on their strongest issues and therefore 'talk past each other' (e.g., Budge and Farlie, 1983; Petrocik, 1996), more recent studies argue that parties discuss the same issues to a considerable extent. Scholars conceptualise this behaviour as 'issue engagement' (also 'issue convergence') between political actors (e.g., Banda, 2015; Damore, 2004; Green-Pedersen and Mortensen, 2015; Meyer and Wagner, 2016; Seeberg, 2022; Sigelman and Buell Jr., 2004). There are several strategic reasons for parties to perform issue engagement. For example, parties have incentives to engage on an issue if this issues is a potential vote-winner (Spoon et al., 2014) or if the parties want to influence the framing of this issue in the public debate (Jerit, 2008; Nadeau et al., 2010).

Second, parties can respond to voter concerns by focusing on issues that are salient among the public. This strategy is often referred to as 'riding-the-wave'. By 'riding-the-wave', parties can signal that they take voter concerns seriously and this way increase their popularity among the electorate, as Ansolabehere and Iyengar (1994) argue. Hence, employing a 'riding-the-wave' strategy can be an attractive option for political parties during campaigns. Recent research has found support for it by showing that parties pay attention to voter concerns and adjust their communication accordingly (e.g., Klüver and Sagarzazu, 2016; Klüver and Spoon, 2016; Spoon and Klüver, 2014; Wagner and Meyer, 2014).

Third, external events can lead parties to adjust their issue agendas (e.g., Dalmus et al., 2017; Gessler and Hunger, 2021). Crises or catastrophes such as the flood disaster or the events in Afghanistan during the German federal election campaign in 2021 bring new issues to the fore and abruptly increase their salience in the media (Dalmus et al., 2017; Helbling and Tresch, 2011).

In addition, such events can increase the so-called 'problem pressure' related to an issue, since political actors immediately have to react to it (Green-Pedersen, 2019). As a result, external events can lead parties to pick up and address a particular issue.

To summarize, parties can use different salience strategies to adjust their issue agendas and deal with changing contexts during election campaigns. They can respond to other parties ('issue engagement'), react to public opinion and voter concerns ('riding-the-wave') or to external events. As discussed above, parties have several reasons to employ one or more of the named strategies and adjust their so-called 'ideal agenda' according to these strategies. Each strategy thus offers potential explanatory power to analyze party communication during election campaigns. Accordingly, we postulate three hypothesis (one per strategy) with regard to party agenda adjustment during the German federal election campaign in 2021:

- **H1.** Parties devote more attention to an issue when other parties show high issue salience for the respective issue ('issue engagement').
- **H2.** Parties devote more attention to an issue when public salience is high for the respective issue ('riding-the-wave').
- **H3.** Parties devote more attention to an issue when there are major external events concerning the respective issue.

Which strategy a party pursues and to what extent may be influenced by further contextual factors. For example, previous research shows that party-level factors (e.g., party size, party resources, government participation or ideological position) influence the responsiveness of parties to voter concerns (Spoon and Klüver, 2014; Wagner and Meyer, 2014) or the extent to which parties discuss the same issues (Green-Pedersen and Mortensen, 2015; Meyer and Wagner, 2016). However, the arguably most important factor that should influence the choice of salience strategy during a campaign is the current poll ratings. A large amount of opinion polls is usually carried out by various organisations during elections campaigns in order to capture current voting intentions. This way, poll ratings function as an important source of information for parties, as they continuously indicate to a party whether their applied campaign and salience strategy is successful or not. Therefore, parties potentially choose different salience strategies depending on the current poll trends. Tresch et al. (2018), for example, show that winning parties in the 2009 regional elections in Flanders focused more strongly on their manifesto agenda ('ideal agenda') in press releases, while losing parties put more emphasis on party-owned issues.

Poll trends may therefore also moderate a party's issue engagement, riding-the-wave or response to external events. On the one hand, winning

parties may have less incentives to adjust their salience strategy, while losing parties may be more inclined to pick up new issues to turn things around (Spoon et al., 2014). As discussed above, picking up issues that are important to voters and in the political debate is a potentially vote-winning strategy and therefore particularly attractive to parties that are losing in polls. Following this line of argument, losing parties might adjust their issue agenda in line with voter concerns (i.e. riding-the-wave), the communication of other parties (i.e. issue engagement) or based on external events to broaden their appeal and attract new voters. On the other hand, however, losing parties might also be more compelled to stick to their owned issues in order to mobilize and secure the support of at least traditional party voters (Budge, 2015). In this case, the hands of losing parties are tied and they may abstain from issue engagement, riding-the-wave or responding to external events in order to focus on their main message.

This discussion shows that different reactions are plausible when parties face different trends in polls. While issue engagement, riding-the-wave or responding to external events can be interesting strategies for losing parties in order to attract new voters, it might also be plausible for them to stick more closely to their 'ideal agenda' and focus on owned issues in order to mobilize at least traditional party voters. Thus, both lines of argument outlined here are intuitive, but their empirical implications are still vague. Therefore, we use this case study to explore whether and how poll trends moderate the extent to which parties perform issue engagement, pursue a riding-the-wave strategy or respond to external events during election campaigns.

