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The impact of local protests on political elite communication: evidence from Fridays for Future in Germany

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The Impact of Local Protests on Political Elite Communication:

Evidence from Fridays for Future in Germany

Lennart Schürmann

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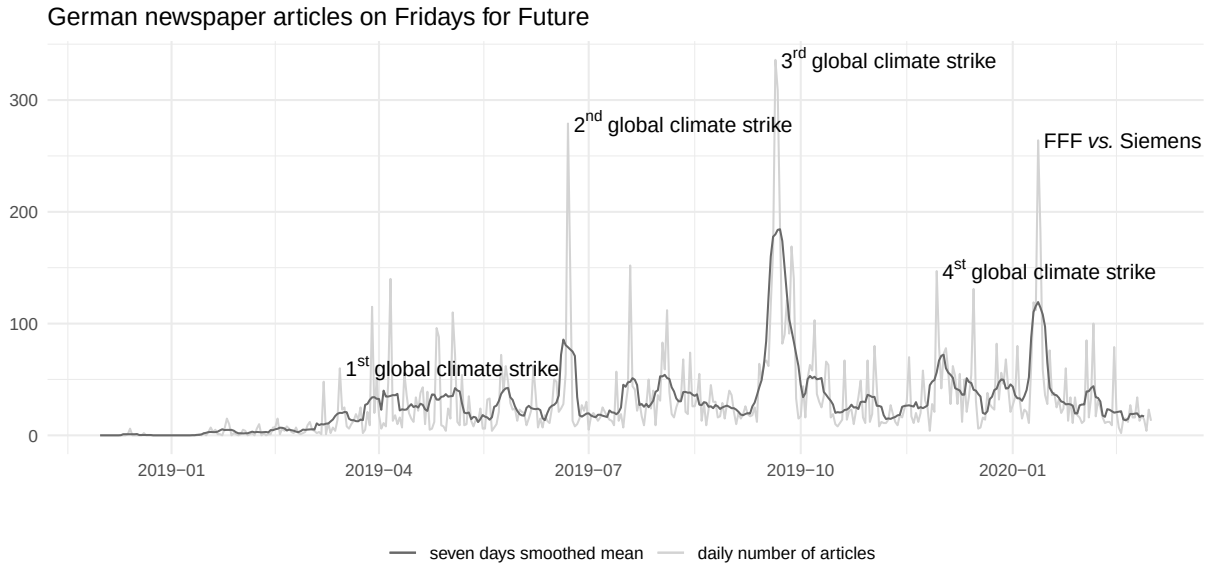
A Summary: The Climate Strike Movement in Germany

One of the most important of the newer protest movements is arguably the climate strike movement, also called Fridays For Future (FFF). This movement has a remarkably high number of participants worldwide and receives enormous coverage in newspaper articles. Due to its ubiquity, the climate strike movement is one of the most influential social movements in recent years. However, I start with a short recap of the history of the climate strike movement. Since the analysis in this paper focuses on German politicians' reactions, the recap centers on Germany.

It is August 20, 2018, when the Swedish student Greta Thunberg (15) protests for the first time in front of the Swedish parliament with the slogan "Skolstrejk för klimatet." The German left-leaning newspaper Taz and the British left-leaning Guardian each published an article covering her protest activity one week later (Schirmer, Kainz, and Blickle 2019). Two weeks later, the hashtag #FridaysForFuture is born, and regular strikes every Friday start to occur in cities worldwide. During the climate conference in Katowice (December 14, 2018), the first organized protests also appear in several German cities. Three months later (March 15, 2019) is the first global climate strike with protest activities in many German cities. This event is followed by the second global climate strike, which occurs on May 24 during the week of the European parliamentary election 2019. Over 320.000 protesters in 280 cities participate in the protest actions of the second global climate strike in Germany (ibid.). Finally, the global climate strike week takes place from September 20 to 27, 2019, with conservative estimates of more than 6 million participants worldwide (Taylor, Watts, and Bartlett 2019). The German public TV station (ZDFheute 2019) reports that 1.4 million people are protesting in German cities.

Figure A.3 illustrates the daily number of German newspaper articles on Fridays for Future. While the first global climate strike was discussed in relatively few newspaper articles, the second and the third global climate strikes received significantly more media attention. Another media attention peak is visible in January 2020, when the German company Siemens decided to participate in a coal mining project in Australia – a decision against which Fridays for Future mobilized throughout Germany. In this context, Siemens CEO Joe Kaeser has offered climate activist Luisa Neubauer a position on the supervisory board of the future company Siemens Energy. She rejected the offer, however, and recommended to fill the position with a scientist (Eydlin 2020; Heflik 2020).

Figure A.1: Temporal distribution of newspaper articles on Fridays for Future in Germany.



B Descriptive Statistics

Descriptive statistics for the independent and control variables in Table A.1, for the dependent variables are shown in Tables A.2, A.3 and A.4.

Table A.1: Descriptive statistics: Independent and control variables

Statistic	N	Mean	St. Dev.	Min	Max
Number of protest events in electoral district	686	0.91	0.70	0	4
Gender (male = 1)	686	0.70	0.46	0	1
Age (in 2017)	686	50.00	10.00	25	77
Parenthood status	686	0.66	0.47	0	1
Doctoral degree	686	0.18	0.38	0	1
Opposition party	686	0.44	0.50	0	1
Sustainability positive	686	3.10	2.10	0.00	7.80
Environmental protection	686	3.40	1.90	1.50	8.90
Human rights	686	1.40	1.00	0.10	3.90
Nominally elected	686	0.42	0.49	0	1
Share of young population	686	21.00	3.40	14.00	33.00
University entrance qualification	686	35.00	7.40	20.00	55.00
Income of private households	686	21.00	2.50	16.00	30.00

Table A.2: Descriptive statistics: Number of references after first global strike day (2019-03-14 – 2019-05-22)

Statistic	N	Mean	St. Dev.	Min	Max
References to Climate Strike Movement on Facebook	686	0.88	4.10	0	76
References to Climate Strike Movement on Twitter	686	2.10	9.40	0	206
References to Climate Strike Movement in Parliamentary Debates	686	0.14	0.95	0	16
References to Environmental Policy on Facebook	686	0.44	1.20	0	10
References to Environmental Policy on Twitter	686	0.28	0.95	0	11
References to Environmental Policy in Parliamentary Debates	686	0.42	1.80	0	22

Table A.3: Descriptive statistics: Number of references before first global strike day (2019-01-01 – 2019-03-13)

Statistic	N	Mean	St. Dev.	Min	Max
References to Climate Strike Movement on Facebook	686	0.40	3.00	0	60
References to Climate Strike Movement on Twitter	686	1.40	9.10	0	209
References to Climate Strike Movement in Parliamentary Debates	686	0.04	0.35	0	6
References to Environmental Policy on Facebook	686	0.24	0.74	0	7
References to Environmental Policy on Twitter	686	0.12	0.49	0	7
References to Environmental Policy in Parliamentary Debates	686	0.22	1.10	0	13

Table A.4: Descriptive statistics: Number of references during entire period (2017-09-24 – 2020-02-21)

Statistic	N	Mean	St. Dev.	Min	Max
References to Climate Strike Movement on Facebook	686	4.30	19.00	0	349
References to Climate Strike Movement on Twitter	686	11.00	47.00	0	982
References to Climate Strike Movement in Parliamentary Debates	686	0.63	2.80	0	46
References to Environmental Policy on Facebook	686	3.90	7.30	0	69
References to Environmental Policy on Twitter	686	2.30	6.20	0	60
References to Environmental Policy in Parliamentary Debates	686	3.00	11.00	0	165

Table A.5: Engagement with the Climate Strike Movement and Environmental Policy

	Facebook		Parliamentary Debates	
	Climate Strike Movement	Environmental Policy	Climate Strike Movement	Environmental Policy
Pre-Protest	74	98	16	66
Post-Protest	177	137	36	84

C Operationalization: Independent and Control Variables

Number of protest events in district: Since I am most interested in the effect of local protests on MPs' political communication, this variable is arguably the most important one for this paper. It is a count variable that provides information on the number of local climate strike protest events during the first global climate strike day in the electoral district of an individual MP.

Most protest event analyses rely on data from newspapers or police reports. However, while these sources are useful for comparative data covering a range of protest topics, they are less useful for studying the geographic variations of protests of a particular movement on a single date. Primarily the focus of newspapers to report on larger events in big cities is a bigger issue in this context (Hutter 2014). As a result, protests in peripheral regions are less often covered by newspapers. To bypass this selection bias, I decided to directly get the protest data from the movement itself, which is, in this case, Fridays for Future Germany.

Fortunately, Fridays for Future Germany provided me with an overview of the registered climate strike protests in Germany. These protests were all registered protests, and the locations were made public on a website so that interested people could join the protest event closest to their current location. Of course, the procedure to get protest data from a social movement might also be prone to error. However, since Fridays for Future used this list internally and also for their communication with potential participants, it is closer to a complete dataset than any protest event dataset from newspapers could ever be.

The list provided the locations of the protest events, including the name of the city, the exact location within the city, and the time when the demonstration started. Next, I manually looked up the electoral district where the event took place and grouped those into electoral districts. The number of protest events per district ranges from 0 to 4, with a mean of 0.9 protest events during the first global climate strike day in March 2019.

Gender (male = 1): For the analysis, the politicians' gender serves as a control variable and has no theoretical considerations attached. The variable is dichotomous here because no member of the German parliament identified as non-binary during the 19^{th} legislative period.

Age (in 2017): Age plays an important role in the explanation of whether MPs react to the protest movement. Here, the variable used is the age the MPs reached in 2017. I calculated this value by subtracting the legislator's year of birth from the year of the investigated federal election, which is 2017. The Age of the MPs ranges from a minimum of 25 to a maximum of 77 years. The mean and median are nearly equal, with 50 and 49.6 years.

Parenthood status: Since the climate strike movement had a major impact on pupils (Sommer et al. 2020), I integrate the parenthood status of an MP into the analysis as well. I collected the data in March 2019, mainly from personal web pages or Wikipedia pages. Parenthood is operationalized as a binary variable. Thus, I do not consider the exact number of children. In sum, 66 per cent of the members of the Bundestag have at least one child.

Doctoral degree: I assume that MPs with a profound academic background in the form of a doctoral degree take scientific findings more seriously. Therefore these MPs should be more responsive to the climate strike movement, which heavily emphasize the scientific foundation of their critic concerning human-made climate change. 18% of the MPs in the data set have a doctoral or higher academic degree.

Opposition party: In the 19^{th} legislative period of the German parliament, the social democratic party (SPD) and the Christian democratic parties (CDU and CSU) form the government. So, these parties are coded as 0, while the other parties are coded as 1.

Sustainability positive: The focus on sustainability is measured on the party level by applying data from the *Comparative Manifesto Project*. This dataset relies on a quantitative content analysis of party manifestos to quantify parties' policy positions (Volkens et al. 2021)[2]. The variable *per416_2* describes the party's "[c]all for sustainable economic development. Opposition to growth that causes environmental or societal harm". (ibid.)[27]

Environmental protection: The focus on environmental protection is also measured on the party level by applying data from the *Comparative Manifesto Project*. The variable *per501* describes "[g]eneral policies in favour of protecting the environment, fighting climate change, and other 'green' policies". (ibid.)[17]

Human rights: The focus on human rights is measured on the party level by applying data from the *Comparative Manifesto Project*. This dataset relies on a quantitative content analysis of party manifestos to quantify parties' policy positions (ibid.)[2]. The variable *per201_2* describes the party's "[f]avourable mentions of importance of human and civil rights in the manifesto and other countries, including the right to freedom of speech, press, assembly etc". (ibid.)[26]

Nominally elected: As explained above in the manuscript, the German electoral system provides two ways for candidates to obtain a seat in parliament. 299 seats are filled in single-seat districts (SSDs) in one-round plurality-contests. The other at least 299 seats consist of MPs selected through closed party lists in the sixteen multi-seat districts (MSDs), which geographically correspond to the sixteen federal states (Länder). The German electoral system allows candidates to run for office on both electoral tiers simultaneously, and it is widespread for candidates to do so. In the following analyses, the mode of the mandate serves as a control variable.

