Online Appendix

Do Politicians Appeal to Discrete Emotions?
The Effect of Wind Turbine Construction on
Elite Discourse

Contents

A Topic Model Results

Structural Topic Models (STM) (Roberts, Stewart, and Tingley 2014) belong to the family of unsupervised topic models, which assign topics to documents based on co-occurring clusters of words in the texts. Based on these discriminating words, researchers can identify specific topics for each individual document.

Moreover, STM allow for the possibility of incorporating metadata, defined as additional information about each document. Since I assume that topic salience is strongly influenced by the political party of the speakers and by the construction of wind turbines, I included the party variable and the treatment variable (as a binary variable) as topical prevalence factors. I also pre-processed the text corpus before running the model. I used the inbuilt textProcesser function of the stm package for R (Roberts, Stewart, and Tingley 2014). The pre-processing steps included the removal of German stopwords, numbers, and punctuation. All words have been reduced to their root form (stemming) and transformed into lowercase letters. Using the prepDocuments function, I further removed very rare and very frequent terms that appear in less than 50 or in more than 5000 speeches, respectively.

Since topic models belong to the family of 'unsupervised methods', there are only a few decisions made by the researcher. One of the most consequential manual decisions, however, is setting the number of topics (k) included in the topic model. This somewhat arbitrary decision has the power to influence not only how many topics there are, but how also how substantively meaningful they are. One way of 'automating' this arbitrary decision is setting k to 0, thereby using the algorithm by Lee and Mimno (2014) which automatically selects the number of topics.

Below are the results of the topic model using parliamentary speeches and setting k to 0 (Mimno and Lee 2014). The total number of identified topics is 85.

Topic	Terms	Labels
5	europe, european, union, together, france, british, brexit	EU
6	patients, doctors, medical, doctors, care	Medical + Care
8	research, innovation, science, area, new	Research + Innovation
16	energy transition, energy, eeg, electricity, renewable, fuel	Renewable Energies
33	companies, enterprises. bank, finance, loan, profit	Economy + Finance
40	social, life, poverty, children, basic income	Welfare
41	army, soldies, minister, troops, duty, drones	Military
46	apartment, tenants, build, rent, rental price	Housing
56	climate protection, climate, climate change, coal phase out, global warming	Climate
63	mission, afrika, united, nations, region, help, mali, south sudan	Military Interventions

Table A1: Selection of Topics, Parliamentary Speeches (k=0)

Figure A1 displays the results for the treatment variable interacted with party affiliation. As can be seen, the increase in salience of climate issues is largely driven by left-wing parties (the Greens and The Left). Furthermore, MPs from radical-right AfD also increase their focus on climate change once wind turbines are constructed in their electoral district. As can be seen in Figure A1, mainstream right parties (as well as the social democrats) do not significantly change their focus on this topic.

Figure A1: Topic prevalence (Topic 56) by party

Figure A2: Topic Proportions by Treatment

Figure A3: Topic Proportions by Party

Figure A4: Topic Proportions by Treatment and Party (Topic 16)

Figure A5: Topic Proportions by Treatment and Party (Topic 16 + 56 combined)

B Regression Table

Online Appendix B presents the regression table of the main analysis using parliamentary speeches as text source.

Anger

	Greens	AfD	CDU/CSU	FDP	SPD	The Left
Additional wind turbine	0.006	−0.008	0.008	−0.004	0.007	−0.078
	(0.009)	(0.021)	(0.020)	(0.003)	(0.005)	(0.057)
Num.Obs.	449	433	483	434	496	432
R2	0.001	0.001	0.001	0.002	0.003	0.010
R2 Adj.	−0.528	−0.587	−0.579	−0.571	−0.509	−0.552

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Disgust

	Greens	AfD	CDU/CSU	FDP	SPD	The Left
Additional wind turbine	−0.001	0.006***	0.000	0.000*	0.000	0.002
	(0.000)	(0.002)	(0.002)	(0.000)	(0.000)	(0.002)
Num.Obs.	449	433	483	434	496	432
R2	0.001	0.021	0.000	0.001	0.000	0.000
R2 Adj.	−0.528	−0.555	−0.580	−0.572	−0.513	−0.567

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

C Additional Analyses

C.1 Fear + Sadness

Figure C1: The effect of one additional wind turbine on non-moral negative emotional appeals (Fear + Sadness) by party (Parliamentary Speeches)

C.2 Positive Emotions

Figure C2: The effect of one additional wind turbine on positive emotions by party (Parliamentary Speeches)

C.3   Keyword Analysis

Topic models are often criticized for being intransparent and inconsistent. Running the same topic model with a different number of topics, or even with a different seed often leads to divergent results. Researchers have little insight in how clusters are formed and to what extent these clusters are coherent. A more supervised approach of identifying topics is the dictionary approach, i.e. using keyword strings that contain words in relation to the relevant issue. In addition to the structural topic model, I therefore repeat the analysis with the 'dictionary approach'. The applied keyword string is the following:

The keywords used to identify speeches that address green issues are the following:

German: *"klima", "umwelt", "erderwärmung", "umweltverschmutzung" "eeg", "solar", "windkraft", "windenergie", "windpower", "windanlage", "erneuerbar", "strom", "elektri", "kwk", "ökol", "repowering", "emission", "photovoltaik", "fotovoltaik", "wärme", "kraftstoff", "shore", "kohle", "erwärmung", "wasserkraft", "wasserenergie", "geothermie", "kraftwerk", "turbine", "kernkraft", "kernenergie"*

Translated to English: *"climate", "environment", "global warming", "pollution", "eeg", "solar", "wind power", "windenergy", "windpower", "wind installation", "renewable", "electricity", "kwk", "eco", "repowering", "emission", "photovoltaic", "heat", "fuel", "shore", "coal", "warming", "hydropower", "hydroelectric", "geothermal", "power plant", "turbine", "nuclear power", "nuclear energy"*

Figure C3 and C4 replicate the Figure 2 and 3 from the main text, illustrating the effect of additional wind turbines on topic proportions. Topic proportions, in this case, are calculated using the keyword approach. Speeches are counted as regarding climate change when at least eight keywords (multiple counting possible) from the keyword string below are included. This high threshold has been chosen as it helps in identifying speeches that pertain with a high probability to the topic of climate change, while still including enough speeches for each party. As can be seen in the left panel, treated MPs again indicate a higher salience of climate issues. Furthermore, the Green party again shows the highest salience among all parties on climate issues. Figure C4 indicates that the treatment effect holds for all parties. Figure C5 presents the effects of new wind turbines on emotional appeals.

Figure C3: Topic Proportions by Treatment (left panel) and by Party (right panel) using Keyword Approach

Figure C4: Topic Proportions by Treatment and by Party using Keyword Approach

Figure C5: Effect of one additional wind turbine per electoral district on the usage of emotional appeals (Keyword Approach, Parliamentary Speeches)

D Analysis using Twitter data

To see if the main results also hold for different text data, I replicate the main analysis with tweets from all available MP accounts. Twitter is one of the most important social media networks for political discussions. Importantly, Twitter is often used by political elites to communicate and set the agenda (Barberá et al. 2019).

