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Radio and the rise of the Nazis in prewar Germany

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Abstract

Radio and the Rise of the Nazis in Prewar Germany*

How do the media affect public support for democratic institutions in a fragile democracy? What role do they play in a dictatorial regime? We study these questions in the context of Germany of the 1920s and 1930s. During the democratic period, when the Weimar government introduced pro-government political news, the growth of Nazi popularity slowed down in areas with access to radio. This effect was reversed during the campaign for the last competitive election as a result of the pro-Nazi radio broadcast following Hitler's appointment as German chancellor. During the consolidation of dictatorship, radio propaganda helped the Nazis to enroll new party members. After the Nazis established their rule, radio propaganda incited anti-Semitic acts and denunciations of Jews to authorities by ordinary Germans. The effect of anti-Semitic propaganda varied depending on the listeners' predispositions toward the message. Nazi radio was most effective in places where anti-Semitism was historically high and had a *negative* effect in places with historically low anti-Semitism.

Inwieweit können die Medien zum Schutz oder zur Untergrabung ungefestigter Demokratien beitragen? Und inwieweit können sie Unterstützung für die Politik des Diktators generieren? Wir analysieren diese Fragen im Kontext des Radios in der Weimarer Republik und dem frühen NS-Regime. In der Zeit zwischen 1929 und 1932, in der das Rundfunkprogramm pro-demokratisch ausgerichtet war, hatte das Radio einen signifikant negativen Einfluss auf die Wahlergebnisse der NSDAP. Dieser Effekt wurde bereits 5 Wochen nach der Ernennung Hitlers zum Kanzler und der Kontrollübernahme über das Rundfunkprogramm umgekehrt. Nachdem die Nazis ihre Macht konsolidiert hatten, trug die Rundfunkpropaganda messbar zu vermehrten Parteieintritten und zur Zustimmung der Bevölkerung bei der Denunziation von Juden und zu anderen Formen des offenen Antisemitismus bei. Dennoch war der Einfluss der NS-Propaganda nicht uniform. Je nach Voreingenommenheit der Zuhörer konnte die Propaganda sehr effektiv oder aber kontraproduktiv sein. Das NS-Radio war am effektivsten in Orten mit historisch hohem Antisemitismus und hatte einen *negativen* Effekt auf die Unterstützung der antisemitischen Politik in Orten mit historisch niedrigem Antisemitismus.

Keywords: Anti-semitism, dictatorship, media, Nazis, propaganda, unconsolidated democracy

JEL classification: D72, L82, N74

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1. Introduction

Dictators often come to power through democratic processes.¹ Which institutional elements of a consolidated democracy are missing when this happens? How do dictators persuade voters to support them before and after the consolidation of power? What are the safeguards against the rise of popularity of potential dictators? We show that the content of political messages determined by who has control over mass media and the prior beliefs of voters play a role in answering these questions.

The rise of the Third Reich in Germany in the 1930s was the most prominent example of a collapse of democracy without a military coup. Did control over mass media help to establish and maintain Adolf Hitler's dictatorial rule? The Nazis themselves strongly believed in media power. Referring to the time shortly after Hitler was appointed chancellor of Germany and one month before the last competitive election of the Weimar Republic, the Reich minister of propaganda, Joseph Goebbels, wrote in the edited version of his diary published in 1940: "*Now it will be easy to carry on the fight, for we can call on all the resources of the State. Radio and press are at our disposal. We shall stage a masterpiece of propaganda*" (quoted in Shirer 1960). During the radio exhibition in Berlin in August 1933, he claimed: "*It would not have been possible for us to take power or to use it in the ways we have without the radio...*"² Historians, however, have not reached a consensus on the merits of these claims. Several scholars provide case-study evidence in support of the view that propaganda was as important as Goebbels had claimed (e.g., Shirer 1960 and Somerville 2012). Others (e.g., Zimmermann 2006) suggest that propaganda had little additional effect above and beyond the other factors that helped bring the Nazis to power.³ Prior to our paper, there has not been a systematic empirical analysis of the impact of radio on political support for the Nazis during the collapse of the Weimar Republic and the rise of the Third Reich or,

¹ Examples come from different parts of the world, e.g., Robert Mugabe of Zimbabwe, Alexander Lukashenko of Belarus, Hugo Chavez of Venezuela.

² The full text of the speech in English can be found at <http://www.calvin.edu/academic/cas/gpa/goeb56.htm> (accessed August 5, 2014). In addition, in 1934, Goebbels was cited in a handbook of radio to state that radio played a significant role in winning "the war of propaganda" and allowed Nazis to win the March 1933 elections (Weiss 1934, p. 9).

³ For example, Zimmermann (2006) wrote, "However, Goebbels's insistent claims regarding the power of his own propaganda, together with the characteristic methods he used, have misled later generations of historians into believing, likewise, that the propaganda was effective, and into placing primary emphasis on the media as a system of persuasion—a misconception which persists today."

more generally, on the role of media in anti-democratic transitions and consolidation of dictatorships. This paper aims to fill this gap.

To identify the effect of radio we use a combination of an over-time change in the content of radio broadcast and geographic and over-time variation in radio exposure. The content of the broadcast changed twice in pre-WWII Germany. Before 1929, radio programs focused on educational and cultural programs. In response to the initiative of German nationalists to organize a referendum on renouncing the Treaty of Versailles in 1929, the Weimar government altered the previously apolitical mix of radio programming to include political news with a pro-government slant. The Nazis and the Communists were denied airtime unlike other political parties, whereas news analysis programs always took a pro-democratic and anti-extremist perspective. The content of radio broadcast took another sharp turn—from having no Nazi messages on the radio to airing pro-Nazi propaganda—after Hitler was named chancellor of Germany and gained control over radio among other executive powers in January 1933. We document these changes using data on radio programming and confirm with historical sources.

First, we examine how these shifts in radio content affected political support for the Nazi Party (NSDAP) before the establishment of the Nazi dictatorship.⁴ The government of the Weimar Republic was unstable and, as a result, the five parliamentary elections between 1928 and 1933 with NSDAP participation provide us with a frequent measure of political preferences of the electorate. We show that in the parliamentary elections, following the introduction of the pro-government political news broadcast, the Nazis gained significantly lower vote share in areas with radio availability compared to areas with no radio signal. In contrast, in the last (semi) competitive parliamentary elections of March 1933, an increase in the Nazi vote share was greater in areas where radio was available. The five weeks of the Nazi radio access reversed the electoral effect of radio slanted in favor of the Weimar government.

