Persistence and Activation of Right-Wing Political Ideology

(PRELIMINARY PROGRESS REPORT)

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Abstract

We investigate the persistence of right-wing ideology in Germany. The "Alternative for Germany" (AfD), founded as a party espousing fiscal conservatism, has turned to an openly nationalist and anti-immigrant platform since 2015. We document this rhetorical change with quantitative text analysis. We further show that municipalities that voted more for the AfD after 2015 also exhibited higher support for the Nazi party in the 1920s and 30s. The historical correlation we observe is positive, significant, and large. In our preferred specification, a one standard deviation increase in historical support for the Nazi party is associated with a 0.15 standard deviations larger change in votes towards the AfD. Our results are robust to controlling for a large set of historical and contemporary covariates, especially relating to unemployment and the recent inflow of refugees from the Middle East.

Note: This is a preliminary progress report. A more complete, updated draft will follow.

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1 Introduction

In this paper, we investigate the persistence of right-wing ideology in Germany. In recent years, the "Alternative for Germany" (*Alternative für Deutschland*, henceforth AfD) has offered a political platform on the far right: conservative, nationalistic, and at times outright xenophobic. We show that municipalities that, in the 1920s and 30s, expressed strong support for the Nazi party (the NSDAP) now have a stronger vote base for the AfD. In our baseline specification, a one standard deviation increase in Nazi support during the Weimar era is associated with 0.15 standard deviations more support for the AfD in recent elections. This result is robust to controlling for state fixed effects, and for a host of plausible econonomic and social determinants of electoral outcomes.

Crucially, the specific setting of Germany allows us to observe a case in which a change in the supply of political platforms is key in making a long-run persistence of ideological traits reemerge. After the catastrophic experience of Nazism and World War II, and the subsequent denazification process, the postwar legal setting severely constrained the expression of right-wing ideology, and almost completely impeded the creation of parties on the extreme right fringe. The "Alternative for Germany" bypassed these constraints: it was founded in 2013 as a platform to promote fiscally conservative principles and oppose the Greek bailout. Two years later, in 2015, the initial group of founders (many of them economists) was ousted and the party veered strongly to the right, focusing on immigration and nationalism (a near-taboo topic in Germany) as main themes. We find that there is only a small or no correlation between the AfD's electoral fortunes and Nazi support in 2013/14, when the AfD espoused merely economic conservatism, whereas the correlation emerges once the political platform is changed after 2015.

Using quantitative language analysis, we document how the AfD markedly changed its rhetoric after its sudden change of leadership in 2015. Instead of focusing on Greece and the Euro crisis, the AfD now emphasized topics such as nationalism, (the perceived threat of) Islam, and immigration in all media utilized, from political manifestos, to speeches, to Facebook and Twitter posts. Notably, only the rhetoric changed — the name and the logo of the party remained identical. This allowed the party to avoid the intense legal scrutiny, and public stigma, that newly-founded right-wing parties are subject to in Germany. The change in rhetoric after 2015 sufficed as a "dog whistle" to make the historical correlation with Nazi support reemerge.

A major political turning point in 2015 was the sudden, massive inflow of Syrian refugees in September and the following months. This occurred soon after the change in leadership at the AfD's helm, and undeniably influenced the political discourse. Still, we do not think that this political event can explain away our findings. First, the AfD's nationalist turn occurred months *before* the inflow of Syrian refugees (actually, at the peak of the Greek bailout crisis), not as a consequence of it. Second, our empirical strategy rests on a comparison of municipalities and their *change* in voting behavior between 2013 (when the AfD was merely fiscally conservative, and the refugee crisis had not occurred yet) and 2016/17. To the extent that the Syrian refugee crisis

has increased xenophobia and anti-immigration sentiment in Germany overall, this level effect should be captured by considering first differences in voting outcomes. Last, we explicitly control for the presence of refugees in a municipality, and observe that the actual presence of asylum seekers does not sway voters significantly.

Finally, we consider plausible patterns of voter migration. Our analysis suggests that areas which traditionally supported the Nazi party witnessed an increase in voter turnout as the AfD turned more radical; voter mobilization may thus explain parts of the AfD's electoral success. Along the intensive margin, our analysis reveals that municipalities with high Nazi vote shares in the Weimar era moved away from parties on the far left and far right between 2013 and 2016/17, casting more votes for the AfD instead. (In future work, we plan to complement our analysis of electoral results with a parallel analysis of political attitudes as expressed in opinion surveys.)

Our analysis speaks to several research agendas in economics and political science. First, we contribute to the literature on the long-term persistence of cultural traits and attitudes.[1] As in these papers, we show that cultural traits — in our specific case, political attitudes — have deep origins that may trace back to the distant past, and be transmitted across generations.[2] Similar to the work of Giuliano and Nunn (2017), however, we point out that past experience and attitudes may not always result in historical persistence.

The AfD's electoral successes show that the historical persistence of political attitudes is not always visible, and may need to be "activated" by changes in the institutional setting or the political marketplace. This activation of historical memories has also been evidenced by two recent papers. Fisman, Hamao, and Wang (2014) argue that political shocks deteriorating Sino-Japanese relations — related to the memories of Japanese occupation during WWII — have an impact on stock market prices of Japanese firms. Fouka and Voth (2016), instead, show how sales of German cars declined, as the recent Greek debt crisis worsened, in Greek localities that witnessed massacres perpetrated by German forces during WWII.

Second, our work is a contribution to understanding the determinants of (radical) right-wing voting. In recent years, discontent about the social and economic situation has increasingly expressed itself in votes for candidates and parties on the populist (far) right, from Viktor Orbán in Hungary to the FPÖ in Austria, from Marine Le Pen in France to the UKIP in Britain, and to

1. The recent literature in economics on deep roots and persistence of cultural values is large; a very incomplete set of references would include Alesina and Fuchs-Schündeln (2007), Nunn and Wantchekon (2011), Jha (2013), Spolaore and Wacziarg (2013), Alesina, Giuliano, and Nunn (2013), Guiso, Sapienza, and Zingales (2016), Becker et al. (2016), Becker and Pascali (2016). Cultural values persist even when the economic logic that plausibly gave rise to them in the past, in a certain historical and social setting, subsides, or when people migrate into a different country: Voigtländer and Voth (2012) show that antisemitism persisted in German cities even after Jews were completely evicted through pogroms; a large literature, using the "epidemiological approach", has shown how second-generation immigrants often mimic the cultural traits and attitudes of their ancestors' country of origin (Giuliano, 2007; Fernández and Fogli, 2009; Alesina and Giuliano, 2010; Algan and Cahuc, 2010; Luttmer and Singhal, 2011).

2. Complementary to our context, an important literature in political science has studied the intergenerational transmission of political preferences, see e.g. Beck and Jennings (1991) and Jennings, Stoker, and Bowers (2009). Specifically for the context of right-wing ideology, see Avdeenko and Siedler (2017).

Donald Trump. Economic insecurity, spurred by increasing globalization and the demise of traditional manufacturing, may explain part of this political shift.[3] Increasing levels of immigrant population in (Western European) countries may also explain some part of the right's electoral successes.[4] However, closer to the setting studied in our analysis, Steinmayr (2017) finds that the short-term effects of direct exposure to Syrian refugees are more favorable to parties supporting immigration, rather than to xenophobic movements. Finally, Inglehart and Norris (2016) argue that the recent rise of populism can best be understood as a reactionary response to a cultural change that is perceived as too fast and unsettling by some sectors of the population.

This latter research is part of a longer tradition of political scientists trying to understand the emergence of far right parties, especially in a comparative dimension.[5] To our knowledge, we are among the first to bring two new factors, and the interaction thereof, to the explanation of the electoral successes of right-wing parties. On the one hand, we shed light on the role of long-standing, deeply ingrained political beliefs — this is especially salient in Germany, a country that experienced a most destructive instance of fascism.[6] On the other hand, we emphasize the importance of political structures, and the incentives/constraints they set for the formation of political parties, in facilitating the expression of right-wing ideology.[7]

The paper proceeds as follows. In section 2, we provide an introduction to the political context in Germany, and some information about the history of the AfD. In section 3, we describe the data used. In section 4, we use language analysis to quantify the change in the AfD's rhetoric after March 2015. In section 5, we present the empirical analysis linking historical support for the NSDAP with the AfD's electoral results. Finally, in section 6 we conclude.

2 Historical Context

2.1 The Political Landscape in Germany

After the collapse of the Nazi regime and Germany's defeat in World War II, the reconstruction of the political party system in West Germany (the Federal Republic of Germany, founded in 1949) faced two major challenges. First, parties tried to rebuild a system that would supersede the

3. This important dynamic has recently been studied for the US (Autor et al., 2016), for Germany (Dippel, Gold, and Heblich, 2016), and for France (Malgouyres, 2017).

4. Halla, Wagner, and Zweimüller (2016) and Dustmann, Vasiljeva, and Piil Damm (2016).

5. See, e.g., the recent review by Golder (2016), as well as the earlier works by Norris (2005), Mudde (2007), and Arzheimer (2008).

6. Despite the availability of high-quality electoral data from the Weimar era, only few researchers have tried to correlate post-war political outcomes in the Federal Republic of Germany with early Nazi support: Liepelt (1967) showed that in 1966 there was a strong correlation between electoral successes of the NPD (a neo-Nazi party) and the NSDAP in 1932. Cf. also the early contributions by Kaltefleiter (1966), Kühnl, Rilling, and Sager (1969), Sahner (1972), and Winkler (1994).

7. Closer to our argument, Arzheimer and Carter (2006) emphasize the importance of structural factors that shape the political opportunity structure and thus the comparative emergence of right-wing movements, as well as the interaction of economic factors and political structures (Arzheimer, 2009).

structural weaknesses of parties during the Weimar era — a weakness that arguably resulted in the end of democracy and the Nazi's takeover of power. Second, parties struggled to integrate large swaths of the population who were actively involved in the Nazi dictatorship, among those an estimated 8.5 million former card-carrying NSDAP party members, into the new democratic system.

On the right side of the political spectrum, the main actor was the Christian Democratic Union (CDU). Founded by several members of the Nazi resistance, it built on the previous experience of the Catholic "Zentrum" party, but explicitly tried to appeal also to Protestant voters, who before the war largely supported nationalist/conservative parties. The CDU (and its Bavarian sister party, the CSU) succeeded in the endeavor of becoming the main conservative party in Germany, channelling nationalists, economic liberals, and social conservatives alike into one party strongly supporting democratic values in the new Federal Republic of Germany. Smaller parties on the right appealing to specific constituencies, such as the BHE (League of Expellees), targeting the expellees losing their ancestral homelands after WWII, and the DP (German Party), appealing especially to war veterans and northern German conservatives, quickly disappeared and were not represented in the federal parliament any more after 1957.