To access tweets of individual politicians I first collected all available twitter accounts by manually typing in the name of each politician and subsequently checking for existing accounts. In total, 506 accounts are included in the data set. I then scraped these accounts using the R package *academictwitteR* (Barrie and Chun-ting Ho 2021) which accesses the Twitter v2 API endpoint for the Academic Research Product Track. Tweets in other languages than German have been removed. A total number of 1,245,995 tweets are included in the data set, posted between September 24, 2017 and the end of 2020.

Before the analysis, I further remove all retweets from the dataset to only include tweets written by the respective politician. In order to retrieve only tweets that deal with environmental issues and climate change, I again rely on structural topic models (Roberts, Stewart, and Tingley 2014), setting k to 0. In the case of twitter data, the total amount of identified topics is 64. Table D1 presents a selection of different topics for Twitter data.

Topic	Terms	Labels
2	vote, parties, voices, EU elections, regional elections, eligible to vote	Elections
3	army, security, mission, afghanistan, soldiers	Military
19	democracy, society, solidarity, police, hatred, militant democracy	Democracy
38	euro, money, millions, billions, tax, income, VAT	Money, Budget, and Taxes
43	covid, pandemic, vaccination, test, doctor's office, biontech	Covid-19
46	climate, climate protection, goal, coal, renewable, energy	Climate Change

Table D1: Selection of Topics, Tweets (k=0)

In general, the distinction between different policy arenas is less clear-cut on Twitter. This might be due to the style of communication on social media, where politicians talk less formally and mix professional communication with private messages. Nevertheless, there is a clear climate change and renewable energy topic (Topic 46).

After filtering tweets that have been associated with Topic 46, I repeat the two-way fixed effects regression model for all parties. Figure D1 presents the results using Twitter data.

D.1 Anger + Disgust

As can be seen, members of the radical right AfD are again increasing disgust appeals, but not anger appeals. With each additional wind turbine, MPs of the AfD increase disgust appeals by 0.51 percentage points in their twitter communication. On the other hand, there is again no support for the anger hypothesis: Green MPs and members of other left-wing parties do not increasingly appeal to anger.

Figure D1: Effect of one additional wind turbine per electoral district on the usage of anger and disgust appeals by party (Twitter Data)

D.2   Fear + Sadness

Figure D2 indicates that other negative non-moral emotions are again not impacted. All coefficients remain insignificantly different from 0.

Figure D2: Effect of one additional wind turbine per electoral district on the usage of fear and sadness appeals by party (Twitter Data)

D.3 Positive Emotions

Figure D3 shows that most positive emotions are not impacted. Most coefficients remain insignificantly different from 0. The only significant coefficient indicates an increase in pride and joy appeals for the incumbent Social Democrats (SPD). This results can be potentially explained by the SPD being in government during the period of research. Incumbent parties have more incentives to frame their achievements in positive light (Crabtree et al. 2020), as a more positive track record can increase their support during elections. Hence, politicians from the pro-environmental party SPD might celebrate wind turbines with positive emotions, trying to claim their construction as their achievement.

Figure D3: Effect of one additional wind turbine per electoral district on the usage of positive emotions by party (Twitter Data)

E Event Study Plots

Event study plots are often used in staggered difference-in-difference (DiD) designs to test for parallel trends. The parallel trend assumption is important in DiD designs to ensure internal validity. It requires that in the absence of treatment, the difference between the treated and control units is constant over time. However, in contrast to regular DiD, staggered DiD have groups of units which adopt the treatment at different points. This makes the comparison of pre-treatment trends more difficult. One possibility is an event study plot, which includes a regression model that includes treatment leads and lags. The graphical presentations illustrate the effects and confidence intervals of the two-way fixed effects regression models for each time period before and after the treatment period.

If the assumptions hold, pre-treatment coefficients should be insignificant from zero, whereas they should become significant post-treatment. In concrete terms, these plots can show that prior to treatment, the two groups of politicians in treatment and control were similar with regards to their emotional appeals but started to diverge after wind-turbines were built in their electoral district. In the model below, I present Sun-Abraham models which correct often occurring biases in two-way fixed effects models with leads and lags (Sun and Abraham 2021).

Figure E1 presents the results for AfD politicians. Since FDP politicians also showed a small, but statistically significant effect in the main analysis, I also included the event study plot for these MPs in Figure E2. As can be seen, the figures lend support to assuming parallel trends. Coefficients are insignificant to 0 before the treatment, and positive treatment effects can be observed post-treatment.

Figure E1: Event Study, Staggered Treatment (Sun and Abraham 2021)

Effect on Disgust (AfD)

Significant, but small effects can be observed for politicians from the liberal party FDP.

Figure E2: Event Study, Staggered Treatment (Sun and Abraham 2021)

Effect on Disgust (FDP)

F Direct MPs versus state list

In this exercise, I test whether MPs elected directly in their respective electoral district (via first-past-the-post voting) show a stronger effect in comparison to MPs elected via state lists. If the effects are indeed driven by the construction of new wind turbines, one should expect stronger effects for directly elected MPs, as they have higher incentives of reacting to local events in their electoral districts (Schürmann and Stier 2022).

As can be seen, the heterogeneous effects for AfD MPs are indeed significant, showing a larger increase of disgust for directly elected MPs. Interestingly, there is also a significant negative effect on anger appeals. Directly elected MPs decrease anger significantly, which further emphasizes the importance of disgust in this specific setting.

For this exercise it is important to note, however, that especially smaller parties have only a small number of directly elected MPs. For instance, in the period of research the AfD only had two directly elected politicians in the German Bundestag. Thus, the figures below are based on comparing these two directly elected MPs to the remaining MPs.

Figure F1: Heterogeneous effects of wind turbine construction on disgust appeals interacted with election mode for AfD MPs (Parliamentary Speeches)

Figure F2: Heterogeneous effects of wind turbine construction on anger appeals interacted with election mode for AfD MPs (Parliamentary Speeches)

G Placebo Test: Other Topics

In this exercise, I present the results of a placebo test investigating whether the main effects also occur in speeches unrelated to climate change. If the main effects are indeed driven by the construction of wind turbines, the change of emotionality should not occur in speeches regarding other topics.

For this exercise, I replicate the main analysis excluding climate change related topics (topics 56 and 16) from the corpus of parliamentary speeches. The graph G1 supports the main findings. All coefficients are insignificant and close to zero.

Figure G1: Effect of one additional wind turbine per electoral district on the usage of emotional appeals in unrelated topics (Parliamentary Speeches)

H   Placebo Test: Approval Date

In this test, I use the approval date of wind turbines as the date of treatment, rather than the actual construction date. To do so, I collected the approval dates from the 'Renewable Energy Installations Core Dataset' (BNetzA 2021) that I also used for the main analysis. I included all approval dates that lie in the period of research. For this analysis, I also collected additional information about wind turbines that are already approved but not yet built.