Young demographic structure: To examine the demographic structure of the district, I use the share of young adults (aged between 18 and 34). As this variable refers to the data measured in 2015, the constituents' actual Age might have shifted slightly. Still, in general, the constituencies' age proportions should not change significantly in the following years. Unfortunately, due to the data set restrictions, it was not possible to include teenagers in this variable (Bundeswahlleiter 2017). However, following the rational-choice logic that politicians are vote-seeking, the share of underaged constituents should not be important for politicians since this population group is not eligible to vote. The percentage of young adults in the

population ranges from 14% to 33%, with a mean of 21%.

University entrance qualification: At the constituency level, educational data is only available in the form of school graduation data. Therefore, I have to use this data to approximate the educational level of the constituencies. The highest possible school degree in Germany is the *(Fach-)Abitur*, which allows for studying at an institution of higher education. As such, this school diploma is the university entrance qualification in the German educational system. The Bundeswahlleiter provides data on the number and proportion of school graduates leaving school with a university entrance qualification in 2015. In the analyses, I use this number to model the educational level of the constituency (Bundeswahlleiter 2017). Ranging from a minimum of 20% to a maximum of 55%, large educational differences between the constituencies become apparent.

Income private households: As the variable for the socio-economic status, the disposable income of private households (Euro per inhabitant in thousands) in 2014 is used (ibid.). This variable is a useful indicator of the average economic situation of the citizens living in the constituency. The annual disposable income ranges from a minimum of 16,000 Euro to almost double that in the richest constituency, in which the average inhabitant earns 30,000 Euros per year. The mean and median are much alike, with shortly above 21,000 Euro per inhabitant.

D Main Regression Models

Table A.6: Regression models explaining the number of references to the Climate Strike Movement on Facebook

	References to the Climate Strike Movement			
	Model 1	Model 2	Model 3	Model 4 - Full Model
Number of protest events in electoral district	0.25 (0.10)***	0.27 (0.10)***	0.26 (0.09)***	0.24 (0.09)***
Gender (male = 1)		−0.05 (0.14)	0.10 (0.14)	0.14 (0.14)
Age (scaled)		−0.08 (0.08)	0.02 (0.07)	0.02 (0.07)
Parenthood status		0.10 (0.15)	0.14 (0.14)	0.12 (0.15)
Doctoral degree		0.19 (0.19)	−0.02 (0.17)	−0.03 (0.17)
Opposition party			1.07 (0.16)***	1.01 (0.21)***
Environmental protection			0.04 (0.05)	0.03 (0.05)
Human rights			0.18 (0.11)	0.16 (0.12)
Nominally elected				−0.33 (0.22)
Share of young population (scaled)				0.07 (0.07)
University entrance qualification (scaled)				−0.12 (0.08)
Income of private households (scaled)				0.05 (0.07)
Public opinion climate protection (scaled)				−0.10 (0.07)
References to the Climate Strike Movement (pre-climate strike day)	0.07 (0.00)***	0.07 (0.00)***	0.05 (0.00)***	0.06 (0.00)***
Freqency (logged)	0.97 (0.09)***	0.98 (0.10)***	1.04 (0.10)***	1.01 (0.10)***
Intercept	−4.22 (0.42)***	−4.33 (0.44)***	−5.67 (0.48)***	−5.37 (0.49)***
Deviance	1074.67	1069.77	894.07	876.25
Num. obs.	686	686	686	686

Note: Quasi-Poisson regression models. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

Table A.7: Regression models explaining the number of references to Environmental Policy on Facebook

	References to Environmental Policy			
	Model 1	Model 2	Model 3	Model 4 - Full Model
Number of protest events in electoral district	0.08 (0.10)	0.08 (0.10)	0.10 (0.09)	0.08 (0.10)
Gender (male = 1)		0.44 (0.16)***	0.26 (0.16)	0.24 (0.17)
Age (scaled)		−0.11 (0.08)	−0.03 (0.07)	−0.01 (0.08)
Parenthood status		0.20 (0.15)	0.09 (0.15)	0.23 (0.16)
Doctoral degree		−0.06 (0.18)	−0.12 (0.18)	−0.09 (0.19)
Opposition party			0.69 (0.14)***	0.75 (0.22)***
Environmental protection			0.17 (0.07)**	0.11 (0.07)
Human rights			−0.52 (0.12)***	−0.45 (0.13)***
Nominally elected				0.52 (0.23)**
Share of young population (scaled)				0.17 (0.08)**
University entrance qualification (scaled)				−0.00 (0.08)
Income of private households (scaled)				0.03 (0.08)
Public opinion climate protection (scaled)				0.13 (0.07)*
References to Environmental Policy (pre-climate strike day)	0.35 (0.04)***	0.34 (0.04)***	0.35 (0.04)***	0.34 (0.04)***
Freqency (logged)	1.14 (0.10)***	1.11 (0.10)***	1.09 (0.10)***	1.16 (0.10)***
Intercept	−5.43 (0.44)***	−5.77 (0.47)***	−5.73 (0.50)***	−6.25 (0.55)***
Deviance	648.76	633.00	589.99	564.96
Num. obs.	686	686	686	686

Note: Quasi-Poisson regression models. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

Table A.8: Regression models explaining the number of references to the Climate Strike Movement in Parliamentary Debates

	References to Environmental Policy			
	Model 1	Model 2	Model 3	Model 4 - Full Model
Number of protest events in electoral district	0.51 (0.27)*	0.59 (0.23)***	0.55 (0.23)**	0.58 (0.25)**
Gender (male = 1)		−0.89 (0.37)**	−0.30 (0.42)	−0.47 (0.47)
Age (scaled)		−0.68 (0.21)***	−0.53 (0.22)**	−0.55 (0.24)**
Parenthood status		−0.09 (0.40)	−0.20 (0.41)	−0.35 (0.45)
Doctoral degree		0.68 (0.43)	0.67 (0.43)	0.57 (0.49)
Opposition party			0.85 (0.58)	0.83 (0.94)
Environmental protection			0.11 (0.18)	0.13 (0.20)
Human rights			0.12 (0.45)	0.09 (0.52)
Nominally elected				0.39 (0.88)
Share of young population (scaled)				−0.19 (0.25)
University entrance qualification (scaled)				0.25 (0.23)
Income of private households (scaled)				0.17 (0.23)
Public opinion climate protection (scaled)				0.09 (0.22)
References to the Climate Strike Movement (pre-climate strike day)	0.49 (0.17)***	0.48 (0.14)***	0.25 (0.16)	0.20 (0.19)
Freqency (logged)	0.55 (0.13)***	0.75 (0.14)***	0.68 (0.15)***	0.73 (0.18)***
Intercept	−3.60 (0.46)***	−3.84 (0.62)***	−5.08 (0.78)***	−5.26 (1.06)***
Deviance	524.86	467.72	433.03	419.65
Num. obs.	686	686	686	686

Note: Quasi-Poisson regression models. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

Table A.9: Regression models explaining the number of references to Environmental Policy in Parliamentary Debates

	References to Environmental Policy			
	Model 1	Model 2	Model 3	Model 4 - Full Model
Number of protest events in electoral district	0.47 (0.16)***	0.42 (0.15)***	0.41 (0.15)***	0.41 (0.16)***
Gender (male = 1)		0.08 (0.26)	0.11 (0.29)	0.14 (0.30)
Age (scaled)		−0.24 (0.14)*	−0.24 (0.14)	−0.23 (0.15)
Parenthood status		0.74 (0.29)**	0.74 (0.29)**	0.86 (0.31)***
Doctoral degree		0.34 (0.26)	0.34 (0.27)	0.41 (0.28)
Opposition party			0.08 (0.28)	0.12 (0.39)
Environmental protection			0.04 (0.12)	0.01 (0.12)
Human rights			−0.06 (0.26)	0.00 (0.28)
Nominally elected				−0.01 (0.38)
Share of young population (scaled)				0.23 (0.15)
University entrance qualification (scaled)				−0.26 (0.17)
Income of private households (scaled)				−0.12 (0.15)
Public opinion climate protection (scaled)				−0.03 (0.14)
References to Environmental Policy (pre-climate strike day)	−0.02 (0.05)	0.00 (0.05)	0.01 (0.05)	0.00 (0.06)
Freqency (logged)	0.81 (0.12)***	0.82 (0.11)***	0.82 (0.11)***	0.82 (0.12)***
Intercept	−2.98 (0.35)***	−3.61 (0.42)***	−3.71 (0.50)***	−3.85 (0.60)***
Deviance	900.19	866.02	865.29	851.14
Num. obs.	686	686	686	686

Note: Quasi-Poisson regression models. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

E Validity tests

To test the robustness of these results, I run several additional robustness checks. These results can be viewed in Online Appendix E. First, I test whether party dummies instead of party ideology variables change the results, and the results remain robust (see Table A.10).

Second, I test whether outliers had been drivers of the result. While the attention towards the climate strike is partly driven by a smaller number of particularly active MPs, the arguably most important finding that protest had a positive effect on the attention towards environmental policy remains robust (see Table A.12). Logging the dependent variable, so that particularly active MPs receive less weight in the modelling also does not change these results (see Table A.13). Furthermore, I clustered the standard errors on the district level, and the results remain robust, albeit slightly less significant (see Table A.11).

Third, I test whether different specifications of the protest variable can change the effect of local protest events. Logging the number of protest events does not change the significance of the results (see Table A.18). Furthermore, the exclusion of MPs without protest in the district does not change the significance of the results (see Table A.17). While a binary operationalisation of protest events differentiating between no protest and protest in a district leads to a null effect (see Table A.14), a threshold of more than one protest event leads to even more significant results (see Table A.15). Analysing the number of protest events as factors further supports this finding (see Table A.16). These additional analyses show it is not the presence of one event that affects MPs' attention towards social movements and policy issues but a higher number of protest events. So every additional protest event matters, as more protest events are a stronger public opinion signal.

Fourth, I checked whether short-term reactions had been drivers of the results. Therefore, I excluded the Facebook and Parliamentary Speech data from the first week after the protest from the analysis (see Tables A.19 and A.20). The results remain robust and become even more significant, while the respective models for short-term responses become insignificant. This finding suggests that the initial responses in the short-term are not driven by local protests, however the effect of the local protests materializes over time.

Fifth, I conducted several validity checks, testing additional control variables and interactions. To analyse whether MPs with a viable chance of winning the district respond differently (Sieberer and Ohmura 2021), I tested an interaction of the chance of winning a district and the number of protests in the MP's district. Yet, this interaction yields no robust effects (see Table A.23). Furthermore, interacting the public opinion variable with the protest variable shows no significant effects. The same goes for the additional control variable that accounts for party-leader status or prominence of the politician (see Table A.24). Moreover, including a variable for issue ownership (Environment) and its interaction with the primary independent variable does not substantially affect the main results (see Table A.22). In sum, the main results remain robust in various model specifications with additional variables.

Finally, I modelled the dependent count variables in the main models of the analysis with a Possion and negative binomial regression as additional validity checks (see Tables A.25 and A.26). Applying a Poisson distribution yields similar regression coefficients with smaller confidence intervals leading to more significant

results. Concerning the negative binomial distribution, some effects have larger confidence intervals, leading to less significant or non-significant results. However, the main effect of local protests on the usage of Environmental Policy terms becomes even more pronounced in the Parliamentary Debates. Nevertheless, due to the data structure, a quasi-Poisson model is more appropriate; therefore, the results of the negative binomial regression results should be interpreted with caution.