Other political parties emerging to the right of the CDU/CSU in later years were similarly unsuccessful, scoring at best very temporary successes. The NPD (National Democratic Party) was founded in 1964 and enjoyed some temporary popularity in the late 1960, winning some seats in state assemblies. However, it never managed to break through the 5% threshold of votes required to gain representation in the *Bundestag* (the federal parliament). In the following decades, it drifted further to the right and lost electoral support, only to regain popularity after Reunification in the states of former East Germany. There, it entered two state assemblies (in Mecklenburg and in Saxony) twice in the late 2000s, securing up to 9.2% of the votes. At the federal level, the NPD remained insignificant, never scoring more than 1.6% of the vote after 1990.

Among other attempts of party to break through on the right side of the CDU/CSU, the *Republikaner* (Republicans) were notable due to their successes in the late 1980s and early 1990s. They entered two state assemblies, sent MPs to the European Parliament in 1989, but they, too, repeatedly failed to pass the 5% threshold to enter the *Bundestag* and drifted into irrelevance. The ability of the CDU/CSU to squeeze out all margins on the right end of the political spectrum, all the while remaining solidly grounded in democratic and liberal principles, is well summarized by the long-time leader of the CSU, Franz Josef Strauss, who quipped in 1986 that there "shall not be a democratically legitimate party to the right of the CSU."

Indeed, no explicitly nationalistic/right-wing party was ever able to enjoy substantial and continued electoral success in the history of the Federal Republic of Germany. However, this was not only due to the CDU/CSU's ability to occupy the space on the political right: a major factor was also a provision in the Basic Law (the constitution of the Federal Republic of Germany) that enabled the Constitutional Court to disband extremist parties on the left and the right. Article 21.2

of the Basic Law states that *"[p]arties that, by reason of their aims or the behaviour of their adherents, seek to undermine or abolish the free democratic basic order or to endanger the existence of the Federal Republic of Germany shall be unconstitutional."* This article was invoked twice with success: in 1952, the Constitutional Court outlawed the SRP (*Sozialistische Reichspartei*, Socialist Reich Party), a party that had an openly neo-Fascist agenda and recruited former Nazi functionaries, and in 1956 the communist party (KPD).

This provision in the Basic Law was successful in disciplining the extremeness of right-wing political platform even when it did not result in an explicit party ban — the mere threat of disbandment sufficed. The case of the NPD was twice brought to the Constitutional Court, once in the early 2000s, when it was dismissed on formal grounds, and once in 2016-17, when the court ruled that, while the party's ideology is unconstitutional, its support is to small to undermine the democratic order and thus to justify its ban.

2.2 The "Alternative for Germany" (AfD)

In September 2012 three individuals — Bernd Lucke (an economics professor from Hamburg), a former CDU politician and a journalist — signed an appeal to oppose the current policies pursued by the German government to fight the Euro crisis. The manifesto called for the foundation of a party to be called "Electoral Alternative 2013". Notably, this initial manifesto was only concerned with the Euro crisis, the potential bailout of Southern European states, and the fear that the federal government might cede more powers to Brussels (also suggesting the use of referenda) — the manifesto explicitly excluded that the "alternative" should take a stance on other policy concerns.

In the following months, the "Electoral Alternative" morphed into a fully-fledged party, attracting, in particular, a large number of disappointed former CDU and FDP members, as well as several economics professors. In the 2013 federal election, the "Alternative for Germany" (*Alternative für Deutschland*, or AfD), as it was now named, won 4.7% of the votes, only narrowly missing the 5% threshold to enter the *Bundestag*.

Following the federal election, the AfD gained further strength, obtaining 7.1% of the votes in the European Parliament election of May 2014. This expansion, however, also meant that new party members were not only concerned about Euro crisis policies; in fact, the AfD increasingly attracted conservatives of all sorts, who did not feel represented by the centrist course of chancellor Angela Merkel. The tensions between the initial group of party members — economics professors and fiscal conservatives — and the newer, national-conservative, anti-immigration members became virulent in the spring of 2015, when two leading party functionaries from Eastern Germany published the "Erfurt Resolution."

In this document, they called for a policy of opposition to the "social experiments of the past decades (gender mainstreaming, multiculturalism) [...]" and encouraged the party leadership to embrace the xenophobic, anti-immigrant PEGIDA ("Patriotic Europeans Against the Islamization of the West") movement. At the following party congress in Essen, in July 2015, Frauke Petry, rep-

resenting the conservative, anti-immigrant part wing was surprisingly elected party leader with 60% of the vote, against 38% of the votes going to the party founder Bernd Lucke. The congress in Essen sanctioned the takeover of the party by its conservative faction; the fiscal conservatives rallying around Bernd Lucke left the party and founded another movement (with little electoral fortune so far).

With its new, anti-immigrant conservative rhetoric, the AfD sailed to considerable successes in the subsequent state elections held in 2016 in the states of Baden-Württemberg (15.1%), Rhineland-Palatinate (12.6%), Saxony-Anhalt (24.3%), Mecklenburg-Anterior Pomerania (20.8%), and Berlin (14.2%). The sudden, large expansion of the party, and the election of inexperienced and insufficiently vetted candidates to local assemblies also meant that the AfD was involved in several political scandals, especially with regard to extremist political views (antisemitism, holocaust denial). The party leadership also moved further to the right, booting out Frauke Petry in the 2017 national congress and replacing her with even more conservative members.

Perhaps as a consequence of this further radicalization, the party's performance in local elections in 2017 was less impressive; still, it gained representation in all state assemblies that were up for election in that year (Saarland, 6.2%, Schleswig-Holstein, 5.9%, North Rhine-Westphalia, 7.4%). As we write, the AfD prepares for a federal election (scheduled in September 2017) with a program that espouses staunchly conservative values (law and order, traditional family valies), but also less established views (climate change denial, skepticism of mainstream media) and bordering outright xenophobia (calling for a stop to immigration, especially of asylum seekers and family recompositions, limiting access of immigrants to social security, and demanding German values rather than a multicultural society).[8] Figure 1 reports a timeline of the major events.

3 Data Description

Our body of data used in this research consists of three parts: *(i)* electoral data; *(ii)* data documenting the relative shift in political platforms, as reflected by political language; and *(iii)* other control variables.

3.1 Electoral Data

Our electoral data are drawn from the official websites of the Federal Returning Officer (*Bundeswahlleiter*), for the federal election to the *Bundestag* of September 2013, or from the respective state returning officers (*Landeswahlleiter*), for the election to state parliaments (*Landtage*) in 2016 and 2017. The data are provided at the municipality (*Gemeinde*) level.

8. See "Programm für die Wahl zum Deutschen Bundestag am 24. September 2017", `https://www.afd.de/wp-content/uploads/sites/111/2017/06/2017-06-01_AfD-Bundestagswahlprogramm_Onlinefassung.pdf`, last accessed 14 August 2017. Hensel et al. (2017) provide a comprehensive overview of the AfD's history and current goals.

Data for the federal (*Bundestag*) elections prior to 2013 are obtained from DESTATIS, the German federal statistical office. We purchased the municipality-level tabulations of all elections from 1989 until 2009 (data for the elections in 1980, 1983, and 1987 refer to West Germany only).

For the electoral results of right-wing parties during the Weimar Republic, we resort to the pathbreaking work of Jürgen Falter and Dirk Hänisch (Falter and Hänisch, 1990), who digitized the votes for the *Reichstag* elections from 1920 until 1933 as published in the series *Statistik des Deutschen Reiches*. In all years, except for the two elections of 1932 (July and November), electoral results were published at the level of counties as a whole (*Kreis* or *Stadtkreis*), and then separately for all municipalities above 2,000 inhabitants contained in a county.[9] From this disaggregation, we can easily reconstruct the aggregate votes for all municipalities contained in a county, but below the 2,000 inhabitants threshold (the "remainder of the county").

We match present-day electoral outcomes to the Weimar era party support through a geocoding algorithm, in two steps: in the first step, we geocode the Weimar-era electoral entities (counties and municipalities) listed in the Falter and Hänisch (1990) dataset, using a combination of historical county shape files,[10] current geodata in OpenStreetMaps, and a variety of other online sources. In the second step, we match modern electoral geographies to these geocoded entities. Based on the geographic location, a current municipality is either matched to a city-county (*Stadtkreis*) of the Weimar era, or to one of the municipalities whose electoral data are known because it had more than 2,000 inhabitants. We call these municipalities "exact matches". The remaining municipalities are then assigned, based on their location, to the entity "remainder of the county", i.e. to the aggregate electoral results in a historical county, *outside* the municipalities with more than 2,000 inhabitants. Typically, for any Weimar-era observation relating to the "remainder of the county", there will be several present-day municipalities matched. We therefore account for this by clustering our regression analysis at the level of observation in the Weimar era (*Stadtkreis*, municipality above 2,000 inhabitants, or "remainder of the county").[11]

3.2 Text Data

We analyze the language used by the AfD and other major German parties by considering a variety of sources. Besides the AfD, we consider the following parties: CDU/CSU[12] (christian democratic, moderately conservative), SPD (social democratic, moderately left-wing), Grüne (green party), FDP (free democrats, economic/socially liberal), NPD (nationalistic, starkly right-wing, only represented in a few state legislatures).

9. For the elections of 1932, no data at a level of disaggregation below the county were published. After 1933, the new regime unfortunately had priorities other than publishing past electoral results. We therefore cannot use the 1932 electoral results in our analysis.

10. Provided through the Census Mosaic project, `http://www.censusmosaic.org`.

11. Supplementary Appendix A.1 describes this algorithm in detail.

12. For speeches and party manifestos, we consider the CDU and the CSU as one party (among other reasons, because of the low number of observations). For tweets and facebook posts, we look at the CDU and the CSU accounts separately.

First, we look at all party manifestos explaining the respective party's political platform in advance of major elections (federal, state, and European Parliament elections). These manifestos are usually published a few months ahead of the election, and contain variously detailed statements of political objectives and policy proposals. We obtained the full text (pdf) of 74 manifestos from the respective party websites; the median manifesto is 56 pages long and encompasses approximately 19,500 words. In the appendix, Table B.1 provides an overview of the manifestos used.

Second, we consider major political speeches held at party congresses or so-called "Ash Wednesday" speeches[13] by major political leaders (usually the party secretaries or the main candidates). We select these speeches as follows: We limit the search to party congresses, Ash Wednesday meetings, or other national-level party meetings (e.g., the traditional Epiphany meeting of the FDP on 6 January), and we only consider speeches by major party leaders. If the speeches are not available in a transcribed version, we resort to online videos of these speeches and transcribe them with speech recognition software or manually. Our final dataset contains 112 speeches; the median length of a speech is 27 minutes.