We rely on the following two sources of variation in radio exposure: the variation in local radio subscription rates, available between 1931 and 1933, and in radio availability, i.e., the strength of radio signal, available at every point in time during 1928–1938 for every

⁴ NSDAP stands for *Nationalsozialistische Deutsche Arbeiterpartei*, the National Socialist German Workers' Party. It was founded in 1920 and dissolved in 1945.

locality, predicted using the information on the location and the power of transmitters by the Irregular Terrain Model (Hufford 2002, Olken 2009). During the three elections between 1930 and 1932, when the political broadcasts were pro-government and the Nazis were not given access to the radio, we find a significant negative effect of radio expansion on votes for the Nazi Party, conditional on all unobserved time-invariant characteristics of the localities. We also find that the changes in the radio content from apolitical to pro-Weimar in 1929 and from pro-Weimar to pro-Nazi in the end of January, 1933 had the opposite effects on the growth of Nazi popularity as a result of radio exposure: in places where radio was available, the NSDAP electoral gain since the previous parliamentary elections was lower in September 1930 elections and higher in March 1933 elections.

Two counterfactual exercises highlight the modest, but, nonetheless, important effect of radio on the electoral success of the Nazis. In the absence of radio during the campaign for the September 1930 election, the Nazis would have got additional 4.1 percentage points, i.e., 22.3% instead of 18.2% of the total vote. The difference in the vote shares is not big, but it would have reduced the gap between the Nazis and their main competitor, the Social Democratic Party (SPD), which got 24.5%. Such a small difference in election results between the Nazis and SDP could have affected the Nazis' bargaining power over policies and, in particular, over choosing the candidate for chancellor even in 1930. If the radio had been switched off in January 1933, the subsequent elections would have produced a 2.9 percentage point lower vote share for the Nazi Party (41.0 instead of 43.9, which constitutes about a quarter of what NSDAP actually gained in 4 months between November 1932 and March 1933 elections). This is a substantial effect, given that the Nazi propaganda was in effect for only five weeks and, at that time, it primarily targeted uneducated poor workers, who seldom owned a radio set (Paul 1990 [1933]).⁵

The radio had an effect on a range of other outcomes during this period as well, drawing a consistent picture: Pro-Weimar radio was effective in lowering political support for the 1929 referendum and in raising the incumbent's vote in the 1932 presidential election.

⁵ It is worth noting also that by the time of March 1933 election, the Nazi propaganda had not reached its full strength yet. At the same time, the Nazis used a number of different methods to win this election, including the communist and socialist newspapers, violent attacks on meetings of Social Democrats, the passage of Reichstag Fire Decree, which allowed arresting the leaders of the Communist party. They also used other means of political campaigning, such as public speeches at political rallies, posters, flyers, and press.

Nazi party membership was not affected by radio before the Nazis got radio access and was positively affected in 1933, after the radio became pro-Nazi. The extent of discrimination against Jews was negatively associated with the radio in 1928–1932, although these estimates are not very precise, and positively associated in 1933–1934. These results demonstrate that the control over radio content was used successfully in the struggle for power during the democratic period, both by the Nazi opponents before January 30, 1933 and by the Nazis after they gained control over radio in January 30, 1933.

Our second question is whether radio propaganda helped the Nazis maintain political support after the full consolidation of power. We focus on non-electoral manifestations of the popularity of the regime such as the number of Jews deported to concentration camps before 1942 mostly as a result of denunciations by Germans, the number of open anti-Semitic letters to a Nazi newspaper, *Der Stürmer*, between 1935 and 1938, and pogroms on the *Night of Broken Glass* in November 1938.⁶ We find that radio was important in persuading Germans to support the regime. Exposure to Nazi radio propaganda in its full strength increased the number of Jews deported to concentration camps and the number of anti-Semitic open letters.

The effects of the Nazi anti-Semitic propaganda, however, crucially depended on the listeners' predisposition to the broadcasted message. It was most effective in areas with historically more anti-Semitic population, as proxied by the occurrence of anti-Jewish pogroms during the Black Death in 1348–1350 (Voigtländer and Voth 2012) or by the vote for the extreme nationalists (NSFP) in 1924, and in areas with larger popular discontent rooted in wealth inequality, as proxied by the inequality in landholdings as of 1895 (Ziblatt 2009). In contrast, in areas where the local German population historically was not anti-Semitic despite the presence of a sizable Jewish community, the effect of propaganda was negative on the deportations of Jews and open anti-Semitic letters to *Der Stürmer*. This result highlights potential pitfalls of propaganda: it can backfire, if listeners are unlikely to believe its message. Listeners may negatively update their prior about the nature of the regime, which, in turn, may lead to lower susceptibility to other means of persuasion by the regime (such as coercion) or even resistance (such as hiding Jews, in our context).

⁶ There were three parliamentary elections in the Nazi Germany—in November 1933, March 1936, and April 1938. Voting results from these elections, however, are uninformative of the political support for the Nazis during this time, as is typically the case in dictatorships.

This evidence also sheds light on the mechanism of the effect of the Nazi propaganda on the public expressions of anti-Semitism. Potentially, it could serve as both persuasion and coordination devices: making people change their views as a result of propaganda or just signaling that certain actions will not be punished. The coordination mechanism is inconsistent with a negative effect of propaganda even if people are negatively predisposed to the message. Thus, one can conclude that at least a part of the effect is likely to come from direct persuasion or dissuasion, with the direction of the effect depending on the prior attitude of listeners.

A number of tests provide evidence in favor of our identifying assumptions. First, the results are consistent between panel specifications with locality fixed effects and cross-section specifications. Second, a series of tests in the spirit of Altonji, Elder, and Taber (2005) show that our cross-section results are unlikely to be biased due to the effect of unobservable confounds. Third, we show that radio had no effect on placebo outcomes that were measured before radio started broadcasting political news.

Overall, the results suggest that, first, mass media can be both a safeguard against the fall of an unconsolidated democracy and a facilitating factor in its collapse depending on who exercises control over media content and whether the extremists are banned from the media; second, mass media does help dictators gain popular support and persuade people about the virtues of their most atrocious policies, but only if the majority does not disagree with the propaganda message *a priori*; and third, propaganda may even be counterproductive if listeners have a negative predisposition to its message.

Our paper contributes to the literature on institutions in unconsolidated democracies and dictatorships (see Acemoglu and Robinson 2006 and 2012 for an overview). It is the first to empirically assess the role of mass media in the process of institutional change and under different political institutions in the same country.⁷ We contribute to the literature on the political persuasion of media by documenting the dissuasion effect of propaganda, previously not found by the literature (see, e.g., Strömberg 2004, DellaVigna and Kaplan 2007, Gentzkow 2006, Gerber, Karlan, and Bergan 2009, Knight and Chiang 2009, Gentzkow et al. 2011, Durante and Knight 2012, and Enikolopov, Petrova, Zhuravskaya 2011). Our results

⁷ Notable theoretical contributions to the theory of media in autocracies are, for instance, Besley and Prat (2006), Egorov, Guriev, and Sonin (2009), and Gehlbach and Sonin (2014).

also contribute to the literature on the effects of media on ethnic animosity, i.e., DellaVigna et al. (2014) and Yanagizawa-Drott (2014) and to the historical literatures on the determinants of electoral success of the Nazi party (Falter 1991, Ferguson and Voth 2008, King et al. 2006, Satyanath, Voigtländer and Voth 2013, Voigtländer and Voth 2014), on the effects of media in the Weimar Republic and Nazi Germany (e.g., Sington, Weidenfeld 1943, Ross 2006a, and Zimmermann 2006), and on anti-Semitism in Nazi Germany (e.g., Voigtländer and Voth 2012).