E.1 Models with party dummies instead of party ideology

Table A.10: Regression models with party dummies

	Facebook		Parliamentary Debates	
	Climate Strike Movement	Environmental Policy	Climate Strike Movement	Environmental Policy
Number of protest events in electoral district	0.20 (0.09)**	0.10 (0.10)	0.57 (0.26)**	0.40 (0.16)**
Gender (male = 1)	0.11 (0.14)	0.24 (0.17)	−0.35 (0.49)	0.09 (0.30)
Age (scaled)	−0.03 (0.07)	−0.02 (0.08)	−0.59 (0.25)**	−0.22 (0.15)
Parenthood status	0.21 (0.14)	0.12 (0.15)	−0.25 (0.48)	0.84 (0.31)***
Doctoral degree	−0.01 (0.17)	−0.11 (0.18)	0.55 (0.52)	0.41 (0.28)
Nominally elected	−0.07 (0.22)	0.34 (0.23)	0.11 (0.90)	0.08 (0.45)
Share of young population (scaled)	0.09 (0.07)	0.15 (0.08)*	−0.28 (0.26)	0.25 (0.15)*
University entrance qualification (scaled)	−0.09 (0.07)	−0.08 (0.08)	0.14 (0.23)	−0.22 (0.15)
Income of private households (scaled)	0.06 (0.07)	0.13 (0.07)*	0.31 (0.23)	−0.16 (0.15)
Public opinion climate protection (scaled)	−0.11 (0.07)*	0.11 (0.07)*	0.07 (0.23)	−0.01 (0.14)
CDU/CSU	−1.44 (0.32)***	−0.96 (0.26)***	−1.21 (1.16)	−0.01 (0.57)
DIE LINKE	0.44 (0.19)**	−0.79 (0.26)***	0.56 (0.80)	−0.24 (0.62)
FDP	−0.87 (0.28)***	−0.52 (0.21)**	−2.06 (1.52)	0.29 (0.47)
GRÜNE	0.64 (0.23)***	−0.78 (0.31)**	0.86 (0.75)	0.12 (0.50)
SPD	−0.71 (0.22)***	−1.26 (0.24)***	−0.86 (0.97)	−0.02 (0.49)
References to the Climate Strike Movement (pre-climate strike day)	0.06 (0.00)***		0.23 (0.20)	
References to Environmental Policy (pre-climate strike day)		0.35 (0.04)***		−0.00 (0.06)
Freqency (logged)	0.96 (0.09)***	1.11 (0.10)***	0.78 (0.20)***	0.81 (0.11)***
Intercept	−3.98 (0.45)***	−4.98 (0.50)***	−3.82 (0.93)***	−3.74 (0.60)***
Deviance	828.70	575.12	405.09	848.51
Num. obs.	686	686	686	686

Note: Quasi-Poisson regression models. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

E.2 Models with clustered standard errors

Table A.11: Regression models with clustered standard errors

	Facebook		Parliamentary Debates	
	Climate Strike Movement	Environmental Policy	Climate Strike Movement	Environmental Policy
Number of protest events in electoral district	0.24 (0.14)*	0.08 (0.12)	0.58 (0.30)*	0.41 (0.20)**
Gender (male = 1)	0.14 (0.21)	0.24 (0.20)	−0.47 (0.50)	0.14 (0.27)
Age (scaled)	0.02 (0.10)	−0.01 (0.09)	−0.55 (0.25)**	−0.23 (0.11)**
Parenthood status	0.12 (0.18)	0.23 (0.19)	−0.35 (0.54)	0.86 (0.32)***
Doctoral degree	−0.03 (0.21)	−0.09 (0.25)	0.57 (0.34)*	0.41 (0.29)
Opposition party	1.01 (0.25)***	0.75 (0.35)**	0.83 (1.26)	0.12 (0.35)
Environmental protection	0.03 (0.07)	0.11 (0.08)	0.13 (0.34)	0.01 (0.12)
Human rights	0.16 (0.16)	−0.45 (0.15)***	0.09 (0.83)	0.00 (0.28)
Nominally elected	−0.33 (0.24)	0.52 (0.31)*	0.39 (0.84)	−0.01 (0.42)
Share of young population (scaled)	0.07 (0.14)	0.17 (0.10)*	−0.19 (0.32)	0.23 (0.17)
University entrance qualification (scaled)	−0.12 (0.07)	−0.00 (0.10)	0.25 (0.24)	−0.26 (0.17)
Income of private households (scaled)	0.05 (0.07)	0.03 (0.11)	0.17 (0.15)	−0.12 (0.16)
Public opinion climate protection (scaled)	−0.10 (0.10)	0.13 (0.08)	0.09 (0.28)	−0.03 (0.16)
References to the Climate Strike Movement (pre-climate strike day)	0.06 (0.01)***		0.20 (0.25)	
References to Environmental Policy (pre-climate strike day)		0.34 (0.06)***		0.00 (0.04)
Freqency (logged)	1.01 (0.08)***	1.16 (0.12)***	0.73 (0.17)***	0.82 (0.10)***
Intercept	−5.37 (0.46)***	−6.25 (0.70)***	−5.26 (1.10)***	−3.85 (0.57)***

Note: Quasi-Poisson regression models. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

E.3 Models with excluding outlier MPs

Table A.12: Regression models excluding outliers

	Facebook		Parliamentary Debates	
	Climate Strike Movement	Environmental Policy	Climate Strike Movement	Environmental Policy
Number of protest events in electoral district	0.09 (0.11)	0.14 (0.13)	−0.21 (0.32)	0.42 (0.18)**
Gender (male = 1)	−0.03 (0.15)	0.38 (0.21)*	−0.80 (0.42)*	0.57 (0.36)
Age (scaled)	−0.09 (0.08)	−0.09 (0.09)	0.19 (0.20)	−0.14 (0.16)
Parenthood status	0.23 (0.15)	0.05 (0.19)	0.62 (0.45)	0.46 (0.37)
Doctoral degree	−0.02 (0.19)	0.31 (0.22)	1.07 (0.42)**	0.47 (0.35)
Opposition party	0.29 (0.21)	−0.36 (0.26)	0.38 (0.73)	0.01 (0.46)
Environmental protection	0.02 (0.07)	−0.14 (0.10)	0.34 (0.19)*	0.17 (0.16)
Human rights	0.15 (0.14)	0.08 (0.19)	−0.30 (0.46)	−0.18 (0.35)
Nominally elected	−0.41 (0.20)**	−0.02 (0.24)	−0.75 (0.74)	−0.68 (0.48)
Share of young population (scaled)	0.14 (0.08)*	−0.03 (0.11)	0.31 (0.23)	0.00 (0.17)
University entrance qualification (scaled)	−0.04 (0.08)	0.15 (0.10)	0.39 (0.27)	−0.01 (0.17)
Income of private households (scaled)	0.01 (0.07)	0.09 (0.10)	−0.54 (0.25)**	0.18 (0.15)
Public opinion climate protection (scaled)	0.14 (0.07)*	0.01 (0.09)	0.29 (0.22)	0.10 (0.16)
References to the Climate Strike Movement (pre-climate strike day)	0.16 (0.05)***		0.19 (0.20)	
References to Environmental Policy (pre-climate strike day)		0.43 (0.08)***		0.48 (0.18)***
Freqency (logged)	0.84 (0.09)***	0.83 (0.11)***	0.44 (0.17)**	0.70 (0.19)***
Intercept	−4.45 (0.46)***	−5.15 (0.57)***	−5.79 (0.87)***	−4.90 (0.69)***
Deviance	569.18	232.40	84.58	279.36
Num. obs.	663	629	667	652

Note: Quasi-Poisson regression models. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

E.4 Models with logged dependent variable

Table A.13: Regression models with logged dependent variable

	Facebook (logged DV)		Parliamentary Debates (logged DV)	
	Climate Strike Movement	Environmental Policy	Climate Strike Movement	Environmental Policy
Number of protest events in electoral district	0.09 (0.09)	0.08 (0.09)	0.36 (0.20)*	0.40 (0.14)***
Gender (male = 1)	0.02 (0.13)	0.17 (0.15)	−0.45 (0.35)	0.18 (0.25)
Age (scaled)	−0.02 (0.06)	0.00 (0.07)	−0.34 (0.17)*	−0.22 (0.12)*
Parenthood status	0.15 (0.13)	0.12 (0.14)	0.18 (0.35)	0.71 (0.26)***
Doctoral degree	−0.00 (0.15)	0.04 (0.17)	0.73 (0.35)**	0.31 (0.25)
Opposition party	0.64 (0.17)***	0.35 (0.19)*	1.24 (0.63)*	0.10 (0.34)
Environmental protection	0.06 (0.05)	0.05 (0.07)	0.25 (0.16)	0.02 (0.11)
Human rights	0.11 (0.11)	−0.29 (0.12)**	−0.18 (0.39)	−0.03 (0.23)
Nominally elected	−0.39 (0.18)**	0.32 (0.20)	0.32 (0.61)	−0.17 (0.33)
Share of young population (scaled)	0.11 (0.07)*	0.10 (0.07)	−0.06 (0.19)	0.16 (0.13)
University entrance qualification (scaled)	−0.09 (0.07)	0.02 (0.07)	0.09 (0.18)	−0.12 (0.13)
Income of private households (scaled)	0.04 (0.06)	0.04 (0.07)	0.13 (0.18)	−0.04 (0.12)
Public opinion climate protection (scaled)	0.06 (0.06)	0.11 (0.06)*	0.14 (0.17)	−0.03 (0.12)
References to the Climate Strike Movement (pre-climate strike day)	0.02 (0.01)***		0.16 (0.18)	
References to Environmental Policy (pre-climate strike day)		0.30 (0.04)***		−0.01 (0.05)
Freqency (logged)	0.89 (0.08)***	1.00 (0.09)***	0.65 (0.13)***	0.70 (0.11)***
Intercept	−5.26 (0.39)***	−5.86 (0.47)***	−6.12 (0.78)***	−4.29 (0.50)***
Deviance	334.23	270.78	163.86	337.99
Num. obs.	686	686	686	686

Note: Quasi-Poisson regression models. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

E.5 Models with protest events as binary variable

Table A.14: Regression models with protest events as binary variable

	Facebook		Parliamentary Debates	
	Climate Strike Movement	Environmental Policy	Climate Strike Movement	Environmental Policy
Protest event in electoral district (binary)	0.14 (0.18)	−0.00 (0.17)	0.54 (0.58)	0.37 (0.36)
Gender (male = 1)	0.16 (0.14)	0.25 (0.17)	−0.54 (0.45)	0.10 (0.30)
Age (scaled)	0.02 (0.07)	−0.00 (0.08)	−0.58 (0.24)**	−0.22 (0.15)
Parenthood status	0.13 (0.15)	0.23 (0.16)	−0.21 (0.43)	0.90 (0.31)***
Doctoral degree	−0.08 (0.17)	−0.12 (0.19)	0.54 (0.47)	0.45 (0.28)
Opposition party	1.02 (0.21)***	0.75 (0.22)***	0.82 (0.88)	0.06 (0.38)
Environmental protection	0.02 (0.05)	0.11 (0.07)	0.15 (0.20)	0.04 (0.12)
Human rights	0.19 (0.12)	−0.44 (0.13)***	0.05 (0.51)	−0.07 (0.28)
Nominally elected	−0.33 (0.22)	0.52 (0.23)**	0.28 (0.82)	−0.06 (0.37)
Share of young population (scaled)	0.06 (0.08)	0.18 (0.08)**	−0.27 (0.26)	0.20 (0.16)
University entrance qualification (scaled)	−0.13 (0.08)*	−0.00 (0.08)	0.22 (0.23)	−0.26 (0.17)
Income of private households (scaled)	0.04 (0.08)	0.02 (0.08)	0.19 (0.24)	−0.12 (0.16)
Public opinion climate protection (scaled)	−0.12 (0.07)*	0.13 (0.07)*	0.09 (0.21)	−0.01 (0.13)
References to the Climate Strike Movement (pre-climate strike day)	0.06 (0.00)***		0.19 (0.18)	
References to Environmental Policy (pre-climate strike day)		0.34 (0.04)***		0.06 (0.05)
Freqency (logged)	0.98 (0.09)***	1.15 (0.10)***	0.77 (0.18)***	0.75 (0.11)***
Intercept	−5.15 (0.49)***	−6.16 (0.55)***	−5.12 (1.08)***	−3.60 (0.61)***
Deviance	887.88	565.76	434.10	869.40
Num. obs.	686	686	686	686

Note: Quasi-Poisson regression models. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