Third, we analyze tweets posted from the official Twitter accounts of those six major parties (we restrict ourselves to the main/national account of the party, not of its regional branches and candidates). We scrape all tweets from April 2008 (when the Greens party opened a twitter account) until the end of June 2017, obtaining a total of 66,422 tweets (the most prolific party is the NPD, with 18,057 tweets, followed by the SPD, with 10,580 tweets; the AFD posted 4,119 tweets).

Finally, we also scrape facebook posts from the official Facebook pages of the major parties (again restricting ourselves to the federal-level party organization, not to its local branches). We obtain 36,089 posts from November 2008 until May 2017; 12,794 of these posts pertain to the NPD page, 2,881 to the AFD.

3.3 Other Variables

We complement our analysis of electoral results with a range of both historical and contemporary control variables — variables that may be potentially omitted factors in our regression setups. For the Weimar era, we resort to the same dataset by Falter and Hänisch (1990), which also contains statistics on, among others, population, unemployment, employment structure, and religious composition in 1925 and 1933. Population and religion data are available at the municipal level (municipalities above 2,000 inhabitants); all other statistics are only available at the county level. We match those statistics to contemporary voting outcomes using the same algorithm as for electoral data.

We also include a variety of contemporary control variables in our electoral data regressions. These comprise the unemployment rate, total population, male population share, and area of the

13. On Ash Wednesday, all major political parties in Germany hold speeches, often in beer halls, which are typically more polemical and more directly targeted against opponents.

municipality (all measured in 2013) in our regressions, as well as a full set of dummies characterizing the degree of urbanization of a municipality.[14] These data are obtained from DESTATIS.

Note, however, that our preferred specification focuses on the *change* in electoral support for the AfD between 2013 and the following state election (in 2016 or 2017). Therefore, one should be particularly interested in the potentially confounding effect of other changes occurring in the same time frame. For example, we obtained data on the change in unemployment, at the municipal level, between 2013 and 2016 (from DESTATIS). The most salient political event happening in this time frame is the "(Syrian) refugee crisis", which peaked in the fall of 2015 after Germany's decision to suspend the Dublin agreement and not to deport asylum seekers back to the first EU member state they entered. While most asylum seekers enter Germany through the German-Austrian border in the southeast of the country, they are supposed to be reallocated to the single federal states, and then again to counties, according to a quota system which takes into account population and GDP. Within counties, asylum seekers are further assigned to municipalities according to a variety of criteria. From the Federal Employment Agency (*Bundesagentur für Arbeit*), we obtain the number of asylum seekers in each municipality, as of December 31, 2016.[15] Given the low number of refugees in 2013, we consider the *level* of asylum seeker in December 2016 as a close approximation to the change relative to 2013.

4 Evidence on Semantic Change

We view the turn of the AfD from a monothematic, anti-Euro and anti-Greek bailout party to a more traditional xenophobic, anti-immigrant right-wing party as a suitable policy experiment in which an existing party changes its placement on the political spectrum, without changing the name, logo, or most of the party structures.[16] Clearly, this change was also perceived by the voters. In the surveys conducted for the German Longitudinal Election Study (GLES), potential voters were asked to place parties on an 11-point left-right scale.[17] As shown in Figure 2, in 2013 voters were not sure where to place the AfD on a left-right spectrum; the modal answer (excluding "I don't know", which is by far the preferred response) is the score of 6, right in the middle of the spectrum, and the median is 7, just to the right of the center. Over the course of the following years, the public perception of the party shifted radically, especially after 2015. In 2016, only few voters cannot place the AfD on a left-right spectrum, and most place the party to the far right (the

14. Following EUROSTAT guidelines, DESTATIS classifies municipalities according to its urbanization density as follows: "densely populated" if at least 50% of the population lives in high-density clusters, "thinly populated" if more than 50% of the population lives in rural grid cells, and "intermediate density" (all other municipalities).

15. To be precise, the data from the Federal Employment Agency refer to *Erwerbsfähige Leistungsberechtigte im Kontext von Fluchtmigration*, i.e. potential transfer recipients, able to work, in the context of escape migration. This includes, roughly, all asylum applicants who are above age 15, not disabled, excluding family members who joint first emigrants at a later stage. The exact number of asylum applicants cannot be obtained at the municipality level.

16. Figures B.1 and B.2 in the Appendix show, anecdotally, how this change was reflected in party billboards.

17. We use component 8 of the GLES (Long-term online tracking), studies ZA5720, ZA5726, ZA5728, ZA5732. All studies are available through the GESIS website (`www.gesis.org`).

rightmost answer, 11, is also the modal answer).

We back up this survey evidence with text data. To do this, we analyze the language used by the AfD and by other major German parties on different channels: in party manifestos, in major speeches, in Facebook posts (on the official Facebook pages), and in tweets (on the official Twitter accounts of the respective parties). Figure 3 gives a first quantitative impression of the nationalistic turn imparted on the AfD starting in mid-2015.

We classify Facebook posts (looking at trimmed word stems) depending on whether they contain a word that is related to the Euro, to Greece (likely in the context of the bailout talks), to Islam/Muslims, or to Germany/the nation. Up until 2015, about 20% of posts refer, on average, to the Euro, and approximately the same amount refers to Germany/the nation. There is, however, already a slight downward trend in references to the Euro before 2015, which suggests that, as the base expanded, the party's outlook widened beyond its initial narrow focus on economic topics. 2015 witnesses two major changes. First, as the Greek crisis approached a new zenith (the infamous "bailout" referendum was held on July 5), Greece and the Euro reach a short-lived peak in frequencies. At the same time, after the party congress in Essen, the AfD turns rightward: posts referring to Germany or the nation steadily increase in frequency, and so do posts referring to Islam or the Muslim world. Note that the latter change only occurs in mid-2016, well after the peak of the refugee crisis in September 2015.

However, these suggestive trends may also be misleading, and merely capture an overall change in topics relevant for German politics. It is plausible that other parties in Germany, in the context of the dramatic political and economic crises of the past years, have readjusted their rhetoric and the focus of their policy proposals. For this purpose, in Table 1 we look at the overall text body that we collected in manifestos, speeches, tweets and Facebook posts, for seven major parties in Germany: the AfD, as well as the CDU/CSU, SPD, Greens, FDP, Linke, and (as a benchmark of a more radical, right-wing party) the ultranationalist NPD. With this body of data we can estimate a full differences-in-differences specification as follows:

$$f(\text{stem} = s)_{ipt} = \gamma_p + \delta_t + \beta \cdot \mathbb{1}\{\text{party} = \text{AfD}\} \cdot \text{Post}_t + \varepsilon_{ipt}, \tag{1}$$

where the dependent variable $f(\text{stem} = s)$ is the frequency (mention per 100 words) of stem s in document i (party manifesto, speech), of party p at time t. For shorter pieces of text (tweets, Facebook post), we use the following variant specification:

$$\mathbb{1}\{(\text{stem} = s) \in i\}_{ipt} = \gamma_p + \delta_t + \beta \cdot \mathbb{1}\{\text{party} = \text{AfD}\} \cdot \text{Post}_t + \varepsilon_{ipt}, \tag{2}$$

where $\mathbb{1}\{(\text{stem} = s) \in i\}$ is a dummy indicating whether stem s is contained in document i (tweet, post) of party p at time t. In all specifications, we include a is a full set of party fixed effects (γ_p) and of time fixed effects (δ_t): these are year fixed effects for speeches and manifestos, and month$\times$year fixed effects for tweets and Facebook posts. Post_t is a dummy for all periods after

the Erfurt Resolution (March 2015). Standard errors ε_{ipt} are clustered at the party×year cell level (for manifestos ans speeches) or at the party×year×month level (for tweets and Facebook posts).

The crucial difference-in-differences parameter of interest is β, indicating the increase in frequency (or mentions) of a given stem in documents of the AfD, after the Erfurt Resolution, conditional on state and time fixed effects. Table 1 reports the estimates of β across four media (manifestos, speeches, tweets, and Facebook posts, in Panels A through D, respectively), and for five outcome stems of interest: Greece, the Euro, Islam, migration, and nation.[18] Every cell in that table reports the estimate of the difference-in-differences parameter for one regression, defined by a dyad of medium and stem.

Across all text media, we see consistent results. Even when viewed in relation to the language used by the other political parties in Germany, the AfD notably reduces the mentions of Greece and the Euro in its rhetoric, and increases the usage of words related to Islam, to migration, and to Germany/the nation. For example, the estimate in panel B, column 2, suggests that after 2015, the reduction of mentions of stems relating to the Euro in speeches by AfD members is 0.546 per 100 words (significant at $<$1% level). This compares to a mean of the dependent variable of 0.703 (for AfD speeches, before 2015); it is thus a very sizable decrease.[19]

By converse, the estimate in panel D, column 4, suggests that after March 2015, the share of Facebook posts mentioning a stem related to the migration context increases by 11.2 percentage points (significant at $<$1% level). Again, this is sizable if compared to a pre-March 2015 mean of the outcome variable of 5.8 percent (for the AfD).

Arguably, the five word stems shown in Table 1 have been arbitrarily chosen, based on our priors regarding which words should witness the starkest changes following the rightward turn imparted on the AfD after the Erfurt Resolution. To avoid our subjective bias, and to validate the stems chosen in Table 1, in Figure 4 we follow a different approach. Here, we repeat the standard differences-in-differences estimations of equation (1) above, applying this regression setup to the 645 most frequent word stems that we identified in our entire body of Facebook posts.[20]

Figure 4 presents the distribution of the β coefficients estimated from equation (1), across 645 stems. First, it is noticeable that the distribution of point estimates is skewed to the right of zero: this indicates that the language used by the AfD, after March 2015, becomes more varied. Second, vertical dashed lines in the figure show the positioning of the point estimates relating to key words used so far. Confirming the results of Table 1, we see that "Euro" and "Greece" are to the

18. More precisely, the stem "Greece" encompasses all German words including **griech**; "Euro" all words that start with *euro**, but not *europ**, and also the acronym *EZB* (European Central Bank, in German); the stem "Islam" all words including **islam** and **muslim**; the stem "migration" all words including **migration**, **wander**, **flüchtling**, and **asyl**; the stem "nation" all words including **nation** and **deutsch**. Appendix Table B.3 reports the 10 most frequent words identified by this algorithm for each stem.

19. Table B.2 in the Appendix provides (conditional) means for all dependent variables.

20. To be more precise, we consider the universe of words in the body of Facebook posts we collected. We remove numbers, punctuation, and stopwords, and then stem the resulting words using the *tm* package for R. We keep all stems that are used at least 200 times. This results in 645 word stems.

left of zero, whereas the usage of words such as "Islam", "asylum", and especially "Germany" increases dramatically for the AfD after March 2015, relative to other parties. Third, it is also noticeable that a traditional mainstay of conservative political ideology, the "family", does not move into the focus of the AfD's rhetoric: the point estimate is very close to zero. We see this as suggestive of the fact that the post-March 2015 turn experienced by the AfD was explicitly nationalistic and xenophobic (anti-Muslim), not merely conservative.