The rest of the paper is organized as follows. Section 2 lays out the historical and political background. Section 3 presents the hypotheses. Section 4 describes the data. Section 5 discusses empirical strategy and identification issues. Section 6 presents the results. Section 7 concludes.

2. Background

2.1. Political landscape

The Weimar Republic was a parliamentary democracy established in Germany in 1919. Until 1932, its government was controlled by a coalition of centrist parties led by the democratically oriented Social Democratic Party of Germany (*Sozialdemokratische Partei Deutschlands*, SPD). Despite numerous economic problems, including hyperinflation in the first half of the 1920s, the coalition had a stable majority until 1930. The beginning of the Great Depression with the U.S. stock market crash of 1929 leading to a recall of American short-term loans to Germany, and the continuous heavy burden of reparations weakened the electoral support of parties in government. In the early elections held on September 14, 1930, the centrist parties lost legislative majority and in 1930–1932 the government ruled with the aid of presidential decrees. The NSDAP received 18.3% of the vote in 1930 compared to just 2.6% in 1928. Ongoing economic depression led to further radicalization of voters. In the presidential election of March 1932, Adolf Hitler got 30.1% of votes in the first round, second only to the incumbent president, Paul von Hindenburg (49.6%). In April 1932, with three candidates running, von Hindenburg won the second round over Hitler, 53% to 36.7%. In the early parliamentary elections held on July 31, 1932, the Nazi Party received 37.3% of votes. The Nazis got political support from the working poor and financial support from rich industrialists, who feared substantial tax increases to pay for government debt. Despite strong

electoral support of Hitler's party, von Hindenburg refused to appoint him chancellor. In the November 1932 parliamentary election, the Nazis got only 33.1% of the vote. However, as a result of misguided political strategizing during negotiations between von Hindenburg and the ex-chancellor Franz von Papen (ironically, aimed at setting constraints on the Nazis), Hitler was appointed chancellor on January 30, 1933.

Shortly thereafter, the Nazis set about consolidating all executive powers, including police and radio stations. In particular, the Nazis used the radio in an unprecedented way in their political campaign during the March 1933 elections (see below). After the Reichstag fire in February 1933, the Reichstag Fire Decree suspended most civil liberties and restricted the freedom of press. The Communist leaders were arrested. Terror began to spread over the country. A week later, in the March 1933 election, which was the last semi-competitive election in pre-WWII Germany, the NSDAP gained 43.9% of votes. This victory allowed the Nazis, in coalition with DNVP and the Centre Party, to pass the Enabling Act in March 1933, which effectively allowed Hitler's government to enact decrees without consulting the Parliament.⁸ By the summer of 1933, all political parties except the NSDAP were outlawed, all independent newspapers were closed, Nazi officials were put in charge of all local governments, trade unions were abolished, and their leadership was imprisoned. Germany had become a legal dictatorship. However, it took another year and a half to fully consolidate Hitler's power, particularly within the judiciary.

2.2. Radio content

The early 1920s were marked by the beginning of the radio in Germany. In 1923 and 1924, the state postal company (*Reichspost*) together with private investors created nine regional broadcasting companies. Initially, these companies controlled their own content. Programming included music (concerts, stage plays, and operas), literary programs (*belles lettres* and poetry), weather, sports, scientific and popular lectures, and advertising. Local news was mostly limited to nonpolitical information about local affairs, such as retail prices and police calls for witnesses.

In their first year of operation, few regional companies experimented with broadcasting political news. However, within several months of operation, the news agency Dradag had

⁸ DNVP stands for *Deutschnationale Volkspartei*, the German National People's Party.

centralized the production of all political news programs (Sington et al 1943, p.140, von Saldern 2004, p. 316). In 1924–1925, the role of politics in radio broadcasts was a subject of ongoing political debate.⁹ In 1926, a regulation forbidding any political, especially partisan, content was enacted. Between 1926 and 1928, radio was deliberately apolitical; broadcasts consisted of cultural and entertainment programs and the only few appearances of government officials were related to the celebrations of the constitution or the Memorial Day for the 9th November 1918. During the parliamentary elections of 1928, no content related to electoral campaigns was aired (Bausch 1956, p. 175).

In 1929, however, the policy regarding radio content was changed. The Nazi Party, in coalition with other right-wing parties, organized a referendum to repudiate the reparations required under the Treaty of Versailles (i.e., the so-called Young Plan). In response, the government launched an intensive campaign against the proposal of the referendum (Bausch 1956, p. 169).¹⁰ After 1929, radio became increasingly politicized, offering more and more pro-government and pro-democratic content, which included economic and political news, lectures, and speeches. In order to illustrate the change in the radio content in the first decade of radio in Germany, we have collected information on radio programming. In particular, we have compiled a list of radio appearances of prominent political figures on the radio (i.e., government officials at the national or local level, party representatives from any political party, or members of parliament) between 1923 and the March 1933 election. The online appendix data section describes our sources. Panel A of Figure 1 shows the number of

⁹ During the parliamentary election campaigns in May 1924, when the number of radio subscribers reached 16,000, Dradag allocated 15 minutes of air time to each of the following five parties: Zentrum, the DNVP, the SPD (*Sozialdemokratische Partei Deutschlands*, the Social Democratic Party of Germany), the DVP (*Deutsche Volkspartei*, the German People's Party), and the DDP (*Deutsche Demokratische Partei*, the German Democratic Party) (Bausch 1956, p. 175). In 1924, the Minister of Home Affairs, Karl Jarres, argued for the regulation of radio, recognizing the risk of abusive uncontrolled political influence on the masses (Lerg 1980, p.185-187). As a result, a majority stake in Dradag was nationalized and the editors were obliged to report in line with official government positions (Dussel 2006, p. 81). During the campaigns leading up to the parliamentary election of December 1924, when the number of registered listeners grew to more than 460,000, candidates were not given any airtime. In contrast, in the presidential election campaign of 1925, two candidates, von Hindenburg and Wilhelm Marx, were allocated radio time, whereas the Communist candidate, Ernst Thälmann, was not allowed to speak on the air.