However, Figure H1 shows no significant effects for this exercise, which can be potentially explained by the non-political and non-public nature of the majority of decision processes regarding wind turbine construction. As explained in the main manuscript, wind turbines are approved by administrative district offices and do not involve a political decision - nor is the public informed about the approval in most cases. Hence, the approval of wind turbines is - in most cases - not an emotionally arousing nor publicly debated event.

Figure H1: Effect of one additional wind turbine approval per electoral district on the usage of emotional appeals (Parliamentary Speeches)

I Qualitative Evidence

I.1 Text Examples AfD

In this section, I present text examples from radical-right MPs (Members of the AfD), which exemplify how emotional appeals are connected to moral arguments of "sanctity/degradation".

- **Parliamentary speech, Marc Bernhard, September 10, 2019:** Mr. President, Dear Colleagues. Almost exactly a year ago, you from the Greens and the Left massively supported the violent riots in Hambach Forest, and you from the Greens even first approved the clearing of the forest and then **hypocritically** moved your party conference to the edge of Hambach Forest. Don't you think that's pretty **hypocritical** yourself? At the time, the Hambach Forest was about 200 hectares of forest for coal mining. **In contrast, many thousands of hectares of forest have already been cleared in recent years for wind turbines, and you want to destroy many tens of thousands of hectares more in the future. The truth hurts. That's right. Where is your protest against these thousands of hectares, against this immense destruction of the environment? Where is your protest against the destruction of thousands of hectares of forest? The fact that you approve of this shows all your double standards. People living in the vicinity of wind industrial plants suffer from infrasound and grueling light reflections, not to mention the countless animals that are shredded in these industrial plants day after day. For example, 250,000 bats are killed in agony every year because of burst lungs and other internal organs. 1,200 tons of insects every year: that means 5 billion to 6 billion bees, grasshoppers and beetles every day.600 000 birds such as storks, red kites and buzzards are hacked to pieces every year by wind turbines.Against this background, the quote from your parliamentary group leader Göring-Eckardt - "We want … every bee and every butterfly and every bird in this country to know: we will continue to stand up for them" - can hardly be surpassed in mendacity. They have long ceased to be an environmental or nature conservation party, but climate hysterics who sacrifice everything - whether human, animal or environmental - on the altar of their climate religion.** Now the Germans are supposed to save the world climate with a CO_2 tax, practically on their own. This universal tax will put a price tag on all areas of human life, the amount of which the government can set virtually at will, whether for bread, butter, clothing, smartphones or even water, or simply for breathing. **After all, almost 10 percent of man-made CO_2 is produced simply by breathing. And what is all this for? Just to squeeze even more money out of the citizens. The madness goes even further. The more than 30,000 wind industry plants generate just 18 percent of the electricity in Germany, and you want to generate 100 percent from unstable energy sources in the future. To achieve this, more than 100,000 additional wind turbines would have to be built in Germany. One thing is certain, dear Greens: If you get your way here, there will soon be no more forests, bees, birds or bats, and the children - including your children, if you have any at all - will ask you: Why didn't you do anything about it? Your policy is destroying the environment, killing animals and making people sick and poor. This must finally come to an end.**

- **Parliamentary speech, Martin Hohmann, July 03, 2018:** Madam President, Dear Colleagues. One piece of good news first: I was delighted to learn that the German Cabinet has approved an action program for insect protection. At last! **But how could it have come to such a pass that bee populations in our country have come under such threat?** After all, the Federal Ministry has not just been around since yesterday. The AfD's approach to environmental policy stands for reason, a sense of proportion and scientifically proven facts. **In your budget, Madam Minister, ideology and wishful thinking unfortunately prevail. I would cite the expansion of wind power as an example. Wind power, as the most important part of the so-called renewable energies, is being pushed through as hard as nails against growing resistance from the population. The ideology of supposedly so good energy through ever new wind turbines and ever new power lines is taking its toll. There is especially the disfigurement of the landscape by constantly new wind turbine giants. Enoch zu Guttenberg, unfortunately recently deceased, has set a literary monument to our formerly so wonderful home landscape in the "FAZ". For him, wind turbines are "a brutal outrage against landscape and people". He calls the electricity generated "blood electricity". Electricity prices are at the top of the world. It is the many so-called little people who are virtually exploited for wind energy - a real redistribution of wealth from the bottom to the top. Workers and employees know why they no longer vote SPD, but AfD. - The numbers show it - Consistently and from the beginning only one party opposes the wind power mania: the AfD.** […]

- **Parliamentary speech, Karsten Hilse, 19.12.2019:** Mr. president! Ladies and gentlemen! Dear compatriots! I will start with a quote from henryk broder - I have recited it here before; but of course, figuratively speaking, it fits like a glove today -: this climate story has all the ingredients, all the hallmarks of a faith movement: there are the believing masses, who hold their church days … there are heroes like little greta from sweden, there are the clergy like mr. schellnhuber and other scientists or more-or-less-scientists, who take over the role of the priests, and then there are the heretics, the heretics … as the environmental spokesman of the afd parliamentary group, i am the heretic-in-chief for them and for many believing journalists, because i simply don't want to believe in their nonsense, but demand proof for their abstruse theory, which they are not able to present, despite decades and billions of dollars of research. instead, people are supposed to be satisfied with adventurous predictions, although the Intergovernmental Panel on Climate Change itself admits that the climate is a coupled, chaotic, nonlinear system and therefore predictions about future climate states are not - not! - nevertheless, the believers regularly hold their church days, where their priests, against their better judgment, make people afraid of the supposedly imminent end of the world, blame them for it and demand that they do penance and indulge their sins. As the chief heretic of the afd, i had the dubious pleasure of taking part in this church day. i was allowed to witness live everything that henryk m. broder spoke about: thousands of believers, most of whom already sinned by traveling to the church day, because they emitted much more of the devil's product co2 than if they had stayed at home. the heroine greta and many other little heroines of "no education friday", climate protection youth, nature protection youth - a little less alcohol in the lunch break; then it works, mrs. nissen -, fighters for gender equality in climate, etc. etc. i also got to know the "more-or-less-scientists" who, surprisingly,