3 Data

To investigate whether and how parties adjusted their salience strategies during the German federal election campaign 2021, we analyse press releases published by the six major parties and their parliamentary party groups (PPGs). Press releases are a relevant tool in party competition and well-suited for the purpose of this study as they are used to regularly communicate with journalists and voters (e.g., Ennser-Jedenastik et al., 2022; Grimmer, 2010) and to respond to sudden developments (e.g., Dalmus et al., 2017; Gessler and Hunger, 2021; Klüver and Sagarzazu, 2016). Furthermore, the content of press releases can potentially reach a large audience, if picked up by journalists (Hopmann et al., 2012; Meyer et al., 2020). Press releases thereby are not subject to significant institutional or resource constraints (Meyer and Wagner, 2021). Hence, parties are relatively free to choose which issues they want to address and to what extent. This is a significant difference, for example, to parliamentary debates, where the legislative agenda and specific rules (e.g., limits to speaking time) influence issue communication (Proksch and Slapin, 2015). The length of press releases also allows parties to cover more complex issues and discuss them in more detail than, for example, on social media (Engler et al., 2022). While communication on social media is compact and even limited to a specific length on certain platforms (e.g., 280 characters on Twitter), press releases offer more leeway. Therefore, even in increasingly digitalized election campaigns and the era of hybrid media systems, press releases remain important campaign tools.

To collect all press releases, we automatically scraped the individual party and PPG websites. Overall, our data set covers 2,276 press releases published between April 1, 2021 and September 26, 2021. While the first three months (April to June) reflect 'routine' times of politics, we define the last three months before the elections (July to September) as campaign time. We opted for this extended campaign period of three months instead of six weeks, in order to measure changes in salience at different points in time and to capture the development of a dynamic campaign.²

The number of press releases per party is displayed and broken down further by source (central party office or PPG) in Table 1. The inclusion of both sources is in line with previous studies that focus on campaign communication in press releases (e.g., Meyer et al., 2020) and reflects that both party offices and PPGs simultaneously shape the public communication of parties. In terms of volume, it becomes clear that the AfD published the highest number of press releases and also the Left party (Linke) released more press releases than the government parties (CDU/CSU and SPD). However, the other two opposition parties, the Greens (Grüne) and the FDP, issued even fewer. Furthermore, there is variation with regard to the exact source as some parties rely more strongly on PPGs to communicate policies than others. For example, the party offices of the CDU/CSU and the Greens (Grüne) nowadays rarely publish press releases, while their PPGs continue to use them frequently.

Table 1: Number of press releases per party and sender (April 1, 2021-September 26, 2021)

Party	Party office	PPG
AfD	207	438
CDU/CSU	5	385
FDP	43	190
Grüne	0	284
Linke	106	298
SPD	152	168
All	513	1,763

²Moreover, this definition of the campaign period mirrors monhtly survey waves of the GLES Panel Study conducted in the context of the German federal election campaign 2021 (GLES, 2022a,b,c).

In terms of the development of press releases published per week, Figure 1 shows a stark decrease at the beginning of July. From mid-July on the number of weekly press releases increased again for most parties, but did not reach the same levels as before the summer. This shows that even in a year with a federal election, less press releases were published during the summer break in the German parliament, where from July until October no debates took place. Our time coverage allows us to include the variety of different election campaign phases and intensities before the German parliamentary election in September 2021 in our analysis.

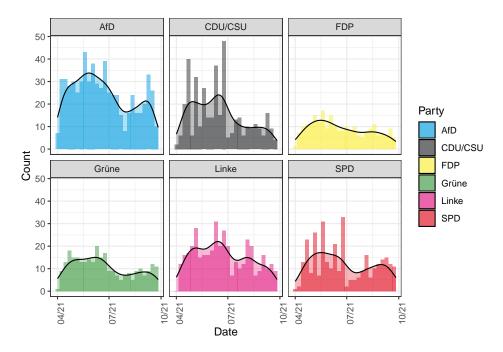


Figure 1: Number of press releases per week (April 1, 2021 - September 26, 2021

Additionally, we leverage further data sources for the analysis. First, we draw on party manifestos obtained through the Manifesto Project corpus (Lehmann et al., 2022) for two main purposes. On the one hand, we use the 2021 manifestos to map the general, fundamental political views and issue salience of the parties ('ideal agenda'). On the other hand, we rely on the labelled manifestos to train our computer-based topic classification model. Accordingly, manifesto data is necessary both for the analysis itself and the data preparation and generation. Second, we use the GLES Panel Study waves 16-19 (GLES, 2021, 2022a,b,c). The survey for wave 16 was conducted in May, for wave 17 in July 2021, for wave 18 in August 2021 and for wave 19 in September 2021. Including all four waves in our analysis allows for

³The relevant waves of the GLES Panel Study 2021 were collected during the following

tracking changes in public opinion over the last few months leading up to the election. Relevant here is the open-ended question about the currently most important political issue from the respondents' point of view, which allows direct insights into the public salience of political issues.⁴

4 Methods

4.1 Cross-domain topic classification

To study how parties used press releases during the German federal election campaign 2021, we analyze the press releases in two steps. First, we make a distinction between policy-related and non-policy-related documents. While policy-related press releases focus on political issues (e.g., health policy, environmental protection), non-policy-related press releases inform about events or organisational matters. To identify non-policy-related content, such as dates for events or invitations to public gatherings, we use a string-matching procedure based on keywords. This approach allows us to differentiate policy-related and non-policy related press releases in the analysis and to avoid potentially skewing our model.