¹⁰ The referendum failed due to insufficient turnout. The following quote is a typical example of messages broadcasted on the radio in the face of the referendum. Reich Minister of Home Affairs Carl Severing spoke on the radio on October 9, 1929, saying: “*The primitive consideration shows that the referendum against the enslavement of the German people would reach exactly the opposite of what it combats. The referendum relies on completely false premises, conceals crucial facts and works with methods which undermine the moral foundations of democracy.*” (*Vossische Zeitung*, 10/10/1929, p.1).

appearances of political figures on the radio between the 1st of January 1923 and the 4th of March 1933, the last day of the election campaign. The figure confirms the claims of media historians (e.g., Pohle 1955, p. 93, Bausch 1956, p.170–171) that before 1929 radio was not used for the purposes of political persuasion: the figure shows a discontinuous jump in 1929 and an increasing trend since 1929 in the political broadcast.

The slant of the political news changed sharply when Hitler was appointed chancellor. To illustrate this point, Panel B of Figure 1 zooms into the election campaigns at the time when radio became politicized and plots the number of appearances of the political figures affiliated with the Nazis, the Weimar government coalitions, or other parties by election campaign. It also provides the vote share received by the Nazis in each parliamentary election. Figure A1 in the online appendix gives detailed information on the number of appearances of political figures on the radio for each political party by year. These figures corroborate that the Nazis were denied access to radio before Hitler's appointment as chancellor in January 1933 and had preferential access to radio after his appointment.

In particular, during the parliamentary election campaign of 1930 airtime was given to all major parties with the exception of the Nazis (NSDAP) and the Communists (KPD). During the presidential election campaigns in the spring of 1932, airtime was given exclusively to the incumbent president, von Hindenburg, who campaigned against Hitler (Lerg 1980, p. 447).¹¹ During the campaign for the July 1932 parliamentary election, the Nazis were given some airtime together with other opposition parties (with the exception of the communists); namely, Nazi representatives appeared on the radio three times during the campaign.¹² The government, however, reserved a disproportionate amount of broadcasting time for its own campaigning (Pohle 1955, p. 106; Paul 1990, p. 93): government representatives appeared 16 times on the radio, including 4 appearances of the newly appointed chancellor von Papen. During the campaign for the November 1932 parliamentary

¹¹ Here is an example of von Hindenburg's radio speech: "*The election of a party man [Hitler], who is an advocate for a one-sided and extreme political ideology and who would turn the majority of the German people against him, would lead our homeland into a deep and extraordinary crisis. It is my duty to prevent this.*" (Schulthess 1932, p.55).

¹² Georg Strasser spoke twice on the radio on 6/14/1932 and on 6/29/1932 and Joseph Goebbels spoke once on 6/18/1932. These appearances of the Nazis on the radio during this campaign reflected the fact that chancellor von Papen tried to establish closer ties with the Nazi Party at that time; these attempts were abandoned before the start of the November 1932 election campaign.

election, the Nazis did not get a single appearance on the radio, while the chancellor von Papen, who actively campaigned against Hitler in this campaign, appeared on the radio 9 times and other government representatives made 8 radio appearances.¹³ During the second half of 1932, radio was brought under a firm state control: the regional broadcasting companies were centralized and placed under the management of the Ministry of Interior. *“As part of this restructuring, Interior Minister von Gayl ordered a daily ‘Government Hour’ for all radio broadcasters, during which ministers could hold supposedly ‘unpolitical’ speeches in support of government policies”* (Ross 2006a, p. 206).

After Hitler’s appointment as chancellor, between February 1 and the parliamentary elections of March 5, the Nazis launched a daily radio political campaign. During this five-week campaign, Adolf Hitler, who had never been given access to radio before, spoke 16 times on the radio. The total number of appearances of the Nazi officials on the radio during the March 1933 election campaign was 28 compared to a total of 4 appearances during the entire period from 1923 to January 29, 1933. The Nazis also blocked access to radio of all other parties and minimized airtime of its coalition partner DNVP, which appeared on the radio 12 times during this campaign (Diller 1980, p. 61). However, it is important to note that the Nazi campaign for the 1933 elections was aimed primarily at uneducated workers, who at that time had limited access to the radio (Paul 1990 [1933], p. 39).

After the elections of March 1933, radio became an increasingly important propaganda tool for the Nazis and was used as such until their defeat (Welch 2002, p. 33).¹⁴ All radio station employees considered “potentially unreliable” were replaced, while listening to foreign radio or disseminating its information was subject to prosecution (Dussel 1999, p. 105). But it was not until the fall of 1933 that complete control over this medium was installed (Führer and Ross 2006, p.83).

Anti-Semitic content was broadcasted starting from 1933 on with varying degrees of intensity. As early as April 1, 1933, the Nazis called on the radio for a boycott of Jewish businesses. There were, however, relatively few anti-Semitic messages on the radio in 1933

¹³ The online appendix presents quotes from the von Papen’s campaign speeches on the radio illustrating the tone of von Papen’s campaign.

¹⁴ Soon after the elections Goebbels instructed radio producers: *“With this instrument [...] we shall win over the people.[...] Once we have won them, radio must hold the 100% of our supporters, must defend them, must indoctrinate them so thoroughly that no one can break away any more”* (quoted in Bramsted 1965, p. 63).

and 1934 (Somerville 2012, p. 118). In contrast, in September 1935, anti-Semitism became prominent on the radio following the announcement of the new Anti-Jewish Law for the Protection of German Blood and German Honor. In the subsequent two years, anti-Semitic messages lost their prominence on the radio with few exceptions (Somerville 2012, p. 123, 125). Then, after the shooting of a German diplomat, Ernst von Rath, by a Polish-German Jew Herschel Grynszpan on November 7, 1938, the German News Agency was instructed to disseminate a story of a Jewish conspiracy (Steinweis 2009, p. 18–20). From the beginning of 1939, the message of a global Jewish conspiracy against Germany was constantly broadcasted on the radio and the anti-Semitic propaganda became an integral part of the Nazi propaganda.

Both the data on the radio content and anecdotal evidence (presented in the online appendix) point to the presence of three distinct periods in the history of radio in Germany before the WWII: 1) prior to 1929, radio was apolitical; 2) between 1929 and January 29, 1933, radio broadcast was increasingly politicized in favor of the Weimar governments with virtually no access of the Nazis to the broadcast; and 3) from January 30 1933 on, the radio broadcast became heavily biased in favor of the Nazis.¹⁵

2.3. Availability of radio

In the first decade of its existence, the German radio network expanded rapidly. Transmitters were frequently added and upgraded and the radio audience grew steadily. Figure 2 presents the aggregate number of radio subscriptions and the cumulative power of transmitters during the first decade of German radio.¹⁶ The radio subscription rate increased from essentially zero in 1924 to almost 5 million by the end of 1933. (Germany's population was 65.36 million in 1933.) Each year thereafter saw about 1 million additional radio subscribers.¹⁷ According to Lerg (1980), by 1927 the radio signal was sufficiently strong for high-quality reception in areas with 31.3% of the German population, and by 1934 it reached areas with 70% of the

¹⁵ Online appendix chapter “Anecdotal evidence” presents quotes from various political speeches broadcasted on the radio at different points in time; quotes from historians analyzing the content of the broadcast, and quotes from Goebbels's diaries about the organization of the March 1933 election campaign.