5 Electoral Results

5.1 Empirical Setup

How did the rightward turn in the AfD's rhetoric and policy platform change its electoral fortunes? We compare electoral results for the AfD before and after 2015 — 2015 marks a watershed, as thanks to the Erfurt Resolution and the subsequent party congress in Essen, the initial (fiscally conservative) party leaders were replaced by a new, nationalistic and xenophobic leadership (cf. the timeline of events in Figure 1). Specifically, we compare the results in the federal election in September 2013 to local elections to state assemblies that occurred after 2015.

In 2013, running on a strict anti-Euro platform, the AfD barely missed passing the 5% threshold to enter the federal parliament; in the period after 2015, state elections occurred in the states of Baden-Württemberg, Rhineland-Palatinate, Saxony-Anhalt, Mecklenburg-Anterior Pomerania (all in 2016), North Rhine-Westphalia, and Schleswig-Holstein (in 2017). In all of those cases, the AfD passed the 5% threshold (often reaching double-digit results) and gained seats in the state assemblies. Figure 5 provides a map of the states used in our analysis.[21]

Our baseline regression specification is as follows:

$$\text{ShareAfD}_{it} = \theta_s + \beta \cdot \text{ShareNazi}_i + x_{1i}{}'\gamma + \varepsilon_{it}, \tag{3}$$

where ShareAfD_{it} is the share of votes cast for the AfD in municipality i in year t (where t may either refer to the federal election of 2013, or a state election in 2016/17). Note that, in our baseline setting, we calculate the share of votes relative to *all* eligible voters, not just relative to votes cast. We do this in order to incorporate two margins of voter mobilization towards the AfD: switching from non-voting to the AfD, or from other parties to the AfD. In a later step we will disentangle the intensive and the extensive margins of voting.

21. Note that we ignore the elections in Berlin in 2016 (as there is only one municipality in the state of Berlin) and in the Saarland in 2017 (as the Saar region did not vote for the *Reichstag* in the Weimar era, being under French occupation). Arguably, people's objectives and motives to vote in a state election may differ from a federal election, potentially confounding a comparison of voting patterns. However, to the extent that this divergence in voting behavior affects all states in the same manner, it should not invalidate the inference we draw. In future work, we plan to analyze the electoral results of the upcoming federal election of 2017, thereby comparing two elections to the same legislative body, the *Bundestag* (2017 and 2013).

The dependent variable is regressed on a full set of state fixed effects, θ_s, a measure of support for the NSDAP party during the Weimar era, ShareNazi_i, and potentially also a set of (mostly time-invariant) municipal level covariates, x_{1i}, such as population or unemployment rates.

To take care of municipal-level, time-invariant omitted factors that may determine a constant inclination to vote for the AfD, the following, alternative specification takes advantage of the fact that each municipality is observed twice, once before and once after 2015, and focuses on the *change* in vote share from 2013 to 2016/17:

$$\Delta(\text{ShareAfD}_{i,2016/17-2013}) = \theta_s + \beta \cdot \text{ShareNazi}_i + x_{2i}{}'\gamma + \varepsilon_{it} \tag{4}$$

Note that, unless one assumes that time-invariant municipality characteristics have time-varying effects on the outcome variables (varying between 2013 and 2016/17), the effect of these variables will be "differenced out" in such a first-differences specification. However, one may still allow for time-varying effects of covariates, or investigate *changes* in municipal-level covariates occurring between 2013 and 2016/17. For these reasons, we may also include a vector of covariates x_{2i}, potentially different from the covariates included in equation (3).

Of the 5,475 municipalities in the six states considered, 1,191 are "exactly matched": that is, they are either matched to a *Stadtkreis* (city-county) of the Weimar era (84 cases), or to a municipality contained in a larger county, but which had more than 2,000 inhabitants in the Weimar era (1,107 cases), thus with exact electoral returns in the 1920s and 30s. The remaining 4,284 municipalities are assigned one of 259 Weimar-era "remainders of a county". To account for potential correlation between these multiple observations assigned to a single historical electoral result, we cluster all error terms ε_{it} at the Weimar-era unit of observation (*Stadtkreis*, municipality above 2,000 inhabitants, or "remainder of the county").

5.2 Baseline Results

Table 2 reports our baseline estimates. To facilitate the interpretation of the coefficients, all variables, dependent and explanatory, are standardized. The four columns represent four possible, alternative explanatory variables: the NSDAP vote share in 1928, 1930, and 1933 in columns 2–4, respectively,[22] and an aggregate z-score index (also standardized) of these three elections in column 1. The regressions in Panel A feature the AfD's vote share in the federal election of 2013 as the dependent variable. Across all columns (all explanatory variables), one can see that there is a positive, but generally small and insignificant correlation between Nazi vote in the Weimar era and AfD support.

However, when one looks at support for the AfD in the state elections occurring in 2016/17, after the Erfurt resolution, the results are very different. As one can see in Panel B, the correlation

22. In 1924, the NSDAP did not present a separate list for the *Reichstag* election, but supported the *Deutschvolkische Freiheitspartei* (DVFP). The electoral results of 1932 were not published at the disaggregate level.

between past Nazi support and contemporary AfD support, in elections in which the AfD represented a far right, xenophobic platform, is strong and significant. In our preferred specification of column 1, a one standard deviation increase in NSDAP votes in the Weimar era corresponds to a 0.16 standard deviations higher vote share for the AfD. Notably, the results are very similar no matter whether one uses an early indicator of Nazi support, such as votes in 1928 (when the NSDAP was still a fringe party, obtaining only 2.6 percent of the votes at the national level), or a late indicator, such as the last, semi-free election of March 1933, when the NSDAP obtained 43.9 percent of the votes.

Finally, the results in Panel C correspond to the regression setup in equation (4). Here, by looking at changes in vote shares, we take into account municipality-specific unobservables that may determine a municipality's inclination to vote for a right-wing alternative to the established parties such as the CDU, no matter whether the party is mostly fiscally conservative (as the AfD in 2013), or mostly nationalistic and anti-immigrant (as the AfD in 2016/17). The resulting picture is very similar to Panel B. The standardized beta coefficient on the association between Nazi vote and the shift to the AfD, following its 2015 turn, is about 0.15. The estimated coefficient is sizable compared to other, plausible determinants of far right electoral outcomes: for example, trade exposure is associated with votes for the far right in France with a beta coefficient of 0.07 (Malgouyres, 2017), or with a beta coefficient of 0.28 in Germany (Dippel, Gold, and Heblich, 2016). Figure 6 provides a visual impression (as a binned scatterplot) of the relationship estimated.

The seminal work by Voigtländer and Voth (2012, 2015) has shown how antisemitism is a persistent feature of certain regions in Germany. In Table 3 we argue, however, that antisemitism is not what explains the success of the AfD in more recent years. Columns 1 and 2 analyze how the AfD's electoral results are correlated with the electoral success of two parties standing for the *Reichstag* election of 1924: the *Deutschnationale Volkspartei* (DNVP) and the *Deutschvölkische Freiheitspartei* (DVFP). The DNVP was the main conservative party of the Weimar era, before the emergence of the NSDAP: nationalist, reactionary, monarchist. The DVFP was split off the DNVP, as some of its members thought it should be more explicitly antisemitic. The 1924 election thus pitted two far right parties against each other: a merely staunchly conservative one (the DNVP), and a clearly antisemitic one (the DVFP). As the results in Table 3 show, the electoral success of the AfD is highly correlated with the conservative party in the Weimar era, but not with its antisemitic spin-off.

Columns 3–5 of Table 3 confirm these results. Here, we limit the analysis to the 423 cities that are both featured in our dataset, and in the work by Voigtländer and Voth (2012). In column 3, we first confirm that our baseline estimate of Table 2 can be replicated, with broadly similar results within those 423 cities. In column 4 we then regress the AfD's electoral fortunes on the composite measure created by Voigtländer and Voth (2012): a z-score index encompassing six measures of antisemitism in the 1920s and 30s.[23] There is virtually zero (or even a negative) correlation be-

23. This index included measures for: pogroms in the 1920s, the share of DVFP votes 1924, the share of NSDAP votes

tween these expressions of early 20th-century antisemitism and AfD support, both in 2013 and in 2016/17. Finally, in column 5 we use the indicator variable for the occurrence of pogroms in the wake of the Black Death of 1348 (again, collected by Voigtländer and Voth (2012)). If anything, the correlation between medieval Jewish hatred —which has been shown to be a consistent predictor Nazi support — and AfD support is negative.

These findings suggest that what persisted between the Weimar era and today, and determines the AfD's electoral succes, is not antisemitism but rather a right-wing ideology. In fact, the AfD was successful at keeping antisemitism out of its official policy platforms and actually explicitly endorsing Israel;[24] its religious animus is clearly more directed against Islam. Rather, the common ground between the NSDAP and the AfD in its post-2015 incarnation is nationalism and a closure towards all things foreign, especially as a reaction to economic distress.

5.3 Robustness checks

The results presented so far were simple bivariate correlations, conditional only on state fixed effects. In the following, we examine the robustness to the inclusion of plausible determinants of electoral behavior: both historical (variables that may explain the predominance of NSDAP voters in the 1920s and 30s) and contemporary (present-day sociodemographics as correlates of electoral outcomes). In Table 4, we examine how our preferred specification of Table 2, Panel C, using the change in AfD votes from 2013 to 2016/17 as the dependent variable, is sensitive to the inclusion of these covariates. Column 1 of Table 4 first presents the baseline estimate (without controls) as a benchmark.

In the following columns, we add control variables related to population, religion, and employment structures. In Panel A, we only include the controls relating to the Weimar era. In Panel B, we only include the controls relating to the present day. Finally, in Panel C we repeat each regression including both historical and contemporary controls. Starting in column 2, we consider the domain of "population": we control either for the (log) size of the municipality in the 1920s/30s, or for the current (log) size of the municipality and for an urbanization category dummy, or for all of these variables together. In neither case is the baseline estimate modified substantially.

When we consider the domain of "religion", in column 3, we control for the population shares of Catholics and Jews in 1925 in Panel A (the omitted category is Protestants and "others", the latter being negligible in 1925), and for the population shares of Catholics and "others" (including Muslims, other religions, and atheists) in Panel B (the omitted category is Protestants). The inclusion of this set of controls, no matter whether contemporary or historical, changes the mag-

1928, letters to the Stürmer (an antisemitic newspaper), deportations per 100 Jews in 1933, and an indicator variable for whether a synagogue was destroyed (or damaged).