Second, we classify the policy-related press releases into political issue categories. The classification of the press releases is based on an adapted version of the Manifesto Project (MARPOR) coding scheme. The MARPOR coding scheme consists of 76 main codes plus one 'NA' category (code '000'). We have re-assigned all MARPOR categories to 18 overarching policy-related issue categories and two additional categories ('NA' and 'political authority'), aggregating positional differentiations (such as between positive or negative references to the EU) and fine-grained categories under a common theme.⁵ This allows to focus on the salience of central political issues. The categories work exclusively, so that each press release is assigned exactly one overarching issue.

The classification process of the press releases into issue categories is done automatically using a multilingual BERT model. BERT (Devlin et al., 2019) is a so-called transformer-based models. Such models have revolutionized machine learning in the text-as-data domain in recent years. Made possible by an attention-based architecture (Vaswani et al., 2017), transformer-

exact time periods: Wave 16 was collected between May 6, 2021 and May 19, 2021; Wave 17 was collected between the July 7, 2021 and July 20, 2021; Wave 18 between August 11, 2021 and August 24, 2021; Wave 19 between September 15, 2021 and September 25, 2021.

⁴The exact question reads 'What do you think is the most important political problem in Germany at the moment?'. There were no restrictions on the length of the respondents' answers.

⁵The adapted codebook with the 20 categories (18 policy-related issue categories plus 'NA' and 'political authority') and the respective MARPOR codes can be found in Appendix A.1.

based language models introduce the principle of transfer learning to text data, which is known from other domains such as image classification. All these models have in common that they are elaborately pre-trained on vast amounts of unlabelled text, so their weights are accordingly good at providing a general syntactic and semantic representation of words. Their 'prior knowledge' acquired trough the pre-training can be used for applications on own text corpora, and often yields much more convincing results than 'traditional' text-as-data approaches (e.g., bag-of-words techniques).

To make use of this state-of-the-art model for our specific use case of issue classification in press releases, we rely on cross-domain transfer learning. The basic idea of cross-domain learning is that computer-based models can be trained on one type of text, but can then also be applied to other types of text without losing significant model performance (e.g., Osnabrügge et al., 2021). We make use of this principle and train ('finetune') the BERT model by drawing on labelled manifestos. Since our aggregated issue categories are compatible and transferable back to the standard MARPOR categories, we can train the model directly on the Manifesto Project's large volume of expert labelled data (Lehmann et al., 2022).⁶ To fully leverage this rich training data set, we train a multilingual model on all annotated manifestos. During the training procedure, the model is adjusted to encode the relationship between certain text features and the issue labels provided in the training data. Put simply, the model learns to classify text into specific issue categories based on the already labelled training data. After training the model, we apply it to our data set of policy-related press releases. The model provides probabilities for each issue per text and we use this information to classify each press release into the issue category with the highest probability. The only exception is the category 'political authority' (e.g., references to a party's or politician's competence), which in itself does not represent a political issue but is often linked to particular policies. In cases where the model reports 'political authority' with the highest probability, we label the press release according to the issue with the second highest probability.⁷

To validate the classification, a sample of 164 press releases was coded manually by a trained student coder.⁸ Based on this manually coded validation data set, the model achieves an overall accuracy of 0.66. This is a quite satisfying result for a topic classification task with multiple political issue categories. First, the performance is comparable to similar state-of-the-art

 $^{^6{\}rm The~pre\textsc{-}trained}$ model was obtained via the Hugging Face python library (Wolf et al., 2020).

 $^{^7\}mathrm{\acute{A}}$ more detailed step-by-step description of our BERT application is provided in Appendix A.2.

⁸The parties have published 823 press releases during the campaign period (July-September 2021). We have randomly sampled 20% of these press releases for manual coding.

applications in the field (e.g., Osnabrügge et al., 2021). Second, the validation shows that the computer-based model does not lag behind significantly when compared to human coding of political texts into multiple issue categories (e.g., Mikhaylov et al., 2012). Third, the results for the individual issue categories are also fairly good, although some weaknesses remain (see Appendix A.3). For example, a close inspection of the validation data set showed that the model was slightly more sensitive to the category 'foreign affairs', while the manual coder opted for 'democracy' or 'freedom', when these issues were brought up together in press releases (e.g., press releases about the Taliban government in Afghanistan or about elections in Russia). Overall, the validation procedure shows that the applied classification technique achieves comparatively good results and is therefore well-suited for our analysis.