E.6 Models with binary threshold: More than one protest event

Table A.15: Regression models with binary threshold: More than one protest event

	Facebook		Parliamentary Debates	
	Climate Strike Movement	Environmental Policy	Climate Strike Movement	Environmental Policy
More than one protest event in electoral district (binary)	0.45 (0.16)***	0.25 (0.19)	1.33 (0.44)***	0.82 (0.28)***
Gender (male = 1)	0.12 (0.14)	0.24 (0.17)	−0.38 (0.46)	0.18 (0.29)
Age (scaled)	0.03 (0.07)	−0.00 (0.08)	−0.51 (0.23)**	−0.21 (0.14)
Parenthood status	0.11 (0.15)	0.22 (0.16)	−0.47 (0.45)	0.84 (0.31)***
Doctoral degree	−0.03 (0.17)	−0.08 (0.19)	0.53 (0.48)	0.46 (0.27)*
Opposition party	0.98 (0.21)***	0.75 (0.22)***	0.79 (0.95)	0.08 (0.39)
Environmental protection	0.04 (0.05)	0.11 (0.07)	0.10 (0.20)	−0.00 (0.12)
Human rights	0.16 (0.12)	−0.44 (0.13)***	0.15 (0.51)	0.04 (0.28)
Nominally elected	−0.31 (0.22)	0.54 (0.23)**	0.47 (0.88)	0.07 (0.38)
Share of young population (scaled)	0.12 (0.08)	0.19 (0.08)**	0.01 (0.25)	0.32 (0.15)**
University entrance qualification (scaled)	−0.11 (0.08)	−0.00 (0.08)	0.22 (0.22)	−0.27 (0.16)
Income of private households (scaled)	0.03 (0.07)	0.02 (0.08)	0.14 (0.22)	−0.14 (0.15)
Public opinion climate protection (scaled)	−0.09 (0.07)	0.13 (0.07)*	0.08 (0.22)	−0.02 (0.14)
References to the Climate Strike Movement (pre-climate strike day)	0.06 (0.00)***		0.21 (0.19)	
References to Environmental Policy (pre-climate strike day)		0.34 (0.04)***		−0.01 (0.06)
Freqency (logged)	1.01 (0.10)***	1.17 (0.10)***	0.71 (0.18)***	0.83 (0.12)***
Intercept	−5.22 (0.48)***	−6.26 (0.55)***	−4.93 (1.02)***	−3.68 (0.57)***
Deviance	874.84	563.67	409.47	846.39
Num. obs.	686	686	686	686

Note: Quasi-Poisson regression models. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

E.7 Models with protest events as factor variable

Table A.16: Regression models with protest events as factor variable

	Facebook		Parliamentary Debates	
	Climate Strike Movement	Environmental Policy	Climate Strike Movement	Environmental Policy
1 protest event in electoral district (reference = 0)	−0.02 (0.19)	−0.07 (0.17)	−0.17 (0.66)	0.07 (0.38)
2 protest events in electoral district (reference = 0)	0.34 (0.22)	0.20 (0.24)	1.32 (0.64)**	0.83 (0.40)**
3 protest events in electoral district (reference = 0)	0.83 (0.32)**	0.24 (0.41)	0.98 (0.86)	0.99 (0.53)*
4 protest events in electoral district (reference = 0)	−10.88 (650.38)	−11.77 (862.30)	−9.48 (1396.40)	−10.67 (871.36)
Gender (male = 1)	0.14 (0.14)	0.25 (0.17)	−0.37 (0.46)	0.18 (0.29)
Age (scaled)	0.03 (0.07)	0.00 (0.08)	−0.50 (0.23)**	−0.21 (0.15)
Parenthood status	0.13 (0.15)	0.23 (0.16)	−0.49 (0.45)	0.84 (0.31)***
Doctoral degree	−0.02 (0.17)	−0.09 (0.19)	0.50 (0.48)	0.44 (0.28)
Opposition party	0.97 (0.21)***	0.75 (0.22)***	0.78 (0.95)	0.10 (0.39)
Environmental protection	0.03 (0.05)	0.11 (0.07)	0.10 (0.20)	−0.01 (0.12)
Human rights	0.17 (0.12)	−0.43 (0.13)***	0.16 (0.51)	0.04 (0.28)
Nominally elected	−0.32 (0.22)	0.54 (0.23)**	0.48 (0.87)	0.05 (0.39)
Share of young population (scaled)	0.12 (0.08)	0.20 (0.09)**	0.06 (0.28)	0.30 (0.16)*
University entrance qualification (scaled)	−0.09 (0.08)	−0.00 (0.08)	0.20 (0.22)	−0.26 (0.16)
Income of private households (scaled)	0.02 (0.08)	0.02 (0.08)	0.14 (0.23)	−0.13 (0.15)
Public opinion climate protection (scaled)	−0.09 (0.07)	0.14 (0.07)**	0.09 (0.22)	−0.03 (0.14)
References to the Climate Strike Movement (pre-climate strike day)	0.06 (0.00)***		0.21 (0.19)	
References to Environmental Policy (pre-climate strike day)		0.34 (0.04)***		−0.01 (0.06)
Freqency (logged)	1.02 (0.10)***	1.17 (0.11)***	0.71 (0.18)***	0.84 (0.12)***
Intercept	−5.23 (0.50)***	−6.22 (0.56)***	−4.82 (1.11)***	−3.72 (0.61)***
Deviance	870.76	563.28	408.62	845.52
Num. obs.	686	686	686	686

Note: Quasi-Poisson regression models. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

E.8 Models excluding MPs without protest event in district

Table A.17: Regression models excluding MPs without protest event in district

	Facebook		Parliamentary Debates	
	Climate Strike Movement	Environmental Policy	Climate Strike Movement	Environmental Policy
Number of protest events in electoral district	0.39 (0.14)***	0.18 (0.15)	0.72 (0.42)*	0.57 (0.19)***
Gender (male = 1)	0.21 (0.18)	0.02 (0.20)	−0.75 (0.68)	0.03 (0.31)
Age (scaled)	0.08 (0.08)	0.10 (0.09)	−0.67 (0.37)*	−0.28 (0.16)*
Parenthood status	0.27 (0.17)	0.18 (0.18)	−0.38 (0.69)	0.83 (0.33)**
Doctoral degree	0.13 (0.20)	0.12 (0.22)	0.14 (0.80)	−0.07 (0.33)
Opposition party	1.03 (0.25)***	0.56 (0.23)**	−0.51 (1.46)	−0.11 (0.40)
Environmental protection	−0.00 (0.06)	0.07 (0.09)	−0.06 (0.33)	0.08 (0.13)
Human rights	0.29 (0.14)**	−0.49 (0.15)***	0.77 (0.98)	−0.17 (0.30)
Nominally elected	−0.22 (0.25)	0.30 (0.24)	0.74 (1.14)	−0.09 (0.38)
Share of young population (scaled)	0.15 (0.10)	0.12 (0.10)	−0.30 (0.38)	0.24 (0.16)
University entrance qualification (scaled)	−0.15 (0.10)	−0.08 (0.10)	0.47 (0.35)	−0.25 (0.18)
Income of private households (scaled)	−0.04 (0.09)	−0.14 (0.10)	0.10 (0.37)	−0.20 (0.15)
Public opinion climate protection (scaled)	−0.10 (0.08)	0.07 (0.08)	0.11 (0.31)	−0.11 (0.14)
References to the Climate Strike Movement (pre-climate strike day)	0.06 (0.01)***		0.16 (0.26)	
References to Environmental Policy (pre-climate strike day)		0.40 (0.05)***		−0.02 (0.06)
Freqency (logged)	1.01 (0.12)***	1.18 (0.12)***	0.81 (0.26)***	0.91 (0.12)***
Intercept	−5.92 (0.64)***	−5.97 (0.69)***	−5.59 (1.46)***	−3.94 (0.66)***
Deviance	676.11	422.69	315.83	633.13
Num. obs.	503	503	503	503

Note: Quasi-Poisson regression models. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

E.9 Models with protest events as logged variable

Table A.18: Regression models with protest events as logged variable

	Facebook		Parliamentary Debates	
	Climate Strike Movement	Environmental Policy	Climate Strike Movement	Environmental Policy
Number of protest events in electoral district (logged)	0.40 (0.19)**	0.11 (0.19)	1.16 (0.57)**	0.80 (0.36)**
Gender (male = 1)	0.14 (0.14)	0.24 (0.17)	−0.49 (0.47)	0.12 (0.30)
Age (scaled)	0.02 (0.07)	−0.01 (0.08)	−0.56 (0.24)**	−0.23 (0.15)
Parenthood status	0.12 (0.15)	0.23 (0.16)	−0.34 (0.46)	0.86 (0.32)***
Doctoral degree	−0.05 (0.17)	−0.10 (0.19)	0.55 (0.49)	0.43 (0.28)
Opposition party	1.02 (0.21)***	0.75 (0.22)***	0.86 (0.94)	0.11 (0.39)
Environmental protection	0.03 (0.05)	0.12 (0.07)	0.14 (0.20)	0.02 (0.12)
Human rights	0.17 (0.12)	−0.45 (0.13)***	0.06 (0.52)	−0.02 (0.28)
Nominally elected	−0.34 (0.22)	0.52 (0.23)**	0.38 (0.87)	−0.01 (0.38)
Share of young population (scaled)	0.06 (0.08)	0.17 (0.08)**	−0.23 (0.25)	0.21 (0.15)
University entrance qualification (scaled)	−0.12 (0.08)	−0.00 (0.08)	0.23 (0.23)	−0.27 (0.17)
Income of private households (scaled)	0.06 (0.08)	0.03 (0.08)	0.22 (0.24)	−0.11 (0.15)
Public opinion climate protection (scaled)	−0.11 (0.07)	0.12 (0.07)*	0.09 (0.22)	−0.02 (0.14)
References to the Climate Strike Movement (pre-climate strike day)	0.06 (0.00)***		0.19 (0.19)	
References to Environmental Policy (pre-climate strike day)		0.34 (0.04)***		0.02 (0.05)
Freqency (logged)	1.00 (0.10)***	1.16 (0.10)***	0.74 (0.18)***	0.79 (0.11)***
Intercept	−5.35 (0.50)***	−6.23 (0.55)***	−5.42 (1.09)***	−3.89 (0.62)***
Deviance	880.30	565.36	422.16	854.94
Num. obs.	686	686	686	686

Note: Quasi-Poisson regression models. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

E.10 Models differentiating between short-term and mid-term effects

Table A.19: Regression models with short-term effects (2019-03-14 – 2019-03-21)

	Facebook		Parliamentary Debates	
	Climate Strike Movement	Environmental Policy	Climate Strike Movement	Environmental Policy
Number of protest events in electoral district	0.09 (0.13)	−0.34 (0.39)	0.35 (0.35)	0.55 (0.29)*
Gender (male = 1)	−0.08 (0.19)	−0.25 (0.45)	−0.98 (0.61)	−1.30 (0.47)***
Age (scaled)	−0.08 (0.09)	0.16 (0.22)	−0.45 (0.29)	−0.13 (0.29)
Parenthood status	0.12 (0.20)	0.32 (0.46)	−0.25 (0.56)	1.27 (0.61)**
Doctoral degree	−0.24 (0.25)	−0.44 (0.68)	1.11 (0.56)**	−0.64 (0.64)
Opposition party	1.07 (0.26)***	−0.07 (0.64)	−0.60 (0.99)	−0.62 (0.61)
Environmental protection	−0.00 (0.08)	−0.36 (0.29)	0.24 (0.27)	0.03 (0.21)
Human rights	0.07 (0.16)	0.24 (0.41)	−0.47 (0.64)	−0.24 (0.51)
Nominally elected	−0.54 (0.28)*	0.30 (0.61)	−0.74 (0.90)	−0.72 (0.56)
Share of young population (scaled)	0.03 (0.10)	0.47 (0.24)*	0.27 (0.32)	0.72 (0.26)***
University entrance qualification (scaled)	0.01 (0.10)	0.04 (0.22)	0.50 (0.30)	−0.21 (0.28)
Income of private households (scaled)	0.24 (0.09)***	0.28 (0.21)	0.24 (0.30)	−0.32 (0.27)
Public opinion climate protection (scaled)	−0.03 (0.09)	0.32 (0.20)	0.08 (0.30)	0.22 (0.26)
References to the Climate Strike Movement (pre-climate strike day)	0.05 (0.01)***		0.12 (0.37)	
References to Environmental Policy (pre-climate strike day)		0.11 (0.17)		0.00 (0.10)
Freqency (logged)	1.01 (0.13)***	1.57 (0.34)***	0.89 (0.23)***	1.20 (0.23)***
Intercept	−5.89 (0.65)***	−8.93 (1.75)***	−4.38 (1.03)***	−5.91 (1.04)***
Deviance	429.25	111.11	256.23	116.66
Num. obs.	686	686	686	686