didn't want to talk about science at all, but harshly demanded that i finally stop the scientific discussion and instead - – what's going on?vice president dr. hans-peter friedrich:mr. colleague hilse, you don't have to be surprised. this kind of discrediting of colleagues is not okay.karstenhilseafdkarsten hilse:okay; good. they asked me to stand up for climate protection instead, the golden calf of the modern age. the only bright spot at this church day was the meeting with a delegation from the united states of america, which is rather skeptical about this belief. however, the delegates of the old parties put on a diplomatic dark show when they expressed their hope to the americans that they will return to the belief after the next presidential election, i.e. rejoin the paris convention. they were expressing nothing other than the wish that the president, our host, would kindly not be re-elected - an embarrassing faux pas! i told the americans that we are the only party in the german parliament that has taken note of trump's election, fully accepts the decision of the american people and also wants to withdraw from the paris agreement. somehow, this year's church day was a debacle for the faithful,because the world community simply refused to flagellate itself even more. socialist gag demands and gender justice did not find their way into the texts, and even otherwise most states did not feel like committing to anything concrete at all.yet everything had been imagined so beautifully. with a successful church day, it would have been much easier to sell the people on the further plundering that had been planned for them: from 2020, at least 1,000 euros and from 2025, at least 2,000 euros higher living costs per family per year for saving the world.but since it was not possible to come up with a further, even stronger declaration of faith by the world community, people are surprisingly not cheering for the plunderers now after all. some even say that they have taken the precaution of putting on an extra yellow vest.i am very excited and hopeful that their tall tales will soon blow up in their faces, as they have done in other countries. then, perhaps, debates will again be held in this Bundestag on the basis of scientific findings, and for the good of the german people.i will close with another quote from henryk broder: **the climate story is a new global church .and all of you sitting here are allowing this climate sect to abuse this bundestag as a temple for their new religion. at some point, according to henryk m. broder, reason prevails; sometimes it takes a little longer; but eventually it prevails.despite all the differences of opinion, i wish everyone a peaceful and blessed christmas.vice-president dr. hans-peter friedrich:on behalf of the cdu/csu group, my colleague andreas jung speaks.**

- **Parliamentary speech, Karsten Hilse, 26.09.2019:** Mr. president! ladies and gentlemen! dear coal miners, especially in jänschwalde! the un is meeting in new york. the general assembly currently taking place began with a climate summit. to this summit, the unfortunate greta also set off on a billionaire's super sailing yacht, causing at least six times as much of the devilish CO_2 than if she had taken a plane like most people.on the sidelines of the climate summit, greta spoke in "was erlauben strunz?" manner to the politicians, ngos and lobby representatives glued to her lips. some called it an emotional speech that woke her up, others called it the typical expression of a pitiful child suffering from asperger's syndrome.those who repeatedly drag this child into the limelight, destroy its childhood and use it as legitimation for their sick policies are not legally but morally guilty of child abuse. "the dignity of the human being is inviolable", that is probably the most important sentence in our constitution. you are trampling the dignity of this child with his exhibition.and for what? to enforce your

disastrous politics and the interests of the eco-industrial complex! shame on you!there was also good news in the run-up to the climate summit. a court convicted michael mann, the inventor of the field hockey stick curve, the grail of climate hysterics, of virtual fraud. the curve was supposed to prove that temperatures had been falling slightly in recent centuries and rising steeply since industrialization. the field hockey stick curve has since been used as evidence of unnatural warming and was mentioned nearly 70 times in the third report of the so-called intergovernmental panel on climate change alone. the court, like many scientists before it, had ordered mann to disclose the raw data and algorithms he claimed to have used to calculate his curve. mann refused, and so the field hockey stick curve is dead, dead as a doornail.the climate hysterics who are screaming "we're burning up" have lost their main argument; they are standing there virtually naked.mr. taalas, secretary general of the world meteorological organization, one of the biggest climate alarmists in the past, warned against climate hysteria and scurrilous demands such as not having any more children because of climate change. yes, there are such demands - triggered by hysteria that has no scientific basis. after all, more than 500 scientists have contradicted the theory of man-made climate change in a letter to un secretary general guterres entitled "there is no climate emergency", signed among others by former hamburg environment senator fritz vahrenholt of the spd.the letter states:the climate models on which international policy approaches are currently based are inappropriate. it is "cruel and unwise to commit to wasting billions based on the results of such childish models."on monday, i was at a panel discussion with all the other parties represented in the federal parliament. at the end, the moderator asked me whether we as afd couldn't pull together with all the other parties on the climate package. i answered her: this energy turnaround is destroying our car industry, our power plant and heavy industry. it is destroying our nuclear and coal-fired power plants. to pull together with the other parties would mean: we are participating in the destruction of our country's economic existence, and we will never do that.we will oppose this destruction with all our might. my word to that. A friendly "happily ever after" to my homeland, above all to Jänschwalde! thank you very much.

- **Parliamentary speech, Karsten Hilse, 19.12.2019:** Mr. President, Ladies and Gentlemen! Dear compatriots. I'll start with a quote from Henryk Broder - I've recited it here before; but of course, figuratively speaking, it fits like a glove today: **This climate story has all the ingredients, all the hallmarks of a faith movement: There are the believing masses who hold their church congresses … there are heroes like little Greta from Sweden, there are the clergy like Mr. Schellnhuber and other scientists or more-or-less scientists who take on the role of priests, and then there are the heretics, the heretics …As the environmental policy spokesman for the AfD parliamentary group, I am the heretic-in-chief for you and for many devout journalists, because I simply don't want to believe in your nonsense, but demand proof for your abstruse theory, which, however, you are unable to present despite decades and billions of dollars of research. Instead, people should be satisfied with adventurous predictions, although the Intergovernmental Panel on Climate Change itself admits that the climate is a coupled, chaotic, nonlinear system and therefore predictions about future climate states are not - not! - possible. Nevertheless, the believers regularly organize their church congresses, where their priests,**

against their better knowledge, make people afraid of the supposedly imminent end of the world, blame them for it and demand from them penitence and indulgence for their sins.As the chief heretic of the AfD, I had the dubious pleasure of attending this church congress. I was allowed to experience live everything Henryk M. Broder was talking about: Thousands of believers, who for the most part already sinned by their journey to the Kirchentag, because they thereby emitted much more of the devil's stuff CO2 than if they had stayed at home. The heroine Greta and many other small heroines of "No Education Friday", climate protection youth, nature protection youth - a little less alcohol in the lunch break; then it works, Mrs. Nissen -, fighters for gender justice with the climate etc. etc.. I also got to know the "more-or-less scientists" who, surprisingly, didn't want to talk about science at all, but harshly demanded that I finally stop the scientific discussion and instead - – What's going on? […] You asked me to stand up for climate protection instead, the golden calf of modern times. The only bright spot at this Church Meeting was the meeting with a delegation from the United States of America, who are rather skeptical about this belief. The delegates of the old parties, however, had a diplomatic dark moment when they expressed their hope to the Americans that they would return to the faith after the next presidential election, i.e., that they would rejoin the Paris Agreement. In doing so, they expressed nothing other than the wish that the president, our host, would kindly not be re-elected - an embarrassing faux pas! I informed the Americans that we are the only party in the German Bundestag that has taken good note of Trump's election, fully accepts the decision of the American people, and also wants to withdraw from the Paris Agreement.Somehow, the Kirchentag this year was a debacle for the faithful,because the world community simply refused to flagellate itself even more. **Socialist gagging demands and gender justice did not find their way into the texts, and most countries did not feel like committing to anything concrete at all.Yet everything had been imagined so beautifully. A successful church congress would have been a much better way to sell the people on the further plundering that had been planned for them: from 2020, at least 1,000 euros, and from 2025, at least 2,000 euros higher living costs per family per year for saving the world.But since it was not possible to come up with a further, even stronger profession of faith by the world community, people are now surprisingly not cheering for the plunderers after all. I am very excited and hopeful that your tall tales, as in other countries, will soon blow up in your face. Then perhaps debates will be held again in this Bundestag on the basis of scientific findings, and for the good of the German people.**

- **Tweet, Leif Erik Holm, April 17, 2018:** "We also have to contend with this wind power scrap in Mecklenburg-Western Pomerania. There, toxic oil apparently leaked into the groundwater for weeks."