24. At the same time, however, several elected officials of the AfD (especially in Baden-Württemberg's state legislature) have expressed antisemitic attitudes.

nitude (but not the precision) of the estimated coefficients quite substantially: the estimated beta coefficients drops by about half from 0.15 to 0.06–0.07. The crucial explanatory factor here is the presence of Catholics: as pointed out by a large literature, most recently by Spenkuch and Tillmann (2017), Catholic regions were, ceteris paribus, less likely to vote for the NSDAP. Our analysis shows that this holds also for today's support for the AfD, even in a within-state setting. Nevertheless, albeit dampened the correlation between Nazi support and AfD electorate today remains quite substantial and highly significant.

Column 4 considers another major determinant of voting behavior: the economic/social structure, and the economic conditions (especially distress caused by unemployment). In Panel A, we control for the historical employment structure in municipalities or counties: shares of employed in industry/manufacturing, in commerce, and in administration (agriculture and other sectors being the omitted category). We also control for unemployment rates in 1933, at the peak of the Great Depression in Germany. In Panel B, we control for the official, municipal-level unemployment rate in 2015. Across all panels, including controls for the employment structure does not affect the baseline correlation between historical Nazi support and contemporary votes for the AfD (if anything, the correlation becomes stronger).

Finally, column 5 pools all control variables from columns 2–4 together. Even in this most demanding specification, the correlation between NSDAP support and support for the AfD remains strong and significant: the estimated beta coefficient in Panel C, when both historical and contemporary controls are included, is approximately 0.07.

Table 5 looks more closely at the spatial heterogeneity of results, and at current determinants of voting that may explain the shift towards the AfD from 2013 to 2016/17. After reproducing the baseline estimate again in column 1, in column 2 we investigate whether the effect of historical NSDAP voting differs between states East and West Germany. Radical right movements (especially neo-Nazis) and xenophobia have long been a problem in the states of formerly communist East Germany. However, even if generally support for the AfD (post-2015) is higher in the East (in our sample of elections, 10.7% in the West and 24.0% in the East), the pattern of historical persistence is nearly identical. The two coefficients suggest a standardized correlation ranging between 0.11 in the East and 0.15 in the West; a test of equality of coefficients yields a p-value of 0.78.

Arguably the most important political event in Germany in 2015 was the sudden and dramatic influx of refugees, mostly fleeing the Syrian civil war. Large numbers of them — hundreds of thousands — reached Germany on foot, via the Balkans and Austria, after Germany's decision, in September 2015, to suspend the Dublin agreement and not to limit their intake. The refugees were allocated to states and counties according to their size and GDP; however, within counties, the allocation of refugees to municipalities had idiosyncratic reasons. The effect of the refugee inflow on votes for the far right is ambiguous. On the one hand, refugees are often perceived as a threat and a potential source of crime, moving voters to the right (Dustmann, Vasiljeva, and Piil Damm, 2016); on the other hand, in line with Allport's (1954) "contact hypotheses", direct

acquaintance with the fate of refugees can actually increase empathy and support for moderate parties (Steinmayr, 2017).

In column 3, we control for the presence of refugees in each municipality (calculated as a share relative to total population, as of late 2016). The effect is negative, suggesting that more refugees lead to *fewer* votes for the AfD, and negligible: the standard deviation of the "share refugees" variable is 0.004. Increasing the share of refugees by one standard deviation thus decreases the vote share of the AfD by less than half a percentage point of a standard deviation.

Globalization, the decline of manufacturing, and the increase in job insecurity are often cited as a cause of the far right's electoral fortunes. Overall, Germany had a comparatively strong economy in the time frame considered (2013 to 2016/17), and among developed countries it remains among those with the highest shares of employment in (skilled) manufacturing, and the lowest rates of unemployment, also among youths. In fact, across the municipalities in our dataset, between 2013 and 2016 the number of unemployed individuals decreased by 7 percent on average. In column 4, we control for the change in unemployment: as predicted, an increase in unemployment leads to a larger change in the AfD's vote share between 2013 and 2016/17. However, the effect is comparatively small and leaves the main coefficient of interest virtually unaffected. Including both the controls for refugee presence and for unemployment (column 5) also does not affect the historical persistence of NSDAP voting; when all controls, historical and contemporary, of Table 4 are additionally included, the results are still stable (column 6).

5.4 Voter migration

Recall that, in all regressions shown so far, the dependent variable was defined as the share of votes cast for the AfD relative to the eligible voting population: the goal was to encompass both margins of voter mobilization towards a party moving to the far right. In what follows, we want to understand the importance of the intensive margin (voters moving from other parties to the AfD) and the extensive margin (voter mobilization from non-voting to voting).

We begin with the analysis of turnout. Table 6, column 1, present regressions in which the dependent variable is the voter turnout in the elections of 2013 and 2016/17 (in Panels A and B, respectively), and the change in voter turnout between 2013 and 2016/17 (Panel C). Higher Nazi support in the 1920s and 30s is associated with moderately lower turnout in 2013: a one standard deviation higher NSDAP support translates into half a percentage point lower turnout, relative to a sample mean of almost 64 percent. In 2016, the association turns positive, but is small and insignificant. More interestingly, between 2013 and 2016/17 voter turnout increased by 3.6 percentage points overall, and this increase is substantially and significantly correlated with historical Nazi vote: a one standard deviation higher NSDAP support is associated with a 0.7 percentage points larger increase in turnout.

Having established that the mobilization of non-voters is strongly associated with historical Nazi support, we now look at the intensive margin: conditional on voting, which parties are

chosen? We first, in column 2, look at the AfD. As opposed to the previous tables, we now use the (unstandardized) AfD vote share *relative to votes cast* as the dependent variable, rather than relative to eligible voters. The picture, however, is similar. There is a small and insignificant correlation of historical Nazi support with AfD votes in 2013, and a positive, strong and significant correlation with AfD votes in 2016, and with the change in votes cast for the AfD.

In columns 3 and 4 we consider the two largest parties in Germany, the moderately conservative CDU and the social democratic SPD. The associations of historical Nazi support with votes for these two parties are each other's mirror image: CDU voters are, on average, located where historically the NSDAP was less represented, whereas SPD voters are more likely to be located in NSDAP strongholds. This historical association can plausibly be explained by sociodemographic characteristics (urban vs. rural, presence of Catholics); importantly, however, the comparison of Panels A and B (or, the results in Panel C) shows that this correlation does not change over time, even as the electoral fortunes of these two parties vary.

Instead, the results of the far-right NPD are consistently positively correlated with the NSDAP vote (column 5). The implied beta coefficient is approximately 0.1, thus slightly lower than the correlation with the AfD vote in 2016/17. Looking at Panel C, one can see that higher Nazi vote shares in the past are associated with a move away from the NPD between 2013 and 2016/17, suggesting that this is a potential electoral basin the AfD drew from — albeit one should obviously be cautious with inferences on individual voter migration made based on aggregate data. A similar picture emerges for the "Linke" party, the far-left option in the German political spectrum (column 6). In 2013, there is a positive correlation between historical Nazi vote and contemporary Linke vote shares; this correlation all but disappears by 2016/17. As was the case for the NPD, the change in votes going to the Linke is negatively associated with historical Nazi support.

Again, one should caution against drawing conclusions on individual voter migration based on aggregate data. The historical correlations in Table 6 are, however, at least consistent with a world in which the electoral success of the AfD post-2015 draws from two sources: from mobilizing former non-voters, and from former voters of other extreme parties, both on the far left and the far right end of the political spectrum.[25]

6 Conclusion

We have argued that a hitherto unexplored historical persistence of right-wing ideology is a determinant of electoral outcomes in Germany. As an existing party, the Alternative for Germany, moved to the right end of the political spectrum and espoused a nationalist, xenophobic platform, a historical pattern emerged: municipalities that (conditional on state fixed effects and several other covariates) supported the NSDAP during the Weimar republic voted proportionally more

25. This is also consistent with the survey-based analysis of voter migration flows presented in Hensel et al. (2017, Table 1).

for the AfD.

This is a preliminary progress report. The upcoming federal election of September 24 will allow us to test this hypothesis on the universe of municipalities in Germany. Moreover, in future work we plan to analyse the persistence of right-wing attitudes as expressed in opinion surveys.