4.2 Measuring salience strategies

To test the discussed theories of party competition, we use linear regression to identify the driving factors behind party issue salience in press releases during the German federal election campaign. We therefore analyse the press releases published in July, August and September 2021 (N=823). The dependent variable is the salience of each issue per party and per month (press release salience). The salience is thereby measured as the relative amount of attention (in percent) a party devotes to each issue during a particular month of the campaign. This calculation is based on the classification results delivered by the BERT model.

To explain issue communication of parties in press releases, we include four main independent variables in the regression model. Three of these variables correspond to the three salience strategies that parties can pursue when campaign contexts change. First, competitor salience reflects how salient an issue is for a particular parties' competitors (i.e., all other parties). Including this variable in the analysis allows us to look at the extent to which parties respond to issues that are salient among their competitors. Hence, it captures dynamics of issue engagement between the parties (H1). We measure competitor salience as the press release salience (in percent) across all parties (with the exception of the one under investigation) for an issue, again calculated separately for each month. We expect parties to permanently monitor press releases of each other and thus include competitor salience for the same month as the dependent variable, denoted as t₀. Additionally, we also provide robustness checks with competitor salience as measured in the previous month, denoted as t₋₁ (see Appendix A.8).

Second, the variable *public salience* captures which issues are particularly important to voters at a certain point in time. This enables us to determine whether the current public attention paid to an issue has an impact on a party's public communication strategy. We obtain the vari-

able via the GLES Panel Study 2021 (waves 16-19), in which respondents were asked about the issue that was most important to them at the time (GLES, 2021, 2022a,b,c). Using the automated semi-supervised classification method Newsmap (Watanabe, 2018), we assigned the unstructured text responses in the questionnaire to one of the categories from our coding scheme.⁹ This allows us to calculate the percentage share of each issue in all answers (equivalent to press release salience) for each month. As we expect that parties need some time to detect and process changes in public salience, we include a time lag between the dependent variable and public salience, which we measure in the previous month and denote as t_{-1} .¹⁰

Third, we measure whether major external events affected party communication during the 2021 German federal election campaign. The campaign saw two of these events at once: a large-scale flood disaster as well as the Taliban offensive in Afghanistan and the connected chaotic withdrawal of NATO troops from the country. These events dominated the public debate for a certain period of time and thus also increased the general salience of the issues associated with them. The flood disaster in July was strongly connected to the issue 'environment', while the Taliban offensive and the withdrawal of NATO and German troops from Afghanistan put the issues 'foreign affairs' and 'defense' into the spotlight. To account for this, we include a dummy variable external events in the regression model, which explicitly marks the three issues made more salient by the external events. For the issue 'environment' the variable is assigned the value 1 in July (and 0 in August and September); for 'foreign affairs' and 'defense' the variable is assigned the value 1 in August (and 0 in July and September). 11 As external events immediately increase the 'problem pressure' and require swift action, we expect parties to respond to them quickly. Therefore, we measure external events in the same month as the dependent variable (t_0) . However, we also test whether parties need more time to respond to external events and therefore include a robustness check with a time lag of one month, denoted as t₋₁ (see Appendix A.9).

Fourth, we include the variable *poll trend* to test whether current poll ratings influence the salience strategies of parties. The variable *poll trend* measures the positive or negative difference in votes in the monthly polls compared to a party's polling results in the previous month. We add this

⁹We validated the semi-supervised classification of topics by manually coding 1.031 open-ended responses, which constitute circa 1.8% of all responses given in the four GLES survey waves used in this paper. The automated classification achieves an accuracy of 0.76 and a Cohen's kappa of 0.71, indicating substantial agreement.

¹⁰The values for the lagged version of the variable *public salience* in July represent survey responses from May based on wave 16 of the GLES Panel Study 2021 (GLES, 2021), since no survey was conducted in June.

¹¹The flood disaster occurred in mid-July and several regions in western Germany were affected. The Taliban summer offensive gained significant momentum and reached Kabul in mid-August.

variable to the regression model and interact it with the three main independent variables (competitor salience, public salience and external events). As discussed above, several opinion polls are regularly carried out during election campaigns and deliver nearly 'real time' information on trends in voting intentions. Therefore, we assume that parties continuously monitor poll ratings (particularly during election campaigns) and react to them immediately. Thus, we measure *poll trend* concurrently in the same month as the dependent variable (t_0) . However, we also include robustness checks where we introduce a time lag of one month, denoted as t_{-1} , to account for the fact that parties may need some time to react to changes in poll trends (see Appendix A.10).

Furthermore, we control for a number of potential confounding variables. First, we include issue salience in manifestos (manifesto salience) as parties are expected to pay more attention to those issues that are relevant in their respective manifestos. We obtain the necessary data via the Manifesto Project (Lehmann et al., 2022) and measure the salience of each issue in the manifestos in percent. Second, we control for the government status and party size as previous research shows that both factors can influence party communication (Klüver and Spoon, 2016; Tresch et al., 2018; Wagner and Meyer, 2014).