¹⁶ In the online appendix, we give precise information on the cumulative power and the number of transmitters at every election date.

¹⁷ The subscription figures give a lower bound on the number of radio listeners, because 1) usually there were several listeners per subscription and 2) some listeners have evaded the subscription fee (e.g., Fuge 2009). However, the number of evaders was probably not very large after the initial period of radio introduction as evading the subscription fee was severely punished.

population. Far from all of them had radios, however. In 1934, 33.3% of German households had a radio set and radio-set ownership increased to 65% by 1938 (Fuge 2009, p. 21, Bramsted 1965, p74).

The transmitters were placed strategically to reach the maximum number of potential listeners. Listenership was substantially higher in the big cities with transmitters and suburban areas around them than in rural areas. Primarily, this was because of the differences in the signal strength, but also because of the differences in the access to electricity (96.5% of receivers required electric power supply in 1930s, according to Vollmann 1936) and due to income differences, more generally (Cebulla 2004, p. 34). The monthly radio subscription fee of 2 marks was routinely collected up to 1933; it was roughly equivalent to the price of a monthly newspaper subscription, two hours of skilled labor, or four hours of unskilled labor. The prices of radio receivers declined over time and the number of households that could afford them increased. The annual average household budget for radio related expenditures among lower-income households (below RM 3,000) increased from RM 4.11 in 1927–1928 to RM 15.75 in 1937 (Ross 2006b, p.185). Overall, radio listenership was higher in places with higher population density, better economic conditions, and more favorable terrain. However, even in rural areas far away from transmitters, listenership was above zero, as long radio waves (AM transmission) could travel great distances.¹⁸

From 1933 onward, the Nazis strove to increase the number of radio listeners. Mass production of an affordable radio receiver was organized on Goebbels orders. In addition, in an attempt to maximize listenership after consolidating power, the Nazis substantially broadened the categories of the population exempt from the radio subscription fees (Fuge 2009).¹⁹

¹⁸ For example, in 1931, the district with the lowest subscription share had 4.46 subscriptions per 100 households. In addition, in rural areas higher number of people listened to one radio set on average compared to urban areas (Ross 2008 p. 137) and listening to the radio in groups was popular already in the 1920s and early 1930s (Cebulla 2004, p. 82, Lacey 2006, p.71, von Saldern 1990, p.36). In the second half of 1930s, collective listening was organized by the Nazis at the local party branches (Bramsted 1965, p. 74). Sington and Weidenfeld (1943) note that “*the party through its ‘wireless wardens’ and ‘block wardens’ in every village and town, help[s] to install communal receiving sets, organizes group listening, lays down rules about the erection of aerials, and reports on illegal listening-in to foreign stations.*”

¹⁹ More detailed historical information about radio subscriptions and radio listeners is provided in the online appendix.

3. Hypotheses

First, to test whether the radio played a role in dismantling democracy in the late Weimar Republic, we consider how radio affected voting for the Nazi Party during three periods: (1) before 1929, when radio was neutral and apolitical; (2) between 1929 and 1932, when radio had a relatively mild pro-government, pro-democracy slant with no access of the Nazis to radio; and (3) after January 1933, when the Nazis started using radio as a propaganda machine. We expect that exposure to radio decreased the vote share of the Nazi Party at the time when the slant in the political news was in favor of the Weimar government and increased the vote share of the Nazi Party after it got control over the radio. A similar pattern is expected for other available outcomes measuring the popularity of extremist ideas and support for the Nazis. In particular, we expect radio to increase the number of new members in the Nazi Party and promote discrimination against Jews once the Nazis got control over the radio content in 1933.

Second, we investigate the effects of radio in the second half of the 1930s when Hitler fully consolidated power. Once the anti-Semitic propaganda took its full strength, we expect radio to trigger open and violent expressions of anti-Semitism among the ordinary Germans.

Third, we test whether the persuasion power of the propaganda messages depends on the audiences being more and less positively susceptible to propaganda. Theoretically, listener's prior beliefs about the content of the message should matter for the effectiveness of propaganda (DellaVigna and Gentzkow 2010). In particular, we expect that in places with higher initial levels of anti-Semitism, Nazi anti-Semitic radio propaganda had a larger effect on the open expressions of anti-Semitic sentiments compared to places with lower initial levels of anti-Semitism. Furthermore, as recent research in social psychology suggests, higher levels of wealth inequality are associated with higher levels of anxiety (e.g., Pickett and Wilkinson 2011) and people with high level of anxiety are more responsive to persuasive messages (Marcus et al. 2006, Brader, Valentino, and Suhay 2008); therefore, we expect propaganda to be on average more effective in more unequal localities.

4. Data sources

Radio Exposure. We use two main sources of data for radio availability: radio signal strength, available for districts and cities for the entire period, and radio subscription rate, available at

the district level for only three points in time: April 1931, April 1932 and April 1933. We calculate radio signal strength using information on transmitter location, frequency, and power from *Mitteilungen der Reichs-Rundfunk-Gesellschaft* (for various years) and from *Rundfunk Jahrbuch* (1929) for the year 1928. All these sources refer to *Union Internationale de Télécommunications* as the primary source of their data. Based on this information, we calculate predicted radio signal strength in all localities using the Irregular Terrain Model (Hufford 2002). This methodology was also used by Olken (2009), Enikolopov et al. (2011), and DellaVigna et al. (2014). For the sake of comparability, we use exactly the same units of measurement as in the previous works, i.e., the decibels above the power required for top quality signal reception for TV. As some of our outcomes, such as electoral outcomes, are measured at the level of 958 districts (*Kreis*) and others, such as anti-Semitism, are measured at the level of 1391 cities, we compute signal strength at geographical centers for both districts and cities.²⁰ The district boundaries are obtained from the map of administrative borders in 1925. Figures A2–A4 in the online appendix present the district-level maps of the radio signal strength during each of the five parliamentary elections during 1928–1933, the radio subscription rate at each point in time, when it was measured, and the changes in the signal strength from one election to another. The sources of these data are described in the online appendix.

Outcome variables. We use results of each election during the period under study, the Nazi party membership, and different measures of anti-Semitism as outcome variables. Figure 3 presents the timing of measurement for all considered outcomes. Below we describe their sources.

Electoral results. The data on elections come from Falter and Hännisch (1990) and ICPSR (1999). We use voting outcomes at the district level for the five parliamentary (*Reichstag*) elections between 1928 and 1933, presidential elections in 1932, and the referendum on the “Law Against the Enslavement of German People” in December 1929. For the parliamentary elections, we focus mainly on the Nazi vote share, but we also consider the vote shares of other major parties and voter turnout. For the presidential elections, the

²⁰ As summary statistics Table A1 in the online appendix shows, an average district had 63,440 inhabitants and a median district had around 40,000 inhabitants.

outcomes are the shares of votes received by the incumbent von Hindenburg and by Hitler. As for the referendum, the outcome is the number of votes in favor of the proposal during the referendum as a share of registered voters.²¹ As placebo outcomes and controls, we also use data on the results of earlier elections.