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Figures and Tables

FIGURE 1: TIMELINE OF EVENTS

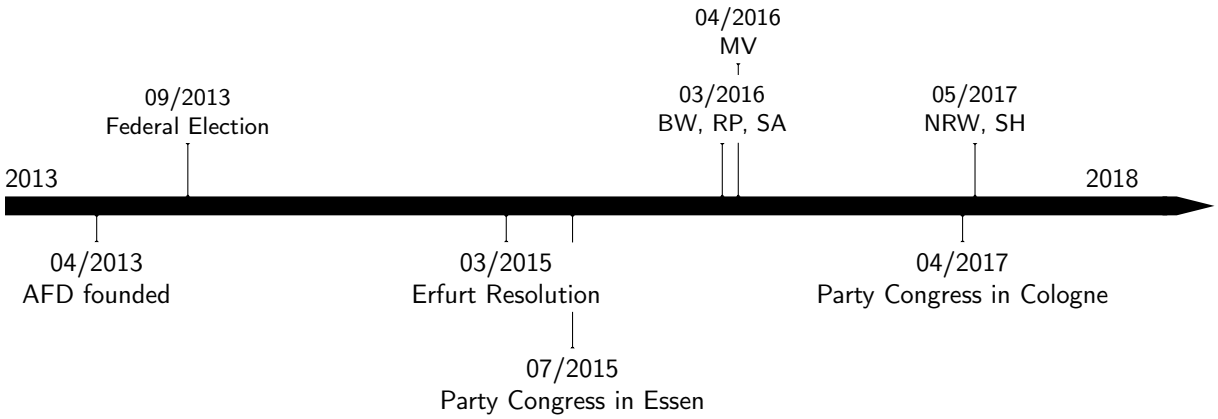
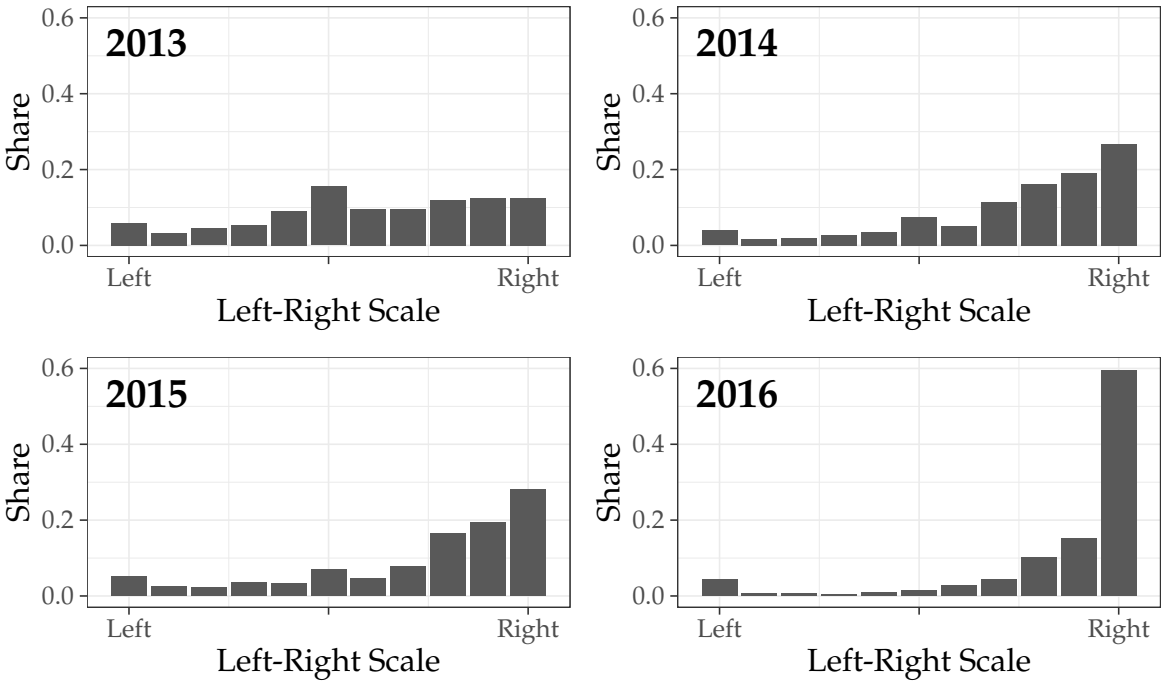
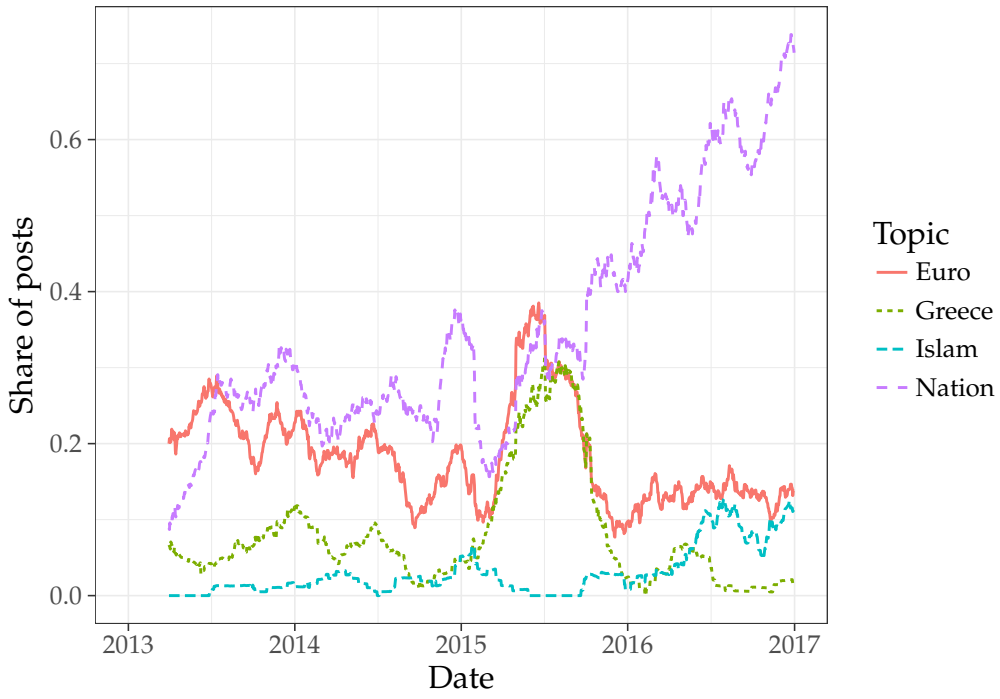


FIGURE 2: SURVEY EVIDENCE ON AFD'S POLITICAL ORIENTATION



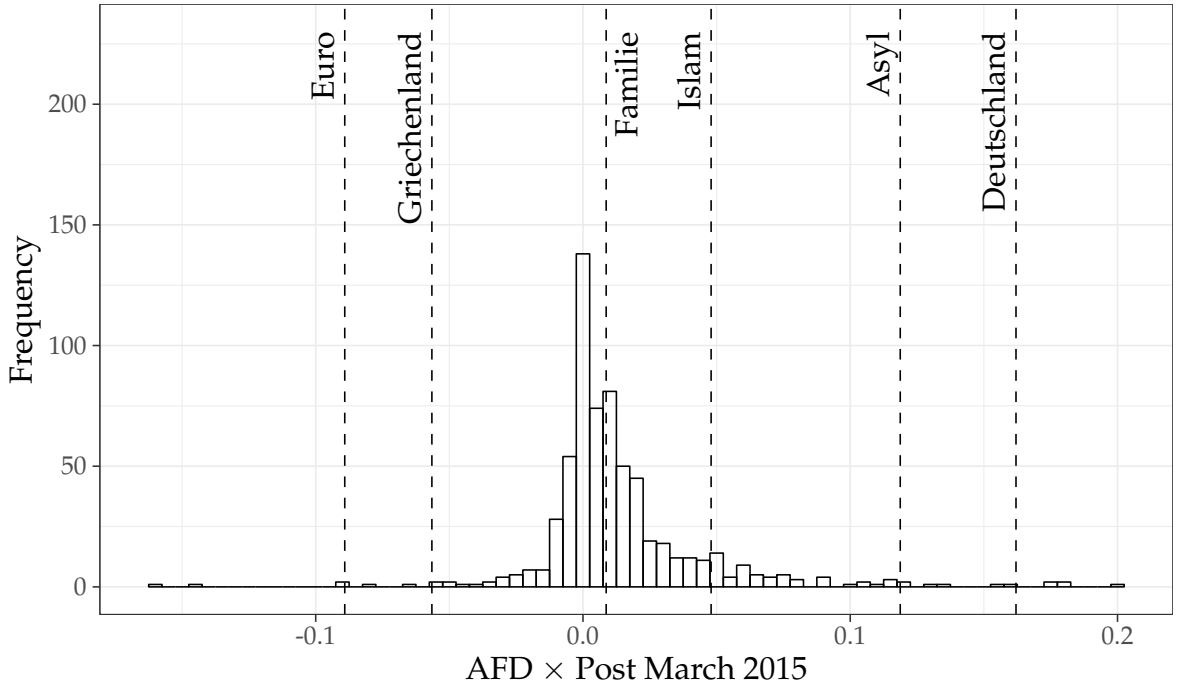
Notes: The four graphs report the perceived location of the AfD on the left-right political spectrum, as derived from answers to the German Longitudinal Election Study (GLES).

FIGURE 3: LANGUAGE USE ON AFD'S FACEBOOK PAGE: SELECTED STEMS



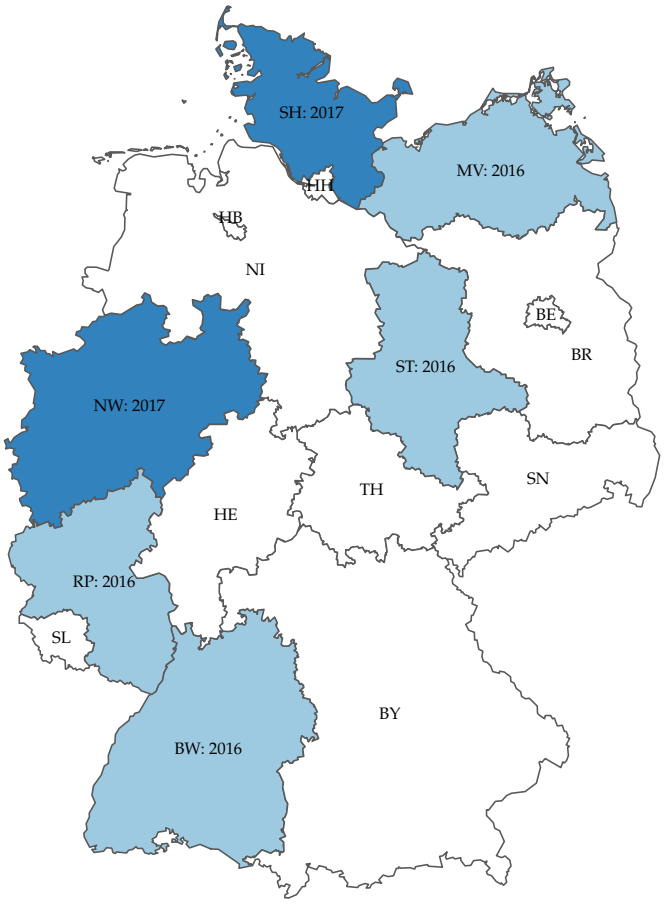
Notes: The graph shows the frequency of Facebook posts containing one of four, selected word stems/families. 90-day moving averages displayed.

FIGURE 4: LANGUAGE USE ON AFD'S FACEBOOK PAGE: ALL STEMS



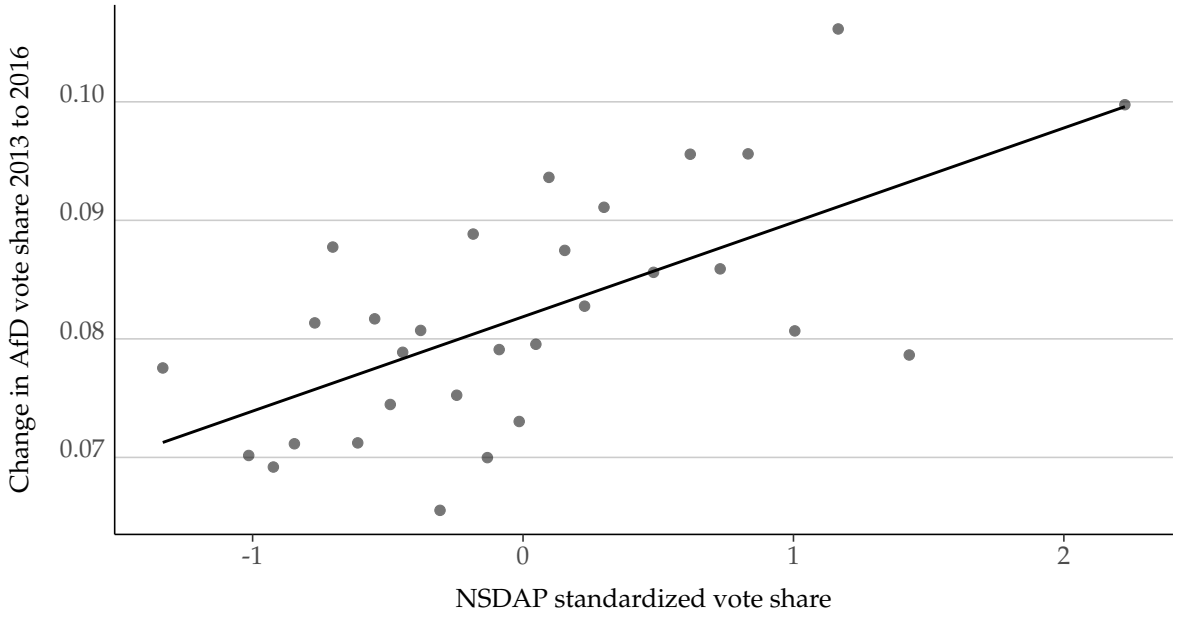
Notes: The graph shows the empirical distribution of estimated difference-in-difference coefficients, resulting from the empirical setup in equation (2), relating to 645 frequent word stems on Facebook, together with the location of six selected word stems.