5 Results

In this section, we report the results from our analysis of party communication during the German federal election campaign in 2021. Before we move into the statistical analysis and test the discussed theories, we first provide descriptive results on the use, purpose and content of party press releases during the campaign.

In our analysis of the German federal election campaign, we find intriguing differences between the parties regarding the purpose of press releases. In general, parties can use press releases to (1) draw attention to their policies (e.g., health policy, environmental protection) or to (2) inform journalists and the public about campaign events or organisational matters. We therefore differentiate policy-related and non-policy-related press releases. While the former are more prominent and regularly subject to research (Gessler and Hunger, 2021; Klüver and Sagarzazu, 2016; Meyer et al., 2020), the latter also play a substantial role in party communication, particularly during election campaigns. Non-policy-related press releases provide information about talks, TV appearances or conventions. This is a crucial aspect of campaigning as such events can reach a big amount of voters and potentially influence candidate preferences and vote choice (Atkinson et al., 2014; Kilibarda et al., 2020; Shaw, 1999). It is precisely here in the use of non-policy-related press releases that we find interesting differences between the

parties.

Figure 2 compares the type of content of press releases (policy-related vs. not policy-related) during non-campaign times in the left pane (April 1, 2021 to June 30, 2021) and during campaign times in the right pane (July 1, 2021 to September 26, 2021). In contrast to all other parties, the SPD predominantly used press releases to communicate non-policy-related content and inform about campaign events. While the SPD already stood out before the campaign started, as their share of non policy-related press releases (8.5%) was higher than that of the other parties, this difference was even bigger during the campaign (72.7% not policy-related). All other parties mainly focused on policy-related messages in their press releases, both before and during the election campaign.

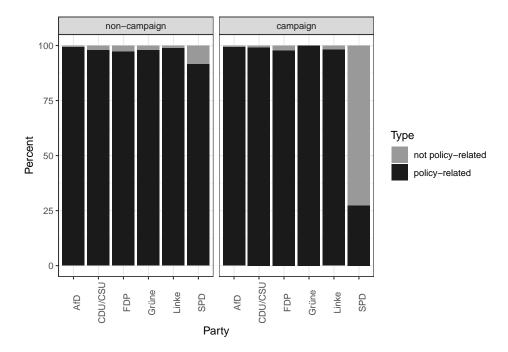


Figure 2: Type of press release usage per party before and during the election campaign.

Interestingly, the observed shift between policy-related and non-policy-related content in SPD press releases coincides with a shift in the primary sender of the press releases (see Appendix A.4). Ahead of the election campaign (April to June 2021), 75.9% of all SPD press releases were published by the SPD's parliamentary party group (PPG) and only 24.1% by the central party office. During the campaign, however, we can observe a clear reversal. Between July and September 2021 the central party office now issued nearly 86% of all SPD press releases, while the PPG only played a minor role. While PPGs usually focus strongly on current topics and policies,

the coordination of (campaign) events and organisational matters mainly resides with the central party office. Therefore, the sudden predominance of the central party office with regard to press releases might be a fitting explanation for the SPD's strong focus on non-policy-related content during the campaign. Also here, this observation is unique to the SPD as we can observe no substantial shifts between campaign and non-campaign times for all other parties.

In the second step of the analysis, we investigate to what extent and how the parties adjusted their communication to the specific context of the campaign. As introduced earlier, parties develop a so-called 'ideal agenda' in their manifestos prior to the election campaign, but potentially adjust their issue communication when campaign contexts change.

Figure 3 compares the issue salience in party manifestos and press releases across all parties during the election campaign. Overall, there seems to be a considerable degree of overlap between the issue agendas in manifestos and press releases. This is also confirmed when we analyze the correlation in issue salience between manifestos and press releases as we find moderate to strong positive correlation for nearly all parties (see Appendix A.5). However, we can also observe differences. Specific issues clearly came much more to the fore in press releases than in manifestos and vice-versa. While the issue 'economy', for example, dominates manifestos (12.9%), it only appears in 8.1% of the press releases. On the other hand, 'foreign affairs', for example, are nearly twice as salient in press releases (10.9%) than in manifestos (5.5%). A similar trend is observable for the issues 'immigration' and 'welfare state', which are also more salient in press releases.

The discussed observations largely hold for all parties, but there are also differences in issue salience between them (see Appendix A.5). For example, the high importance of 'foreign affairs' in press releases compared to manifestos is especially pronounced in the case of the Greens, and while the SPD focused its press releases much more on 'economy' than its manifesto, this is not the case for the other parties. Similarly, the general increase in press release salience for 'immigration' is mainly driven by one party. The AfD put comparatively strong emphasis on this issue, but all other parties paid little attention to it during the campaign. Moreover, AfD, FDP and the Left party put more emphasis on the 'welfare state' in press releases than in manifestos.