Note: Quasi-Poisson regression models. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

Table A.20: Regression models with mid-term effects (2019-03-21 – 2019-05-22)

	Facebook		Parliamentary Debates	
	Climate Strike Movement	Environmental Policy	Climate Strike Movement	Environmental Policy
Number of protest events in electoral district	0.31 (0.11)***	0.10 (0.10)	0.65 (0.22)***	0.43 (0.17)**
Gender (male = 1)	0.26 (0.18)	0.30 (0.18)	0.13 (0.40)	0.36 (0.33)
Age (scaled)	0.07 (0.08)	−0.02 (0.08)	−0.74 (0.24)***	−0.27 (0.16)*
Parenthood status	0.12 (0.18)	0.22 (0.16)	−0.56 (0.43)	0.89 (0.34)**
Doctoral degree	0.07 (0.20)	−0.06 (0.19)	−0.52 (0.55)	0.54 (0.30)*
Opposition party	0.98 (0.26)***	0.79 (0.23)***	4.11 (1.15)***	0.19 (0.43)
Environmental protection	0.05 (0.07)	0.15 (0.07)**	0.06 (0.18)	0.00 (0.13)
Human rights	0.21 (0.15)	−0.50 (0.14)***	0.67 (0.50)	0.02 (0.30)
Nominally elected	−0.22 (0.27)	0.54 (0.24)**	2.75 (0.89)***	0.09 (0.43)
Share of young population (scaled)	0.11 (0.09)	0.16 (0.08)*	−0.79 (0.24)***	0.15 (0.16)
University entrance qualification (scaled)	−0.20 (0.10)**	−0.01 (0.08)	0.07 (0.20)	−0.26 (0.18)
Income of private households (scaled)	−0.06 (0.09)	0.00 (0.08)	0.19 (0.21)	−0.10 (0.17)
Public opinion climate protection (scaled)	−0.13 (0.08)	0.11 (0.07)	0.01 (0.18)	−0.05 (0.15)
References to the Climate Strike Movement (pre-climate strike day)	0.06 (0.01)***		0.21 (0.14)	
References to Environmental Policy (pre-climate strike day)		0.35 (0.04)***		−0.00 (0.06)
Freqency (logged)	1.01 (0.12)***	1.14 (0.11)***	0.51 (0.18)***	0.77 (0.12)***
Intercept	−6.13 (0.60)***	−6.37 (0.57)***	−10.12 (1.38)***	−4.18 (0.67)***
Deviance	744.56	546.87	178.50	829.41
Num. obs.	686	686	686	686

Note: Quasi-Poisson regression models. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

E.11 Models with heterogeneous effects of protest and public opinion

Table A.21: Regression models with public opinion and protest interaction

	Facebook		Parliamentary Debates	
	Climate Strike Movement	Environmental Policy	Climate Strike Movement	Environmental Policy
Number of protest events in electoral district	0.22 (0.09)**	0.07 (0.10)	0.58 (0.25)**	0.40 (0.16)**
Gender (male = 1)	0.13 (0.14)	0.24 (0.17)	−0.47 (0.47)	0.15 (0.30)
Age (scaled)	0.02 (0.07)	−0.00 (0.08)	−0.55 (0.24)**	−0.23 (0.15)
Parenthood status	0.13 (0.15)	0.21 (0.15)	−0.35 (0.45)	0.86 (0.32)***
Doctoral degree	−0.04 (0.17)	−0.07 (0.18)	0.57 (0.49)	0.42 (0.28)
Opposition party	1.00 (0.21)***	0.73 (0.22)***	0.83 (0.94)	0.17 (0.40)
Environmental protection	0.04 (0.05)	0.11 (0.07)	0.13 (0.20)	0.01 (0.12)
Human rights	0.15 (0.12)	−0.44 (0.13)***	0.09 (0.52)	−0.01 (0.28)
Nominally elected	−0.32 (0.22)	0.54 (0.23)**	0.39 (0.87)	−0.03 (0.39)
Share of young population (scaled)	0.08 (0.07)	0.18 (0.08)**	−0.19 (0.25)	0.22 (0.15)
University entrance qualification (scaled)	−0.12 (0.08)	−0.02 (0.08)	0.25 (0.23)	−0.26 (0.17)
Income of private households (scaled)	0.05 (0.07)	0.03 (0.08)	0.18 (0.24)	−0.11 (0.16)
Public opinion climate protection (scaled)	0.03 (0.12)	0.27 (0.10)***	0.07 (0.40)	−0.17 (0.23)
Public opinion climate protect. * Num. of protest events in elect. dist.	−0.16 (0.12)	−0.19 (0.11)*	0.02 (0.32)	0.13 (0.17)
References to the Climate Strike Movement (pre-climate strike day)	0.06 (0.00)***		0.20 (0.19)	
References to Environmental Policy (pre-climate strike day)		0.36 (0.04)***		0.01 (0.06)
Freqency (logged)	1.01 (0.10)***	1.17 (0.10)***	0.73 (0.18)***	0.81 (0.12)***
Intercept	−5.40 (0.49)***	−6.31 (0.55)***	−5.26 (1.05)***	−3.84 (0.61)***
Deviance	872.77	560.87	419.64	848.87
Num. obs.	686	686	686	686

Note: Quasi-Poisson regression models. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

E.12 Models with heterogeneous effects of protest and issue ownership (environment)

Table A.22: Regression models with issue owner and protest interaction

	Facebook		Parliamentary Debates	
	Climate Strike Movement	Environmental Policy	Climate Strike Movement	Environmental Policy
Number of protest events in electoral district	0.25 (0.10)**	0.10 (0.10)	0.70 (0.33)**	0.34 (0.18)*
Gender (male = 1)	0.10 (0.14)	0.21 (0.17)	−0.51 (0.49)	0.17 (0.31)
Age (scaled)	0.00 (0.07)	−0.00 (0.08)	−0.62 (0.25)**	−0.21 (0.15)
Parenthood status	0.14 (0.15)	0.23 (0.16)	−0.26 (0.47)	0.83 (0.32)***
Doctoral degree	−0.03 (0.17)	−0.09 (0.19)	0.57 (0.51)	0.42 (0.28)
Opposition party	1.32 (0.27)***	0.63 (0.31)**	1.92 (1.32)	−0.13 (0.55)
Environmental protection	0.39 (0.20)*	0.01 (0.22)	1.19 (0.89)	−0.22 (0.40)
Human rights	−0.07 (0.17)	−0.41 (0.16)**	−0.60 (0.78)	0.08 (0.31)
Issue owner (Environment)	−1.75 (1.03)*	1.02 (1.31)	−5.08 (4.33)	0.76 (2.45)
Nominally elected	−0.46 (0.23)**	0.57 (0.25)**	−0.18 (1.03)	0.10 (0.44)
Share of young population (scaled)	0.07 (0.07)	0.17 (0.08)**	−0.22 (0.26)	0.25 (0.15)*
University entrance qualification (scaled)	−0.12 (0.08)	0.00 (0.08)	0.24 (0.24)	−0.28 (0.17)*
Income of private households (scaled)	0.06 (0.07)	0.02 (0.08)	0.19 (0.24)	−0.14 (0.16)
Public opinion climate protection (scaled)	−0.10 (0.07)	0.13 (0.07)*	0.09 (0.23)	−0.03 (0.14)
Issue owner (Environment) * Number of protest events in electoral district	−0.09 (0.25)	−0.45 (0.50)	−0.32 (0.52)	0.48 (0.46)
References to the Climate Strike Movement (pre-climate strike day)	0.06 (0.00)***		0.19 (0.20)	
References to Environmental Policy (pre-climate strike day)		0.34 (0.04)***		0.01 (0.06)
Freqency (logged)	1.00 (0.09)***	1.15 (0.10)***	0.77 (0.19)***	0.80 (0.12)***
Intercept	−6.13 (0.64)***	−5.96 (0.77)***	−7.96 (2.37)***	−3.17 (1.19)***
Deviance	869.39	563.63	412.07	846.16
Num. obs.	686	686	686	686

Note: Quasi-Poisson regression models. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

E.13 Models with protest and electoral (in)security interaction

Table A.23: Regression models with protest events and electoral (in)security

	Facebook		Parliamentary Debates	
	Climate Strike Movement	Environmental Policy	Climate Strike Movement	Environmental Policy
Number of protest events in electoral district	0.31 (0.10)***	0.10 (0.10)	0.68 (0.25)***	0.41 (0.18)**
Number of protest events in electoral district * Chance to win district (10%)	−0.50 (0.27)*	0.05 (0.29)	−0.49 (0.76)	−0.00 (0.46)
Gender (male = 1)	0.13 (0.14)	0.21 (0.17)	−0.61 (0.45)	0.14 (0.30)
Age (scaled)	0.01 (0.07)	−0.00 (0.07)	−0.62 (0.24)***	−0.24 (0.15)
Parenthood status	0.16 (0.15)	0.21 (0.15)	−0.37 (0.44)	0.86 (0.32)***
Doctoral degree	−0.05 (0.17)	−0.06 (0.18)	0.62 (0.47)	0.41 (0.28)
Opposition party	0.99 (0.21)***	0.79 (0.22)***	1.06 (0.88)	0.12 (0.39)
Environmental protection	0.03 (0.05)	0.11 (0.07)	0.15 (0.19)	0.01 (0.12)
Human rights	0.18 (0.12)	−0.44 (0.13)***	0.03 (0.48)	0.00 (0.28)
Nominally elected	−0.29 (0.22)	0.56 (0.23)**	0.27 (0.83)	−0.01 (0.38)
Share of young population (scaled)	0.08 (0.08)	0.15 (0.08)*	−0.10 (0.25)	0.23 (0.15)
University entrance qualification (scaled)	−0.09 (0.08)	0.01 (0.08)	0.26 (0.22)	−0.27 (0.17)
Income of private households (scaled)	0.04 (0.07)	0.03 (0.08)	0.24 (0.23)	−0.12 (0.15)
Public opinion climate protection (scaled)	−0.10 (0.07)	0.13 (0.07)*	0.10 (0.21)	−0.03 (0.14)
References to the Climate Strike Movement (pre-climate strike day)	0.06 (0.00)***		0.20 (0.18)	
References to Environmental Policy (pre-climate strike day)		0.35 (0.04)***		0.00 (0.06)
Freqency (logged)	1.02 (0.10)***	1.17 (0.10)***	0.84 (0.19)***	0.82 (0.12)***
Intercept	−5.47 (0.50)***	−6.17 (0.55)***	−6.29 (1.17)***	−3.88 (0.63)***
Deviance	868.27	559.74	402.87	851.03
Num. obs.	686	686	686	686

Note: Quasi-Poisson regression models. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