FIGURE 5: FEDERAL ELECTIONS IN THE DATASET



Notes: The map shows the 16 federal states in Germany, including three city states. Six states held the elections to their regional parliaments between March 2015 and September 2017 and are thus included in our empirical analyses: Baden-Württemberg (BW), Rhineland-Palatinate (RP), Saxony-Anhalt (ST), Mecklenburg-Anterior Pomerania (MV), Schleswig-Holstein (SH), and North Rhine-Westphalia (NW). The Saarland (SL) also held its regional elections in 2017; however, we disregard the Saarland as, during the Weimar era, it was occupied by French troops and no elections to the *Reichstag* were held. We also do not consider the city states of Berlin (BE), Bremen (HB), and Hamburg (HH).

FIGURE 6: AFD ELECTORAL RESULTS: 2013, 2016/17 (BINNED)



Notes: The graph shows the relationship between historical Nazi vote share and the change in votes for the AfD between 2013 and 2016/17 as a binned scatterplot.

TABLE 1: AFD'S LANGUAGE CHANGE: DIFF-IN-DIFF ESTIMATES

	(1) Greece	(2) Euro	(3) Islam	(4) Migration	(5) Nation
PANEL A: *Mentions per 100 words in manifestos*					
AfD × After March 2015	-0.011	-0.780***	0.052***	0.269***	-0.041
	(0.021)	(0.193)	(0.013)	(0.050)	(0.237)
PANEL B: *Mentions per 100 words in speeches*					
AfD × After March 2015	-0.183**	-0.546***	0.063*	-0.028	0.112
	(0.070)	(0.099)	(0.034)	(0.097)	(0.100)
PANEL C: *Mentioned in Twitter posts*					
AfD × After March 2015	-0.059***	-0.157***	0.020**	0.023**	-0.098***
	(0.009)	(0.011)	(0.009)	(0.012)	(0.018)
PANEL D: *Mentioned in Facebook posts*					
AfD × After March 2015	-0.017	-0.055***	0.042***	0.112***	0.209***
	(0.016)	(0.021)	(0.011)	(0.023)	(0.030)

Notes: Coefficients and standard errors (in brackets) from OLS regressions. In panel A the unit of observation is a manifesto, in panel B a speech, in panel C a Twitter post and in panel D a Facebook post. All regressions include party (AFD, CDU, CSU, FDP, Grüne, Die Linke, NPD, SPD) fixed effects. Panels A and B include year fixed effects, panels C and D month fixed effects. Number of observations: 70 (panel A), 113 (panel B), 66,422 (panel C) and 40,118 (panel D). One, two and three stars represent significance at the 10%, 5% and 1% levels respectively.

TABLE 2: AFD ELECTORAL RESULTS

	(1) NSDAP average	(2) NSDAP 1928	(3) NSDAP 1930	(4) NSDAP 1933
PANEL A: *AfD vote share 2013*				
	0.0523	0.0129	0.0832*	0.0408
	(0.0443)	(0.0315)	(0.0472)	(0.0414)
PANEL B: *AfD vote share 2016/17*				
	0.1606***	0.0943***	0.1765***	0.1226***
	(0.0372)	(0.0280)	(0.0387)	(0.0353)
PANEL C: *Change in AfD vote share 2013 to 2016/17*				
	0.1510***	0.0945***	0.1574***	0.1149***
	(0.0318)	(0.0256)	(0.0309)	(0.0301)
State FEs	✓	✓	✓	✓
Observations	5861	5861	5861	5861

Notes: The column header indicates the respective explanatory variable used, the panel header the respective dependent variable. The explanatory variable in column (1) is the standardized average of NSDAP vote shares in 1928, 1930, and 1933. All variables (explanatory and dependent) are standardized. Sample includes municipalities in the six German states of Baden-Württemberg, Mecklenburg-Anterior Pomerania, North Rhine-Westphalia, Rhineland-Palatinate, Saxony-Anhalt and Schleswig-Holstein. All regressions include state fixed effects. Standard errors are clustered at the level of historic municipalities/counties. One, two and three stars represent significance at the 10%, 5%, and 1% levels respectively.

TABLE 3: AFD ELECTORAL RESULTS: PERSISTENCE OF ANTISEMITISM

	(1) DNVP 1924	(2) DVFP 1924	(3) NSDAP average	(4) Anti-Semitism	(5) Black Death Pogroms
PANEL A: *AfD vote share 2013*					
	0.0559	0.0140	0.0401	-0.0510**	-0.0982
	(0.0473)	(0.0290)	(0.0369)	(0.0246)	(0.0609)
PANEL B: *AfD vote share 2016*					
	0.2392***	0.0119	0.1135***	-0.0178	-0.1264**
	(0.0433)	(0.0350)	(0.0327)	(0.0247)	(0.0495)
PANEL C: *Change in AfD vote share 2013 to 2016*					
	0.2322***	0.0078	0.1057***	-0.0018	-0.0999**
	(0.0373)	(0.0331)	(0.0313)	(0.0244)	(0.0500)
State FEs	✓	✓	✓	✓	✓
Observations	5860	5860	423	423	423

Notes: The column header indicates the respective explanatory variable used, the panel header the respective dependent variable. The explanatory variable in column (4) is the standardized first principal component of six measures of 1920s/30s antisemitism, as in Voigtländer and Voth (2012). All variables (explanatory and dependent) are standardized, except the indicator variable for Black Death Pogroms in column (5), which has a mean of 0.251. Sample includes municipalities in the six German states of Baden-Württemberg, Mecklenburg-Anterior Pomerania, North Rhine-Westphalia, Rhineland-Palatinate, Saxony-Anhalt and Schleswig-Holstein. All regressions include state fixed effects. Standard errors are clustered at the level of historic municipalities/counties. One, two and three stars represent significance at the 10%, 5%, and 1% levels respectively.

TABLE 4: AFD ELECTORAL RESULTS INCLUDING CONTROLS

	(1) Baseline	(2) Population	(3) Religion	(4) Employment	(5) Full
PANEL A: *With historical controls*					
Standardized NSDAP Share	0.1510***	0.1550***	0.0652**	0.1753***	0.0903**
	(0.0318)	(0.0326)	(0.0285)	(0.0342)	(0.0364)
Observations	5861	5797	5407	4520	4359
PANEL B: *With contemporary controls*					
Standardized NSDAP Share	0.1510***	0.1512***	0.0705***	0.1418***	0.0654**
	(0.0318)	(0.0317)	(0.0268)	(0.0307)	(0.0264)
Observations	5861	5861	5088	5827	5057
PANEL C: *With historical and contemporary controls*					
Standardized NSDAP Share	0.1510***	0.1554***	0.0575**	0.1646***	0.0714**
	(0.0318)	(0.0323)	(0.0280)	(0.0346)	(0.0352)
State FEs	✓	✓	✓	✓	✓
Observations	5861	5797	4998	4487	4008

Notes: The dependent variable is the change in vote share for the AfD (relative to eligible voters) from 2013 to 2016/17. Each column adds a different set of historical control variables. The explanatory variable across all columns is the average NSDAP vote share across 1928, 1930, and 1933 (standardized). Population controls are: [historical] log population size (average of 1925 and 1933); [contemporary] log population size in 2015 and urbanization code dummies (3 categories). Religion controls are: [historical] the share of Catholics and Jews; [contemporary] the share of Catholics and "Others" (i.e., Muslims, other religions, and no religion). Employment controls are: [historical] shares of employed in industry and manufacturing, employed in trade and commerce, and employed in administration (agriculture and "other sectors" is the omitted category), all measured in 1925, as well as the unemployment share in 1933; [contemporary] the unemployment rate in 2015. Sample includes municipalities in the six German states of Baden-Württemberg, Mecklenburg-Anterior Pomerania, North Rhine-Westphalia, Rhineland-Palatinate, Saxony-Anhalt and Schleswig-Holstein. All regressions include state fixed effects. Standard errors are clustered at the level of historic municipalities/counties. One, two and three stars represent significance at the 10%, 5%, and 1% levels respectively.

TABLE 5: AFD ELECTORAL RESULTS: LOCAL ECONOMIC SHOCKS

	(1) Baseline	(2) East vs. West	(3) Refugees	(4) Unempl.	(5) Both	(6) With Controls
Standardized NSDAP Share	0.1510***		0.1508***	0.1439***	0.1436***	0.0665*
	(0.0318)		(0.0318)	(0.0306)	(0.0307)	(0.0350)
Std. NSDAP Share × East		0.1144				
		(0.1331)				
Std. NSDAP Share × West		0.1526***				
		(0.0327)				
Share refugees			-1.1094		-1.4516	-1.2306
			(2.4535)		(2.4239)	(2.9898)
% change unemployed (2013–16)				0.0497*	0.0518*	0.0880***
				(0.0293)	(0.0291)	(0.0337)
State FEs	✓	✓	✓	✓	✓	✓
Historical controls						✓
Contemporary controls						✓
Observations	5861	5861	5861	5768	5768	3949

Notes: The dependent variable is the change in vote share for the AfD (relative to eligible voters) from 2013 to 2016/17. NSDAP share is defined as the standardized average of vote shares in 1928, 1930, and 1933. Sample includes municipalities in the six German states of Baden-Württemberg, Mecklenburg-Anterior Pomerania, North Rhine-Westphalia, Rhineland-Palatinate, Saxony-Anhalt and Schleswig-Holstein. All regressions include state fixed effects. Standard errors are clustered at the level of historic municipalities/counties. One, two and three stars represent significance at the 10%, 5%, and 1% levels respectively.