- **Tweet, Leif Erik Holm, June 04, 2019:** "#TheGreens - from #environmental activism to #climate fanaticism. #Habeck & Co. are"leaders" of a new #religion, which tolerates only one "truth". Paternalism, #bans and #dogmas - dissenters are stigmatized by you as thought criminals. #AfD"

- **Tweet, Tino Chrupalla, March 23, 2019:** "+++ Frequent serious accidents at wind turbines - authorities are clueless +++"Masts break, rotors crash to the ground, burning debris sometimes flies hundreds of meters", but politicians don't want to know about it. #AfD #wind energy #Energiewende #BEW"

I.2 Qualitative Analysis The Greens

Even though the statistical evidence for the effect of wind turbines on Green politicians was not robust, in this exercise, I draw on speeches and tweets that come from Green MPs and that have been classified as containing at least one anger appeal. I then try to see whether anger appeals are connected to the corresponding domain of "care" and "fairness". Text examples can be found below.

In the case of Green MPs, I find a very different framing. As expected, members of the Green party link anger appeals to moral concerns of harm and injustice. The domain of justice includes beliefs that people should respect each other and treat others fairly. These morals promote for instance cooperation and reciprocity. The harm/care domain pertains to convictions that people should not harm one another and ought to help others, especially those in need [@horberg2009]. Green MPs accuse the government of a slow process in transitioning to green energy and relying on outdated ways of producing power. They also accuse the government, as well as opposition parties like the liberals or the AfD, of purposefully delaying or blocking the transition for their own interests. These actions, Green politicians argue, subsequently cause "harm" and "injustice" to individuals, to workers, to the economy, and to nature in general. In terms of economy, they emphasize the dramatic costs caused by delaying green energies and the injustice this implies for companies and workers in the green sector. They also refer to injustice committed to people who have to leave their homes due to coal mining. They also particularly focus on harm caused by air pollution such as respiratory diseases. Furthermore, they refer to the injustice of higher energy costs due to fossil power which disproportionately burdens the "poorest in our country". Lastly, they frequently refer to the unfair and harmful consequences of climate change that affect people in other countries (which leads to increasing refugee numbers) and future generations. In this respect, they often use hashtags such as \#GenerationalJustice. At the same time, they portray themselves as the only party that fights for climate justice and protection of our "children and grand-children" around the world. To do so, they promote "international cooperation" as the only solution (and simultaneously criticize the AfD for its nationalistic stance).

I.3 Examples The Greens

In this section, I present text examples from Green MPs, which exemplify how emotional appeals are connected to moral arguments of "care/harm".

- **Parliamentary speech, Oliver Krischer, May 07, 2020:** Madam President, dear colleagues. The climate crisis is not something that is happening somewhere in the Arctic, in the South Seas or in some other distant part of the world. **No, it is happening here in our country,**

it is threatening people and their livelihoods, it is causing billions in damage, and it is destroying nature on an unimagined scale. And that, ladies and gentlemen, is why we have to deal with the consequences of the climate crisis. We have now experienced two years of drought on a scale that was previously unimaginable. Even though it has now rained for a few days, we are threatened with the third drought year in a row. The soil under our feet, the soil under the fields, the soil in the forests is dry as dust down to a depth of 1.80 meters, and the entire water system in our country is completely out of joint in many areas. **This cannot leave us cold. We have to take care of that. This is the livelihood of our life and economy in our country.The consequences of the drought can be seen very clearly if you go to the forest. The forests, especially the coniferous forests and the coniferous plantations, have died over the last few years, area by area, hectare by hectare. You can't miss that anymore. The damage to the timber industry runs into the billions; not to mention the ecological harm. You can also see the harm everywhere in agriculture. When you talk to farmers, they tell you about the drought and dryness in April, and you can see the worry lines on their foreheads.** They wonder: is this going to be another disaster year? In some corners of this country, crops are being plowed up because they haven't come up. But the drought is not only affecting the traditional economic sectors of forestry and forestry. No, a group like thyssenkrupp - you wouldn't believe it - suffered additional losses of 100 million euros in 2019 - it has been suffering for many years anyway - because of the drying up of the Rhine, which is why no ore could be delivered to the blast furnaces in Duisburg. There seem to be some who don't care about agriculture, forestry and ecology, but at this point at the latest it must be clear: **The climate crisis is causing economic damage, and it is destroying the basis of our actions and lives. That is why we have to take action, which means above all that we have to reduce greenhouse gas emissions. But it also means that we have to make ourselves more resilient, that our society and our economy need more protection.** Let me make one thing very clear: I never see Mr. Bareiß, Mr. Pfeiffer or Mr. Linnemann in these debates. Now there are calls to slow down a bit with climate protection and to take care of fighting the consequences of the corona crisis. **Let me tell you: Anyone who demands this is sinning against this country, destroying the basis of our economy.** We have to bring together the fight against both crises. This is the task of our time, of our generation.The task now is to build up climate-resilient forests and to advance near-natural forestry; because - as can be seen everywhere; as can be seen by anyone who walks through the forests with open eyes - the near-natural forests are more likely to survive droughts. We need climate-resilient agriculture with better crop rotations, with new crops, and with new systems. What we no longer need are emergency programs that solve problems after the fact. **We need prevention, we need water management, and we need an urban development policy that allows people to breathe and sleep even at 40 degrees plus.All of that is on the agenda now. We have to get to grips with this. We caused the climate crisis through our fossil fuel economy. Now we need to address the impacts. We need to make the country more resilient. That is the challenge of our time.**