E.14 Models with partylist leader variable

Table A.24: Regression models with partylist leader

	Facebook		Parliamentary Debates	
	Climate Strike Movement	Environmental Policy	Climate Strike Movement	Environmental Policy
Number of protest events in electoral district	0.26 (0.09)***	0.08 (0.10)	0.57 (0.25)**	0.51 (0.15)***
Gender (male = 1)	0.12 (0.14)	0.29 (0.18)	−0.43 (0.46)	0.17 (0.28)
Age (scaled)	0.03 (0.07)	−0.00 (0.08)	−0.56 (0.24)**	−0.22 (0.14)
Parenthood status	0.17 (0.14)	0.28 (0.17)*	−0.36 (0.45)	0.81 (0.30)***
Doctoral degree	−0.06 (0.17)	−0.36 (0.21)*	0.54 (0.49)	0.13 (0.29)
Opposition party	1.07 (0.21)***	0.75 (0.24)***	0.81 (0.94)	0.05 (0.37)
Environmental protection	0.04 (0.05)	0.13 (0.07)*	0.14 (0.20)	0.02 (0.11)
Human rights	0.16 (0.12)	−0.46 (0.14)***	0.07 (0.51)	−0.04 (0.26)
Nominally elected	−0.20 (0.23)	0.70 (0.25)***	0.64 (0.89)	0.06 (0.37)
Partylist leader	0.08 (0.14)	0.05 (0.18)	−0.05 (0.48)	0.18 (0.30)
Share of young population (scaled)	0.09 (0.08)	0.25 (0.09)***	−0.16 (0.26)	0.26 (0.15)*
University entrance qualification (scaled)	−0.13 (0.08)*	−0.03 (0.09)	0.22 (0.24)	−0.25 (0.16)
Income of private households (scaled)	0.06 (0.07)	0.04 (0.09)	0.19 (0.23)	−0.18 (0.15)
Public opinion climate protection (scaled)	−0.12 (0.07)*	0.11 (0.07)	0.08 (0.22)	−0.07 (0.13)
References to the Climate Strike Movement (pre-climate strike day)	0.06 (0.00)***		0.20 (0.19)	
References to Environmental Policy (pre-climate strike day)		0.38 (0.05)***		−0.03 (0.06)
Freqency (logged)	1.04 (0.10)***	1.14 (0.11)***	0.71 (0.19)***	0.85 (0.11)***
Intercept	−5.65 (0.49)***	−6.32 (0.61)***	−5.23 (1.05)***	−3.97 (0.58)***
Deviance	796.38	493.24	411.73	728.95
Num. obs.	617	617	617	617

Note: Quasi-Poisson regression models. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

E.15 Models with poisson distribution

Table A.25: Regression models with poisson distribution

	Facebook		Parliamentary Debates	
	Climate Strike Movement	Environmental Policy	Climate Strike Movement	Environmental Policy
Number of protest events in electoral district	0.24 (0.07)***	0.08 (0.09)	0.58 (0.13)***	0.41 (0.08)***
Gender (male = 1)	0.14 (0.10)	0.24 (0.15)	−0.47 (0.25)*	0.14 (0.16)
Age (scaled)	0.02 (0.05)	−0.01 (0.07)	−0.55 (0.13)***	−0.23 (0.08)***
Parenthood status	0.12 (0.10)	0.23 (0.14)	−0.35 (0.24)	0.86 (0.17)***
Doctoral degree	−0.03 (0.12)	−0.09 (0.17)	0.57 (0.26)**	0.41 (0.15)***
Opposition party	1.01 (0.15)***	0.75 (0.20)***	0.83 (0.51)	0.12 (0.21)
Environmental protection	0.03 (0.04)	0.11 (0.06)*	0.13 (0.11)	0.01 (0.07)
Human rights	0.16 (0.09)*	−0.45 (0.12)***	0.09 (0.28)	0.00 (0.15)
Nominally elected	−0.33 (0.16)**	0.52 (0.21)**	0.39 (0.47)	−0.01 (0.20)
Share of young population (scaled)	0.07 (0.05)	0.17 (0.07)**	−0.19 (0.14)	0.23 (0.08)***
University entrance qualification (scaled)	−0.12 (0.06)**	−0.00 (0.07)	0.25 (0.12)**	−0.26 (0.09)***
Income of private households (scaled)	0.05 (0.05)	0.03 (0.07)	0.17 (0.13)	−0.12 (0.08)
Public opinion climate protection (scaled)	−0.10 (0.05)**	0.13 (0.06)**	0.09 (0.12)	−0.03 (0.07)
References to the Climate Strike Movement (pre-climate strike day)	0.06 (0.00)***		0.20 (0.10)*	
References to Environmental Policy (pre-climate strike day)		0.34 (0.04)***		0.00 (0.03)
Freqency (logged)	1.01 (0.07)***	1.16 (0.09)***	0.73 (0.10)***	0.82 (0.06)***
Intercept	−5.37 (0.35)***	−6.25 (0.50)***	−5.26 (0.57)***	−3.85 (0.32)***
Deviance	876.25	564.96	419.65	851.14
Num. obs.	686	686	686	686

Note: $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

E.16 Models with negative binomial distribution

Table A.26: Regression models with negative binomial distribution

	Facebook		Parliamentary Debates	
	Climate Strike Movement	Environmental Policy	Climate Strike Movement	Environmental Policy
Number of protest events in electoral district	−0.01 (0.12)	0.04 (0.13)	0.19 (0.34)	0.59 (0.19)***
Gender (male = 1)	0.10 (0.18)	0.24 (0.21)	−1.14 (0.48)**	0.57 (0.34)*
Age (scaled)	−0.05 (0.08)	0.06 (0.10)	−0.40 (0.24)*	−0.18 (0.15)
Parenthood status	0.34 (0.18)*	0.16 (0.20)	−0.41 (0.48)	1.15 (0.34)***
Doctoral degree	−0.05 (0.21)	0.17 (0.23)	1.46 (0.50)***	0.72 (0.34)**
Opposition party	0.82 (0.23)***	0.47 (0.27)*	2.54 (0.82)***	−0.10 (0.45)
Environmental protection	0.08 (0.08)	0.04 (0.10)	0.43 (0.21)**	0.03 (0.14)
Human rights	0.11 (0.16)	−0.33 (0.18)*	−0.66 (0.46)	−0.05 (0.31)
Nominally elected	−0.31 (0.23)	0.36 (0.27)	0.57 (0.79)	−0.16 (0.43)
Share of young population (scaled)	0.25 (0.09)***	0.14 (0.11)	−0.01 (0.25)	0.03 (0.16)
University entrance qualification (scaled)	−0.16 (0.10)*	−0.09 (0.11)	0.07 (0.26)	0.01 (0.17)
Income of private households (scaled)	0.01 (0.09)	0.04 (0.10)	0.06 (0.25)	−0.00 (0.16)
Public opinion climate protection (scaled)	0.07 (0.08)	0.11 (0.09)	−0.01 (0.24)	−0.12 (0.15)
References to the Climate Strike Movement (pre-climate strike day)	0.11 (0.02)***		1.32 (0.37)***	
References to Environmental Policy (pre-climate strike day)		0.50 (0.07)***		0.18 (0.12)
Freqency (logged)	1.05 (0.10)***	1.28 (0.14)***	1.17 (0.23)***	0.96 (0.17)***
Intercept	−5.46 (0.52)***	−6.50 (0.68)***	−6.45 (1.01)***	−4.80 (0.65)***
Deviance	402.89	340.42	107.14	231.78
Num. obs.	686	686	686	686

Note: $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

F Additional analyses

Beyond the additional validity tests, I also studied additional aspects that couldn't make it into the paper due to space constraints. However, these results are probably interesting for some readers, which is why I present and discuss them here in more detail.

First, I tested whether these findings also extend to Twitter (see Tables A.27 and A.28), another prominently used social media platform among politicians. However, local protest events do not affect social media communication on Twitter. This can be explained by the fact that Twitter is used more as a platform to discuss current events among elite actors such as other politicians or journalists and less for communication with geographic constituents (Stier et al. 2018).

Second, I extended the time frame to the entire 19th legislative period of the German Bundestag to study general patterns of MP's issue attention to the Climate Strike Movement and Environmental policy detached from a single protest event (see A.29). The models cover the entire legislative period and, thus, also the time before the actual protest event. Therefore, I cannot use the number of protest events as a variable in the models. The main idea behind these models is to show to what extent there is a general pattern of issue attention towards the Climate Strike Movement and Environmental Policy. Several results are quite striking here. Older MPs refer less to the Climate Strike Movement on Facebook and in Parliamentary Debates, while MPs with a doctoral degree use more references to Environmental Policy on Facebook and in Parliamentary Debates. In general, opposition party members refer more often to the movement. And members from parties that emphasise environmental protection more actively refer to the movement and environmental policy on Facebook.

Third, I examined how the sentiment of the MPs' communication changed in response to the First Global Climate Strike. Visualizations on the party level are presented in Appendix F.3. Similar to the frequency analyses, I grouped the observations per MP in a pre-and a post-Global Climate Strike period. The plots present differences-in-means between the two periods per party. Some parties did not or just rarely mentioned the Climate Strike Movement in parliamentary debates. Therefore I did not calculate sentiment scores for these parties. The effects remain primarily insignificant. Just the members of the Left party used significantly more positive language regarding the Climate Strike Movement on Facebook after the First Global Climate Strike. In contrast, Green Party members used a significantly more negative tone regarding Environmental Policy on Facebook.

F.1 Twitter data

Table A.27: Regression models explaining the number of references to the Climate Strike Movement on Twitter

	References to Climate Strike Movement			
	Model 1	Model 2	Model 3	Model 4 - Full Model
Number of protest events in electoral district	0.04 (0.08)	0.01 (0.08)	0.05 (0.07)	−0.02 (0.07)
Gender (male = 1)		−0.40 (0.11)***	−0.09 (0.10)	−0.03 (0.10)
Age (scaled)		−0.09 (0.06)	−0.02 (0.05)	0.00 (0.05)
Parenthood status		0.30 (0.11)***	0.20 (0.10)**	0.24 (0.10)**
Doctoral degree		−0.13 (0.15)	−0.09 (0.13)	−0.08 (0.13)
Opposition party			1.23 (0.13)***	0.75 (0.17)***
Environmental protection			0.15 (0.04)***	0.15 (0.04)***
Human rights			−0.18 (0.09)*	−0.14 (0.09)
Nominally elected				−0.60 (0.18)***
Share of young population (scaled)				0.11 (0.05)*
University entrance qualification (scaled)				−0.13 (0.06)**
Income of private households (scaled)				−0.15 (0.05)***
Public opinion climate protection (scaled)				0.01 (0.05)
References to the Climate Strike Movement (pre-climate strike day)	0.02 (0.00)***	0.02 (0.00)***	0.02 (0.00)***	0.02 (0.00)***
Freqency (logged)	0.75 (0.03)***	0.78 (0.04)***	0.78 (0.04)***	0.80 (0.04)***
Intercept	−2.73 (0.21)***	−2.78 (0.25)***	−4.14 (0.28)***	−3.83 (0.30)***
Deviance	1746.53	1670.16	1257.72	1186.47
Num. obs.	686	686	686	686

Note: Quasi-Poisson regression models. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

Table A.28: Regression models explaining the number of references to Environmental Policy on Twitter

	References to Environmental Policy			
	Model 1	Model 2	Model 3	Model 4 - Full Model
Number of protest events in electoral district	0.09 (0.11)	0.07 (0.11)	0.06 (0.11)	0.08 (0.12)
Gender (male = 1)		−0.13 (0.16)	0.03 (0.18)	0.08 (0.19)
Age (scaled)		−0.12 (0.09)	−0.10 (0.09)	−0.08 (0.09)
Parenthood status		0.91 (0.18)***	0.92 (0.18)***	0.86 (0.19)***
Doctoral degree		−0.04 (0.20)	0.00 (0.21)	0.07 (0.21)
Opposition party			−0.12 (0.19)	−0.17 (0.24)
Environmental protection			−0.00 (0.07)	0.01 (0.07)
Human rights			0.16 (0.17)	0.14 (0.18)
Nominally elected				−0.19 (0.26)
Share of young population (scaled)				0.05 (0.09)
University entrance qualification (scaled)				−0.00 (0.09)
Income of private households (scaled)				0.11 (0.08)
Public opinion climate protection (scaled)				0.22 (0.09)**
References to Environmental Policy (pre-climate strike day)	0.25 (0.05)***	0.30 (0.06)***	0.30 (0.06)***	0.31 (0.07)***
Freqency (logged)	0.77 (0.05)***	0.81 (0.06)***	0.82 (0.06)***	0.84 (0.06)***
Intercept	−4.83 (0.32)***	−5.61 (0.40)***	−5.97 (0.46)***	−6.02 (0.51)***
Deviance	405.30	374.88	369.56	359.65
Num. obs.	686	686	686	686

Note: Quasi-Poisson regression models. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

F.2 Issue attention to the Climate Strike Movement and Environmental Policy (2017 – 2020)

Table A.29: Issue attention regression models covering entire period (2017-09-24 – 2020-02-21)