These findings suggest that although parties seem to use their manifesto agendas as points of reference for their press releases, they also deviate from them during election campaigns. As discussed before, we hypothesize that parties adjust their communication in three ways, namely by responding to other parties (H1), public salience (H2), or by focusing on external events (H3). We test the impact of these strategies on the issue salience in press releases in four regression models (see Table 2).

Our data set contains observations for the six major parties in 18 policy-

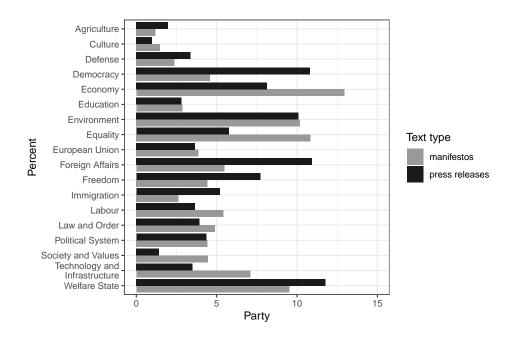


Figure 3: Comparison of issue salience in party manifestos and press releases (July-September) during the German federal election campaign in 2021.

related issues across three months of campaigning (July, August and September 2021). To account for this data structure, we (1) report our models with clustered standard errors by party and issue to address the clustering and (2) include a lagged dependent variable (press release salience (t_{-1})) to address the time component and control for potential autocorrelation in the dependent variable (for a similar approach, see Klüver and Sagarzazu, 2016).

We report four models that focus on the potential influence of the three named salience strategies. The first model explores whether parties adjust their campaign communication based on their competitor's communication. As expected, issue attention increases, when salience of a specific issue is high for all other parties (competitor salience). The effect is statistically significant. The second model investigates whether public salience has a positive effect on parties' issue attention. While the effect is positive, it is not statistically significant. The third model includes the dummy variable external events - for the flood disaster and the Taliban offensive in Afghanistan - as the independent variable. The effect is in the expected positive direction and statistically significant. Thus, parties put more focus on issues that were directly related to the external events. The fourth model brings together all three main independent variables. Here, the effect for external events remains stable, but the effect for competitor salience becomes statistically insignificant. A potential explanation is the simultaneous

influence of external events on the communication of all parties. Thus, the variables *external events* and *competitor salience* are correlated to a certain extent (see Appendix A.6) impacting the regression results in the fourth model.

In terms of goodness-of-fit, the first model testing the effect of *competitor salience* and the full model (model 4) appear to have the largest explanatory power (see values for R-squared in Tables 2). Based on this finding, the theory of 'issue engagement' seems to add the most explanatory power to our regression models. However, the differences between the estimated models are not particularly large and should therefore not be over-interpreted.

Table 2: Testing issue emphasis strategies in party press releases.

		Dependent variable: Press release salience (t0)				
	(1)	(2)	(3)	(4)		
Competitor salience	0.281*			0.262		
•	(0.117)			(0.171)		
Public salience (t-1)		0.047		0.010		
		(0.034)		(0.045)		
External event			1.325***	0.524^{*}		
			(0.119)	(0.222)		
Manifesto salience	0.182	0.208	0.250**	0.178		
	(0.095)	(0.104)	(0.095)	(0.172)		
Government status	0.017	0.029	0.035***	0.017		
	(0.071)	(0.038)	(0.003)	(0.286)		
Party size	-0.001	-0.002	-0.002	-0.001		
	(0.016)	(0.031)	(0.028)	(0.025)		
Press release salience (t-1)	0.459***	0.497***	0.503***	0.458***		
	(0.108)	(0.074)	(0.060)	(0.083)		
Constant	0.470***	1.418***	1.340**	0.512**		
	(0.095)	(0.350)	(0.406)	(0.164)		
Observations	324	324	324	324		
R-squared	0.326	0.311	0.309	0.326		
Adj. R-squared	0.315	0.3	0.298	0.311		

*p<0.1; **p<0.05; ***p<0.01 Standard errors clustered by party and issue.

To test the potential influence of poll ratings on the choice of salience strategies we estimate further regression models and interact competitor salience, public salience and external events with poll trends (difference in a party's poll ratings compared to previous month). Table 3 reports the results of these regression models. In all three models (models 5-7) we do not find statistically significant interaction effects. This finding also holds if we include a time lag of one month for poll trends to allow the parties more time to react to changes in poll ratings (see Appendix A.10). Thus, parties

Note:

did not appear to adjust their campaign communication to current positive or negative poll trends during the German federal election campaign in 2021.

Table 3: Examining the influence of standing in polls on issue emphasis strategies in party press releases.