- **Parliamentary speech, Ingrid Nestle, November 30, 2018:** Thank you. - Dear Mr. President, Ladies and gentlemen. Dear Matthias Miersch, I would like to clarify one thing beforehand: Robert Habeck in Schleswig-Holstein has by no means introduced or demanded

new distance regulations, but in tough coalition negotiations with the CDU and FDP - now perhaps you will listen to the end before you shout "Aha!"! - the solution was found in such a way that they said for the closest proximity of the villages: There should not be very high mills, but only normal high mills. - That is not a distance regulation that would take out any wind turbine or any wind area. Just because a few people obviously didn't understand that when they read it, this myth is still being perpetuated, and I think that's a shame. Dear Matthias, I would ask you not to do that. We can have a conversation about that, too. I was there during the coalition negotiations. **But actually, it's about something much bigger; actually, it's about the whole thing here today. It's about the climate crisis. The last time in the history of the earth, when the earth heated up a lot, 90 percent of the species in the ocean and 70 percent of the species on land became extinct. There were no humans, no civilization at stake then - unlike today. Today, we are heating the earth 100 times faster. So today, this is also about the causes of flight and internal and external security. It is about prosperity. And yes, of course, it is also about a secure energy supply.** What is at stake today is a secure and affordable energy supply that needs planning security. That's why I find it disturbing how you in the coalition are misusing this issue for your party-political squabbles. What you are presenting here is more of an energy chaos law. With this law, you are not even trying to implement your own goals. Of course, it is good parliamentary custom to argue about the level of the targets. Of course I would like to have more than 65 percent renewables in 2030, but what you can't argue about is that you have to try to achieve your own targets and that you have to create the framework conditions for it. But that's exactly what you're not doing. You're making a few rules for the next few years, muddling around a bit and not creating any planning security. **That is the government's refusal to work. Unfortunately, I have to say, I think it's pure ideology with you. You want to stay in the past at all costs, but not because the facts would support it. It is just the other way around. What did you say? That it was expensive? Hm. When renewables were expensive, we added a lot. Today, when renewables are cheaper than new fossil, we're not expanding them. That's garbage; it's nonsense.** You said: The electricity has to be usable, it has to fit into the grids. - Then make it usable, then at least vote for our motion. Use it instead of switching it off: You can also use the electricity before the grid bottleneck. But that's exactly what you're not doing. Ladies and gentlemen, Mr. Harbarth from the CDU/CSU said that the Bundestag is not a place for experimentation. - And that also applies to the energy transition. It is not a place for experimentation. You have your own concept: 65 percent renewables, coal phase-out, grid expansion. Everything has been agreed, and it is a scandal that you are not implementing your own concept, but are leaving the entire industry in investment uncertainty. **Please think about the future of our children.** Thank you.

- **Parliamentary speech, Ingrid Nestle, April 25, 2018:** Dear Mr. President, Dear colleagues. Minister Schulze, over the weekend you described the idea of a CO2 prize as very plausible. A true word, calmly spoken. Your composure in the face of your coalition partner's statements is all the more remarkable. Loud declarations of support for the 2030 climate target, no discernible efforts to move closer to the 2020 target, and consistent reservations about any measure more concrete than setting up a commission: that's not enough; because

blocking an effective CO2 price in particular is wrong from three points of view. Firstly, it is shabby because at the beginning of the year, together with the Assemblée nationale, we called for "joint initiatives, in particular on the CO2 price" in the resolution on the Élysée Treaty. Now there is silence in the forest, as again the official statement on the meeting of Macron and Merkel last week. It is shabby to value our word so little towards our French partners. Second, your handling of the CO2 price makes Germany look small for no reason at all; because according to the coalition agreement, you want the CO2 price only with the approval of the G-20 countries. So you want to wait for Trump? You make a market-based climate protection policy dependent on the whims of this American president? You are making yourself weaker than the famous rabbit in front of the snake. Now please don't come with the old canard that a CO2 price will only work globally or with Trump. Several neighboring countries are waiting for us. The UK already has a CO2 price, the Netherlands wants to implement it this year, 87 countries currently want to introduce a CO2 price. This is really an old argument. Third, the rejection of a CO2 price is above all highly irrational. CO2 price, that is market economy. Market economy and climate targets, you can't have that without a CO2 price. Which of the two have you actually given up? Be honest at last! Any path to the climate targets without an effective CO2 price would be more expensive, less open to technology, more remote from the market, and subject to gigantic subsidies. Again and again, inventors come to me and say: Here, I have a great energy-saving technology, but it's not catching on in the market. - Usually, this is then linked to the demand for subsidies. Subsidies for every single technology, is that your idea of economic policy? Do you want a flood of subsidies instead of clear market signals? **We don't want that. I'm afraid you're not taking climate protection seriously, and that's disastrous news for our country and our economy. Climate protection is hard-nosed realpolitik, climate protection is security policy, means combating the causes of flight, is nature conservation, is economic policy. We are currently far from limiting warming to 2 degrees; we are on a 4-degree path. A baby born today has a life expectancy until 2100. Even for these people, the effects of the climate crisis would be devastating, and the economic damage would be many times greater than the cost of a carbon price, and the financial resources from this can at least be spent again. Indeed, we want to invest the revenue and give it back to citizens and businesses. Please open up in the interest of all the children of this world; also of those who are already alive today, whom you meet on weekends, and also of the grandchildren.** Open yourself to the charm of logical thinking. Follow the call of your own economic expert Christoph Schmidt, the demand of 52 companies and associations last November, the IHK Hamburg with 162,000 member companies, the BDEW and many, many more. Stand up for an effective CO2 price. Dear members of the CDU/CSU and SPD, you are the government. That means responsibility for the framework conditions, that means backbone, and that means an eye for the simple and good solutions. All the innovations in the pipeline are just waiting for an honest market to finally be created. Create it! Then this legislative term will have been worthwhile for Germany. Thank you very much.

- **Parliamentary speech, Ingrid Nestle, June 08, 2018:** Madam President, Dear Colleagues. The most remarkable thing about this bill is what is not in it. You from the coalition have even actively cancelled the special tenders requested by the Bundesrat. I asked the federal

government: When and how do you want to start achieving your renewable targets? The answer at the beginning of this week was - in short - that everything depends on the power grid. Does everything really depend on the power grid? Let me illustrate with a story. Let's say the renewables are the cornfields; that's where the food is produced. We need them for climate protection; in the story, they are the children. Right now, we have 38 percent renewable energy, so we need 38 children for climate protection. We know: In 2030, we need 65 children, otherwise we can't achieve the goals that you also want to achieve. So we need more cornfields. Now you say: Everything depends on the networks. - In our story, these are the conveyor belts between the grain fields and the children. Yes, something falls down there from time to time. In a year, about 1 percent of the grain falls off; 1 percent of the electricity consumption is currently being cut off. You could take many different approaches. For example, you could put more grain on the conveyors; that's called phase shifters in the power world, smart grids, temperature monitoring. **You could work locally to get the new conveyor belts we need to come faster, instead of complaining here in Berlin that they're not there. You could say: If nothing fits on the conveyor belt anymore, then we'll do something useful with the grain. We give it to other children - I'll call them the heat or traffic children - who urgently need more climate protection. There are lots of players here who want to innovate, for example, power to heat. We could use it in industry, in all kinds of different areas. You can do all that. You can do a lot more, for example, feed in less coal or nuclear power. You can do all of that. But there's one thing you can't do, and that's to say: Well, then we won't plant any new cornfields, we'll just let the climate protection children starve. - After all, these are our children**. **I think that's where we come back to the real world, because our children's food security also depends on climate protection.** […]