	Facebook		Parliamentary Debates	
	Climate Strike Movement	Environmental Policy	Climate Strike Movement	Environmental Policy
Gender (male = 1)	−0.14 (0.15)	0.02 (0.11)	0.40 (0.25)	−0.12 (0.20)
Age (scaled)	−0.17 (0.07)**	−0.07 (0.05)	−0.31 (0.13)**	−0.07 (0.09)
Parenthood status	−0.50 (0.14)***	0.13 (0.11)	−0.54 (0.24)**	0.40 (0.20)**
Doctoral degree	−0.37 (0.19)*	0.23 (0.12)*	0.32 (0.28)	0.45 (0.18)**
Opposition party	1.29 (0.24)***	0.51 (0.13)***	1.48 (0.57)***	0.28 (0.25)
Environmental protection	0.15 (0.06)**	0.10 (0.05)**	0.13 (0.12)	−0.12 (0.08)
Human rights	0.23 (0.14)*	−0.16 (0.09)*	0.37 (0.31)	0.18 (0.18)
Nominally elected	−0.32 (0.26)	0.04 (0.14)	0.37 (0.49)	0.25 (0.25)
Share of young population (scaled)	−0.12 (0.08)	0.06 (0.06)	−0.20 (0.14)	0.21 (0.11)*
University entrance qualification (scaled)	−0.02 (0.07)	−0.16 (0.05)***	0.16 (0.12)	−0.27 (0.10)***
Income of private households (scaled)	−0.03 (0.07)	0.00 (0.05)	0.15 (0.11)	−0.03 (0.10)
Public opinion climate protection (scaled)	−0.05 (0.07)	−0.00 (0.05)	0.10 (0.12)	−0.05 (0.09)
Freqency (logged)	1.39 (0.13)***	1.01 (0.08)***	0.59 (0.10)***	0.78 (0.05)***
Intercept	−8.45 (0.93)***	−5.26 (0.53)***	−5.19 (0.70)***	−2.32 (0.38)***
Deviance	4347.97	2717.08	1171.44	4046.60
Num. obs.	686	686	686	686

Note: Quasi-Poisson regression models. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

F.3 Sentiment analyses

Figure A.2: Party sentiment before and after the First Global Climate Strike on Facebook.

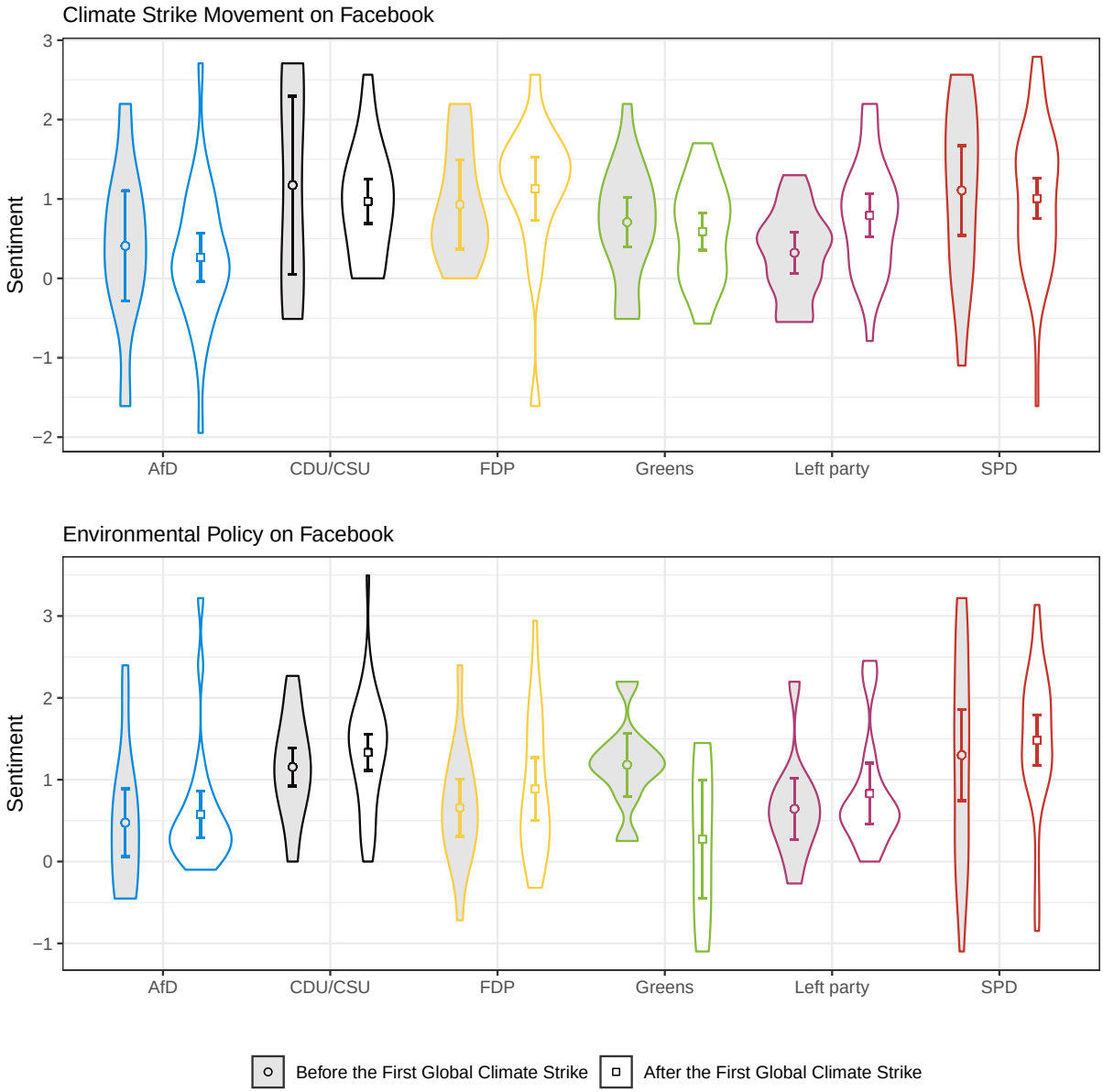
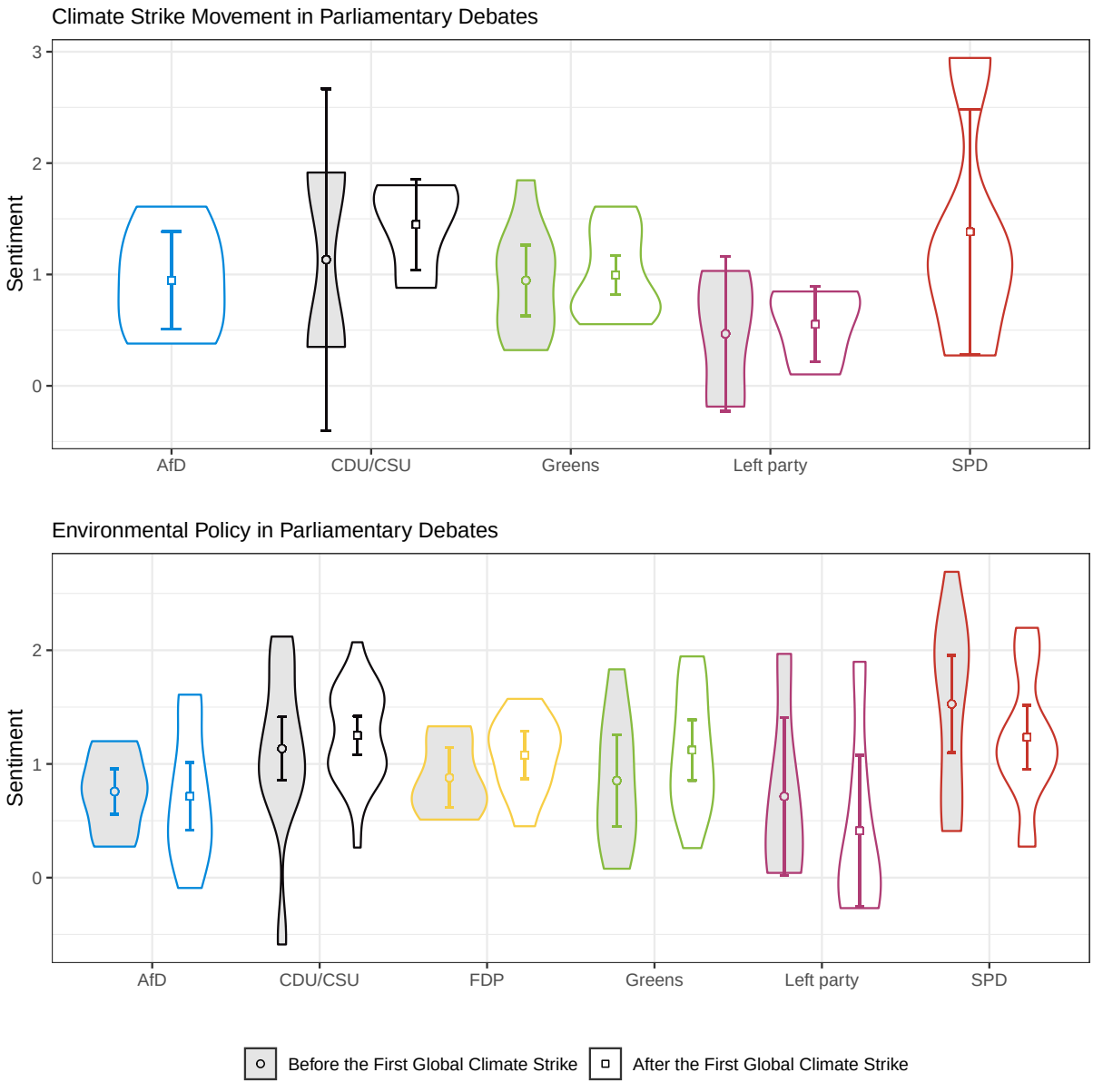


Figure A.3: Party sentiment before and after the First Global Climate Strike in Parliamentary Debates.



G Dictionaries: Climate Strike Movement and Environmental Policy

The complete dictionaries which were applied in the paper are shown in the tables below. Table A.30 is separated in the three different columns `Buzzwords`, `Persons/Organizations` and social media specific `Hashtags` for better orientation. Besides the German terms, table A.31 also present English equivalents which were provided by the services of `Google Translate`.

Table A.30: Dictionary: Climate Strike Movement

Buzzwords	Persons/Organizations	Hashtags
Klimastreik	thunberg	fridaysforfuture
climate strike	luisa neubauer	fridays4future
klimakrise	fridays for future	luisamneubauer
climate crisis	for future	gretathunberg
klimagerechtigkeit		climatestrike
climate justice		schoolstrike4climate
klimanotstand		
climate emergency		

Table A.31: Dictionary: Environmental policy

German term	English translation
AAU	AAU
Abfallagerung	waste storage
Abfallaufbereitung	waste processing
Abfallbehandlung	waste treatment
Abfallbeseitigung	waste disposal
Abfalllagerung	waste management
Abfallmanagement	waste management
Abfallrecycling	waste recycling
Abfallverbrennung	waste incineration
Abfallverwertung	waste recycling
Abfallwirtschaft	waste management
Abgabe auf Verschmutzungsstoffe	Tax on pollutants
Abgaskatalysator	catalytic converter
Ableitung von Abfallstoffen	Removal of waste products
Abwasserreinigung	wastewater treatment
Anpassung an den Klimawandel	Adaptation to climate change

Aufbereitung von Trinkwasser aus Abwasser	Treatment of drinking water from wastewater
Ausbeutung der Ressourcen	Exploitation of resources
Auswirkung auf die Umwelt	Impact on the environment
Bekämpfung der Umweltbelastungen	Pollution control measures
Bekämpfung der Umweltverschmutzung	Pollution control
Belastungsgrad	load factor
Belastungsindex	stress index
Bestandsaufnahme der Ressourcen	Inventory of resources
Bewertung der Ressourcen	Resource assessment
Bewirtschaftung der Ressourcen	Management of resources
biologische Abbaubarkeit	biodegradability
biologische Norm	standard biological
Biosphärenreservat	Biosphere Reserve
Brandbekämpfung	Firefighting
Brandgefahr	fire hazard
Brandschutz	Fire protection
CER	CERIUM
Chlorung	chlorination
CO2-Gutschrift	CO2 credit
CO2-Markt	CO2 market
CO2-Steuer	CO2 tax
Dekontamination	decontamination
Desinfektion	disinfection
EG-Umweltpolitik	Community environmental policy
Einleitung von Abwässern	Sewage discharge
Einleitungsabgabe	Introduction levy
EMAS	EMAS
Emissionsberechtigung	emission allowance
Emissionsgutschrift	emission credit
Emissionshandel	emissions trading
Emissionshandelssystem der EU	The EU emissions trading system
Emissionsminderung	emissions
Emissionsreduktion	emissions reduction
Emissionsreduktionseinheit	Emission reduction unit
Emissionsreduktionsgutschrift	Emission reduction credit
Emissionszertifikat	emissions certificate
Endlagerung von Abfällen	Disposal of waste
Entsalzung	desalination
Entseuchung	decontamination
Entsorgung	disposal
Erdbebenwarnung	earthquake warning