Anti-Semitism. We use two sets of measures of anti-Semitism at the city level. For measures of discrimination against Jews in the period before the Nazis fully consolidated power and before they started systematic anti-Semitic propaganda, namely, between 1929 and 1934, we construct a city-level panel dataset based primarily on a comprehensive 3-volume compilation of Jewish history in the German-speaking world (Alicke 2008). Our dataset records any mention of verbal expressions of anti-Semitism (e.g., anti-Semitic demonstrations or speeches), physical violence (e.g., harassment, beatings, killings) and property damage (e.g., destruction of Jewish property) for each city. In rare cases, when the city was not surveyed in Alicke (2008), we supplement our dataset with information from the “Encyclopedia of Jewish Life Before and During the Holocaust” by Wigoder and Spector (2001). The resulting dataset is a city-level panel of occurrence of any incidence of discrimination or violence against Jews between 1929 and 1934. The measures of anti-Semitism for the period after the Nazis fully consolidated power come from Voigtländer and Voth (2012). In particular, we use the information on the number of anti-Semitic letters to *Der Stürmer* from 1935 to 1938, a dummy variable for whether synagogues or Jewish prayer rooms were damaged or destroyed during the *Reichskristallnacht* in 1938, and the information on the number of Jews deported from 1933 to 1942. After 1942, deportations of Jews grew into a systematic and massive policy and, therefore, stopped being a proxy for the local anti-Semitism. Before 1942, however, deportations reflected hostility of local officials and non-Jewish neighbors. In support of this, Gellately (2001) provides evidence that the vast majority of the Gestapo cases against the Jews were based on denunciations by local non-Jewish population. This variable comes from the database of Jewish deportees during the Nazi period, which was compiled by the German Federal Archives (Bundesarchiv 2007).

²¹ For a proposed law that did not require changes in the constitution to pass referendum, a majority of eligible voters had to turn up to the polls and a majority of those who turned up had to vote in favor of the proposal. Voter turnout at the referendum was extremely low (about 12 percent), so not voting was equivalent to casting the vote against the proposed law. This is why we use the ratio of those who voted in favor of the law to the total number of eligible (registered) voters, rather than to the number of valid votes cast.

NSDAP membership. The information on NSDAP membership comes from a data set of party membership cards (Brustein and Falter 1995). Based on the information given in this source, we compute the number of people, who joined NSDAP in 1932 and between February and May of 1933, by city. Due to a massive increase in the number of applicants, the Nazis stopped accepting new members in May 1933 (this ban was lifted in 1937). We restrict the sample to those cities in which there is at least one observation in both 1932 and 1933. The reason for this is that missing data for a particular city-year does not mean that there were no new members from this city joining NSDAP, as the data are a random sample of party membership cards stratified at the city and year level.

Predisposition to extremist propaganda. To measure historical predisposition to anti-Semitism at the city level, we use measures of the incidence of pogroms and information on the existence of Jewish settlement in the 14th century from Voigtländer and Voth (2012). As alternative measures of predisposition to propaganda, we also use the historical landholding inequality as of 1895 from Ziblatt (2009) and the vote in December 1924, i.e., at the time when NSDAP was banned, for the extreme-right political party NSFP, the National Socialist Freedom Party.

Socioeconomic and geographic control variables. For sociodemographic variables, our primary sources are *Zentralarchiv* and German census data from Falter and Hänisch (1990). In particular, we use the following sociodemographic controls from the census: population, the share of Jewish and Catholic population, and the share of workers in white- and blue-collar occupations in 1925. We also control for the shares of unemployed and partially employed people in 1933 (Childers 1983 and King et al. 2008), and for the property tax payments and the number of participants of World War I, welfare recipients, and pensioners receiving social assistance from the statistical yearbooks (*Statistik des Deutschen Reichs* for various years; see the online appendix for details). Welfare recipients and property tax controls are included in the district sample only, as these data are not available at city level. In addition, we control for altitude for each district and city and for whether the city is located on a navigable river. For the districts sample, we also control for the distance to the closest big city (i.e., urban community with at least 50 thousand inhabitants). In some specifications, we include controls for the number of newspaper titles (from *Deutsches Institut für Zeitungskunde*) and cinemas (from *Reichs-Kino-Adreßbuch*) in 1932 at city level as well as the number of speeches that

Hitler gave in 1932 in each city, based on the information from Domarus (1962) and Dusik (1992).

The electoral districts and socio-demographic data were manually merged to administrative district units in 1925 borders.²² The number of districts in the dataset varies between 918 and 959, depending on the year. All data sources are described in more detail in the online appendix, and the summary statistics for all variables are presented in Table A1 of the online appendix.

5. Empirical framework

In this section, we present our empirical approach and a series of reality checks to provide evidence in favor of our identifying assumptions.

5.1. The measures of radio exposure: subscriptions and signal strength

First, we examine how radio signal strength is related to the radio subscription rate, which is the best available proxy for the actual radio listenership.²³ Figure 4 illustrates the relationship between the signal strength across districts in September 1930 and the subscription rate in April 1931. The figure presents the scatterplot and the generalized logistic function that is the best-fit parametric relationship between the two variables. It shows that an increase in the signal strength translated into additional subscriptions only between two threshold levels of signal strength. Below the first threshold, the quality of the signal was insufficient to listen to the radio.²⁴ Above the second threshold a further increase in signal strength did not translate into an increase in listenership because signal was already sufficiently strong for high-quality reception; only few observations lie above the second threshold.²⁵

²² In cases when the level of election and socioeconomic data did not coincide with 1925 administrative districts (*Kreis*), we merged units in Census and elections data from Falter and Hänisch (1990) dataset with 1925 units using maps. Note that, due to gerrymandering, the number of electoral districts is different for different years.

²³ The number of subscribers should be proportional to actual listenership, but is substantially smaller, as it does not take into account that, on average, several people listen to one radio set with a subscription and that some people listened to radio without paying the subscription fee (either legally or illegally). See section 5 of the online appendix for more details.

²⁴ As mentioned above, all districts had above zero subscription rates. The reason is the nature of AM transmission, which allows unstable radio reception with high-quality receivers even in places with a very weak signal.

²⁵ Similar S-shape relationships have been documented in other contexts, e.g., Olken (2009). The threshold levels of the signal strength, above and below which the change in the signal does not affect the actual radio availability, change with technological progress. Thus, the level of the thresholds cannot be compared across different contexts.