	-	Dependent variable:			
	Press release salience (t0)				
	(5)	(6)	(7)		
Competitor salience	0.282^* (0.140)				
Public salience (t-1)		0.050 (0.031)			
External event			1.328* (0.640)		
Poll trend	-0.045 (0.101)	-0.108^{***} (0.017)	-0.011 (0.071)		
Competitor salience:Poll trend	0.008 (0.027)				
Public salience (t-1):Poll trend		0.020 (0.017)			
External event:Poll trend			0.171 (0.833)		
Manifesto salience	0.182^* (0.090)	0.202 (0.118)	0.249** (0.092)		
Government status	0.021 (0.239)	0.029 (0.042)	0.045 (0.266)		
Party size	-0.001 (0.017)	-0.002 (0.038)	-0.002 (0.017)		
Press release salience (t-1)	0.459*** (0.111)	0.498*** (0.095)	0.504*** (0.099)		
Constant	0.469* (0.188)	1.434** (0.392)	1.330* (0.535)		
Observations	324	324	324		
R-squared Adj. R-squared	0.326 0.311	0.314 0.299	0.309 0.294		

Standard errors clustered by party and issue.

To sum up, we find that parties adjust their issue communication to changing contexts during election campaigns by responding to other parties ('issue engagement') and to external events. In contrast, our results do not provide evidence for the 'riding-the-wave' strategy as parties did not adjust their press release salience according to public salience. This goes against previous studies, which show that parties adjust their communication to voter concerns. Two explanations may apply here: first, some existing studies have focused on longer (non-campaign) time periods (Klüver and

Sagarzazu, 2016) and potential differences in party behavior may exist between campaign and non-campaign times; second, in the relatively short and intense phase of the election campaign, parties may not have enough time to detect, process and respond strategically to changes in voter concerns. This may explain the difference between our findings from press releases and previous studies that analyze data with less time granularity such as manifestos (Klüver and Spoon, 2016; Spoon and Klüver, 2014; Wagner and Meyer, 2014).

Furthermore, we also do not find significant differences in the use of the tested salience strategies depending on current poll trends. Similar to the null effect we find for public salience, parties may not have enough time to process and respond strategically to changes in poll ratings during the short time period of election campaigns. Crucially, however, these findings may also indicate that parties themselves are unsure about how to manage their salience strategies in the face of positive or negative poll ratings. As we have outlined in the theoretical framework, different types of responses to changing poll trends are conceivable and have the potential to be electorally beneficial. For example, losing parties may be inclined to both pick up new issues in order to turn their electoral fortunes around (Spoon et al., 2014) or to stick to their owned issues to mobilize and secure at least the support of traditional party voters (Budge, 2015).

In addition to the regression results reported here, we have tested some alternative specifications of the models as robustness checks. First, we excluded the SPD from the analysis as it is a clear outlier when it comes to the use of press releases during the campaign (see Appendix A.7). The results are largely consistent and statistically even more significant, albeit with one exception. In contrast to the results in model 7 of Table 3 we do find a positive and significant interaction effect between external events and poll trends when we exclude the SPD from the analysis. Second, we include a time lag for competitor salience (see Appendix A.8). Here, the results remain stable in all models. Third, we include a time lag for external events (see Appendix A.9). In this case, we do not find a statistically significant lagged effect of external events. This is an expected finding as external events immediately increase 'problem pressure' and require swift responses by political actors. Finally, as discussed before, we include a time lag for poll trends and do not find a significant interaction effect between the tested strategies and poll trends, again confirming the main results (see Appendix A.10).

Besides these general patterns, we can also estimate models for each party separately and find some interesting differences between them (see Appendix A.11). The CDU/CSU, Greens (Grüne) and Left (Linke), for example, responded comparatively strongly to the communication of their competitors (i.e., other parties). The AfD put considerable strong emphasis on issues salient among voters. Given the party's populist orientation, this is not surprising. Advocating for the 'people' and putting strong empha-

sis on the needs of the 'people' is namely at the core of populist ideology (e.g., Engesser et al., 2017; Taggart, 2000). In contrast, we find a negative effect for public salience in the case of the Greens as they rather reacted to their competitors' salience and stuck to their 'ideal agenda' laid out in the manifesto. The latter also applies to the CDU/CSU and the FDP.

6 Discussion and conclusion

In this paper we provided an in-depth case study of party competition during the German federal election campaign 2021. The campaign was marked by a special context as it was significantly shaped by major external events and a dynamic election race with rapid changes in poll ratings. Parties therefore potentially had to adjust their campaign communication to the changing context. Three strategies that parties can pursue in such circumstances are regularly discussed in the literature: parties can respond to other parties ('issue engagement'), voter concerns ('riding-the-wave') or external events. We use the special setting of the German federal election campaign 2021 as a case to contribute to the literature by bringing together and testing the outlined theories in a coherent analysis.

Our computer-based text analysis of press releases from the six major parties ahead of the election shows that parties indeed adjusted their issue communication to the changing context of the campaign. We find that parties both responded to the communication of their competitors ('issue engagement') and to important external events, namely a large-scale flood disaster as well as the Taliban offensive in Afghanistan. Both findings lend support to the respective theories of party competition. In contrast, we do not find a statistically significant effect of public salience on issue salience in party press releases during the campaign. Hence, we cannot confirm the general presence of the 'riding-the-wave' strategy during the German federal election campaign in 2021. This goes against previous studies. Two potential explanations are (1) possible differences in party behavior between campaign and non-campaign times and (2) limitations of parties to detect, process and respond strategically to changes in voter concerns during short time periods such as election campaigns. The latter factor potentially also explains why we do not find evidence that the parties pursued different strategies based on positive or negative poll trends. However, the lack of influence of poll trends on salience strategies can also indicate that parties themselves are unsure about how to react strategically to shifts in poll ratings, since different types of responses are conceivable. Thus, more research is needed to gain a better understanding of the influence of poll ratings on party salience strategies.