- **Parliamentary speech, Sylvia Kotting-Uhl, October 08, 2020:** Dear Mr. President, Ladies and Gentlemen. Paper is getting impatient: in 2015, the Sustainable Development Goals were adopted in New York, and also in 2015, the Paris Climate Agreement was reached. **Everyone agreed: we must do much more for climate protection, for justice, for the long-term survival of mankind on our planet.** And what is happening in the German cabinet? CO_2 price, coal phase-out, EEG amendment - wherever you could do something strong, Mr. Altmaier, you duck away, which is why your strong statements last Friday on a serious climate policy are simply worth nothing.The best example is your proposal for commissions. You demonstrated how you deal with their recommendations in the end with the coal commission. That's how you frustrate civil society, and that's exactly what we don't need in these times.In your latest amendment to the Renewable Energy Sources Act, you want to get by with half of the 16 gigawatts of expansion per year needed for climate protection. To ensure that this is still enough to generate 65 percent green electricity in 2030, you have simply assumed a reduction in electricity consumption. But, like us, you want electric cars, heat pumps and hydrogen. That doesn't go together. **30,000 jobs in the wind industry, which you drove to the wall along with the flourishing expansion of renewables, were worth nothing to you.** Saving Lufthansa was important to you; but you waived ecological conditions. Reason and tightening today's targets go hand in hand in climate protection. There is no need to seek a balance, Mr. Scheuer. And you create uncertainty in the economy not by

being clear, but by talking about climate protection and doing nothing.The transport sector has not saved anything so far.With your typical comments on the absolutely necessary tightening of CO_2 limits for the passenger car fleet, you are not only discrediting yourself, but once again the entire German climate policy. **And you are putting your hand on the long-term survival of the automotive industry by persuading it that the transformation still has time. Ms. Schulze supports the EU Commission's proposal for a stricter emissions target. Now we have to convince our coalition partners and then be consistent. Firstly, this means not accepting that reforestation should be counted as a reduction measure. If forests die in the climate crisis and have to be reforested, is that supposed to be a CO_2 reduction?- Seriously**? Secondly, it means adapting our national targets and measures to the new EU target and using the opportunity of the EU Council presidency to convince hesitant countries. **And in the run-up to the budget week: finally using the double climate policy and budgetary benefit of reducing climate-damaging subsidies.Incidentally, an effective CO_2 price would also have a double benefit, especially if the revenue per capita is returned to the population and thus creates a social balance.At the latest, the Corona crisis has shown us how all policy areas are interconnected: without nature conservation no health, without climate protection no social justice. Resilient cities with different mobility are needed, which no longer make children, the elderly and low-income earners the losers of the system because they suffer more than average from noise, bad air, used space and warming. The same applies to agriculture: animal suffering, cheap meat, underpaid workers, overfertilization, groundwater pollution, pollutant and CO_2 emissions are the negative peaks of the current system.** They could all be mitigated simply by linking the number of animals to the area.If you then also got your way to phasing out glyphosate and to a pesticide reduction strategy, you would have made not only bees and insects, but also the climate a bit healthier.But no! **Time and again, it is your palpable fear of losing the love of business and society that makes you put on the brakes and not do what you know needs to be done.Yet in many cases, business and society have long been further along than you: I would mention Fridays/Parents/Scientists for Future, appeals from the scientific community, the World Economic Forum in Davos, the 2° Foundation, and now the heads of 150 international companies such as Google, Apple, and Deutsche Bank, who are calling for a significant reduction in CO_2 emissions.And they are right! Fires all over the world - the rainforest, California, the tundra -, floods in Africa, drought in Brandenburg, forest dieback, heat in German cities - all with only 1 degree average warming. In addition, there may be more frequent zoonotic diseases such as Covid-19, which are related to the repression of natural spaces.The just published State of Biodiversity Report shows that mass extinction continues, and in addition to all the other fatal damage that the decline in biodiversity means, it also favors the leapfrogging of viruses.If you haven't heard the gong now, you can't be helped. Take the EU climate protection targets constructively and implement them for Germany. And if you like, take Mr. Altmaier's 20 points and fill them with something other than hot air.You still have eleven months. I don't want you to continue to fail for tactical reasons; we don't have any more time to lose on this issue, so take this Sustainability and Climate Week as a mandate.** Thank you very much.

- **Tweet, Filiz Polat, March 21, 2018:** "Today is International #ForestDay: Deforestation is devastating for #climate, biodiversity and distributive justice."

- **Julia Verlinden, February 15, 2018:** "#PolluterPaysPrinciple to be taken seriously: #RWE should take responsibility & shut down coal-fired power plants (largest source of CO2 in Europe in the Rhineland) #coal phase-out #climate protection #generational justice #endcoal"

J   Moral Dictionary

In this exercise, I corroborate the qualitative analysis by using additional computational tools to identify moral language. If emotional appeals by politicians are linked to moral arguments, one should be able to find effects of wind turbines also on corresponding moral rhetoric. This means that wind turbines should also impact how radical-right politicians use moral rhetoric in relation to sanctity/degradation (the moral foundation that is linked to disgust). To do so, I apply a moral dictionary for German language (Bos and Minihold 2022) to see - using computational tools - whether wind turbines in fact cause radical-right MPs to increase corresponding moral language. Figure J1 presents the results of this analysis.

As can be seen, the results fully support the qualitative findings as well as the theoretical expectations. New wind turbines cause radical-right MPs to increasingly use moral words related to the moral foundation of "sanctity/degradation" which is connected to the moral emotion of disgust (Feinberg et al. 2019; Horberg et al. 2009). Left-wing politicians (politicians from the Greens and the social democratic SPD), on the other hand, make more use of words related to the domain of "care/harm" which is linked to the emotion of anger (Rozin et al. 1999; E. J. Horberg, Oveis, and Keltner 2011).

Figure J1: Effect of one additional wind turbine per electoral district on the usage of moral language (Parliamentary Speeches)

K   Citizen Data

In this exercise, I investigate whether politicians use emotional appeals strategically. To do so, I analyze data coming from ordinary citizens and party supporters. The theoretical framework of this study rests on the assumption that politicians appeal to emotions which resonate among their supporters, in order to mobilize them. To do so, however, politicians need to know the "moral-emotional" preferences of their supporters, or else they risk losing support (Enke 2020). Thus, I test whether I can find similar emotional appeals in text documents about climate change written by radical-right supporters. To do so, I make use of differently sampled groups of AfD supporters on Twitter.

K.1   Twitter Replies

In a first analysis, I analyze all replies to all tweets from politicians in the period of research. To do so, I collected all replies to tweets in the Twitter data set used in Online Appendix D, which I used in the replication of the main analysis. The twitter data used in Online Appendix D includes 1,245,995 tweets from politicians. Collecting all replies from these tweets results in 19,889,441 replies from followers. All tweets and replies have been collected using the R package *academictwitteR* (Barrie and Chun-ting Ho 2021).