TABLE 6: PERSISTENCE OF VOTING: TURNOUT AND OTHER PARTIES

		Intensive margin				
	(1) Turnout	(2) AfD	(3) CDU	(4) SPD	(5) NPD	(6) Linke
PANEL A: *2013*						
Standardized NSDAP Share	-0.0053**	0.0015	-0.0238***	0.0160***	0.0017***	0.0033***
	(0.0021)	(0.0010)	(0.0069)	(0.0047)	(0.0005)	(0.0011)
Mean dep. var.	0.6385	0.0473	0.4628	0.2410	0.0144	0.0751
PANEL B: *2016*						
Standardized NSDAP Share	0.0021	0.0090***	-0.0212***	0.0120***	0.0012***	0.0003
	(0.0023)	(0.0022)	(0.0058)	(0.0039)	(0.0004)	(0.0004)
Mean dep. var.	0.6748	0.1291	0.3260	0.2688	0.0112	0.0415
PANEL C: *Change 2013 to 2016*						
Standardized NSDAP Share	0.0074***	0.0075***	0.0026	-0.0039	-0.0013***	-0.0030***
	(0.0023)	(0.0017)	(0.0026)	(0.0027)	(0.0004)	(0.0008)
Mean dep. var.	0.0363	0.0818	-0.1368	0.0277	-0.0051	-0.0336
State FEs	✓	✓	✓	✓	✓	✓
Observations	5861	5861	5861	5861	4725	5861

Notes: The dependent variable is turnout (total votes cast relative to eligible voters) in column 1; the vote share (relative to total votes cast) of AfD, CDU, SPD, NPD and Linke, respectively, in columns 2–6. NSDAP share is defined as the standardized average of vote shares in 1928, 1930, and 1933. Sample includes municipalities in the six German states of Baden-Württemberg, Mecklenburg-Anterior Pomerania, North Rhine-Westphalia, Rhineland-Palatinate, Saxony-Anhalt and Schleswig-Holstein. All regressions include state fixed effects. Standard errors are clustered at the level of historic municipalities/counties. One, two and three stars represent significance at the 10%, 5%, and 1% levels respectively.

Supplementary Appendix: Not for Publication

A Data Description

A.1 Matching contemporary and historical election data

We match present-day electoral outcomes to the Weimar era party support in two steps:

Step 1: First, we identify the boundary of each county with electoral data in the Falter and Hänisch (1990) dataset, using the county name to match counties to polygons in the shapefile provided by the Census Mosaic project[1]. We then identify coordinates for each Weimar era municipality (to the best of our knowledge, no shapefiles of municipalities in the period are available): for each municipality, we first use OpenStreetMaps' Nominatim API to search for modern administrative centers, villages, towns, cities or suburbs sharing a name with the historic municipality. We overlay the returned coordinates on the county map and discard any results which lie outside the boundary of the county to which the historic municipality belongs, according to the Falter and Hänisch (1990) data. In this way, we obtain valid latitude and longitude coordinates for around two thirds of the Weimar era municipalities. For municipalities which return no valid matches, for example because of name changes between the Weimar era and today, we manually search for coordinates. To do so, we use a combination of sources including gov.genealogy.net, a database of historic geographies, and Wikipedia. We check the manual lookups for validity by ensuring that the coordinates lie within the boundaries of the county to which the municipality belongs, again according to the Falter and Hänisch (1990) data.

Step 2: In this step, we match contemporary municipalities to a Weimar era geography for which the Falter and Hänisch (1990) dataset provides electoral data. If a modern municaplity's coordinates (provided by DESTATIS) are within 2.5 kilometers of the coordinates of a municipality identified in Step 1, we match the contemporary district to the electoral data from that historic municipality. Otherwise, we overlay the coordinates of the modern municipality on top of the shapefile of counties and assign the electoral results for the "remainder of the county" to the modern municipality. Because electoral geography is not constant between 1924 and 1932, a modern municipality can be matched to different entities for different election years.

1. Electoral geography changes between the years 1924 and 1932, the result of counties being merged or split and other boundary changes. We thus match counties to boundaries seperately for each of the 1924, 1928, 1930 and 1932 elections. In a very small number of cases, we make changes to the county shapefiles in order to better match the county/municipality hierarchy provided by the Falter and Hänisch (1990) dataset

B Additional results: Text Data

FIGURE B.1: AFD ELECTORAL POSTER, 2013

Notes: Electoral poster for the federal election of September 2013. It reads: "Greeks are desperate. Germans are paying. Banks are cashing in. Stop this."

FIGURE B.2: AFD ELECTORAL POSTER, 2016

Notes: Electoral poster for the state election in Baden-Württemberg in March 2016. It reads: "For our state – for our values. Immigration needs clear rules."

TABLE B.1: LIST OF POLITICAL MANIFESTOS

Year	Manifesto type	Party	# of words	# of pages
2013	Federal election	AfD	3923	12
2013	Federal election	CDU/CSU	41367	81
2013	Federal election	FDP	38040	104
2013	Federal election	Grüne	86557	337
2013	Federal election	Linke	39011	100
2013	Federal election	NPD	3585	52
2013	Federal election	SPD	41003	120
2014	European Parliament election	AfD	8974	25
2014	European Parliament election	CDU/CSU	22020	84
2014	European Parliament election	FDP	10778	28
2014	European Parliament election	Grüne	22223	57
2014	European Parliament election	Linke	12971	76
2014	European Parliament election	SPD	6383	14
2014	Party platform	AfD	3143	14
2015	Resolution	FDP	6520	13
2015	Erfurter Resolution	AfD	630	3
2016	State election, Baden-Württemberg	AfD	19474	64
2016	State election, Baden-Württemberg	CDU/CSU	33658	156
2016	State election, Baden-Württemberg	FDP	20213	63
2016	State election, Baden-Württemberg	Grüne	50632	249
2016	State election, Baden-Württemberg	Linke	25084	44
2016	State election, Baden-Württemberg	NPD	6310	26
2016	State election, Baden-Württemberg	SPD	25232	41
2016	Guidelines	CDU/CSU	18117	47
2016	Guidelines	AfD	23846	96
2016	Guidelines	AfD	21892	78
2016	State election, Mecklenburg-A. Pomerania	AfD	6744	22
2016	State election, Mecklenburg-A. Pomerania	CDU/CSU	8464	27
2016	State election, Mecklenburg-A. Pomerania	FDP	21439	86
2016	State election, Mecklenburg-A. Pomerania	Grüne	21702	28
2016	State election, Mecklenburg-A. Pomerania	Linke	22124	54
2016	State election, Mecklenburg-A. Pomerania	NPD	2978	7
2016	State election, Mecklenburg-A. Pomerania	SPD	17426	48
2016	State election, Rhineland-Palatinate	AfD	7784	17
2016	State election, Rhineland-Palatinate	CDU/CSU	1815	8
2016	State election, Rhineland-Palatinate	FDP	31497	83
2016	State election, Rhineland-Palatinate	Grüne	39389	57
2016	State election, Rhineland-Palatinate	Linke	18830	57
2016	State election, Rhineland-Palatinate	NPD	1506	3
2016	State election, Rhineland-Palatinate	SPD	16737	56
2016	State election, Saxony-Anhalt	AfD	4867	68

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Year	Manifesto type	Party	# of words	# of pages
2016	State election, Saxony-Anhalt	CDU/CSU	19715	64
2016	State election, Saxony-Anhalt	FDP	2705	12
2016	State election, Saxony-Anhalt	Grüne	27260	76
2016	State election, Saxony-Anhalt	Linke	19222	44
2016	State election, Saxony-Anhalt	NPD	1750	6
2016	State election, Saxony-Anhalt	SPD	19070	53
2017	State election, North Rhine-Westfalia	AfD	12091	39
2017	State election, North Rhine-Westfalia	CDU/CSU	38115	120
2017	State election, North Rhine-Westfalia	FDP	24188	49
2017	State election, North Rhine-Westfalia	Grüne	82836	131
2017	State election, North Rhine-Westfalia	Linke	44709	132
2017	State election, North Rhine-Westfalia	NPD	8182	52
2017	State election, North Rhine-Westfalia	SPD	38163	116
2017	State election, Schleswig-Holstein	AfD	18053	56
2017	State election, Schleswig-Holstein	FDP	28952	117
2017	State election, Schleswig-Holstein	Grüne	34612	94
2017	State election, Schleswig-Holstein	CDU/CSU	23827	96
2017	State election, Schleswig-Holstein	Linke	24669	70
2017	State election, Schleswig-Holstein	SPD	21670	66
2017	State election, Saarland	AfD	9654	43
2017	State election, Saarland	CDU/CSU	25816	72
2017	State election, Saarland	FDP	6462	19
2017	State election, Saarland	Grüne	23263	70
2017	State election, Saarland	Linke	15468	34
2017	State election, Saarland	NPD	1895	8
2017	State election, Saarland	SPD	19303	52

TABLE B.2: AFD'S LANGUAGE CHANGE: MEANS OF DEPENDENT VARIABLES (TABLE 1)

	(1) Greece	(2) Euro	(3) Islam	(4) Migration	(5) Nation
PANEL A: *Mentions per 100 words in manifestos*					
Mean (overall)	0.005	0.140	0.030	0.264	0.610
Mean (all parties, pre-March 2015)	0.013	0.292	0.013	0.170	1.028
Mean (AfD)	0.015	0.401	0.046	0.405	0.963
Mean (AfD, pre-March 2015)	0.031	1.043	0.000	0.199	1.406
PANEL B: *Mentions per 100 words in speeches*					
Mean (overall)	0.055	0.145	0.033	0.126	0.556
Mean (all parties, pre-March 2015)	0.088	0.235	0.023	0.074	0.498
Mean (AfD)	0.102	0.367	0.028	0.128	0.789
Mean (AfD, pre-March 2015)	0.216	0.703	0.000	0.105	0.697
PANEL C: *Mentioned in Twitter posts*					
Mean (overall)	0.011	0.021	0.010	0.043	0.086
Mean (all parties, pre-March 2015)	0.012	0.027	0.009	0.022	0.089
Mean (AfD)	0.053	0.133	0.009	0.027	0.113
Mean (AfD, pre-March 2015)	0.069	0.175	0.002	0.016	0.133
PANEL D: *Mentioned in Facebook posts*					
Mean (overall)	0.019	0.055	0.024	0.088	0.230
Mean (all parties, pre-March 2015)	0.017	0.059	0.017	0.040	0.200
Mean (AfD)	0.064	0.184	0.044	0.166	0.371
Mean (AfD, pre-March 2015)	0.068	0.214	0.015	0.058	0.231

Notes: Table reports means for five groups of words. These are the dependent variables in the diff-in-diff regressions of Table 1. Overall means (first row in each panel) and conditional means reported.

TABLE B.3: MOST FREQUENT WORDS (STEMS IN TABLE 1)

Greece	Euro	Islam	Migration	Nation
griechenland	euro	islamischen	zuwanderung	deutschlands
griechische	eurokrise	muslime	flüchtlingen	deutsche
griechischen	euroraum	islam	asyl	deutscher
griechen	ezb	islamistische	migration	deutsch
griechenlands	eurostaaten	islamistischen	einwanderung	nationale
grieche	eurozone	islamische	flüchtlingspolitik	national
griechisch	eurorettung	islamisten	asylverfahren	nationalen
griechenlandanleihen	euros	islamischer	zuwanderer	deutschen
griechischer	eurobonds	muslimen	asylsuchende	deutsches
griechenlandkrise	eurojust	muslimischen	einwanderer	nationaler