Furthermore, our descriptive analysis provides interesting insights on party competition and the use of press releases during the German federal election campaign in 2021. We show that the parties used press releases for different purposes. While the SPD made heavy use of non-policy-related press releases, in which the party informed about campaign events and the like, all other parties predominantly communicated policy-related content. Interestingly, and probably connected, a striking majority of the SPD's press releases during the campaign were issued by the party office and not the parliamentary party group (PPG). Usually PPGs tend to have a strong focus on current issues and policies, while the central party office is primarily responsible for coordinating the campaign and events. Therefore, the sudden predominance of the central party office with regard to publishing press releases might explain the SPD's strong focus on non-policy-related content during the campaign. This finding also shows that non-policy-related press releases are quite frequent and a potentially relevant factor during campaigns. As non-policy-related press releases often contain information on (public) events (e.g., candidate speeches, press conferences), they might attract significant voter and media attention. Furthermore, parties might use such events strategically to appeal to specific groups (e.g., blue-collar workers) or regions (e.g., rural areas) and this way send policy signals, for example. We did not dive deeper into the analysis of non-policy-related communication in this study, but this can be a promising and fruitful avenue for future research.

Besides the empirical analysis of the campaign, the paper shows the potential of computer-based cross-domain learning for topic classification in political science and communication research. We leverage existing labelled training data, so we do not have to deal with the laborious and time-consuming task of creating training data from scratch. Our application thereby yields comparatively good results. This underlines that cross-domain learning is a promising avenue for future research as it allows to explore and compare different text corpora (e.g., manifestos, press releases, social media, coalition agreements) in a relatively resource-efficient way.

Overall, the results of this study emphasize the influence of different contextual dynamics on party competition in election campaigns. Compared to the 'ideal agenda' in manifestos, press releases offer parties the opportunity to quickly adjust communication to specific circumstances and requirements. Parties make use of this flexibility and especially take the communication of other parties and external events into account. The findings in this paper add evidence to prominent theories of party competition and provide important insights into party competition during dynamic election campaigns. However, the study also has some limitations.

On the one hand, although we include a comparatively fine-grained measure of public salience and allow for temporal variation in it, it may still not be sufficiently nuanced. For example, concerns regarding the ongoing Covid-19 pandemic still played a big role in public salience during the campaign. However, since the pandemic has already attracted public at-

tention for more than a year before the election, the parties have already taken Covid-19 into account in their communication, captured by the control variable manifesto salience and the lagged dependent variable in the regression models. This potentially explains some parts of our null finding for public salience. Furthermore, the Covid-19 pandemic is a multi-faceted crisis touching upon multiple different issues (e.g., 'welfare state', 'economy', 'labour', 'freedom'). This is reflected in subtle differences in issue emphasis. We tried to take this into account when classifying the open-ended responses from the GLES surveys, which focused on the Covid-19 pandemic. However, this is a difficult task when working with such a big amount of data and our computer-based classification of the GLES survey responses might therefore not be fine-grained enough to capture subtle differences in issue emphasis.

On the other hand, our study deals with one specific election campaign from a single country. Although the changing context of the campaign provides a well-suited case to test different theories of party competition, this special context may not generalise to other campaign contexts or longer time periods and 'routine times of politics'. For example, we find a clear effect of external events on party communication. Major external events, such as a flood disaster, and the associated 'problem pressure' tend to affect one or two specific political issues and can therefore outweigh the influence of broader changes in public opinion in the short term, as we find in this particular case study. However, over longer periods of time, or in the absence of external events such as crises or catastrophes, changes in public opinion could be far more influential on a broad range of issues, for example. Thus, our findings mainly provide evidence for the relevance of the tested theories in a rather short and highly volatile election campaign marked by major external events. Hence, further similar case studies are needed to deepen our understanding of how parties adapt their communication to changing contexts.

Furthermore, our exclusive focus on press releases limits the generalisability of our findings. Although press releases remain an important tool, increasingly digitalised campaigns add a potentially new dimension to party competition. Political parties nowadays make ample use of even faster and more direct communication via social media. Furthermore, how different parties use the different communication channels may vary. While our study shows that it was mainly the SPD that distributed non-policy-related content via press releases during the campaign, other parties might have resorted to digital communication channels for this task (e.g., websites, social media). The inclusion of digital campaign tools, whether they may act as a supplement or substitute to more traditional communication channels such as manifestos or press releases, and to what extent this affects dynamics of party competition should therefore be considered more strongly in future research.

Data availability

Replication materials for this article are available in Harvard Dataverse at https://doi.org/10.7910/DVN/8TNASL.

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