Table 1 presents the relationship between the radio subscription rate (for the three points in time, when these data are available) and the signal strength at each parliamentary election date between 1930 and 1933 conditional on the standard set of controls. Panel A shows the results using the plain signal strength. In Panel B we use the generalized logistic transformation of the signal strength using the function presented in Figure 4, which best fits the relationship between the signal strength and subscription rate. In all the cases, the coefficients on the signal strength or its non-linear transformation are positive and highly significant (the F-statistics for the significance of the signal strength variables are presented in the last column of the table). A one-standard-deviation increase in the signal strength was associated with a 2.8-percentage-point increase in the share of households with a radio subscription in 1930 (with the mean of 18.9% measured as of 1931). In 1933, a one-standard-deviation increase in the signal strength was associated with 1.8 additional percentage points in the share of subscribers (with the mean value of 26.5%). Thus, we use three alternative measures of radio exposure: namely, the untransformed radio signal strength, a non-linear transformation of the radio signal that is the best parametric predictor of subscription rates, which has a natural interpretation of the predicted subscription rate, and the subscription rate itself.

5.2. Specifications

Data for two of our outcomes, voting for the Nazis and discrimination against Jews, come as a panel. Our baseline panel specification is:

$$y_{it} = \beta_0 + \beta_1 \text{Slant}_t \times \text{Exposure}_{it} + \mathbf{Z}_{it}' \boldsymbol{\beta}_2 + \varphi_i + \tau_t + \epsilon_{it}, \quad (1)$$

where y_{it} denotes the respective outcome; i indexes the cross-sectional dimension of the panel, i.e., districts for election outcomes and cities for anti-Semitism outcomes; and t indexes time, i.e., election years for election outcomes and calendar years for anti-Semitism. Exposure_{it} is the main explanatory variable – one of the three alternative measures of the radio exposure. By Slant_t we denote the direction of the slant in the political radio broadcast at time t . Based on the content analysis, presented in Figure 1, we conclude that political news were slanted from 1929 onwards and that the slant was pro-Weimar government between 1929 and 1932 and pro-Nazi from 1933 until the end of our observation period. The available data on radio content are too crude to assess the relative magnitude of the slant; therefore, we just focus on its direction. As an approximation, we set Slant_t to be equal to 0 in 1928, -1 between 1929

and 1932, and 1 in 1933–1934. φ_i and τ_t denote district (city) and year fixed effects. \mathbf{Z}_{it} denotes the interaction of all time-invariant control variables \mathbf{X}_i (to be described below) with time fixed effects. ϵ denotes unobserved heterogeneity. We estimate equation (1) both restricting the sample to the sub-period 1929–1932 when $Slant_t$ is constant (which includes elections of September 1930, July 1932 and November 1932) and for all available periods pooled together. We estimate equation (1) using OLS with signal strength and the predicted (based on signal strength) radio subscription rate as measures of radio exposure and using 2SLS with the actual radio subscription rate instrumented by the predicted subscription rate, whenever data availability for the actual subscription rates permits.²⁶ The main identifying assumption in these panel-data estimations is that the changes in the signal strength are uncorrelated with time-varying unobservable determinants of the support of the Nazis both before and after the changes in the radio slant.

As we have no data to measure the relative magnitude of the radio slant precisely, we also estimate the electoral effects of the radio persuasion separately during the time of the introduction of the pro-Weimar political news on the radio and at the time of the change in the direction of the slant to pro-Nazi. In order to do this, we estimate the following modifications of equation (1), taking first differences at these two episodes:

$$\Delta y_{it} = \theta_0 + \theta_{1(t)} Exposure_{it} + \mathbf{X}_i' \boldsymbol{\theta} + \epsilon_i, \quad (2)$$

where $t = 1930$ or $t = 1933$; $\Delta y_{i,1930}$ is the change in the Nazi vote share between 1928 and 1930 elections and $\Delta y_{i,1933}$ is the change in the Nazi vote share between November 1932 and March 1933 elections.²⁷ These estimations require additional identifying assumptions. At the 1930 election, equation (1) reduces to equation (2) if $Slant_{1928} = 0$. We present evidence in support of this identifying assumption in the following subsection: in particular, we show that radio had no effect on political preferences before the content turned political, namely in 1928. Consequently, $\theta_{1(1930)} = \beta_1 Slant_{1930}$ and it is expected to be negative as the radio slant was in favor of Weimar government in 1930, i.e., $Slant_{1930} < 0$. At the 1933 election, equation (1) is reduced to equation (2) under the assumption that radio exposure changed very little

²⁶ As mentioned in the data section, the district-level data on radio subscription rate is available only for three points in time between 1930 and 1933 that do not coincide with the timing of election campaigns.

²⁷ Precisely, the first difference of equation (1) takes the form: $\Delta y_{it} = \theta_0 + \gamma_1 Exposure_{it} + \gamma_2 \Delta Exposure_{it} + \mathbf{X}_i' \boldsymbol{\theta} + \epsilon_i$, where $\gamma_1 = \beta_1 \Delta Slant_t$ and $\gamma_2 = \beta_1 Slant_{t-1}$.

between November 1932 and March 1933, i.e., that $\Delta Exposure_{i,1933}$ is negligible, which is reasonable because the signal availability changed only slightly during this period, as illustrated by Figure 2, and the decisions about buying radios were sluggish to improvements in signal availability. Under this assumption, $\theta_{1(1933)} = \beta_1 \Delta Slant_{1933}$, which is expected to be positive as $\Delta Slant_{1933}$ denotes the change in the radio content at the time of the Hitler's appointment from pro-Weimar government to pro-Nazi. Equation (2) is also estimated both with OLS and IV.²⁸

The effect of radio on several cross-sectional outcomes is estimated using:

$$k_i = \alpha_0 + \alpha_1 Exposure_i + \mathbf{X}_i' \boldsymbol{\alpha}_2 + \epsilon_i, \quad (3)$$

where k_i is a cross sectional outcome, such as the Nazi party membership, expressions of anti-Semitism, or referendum and presidential election results. For all electoral outcomes, the unit of analysis is district-year. For the new membership of the Nazi Party, equation (3) is estimated in a subsample of districts, for which this variable is available. For the measures of anti-Semitism, this regression is estimated on the city sample.

Finally, to study the differential effects of radio propaganda, we interact radio exposure with several alternative measures of predisposition to propaganda denoted by P_i in a series of cross-sectional specifications:

$$k_i = \alpha_0 + \alpha_1 Exposure_i + \alpha_2 (Exposure_i - \overline{Exposure}) \times P_i + \alpha_3 P_i + \mathbf{X}_i' \boldsymbol{\alpha}_4 + \epsilon_i. \quad (4)$$

Specifications (3) and (4) require a more stringent identifying assumption that the cross-sectional variation in signal strength is uncorrelated with unobservable determinants of k_i conditional on \mathbf{X}_i .