After the collection of these data, I used the ed8 dictionary published by Widmann and Wich (2022) to analyze the tweet replies. Even though the ed8 dictionary achieves lower performance as the transformer model published in the same study (Widmann and Wich 2022), the dictionary approach is significantly faster and computationally cheaper. Analyzing nearly 20 million tweet replies using the transformer model used in the main analysis would exceed the computational power of a normal computer.

Nevertheless, the ed8 dictionary provides scores for the same eight emotions. To be precise, the ed8 dictionary provides normalized emotional scores for each emotion, which are created by dividing the counts of emotional words by the total word count of each document. I then aggregated the normalized disgust score for the replies to politicians' tweets for topic 18 and 52 (green issues), respectively. The results can be seen in Figure K1.

The figure shows that AfD politicians receive significantly more disgust related language, when talking about climate change and renewable energies (topic 46), than other political parties. Previous research has shown that partisans often follow the parties or politicians they support (Barberá et al. 2019) and that cross-ideological interactions are rare (Barberá 2015). Thus it is reasonable to assume that politicians receive - at least to a large extent - replies from their own party supporters. This means that "below" AfD tweets, discussions are largely dominated by their own supporters. And AfD partisans' discussions about green issues are tinted to higher levels in disgust language than discussions by followers of other parties. Thus, it is reasonable to assume, that disgust plays a more important role among AfD partisans.

Furthermore, comparing disgust levels within replies to different topics, one can see that green issues cause more disgust related replies to AfD tweets than other commonly discussed political topics. Green issues therefore stand out in the amount to which they attract disgust related responses

Figure K1: Mean difference in disgust language between replies to AfD tweets and tweets of other parties (by topic)

from AfD supporters. The results can be seen in Figure K2. Interestingly, green issues include even more disgust-related language than the topic of Covid-19, which relates to death, illness, and infections.

K.2 Random Samples of Twitter Users

In the second part of this analysis, I use different sets of twitter users. To be precise, I collected four different user samples: three partisan samples including twitter accounts from followers of the AfD, the SPD, and The Left. The fourth sample consists of 'politically attentive' users. The samples have been created following the approach by Barberá and co-authors (2019). The 'politically attentive' sample includes 10,000 random Twitter users who are following a major German newspaper (followers of 'Süddeutsche Zeitung,' the biggest daily newspaper in Germany; see (Barberá et al. 2019)). The three additional (partisan) samples consist each of 10,000 random followers of their respective party account.

To create the four samples, I firstly collected all followers from the four official twitter accounts (Süddeutsche Zeitung, SPD, The Left, and AfD). Then I dismissed accounts with less than 10 tweets in total, accounts that have been created later than January 2020 to have enough data to collect, and protected accounts since data from these accounts cannot be collected. Subsequently, I randomly sampled 10,000 users from each of the four follower lists, resulting in four samples of 10,000 users respectively. To make the amount of data managable, I scraped these 40,000 accounts only for the first five months of 2020. After scraping, I dismissed all non-German tweets and retweets (tweets that have not been written by the users themselves). In total, the 'politically attentive' dataset (newspaper sample) includes 290641, the AfD supporters dataset includes 672174, the SPD

Figure K2: Mean difference in disgust language in AfD replies between different topics

supporters dataset includes 504538, and The Left partisan dataset includes 615620 tweets. Again, all tweets have been collected using the R package *academictwitteR* (Barrie and Chun-ting Ho 2021).

I analyzed these citizen and partisan tweets by using the transformer models (as in the main analysis). To identify topics for the different tweets, I rely on keyword strings. The keyword strings for the different topics are the following:

Green Issues: same keyword string as displayed in Online Appendix C3.

Immigration: *immigr, migrat, refugee, asylum, guest work, foreign*

Finance & Business: *business, finance, tax, growth, win, profit*

Covid-19: *corona, covid, pandemic, virus, infection*

Brexit & European Union: *europe, european, brussels, brexit*

Housing: *apartment, rent, house building, house purchase*

Military: *army, soldier, troops, drones, foreign deployment, military*

Agriculture: *agriculture, farmer, animal welfare, farming*

After having identified the topics of different tweets, I run a significance test between the four different group means of disgust appeals. I use coefficient plots to show the statistical difference between the SPD group, The Left group, and the politically attentive group to the AfD group. As can be seen in Figure K3, the AfD supporters use significantly more disgust related language than all other partisan groups when discussing green and climate issues (negative and significant coefficients). However, in Figure K4 we can see that when the same groups discuss other topics (e.g. immigration, the EU, housing etc.) disgust levels are similar and statistically non-significant.

The only topic where results significantly differ is Covid-19 which was a topic where radical-right parties' emotional framing significantly differed from the framing of other parties (Widmann 2022).

Overall, these results show that disgust - when discussing green issues - is an important emotion radical-right supporters rely on (more than partisans of other parties). Since these discussions take place "below" tweets from radical-right politicians or publicly on social media, it is further reasonable to assume that AfD politicians have knowledge about the specifics of this kind of emotional framing, which provides further support that AfD politicians use this kind of emotional rhetoric strategically.

Figure K3: Comparing means of disgust appeals between partisan groups (reference group = AfD partisans)

Figure K4: Comparing means of disgust appeals between partisan groups by topic (reference group = AfD partisans)

Immigration

Left Follow.	
SPD Follow.	
Pol. Interested	

−0.01   0.00   0.01

Finance + Business

Left Follow.	
SPD Follow.	
Pol. Interested	

−0.010   −0.005   0.000   0.005

Brexit & European Union

Left Follow.	
SPD Follow.	
Pol. Interested	

−0.015 −0.010 −0.005 0.000 0.005

Housing

Left Follow.	
SPD Follow.	
Pol. Interested	

−0.02   −0.01   0.00

Military & Army

Left Follow.	
SPD Follow.	
Pol. Interested	

−0.02   0.00   0.02

Agriculture

Left Follow.	
SPD Follow.	
Pol. Interested	

−0.02   −0.01   0.00   0.01

Covid−19

Left Follow.	
SPD Follow.	
Pol. Interested	

−0.006   −0.004   −0.002   0.000

L   Deviations from the Preregistration

The study deviates from the pre-analysis plan in three main ways:

1) I changed the formulation of the two hypotheses to make clear that, in this case, the anger hypothesis should hold for pro-environmental parties and the disgust hypothesis for climate-change skeptical parties. This more general formulation makes clear that the hypotheses are not based on parties affiliation with a certain party-family (e.g. radical right), but based on their standpoint towards climate change and climate change mitigation policies.

2) In both hypotheses, I replaced "the construction of wind turbines" with "a rise in the salience of climate change" to emphasize the expected theoretical mechanism to be in place, rather than the specific case.

3) Additional robustness tests, as well as the exercises to further investigate the strategy of politicians' framing were not preregistered. They are exploratory in nature in order to better understand the precise mechanism at play. This also includes the replication using twitter data, as well as the citizen-generated twitter messages analyzed in Online Appendix K.

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