Erhaltung der Landschaften	Preservation of landscapes
Erhaltung der Natur	Conservation of Nature
Erhaltung der Ressourcen	Conservation of resources
Erhaltung der Umwelt	Preserving the environment
Erschöpfung der Ressourcen	Exhaustion of resources
Ersetzung von Ressourcen	Replacement of resources
ERU	ERU
EU-Emissionshandelssystem	EU emissions trading system
EU-Emissionszertifikate	EU emission allowances
EU-Umweltpolitik	EU environmental policy
Explosionsgefahr	risk of explosion
Faunenreservat	Faunenreservat
Florenreservat	Flore reserve
Fluorierung	fluorination
Früherkennung von Erdbeben	Early detection of earthquakes
Gemeinsame Umsetzung	joint implementation
getrennte Sammlung	separate collection
Gewässerschutz	water protection
Grad der Umweltverschmutzung	Levels of pollution
grüne Wirtschaft	green economy
grünes Wachstum	green growth
Haftung für Umweltschäden	Liability for environmental damage
Impaktstudie	impact study
IMPEL-Netz	IMPEL
Industriegefahren	industrial hazard
Insektenbekämpfung	insect control
Jagdgesetzgebung	hunting regulations
Jagdsaison	hunting season
Jagdschein	hunting license
Kläranlage	sewage plant
Klärung der Abwässer	Treatment of wastewater
Klimaschutzpolitik	climate change policy
Kontrolle der Abfälle	Monitoring of waste
Kontrolle der Umweltbelastungen	Pollution control
Kosten der Gesundheitsschäden	Costs of health
Kosten der Umweltbelastungen	Cost of pollution
Kosten der Umweltschäden	Costs of environmental damage
Kosten der Umweltverschmutzung	Cost of pollution
Küstenbewirtschaftung	coastal management
Küstenmanagement	coastal management
Küstenschutz	coastal protection

Landschaftspflege	landscape Management
Landschaftsschutz	landscape protection
Landschaftsschutzgebiete	Protected landscape areas
Lärmbekämpfung	noise abatement
Lärmschutz	noise protection
Management der Küstengebiete	Coastal Zone Management
maritime Wirtschaft	maritime industry
marktwirtschaftliches Instrument der Umweltpolitik	market instrument of environmental policy
marktwirtschaftliches Instrument für umweltpolitische Ziele	market-based instrument for environmental objectives
Maßnahmen gegen Verschwendung	Measures against waste
Materialrecycling	recycling
Mechanismus für die umweltverträgliche Entwicklung	Mechanism for clean development
Müllverbrennung	Waste incineration
Nationalpark	national park
Naturgefahren	natural hazards
Naturkatastrophenrisiko	Natural disaster risk
Naturreservat	Nature reserve
Naturschutz	natural reserve
Naturschutzgebiet	Nature reserve
Nutzung der Meere	Exploitation of the Sea
Nutzung der Ressourcen	Use of resources
Nutzung des Meeresbodens	Exploitation of the seabed
öffentliche Deponie	public landfill
Öko-Industrie	Eco-industry
Öko-Steuer	Green tax
Ökobilanz	LCA
ökologische Bilanz	ecological balance
ökologische Wirtschaft	ecological economy
ökologischer Fußabdruck	Ecological Footprint
Ökostudie	Ökostudie
Ökowirtschaft	eco-economy
Pfanderhebung auf umweltbelastende Produkte	Deposit on a polluting product
Pfandprodukt	mortgage product
Pflanzenschutz	plant protection
Politische Ökologie	political Ecology
Prinzip der Verursacherhaftung	Principle of polluter liability
Qualität der natürlichen Umwelt	Quality of the natural environment
Raumordnung	Regional planning
Recycling	recycling
Reinhaltungsvorrichtung	Pollution device
Ressourceninventar	resource inventory

Ressourcenprospektion	Ressourcenprospektion
Rückgabeverpackung	return packaging
Rückgewinnung von Stoffen aus Abfällen	Recovery of materials from waste
schadstoffarmes Fahrzeug	polluting vehicle
Schadstoffbekämpfung	pollution control
schadstofffreies Fahrzeug	pollution-free vehicle
Schätzung der Ressourcen	Evaluation of resources
Schutz der Küste	Coastal protection
Schutz der Pflanzenwelt	Protection of plant life
Schutz der Ressourcen	Protection of resources
Schutz der Tierwelt	Protect wildlife
Schutzgebiet	sanctuary
Schutzzone	protection zone
selektive Jagd	selective hunting
städtischer Nationalpark	urban National Park
Steuer auf den Energieverbrauch	Tax on energy consumption
stoffliche Abfallaufarbeitung	material waste reprocessing
Strategie für eine grüne Wirtschaft	Strategy for a green economy
Substitution von Ressourcen	Substitution of resources
technologische Gefahren	technological hazards
Tierschutz	animal welfare
Treibhausgasemissionszertifikat	Greenhouse gas emission certificate
Übergang zu einer grünen Wirtschaft	Transition to a green economy
übermäßige Nutzung der Ressourcen	excessive use of resources
Überwachung der Schadstoffemissionen	Monitoring of emissions
Umweltabgabe	environment
Umweltbetriebsprüfung	Audit
Umweltbilanz	environmental Accounting
Umwelterziehung	environmental education
Umweltforschung	environmental research
umweltfreundliches Fahrzeug	environmentally friendly vehicle
Umweltimpakt	Umweltimpakt
Umweltimpaktstudie	Umweltimpaktstudie
Umweltindikator	environmental indicator
Umweltindustrie	environmental industry
Umweltinspektorat	environmental Inspectorate
Umweltkosten	environmental costs
Umweltmanagement und Umweltbetriebsprüfung	Environmental management and audit scheme
Umweltmonitoring	environmental monitoring
Umweltnorm	environmental standard
Umweltpflege	environmental care

Umweltpolitik	environmental policy
Umweltpolitik der Europäischen Union	Environmental policy of the European Union
Umweltpolizei	environmental police
Umweltqualität	environmental quality
Umweltrecht	environmental law
umweltrechtliche Qualitätssicherungsnorm	environmental law quality standard
Umweltschutz	environmental Protection
Umweltschutzgebiet	Environmental Protection Area
Umweltschutzindustrie	Environmental Protection Industry
Umweltschutzkosten	Environmental protection costs
Umweltschutzpolitik	Conservation Policy
Umweltschutzsteuer	Environmental control
Umweltschutzvorschrift	Environmental protection regulation
Umweltschutzwirtschaft	Environmental Economics
Umweltstatistik	environmental Statistics
Umweltstudie	environmental study
Umweltüberwachung	environmental monitoring
Umweltverbesserung	environmental improvement
umweltverträgliches Wachstum	environmentally sound growth
Umweltverträglichkeit	environmental
Umweltverträglichkeitsprüfung	environmental Impact Assessment
Umweltvorsorge	environmental care
Umweltwirkung	environmental impact
Umweltwirtschaft	environmental Economics
Unschädlichmachen von Abfällen	Neutralization of waste
unterirdische Abfallagerung	underground waste storage
unterirdische Abfalllagerung	underground storage of waste
UVP	RRP
Verantwortung für Umweltbeeinträchtigungen	Responsibility for environmental damage
Verarbeitung von Abfällen	Processing of waste
Vergiftungsgefahr	risk of poisoning
verhandelbare Emission	tradeable emission
verhandelbare Umweltverschmutzungsgenehmigung	tradeable emission permit
Verhütung von Umweltbelastungen	Prevention of pollution
Verklappen von Abfallstoffen	Dumping of waste
Verringerung der Emissionen von Treibhausgasen	Reduction in the emissions of greenhouse gases
Verringerung der Treibhausgasemissionen	Reduce greenhouse gas emissions
Verringerung der Umweltbelastungen	Reduce environmental impact
Verschmutzungsgrad	pollution degree
Versenkung von Abfällen im Meer	Dumping of waste at sea
Versenkung von Abfallstoffen im Meer	Dumping of waste materials in the sea

Verträglichkeitsprüfung	compatibility test
Verursacherprinzip	polluter pays principle
Vogelschutz	birds
Vorbeugung von Umweltrisiken	Prevention of environmental risks
Wasseranalyse	water analysis
Wasseraufbereitung	water treatment
Wasserbedarf	water requirements
Wasserbewirtschaftung	water management
Wasserdesinfektion	water disinfection
Wassernutzung	water use
Wasserpolitik	water policy
Wasserreinigung	water purification
Wasserverbrauch	water consumption
Wiederaufarbeitung von Abfällen	Reprocessing of waste
Wiederaufbereitung von Abfallstoffen	Recycling of waste materials
Wiedergewinnung von Stoffen aus Abfällen	Recovery of materials from waste
Wildreservat	game reserve
Wirtschaftsinstrument für die Umwelt	Economic instrument for the environment
Wirtschaftsinstrument für Umweltschutz	Economic instrument for environmental protection
zertifizierte Emissionsreduktion	certified emission reduction
zugeteiltes Emissionsrecht	Allocated emission rights
Zwischenlagerung von Abfällen	Interim storage of waste

References

Bundeswahlleiter (2017). *Wahl zum 19. Deutschen Bundestag am 24. September 2017. Heft 1: Vergleichszahlen früherer Bundestags- und Landtagswahlen sowie Strukturdaten für die Bundestagswahlkreise*. Wiesbaden: Statistisches Bundesamt.

Eydlin, Alexander (Jan. 2020). "Klimaaktivistin: Luisa Neubauer lehnt Angebot von Siemens-Chef ab". In: *Die Zeit*.

Heflik, Katharina (Jan. 2020). "Fridays for Future: Klimaproteste gegen Siemenslieferung für Kohlebergwerk". In: *Die Zeit*.

Hutter, Swen (2014). "Protest Event Analysis and Its Offspring". In: *Methodological Practices in Social Movement Research*. Ed. by Donatella della Porta. Oxford University Press, pp. 335–367.

Schirmer, Sophia, Constanze Kainz, and Paul Blickle (Aug. 2019). "Greta Thunberg: Am Anfang saß ein Mädchen auf der Straße". In: *Die Zeit*.

Sieberer, Ulrich and Tamaki Ohmura (2021). "Mandate type, electoral safety, and defections from the party line: The conditional mandate divide in the German Bundestag, 1949–2013". en. In: *Party Politics* 27.4, pp. 704–715.

Sommer, Moritz et al. (2020). "Wer demonstriert da? Ergebnisse von Befragungen bei Großprotesten von Fridays for Future in Deutschland im März und November 2019". In: *Fridays for Future - Die Jugend gegen den Klimawandel: Konturen der weltweiten Protestbewegung*. Ed. by Sebastian Haunss and Moritz Sommer. Bielefeld: transcript Verlag.

Stier, Sebastian et al. (Jan. 2018). "Election Campaigning on Social Media: Politicians, Audiences, and the Mediation of Political Communication on Facebook and Twitter". In: *Political Communication* 35.1, pp. 50–74.

Taylor, Matthew, Jonathan Watts, and John Bartlett (Sept. 2019). "Climate crisis: 6 million people join latest wave of global protests". In: *The Guardian*.

Volkens, Andrea et al. (2021). *The Manifesto Project Dataset - Codebook. Manifesto Project (MRG / CMP / MARPOR)*.

ZDFheute (Sept. 2019). *Rekordzahlen bei Klimademos: In Deutschland demonstrieren 1,4 Millionen Menschen*.