5.3. The set of control variables and the determinants of radio availability

The set of controls includes three groups of variables. First, we control for socioeconomic and geographic characteristics, listed in Section 4; these are important determinants of voting for the Nazi. Second, we control for preexisting political preferences with the vote shares of the

²⁸ Alternatively, one can represent the change in the outcome for consecutive elections as a function of the lagged radio exposure and the change in the radio exposure. In particular, $\Delta y_{i,t} = \delta_0 + \delta_{1(t)} Exposure_{i,t-1} + \delta_{2(t)} \Delta Exposure_{i,t} + \mathbf{X}_i' \boldsymbol{\delta} + \epsilon_i$, where $\delta_{1(1930)} = \beta_1 \Delta Slant_{1930} = \beta_1 Slant_{1930} < 0$; $\delta_{2(1930)} = \beta_1 Slant_{1930} < 0$; $\delta_{1(1933)} = \beta_1 \Delta Slant_{1933} > 0$; $\delta_{2(1933)} = -\beta_1 Slant_{1932} > 0$. We check the robustness of our baseline results by estimating this equation for $t = 1930$ and $t = 1933$ in addition to estimating equation (2). Note that, unlike equation (2), it does not require additional assumptions.

two nationalistic parties DNVP and NSFP, the two main non-nationalistic parties (SPD and Zentrum) and voter turnout in December 1924 parliamentary election, the year when radio was not yet available to the general public.²⁹ And third, we control for the determinants of transmitter location as they also can be related to the support for the Nazis independently of their effect on radio availability. In particular, as both radio signal strength and voting for the Nazis were strongly correlated with urbanization and some districts are rural, in the districts sample, we control flexibly for population with the fifth-degree polynomial of population and for a dummy for city status of the district. In the sample of cities, it is sufficient to control for the log of city population, as the variation is much smaller. Radio transmitters were located in or right next to big cities, which were also the centers of diffusion of information via other means. To account for this, in the sample of districts, we control for the distance to cities of at least 50,000 inhabitants. We also verify that our results are robust to controlling for the number of available newspaper titles and cinemas. In all cross-sectional specifications X_i includes fixed effects for each of the 35 German electoral regions (*Wahlkreis*).³⁰

Radio signal strength in each location depended on the distance to transmitters, their power, and topography in the line of sight between transmitters and the location. Transmitters were placed strategically to reach as many listeners as possible. Because transmitters were not randomly located, radio signal strength could be correlated with socioeconomic characteristics. Table 2 summarizes the results of the cross-sectional regressions, in which, at every election date, the signal strength and its non-linear transformation by district are regressed on four groups of variables that jointly form our baseline set of cross-sectional controls: region fixed effects, determinants of transmitter location, socioeconomic characteristics, and voting outcomes in 1924. The most important determinants of district signal strength are the region fixed effects and the variables that predict transmitter location, i.e., distance to the nearest big city, altitude, dummy for the urban districts, and the fifth-order polynomial of population. These variables alone explain over 97% of that part of the variation

²⁹ NSDAP was outlawed 1923–1925 and was not taking part in the parliamentary elections in 1924. Both DNVP and NSFP had nationalistic ideology and were close in spirit to the ideology of NSDAP. The correlation of NSDAP vote share in 1930 with DNVP vote share in 1924 was 0.55 and with NSFP vote share in 1924 it was 0.42.

³⁰ Previous literature on voting for the Nazi Party focused mostly on differences between regions, we are using much finer data, controlling for all unobserved variation across regions.

in the signal strength that is explained by the full set of controls.³¹ However, some socioeconomic characteristics and voting outcomes in 1924 (in particular, the share of white-collar workers, average property tax, the voter turnout and the vote for NSFP party in 1924), are significant correlates of radio signal strength across districts even conditional on region fixed effects and the main determinants of transmitter location. The F-statistics for the joint significance of variables in each of these four groups is given in the Table 2.

Table A2 in the online appendix presents placebo tests, in which the results of 1920, 1924, 1925, and 1928 elections as well as the change in the vote share of extreme nationalists between 1924 and 1928 are regressed on the signal strength between 1928 and 1933, conditional on the determinants of transmitter location and socioeconomic variables. Most importantly, there is no significant effect of the radio on voting for NSDAP or any other political party in 1928, which provides evidence in support of the assumption that $Slant_{1928} = 0$. Out of 120 placebo regressions, the numbers of coefficients of interest significant at 1%, 5%, and 10% level are only 1, 4, and 10, respectively, which is well within the margin of statistical error. Among these few significant placebo results, we find that the signal strength in 1933 is negatively correlated with the vote shares of DNVP and NSFP in 1924 and is positively correlated with the vote share of DNVP in 1920. To account for this correlation, we control for pre-existing political preferences.

The presence of correlation between unobservables and our main explanatory variable is untestable. However, we perform a series of tests in the spirit of Altonji, Elder, and Taber (2005) to show that such a correlation is not likely to bias the results. The results of these tests are reported at the bottom of the tables that show the baseline results for each specification that relies on the cross-sectional variation in signal strength. In addition, we present specifications that rely only on the variation in radio content holding the signal constant and a large set of additional placebo tests, the results of which provide evidence in favor of our identification assumptions.

³¹ The variation in signal strength coming solely from topography (as, e.g., in Olken, 2009) is insufficient because of a relatively flat surface of much of the German territory, and therefore, we rely on the variation in signal strength coming both from topography and distance to transmitters. However, the distance to the closest city of at least 50,000 inhabitants (with or without the transmitter) does control for the potential confounds, such as proximity to other sources of information.

6. Results

6.1. The effect of radio on the support for the Nazis while Germany was still a democracy

Electoral outcomes. During the 1930s, radio was expanding and, therefore, we can explore the over-time variation in the signal strength to estimate the persuasion effect of the radio, controlling for time-invariant unobserved heterogeneity between districts. At first, we confine our analysis to the three consecutive elections in 1930 and 1932, when radio had a pro-government slant. Columns 1 and 2 of Table 3 present the results of the estimation of equation (1) for this period using the signal strength and the predicted radio subscription rate as proxies for radio exposure. We find that districts that gained access to radio at some point in time during 1930–1932, when radio had a pro-Weimar political content and the Nazis were not allowed on the air, saw a significant decline in the Nazi vote share, conditional on all observables as well as unobserved heterogeneity between districts. The effect is negative and significant for both proxies for radio exposure. The magnitude of the effect is as follows: an 8.2 percentage point increase in the predicted radio subscription rate—a change equal to a one standard deviation increase in the actual subscription rate in 1932—led to a decrease in the Nazi vote share in a district by 1.9 percentage points during the 1930–1932 period (according to the estimate presented in Column 2).

In columns 3 and 4 of Table 3, we report the results for the estimation of equation (1) pooling data from all five elections in 1928–1933 together. This specification combines the effect of the change in the radio availability due to radio expansion with that of the change in the radio content. Consistent with our hypothesis, we find that radio availability interacted with the measure of pro-Nazi slant has a positive and significant effect on the Nazi vote share. An 8.2 percentage point increase in the predicted radio subscription rate increases or decreases a Nazi vote share in a district by one percentage point on average, depending on the direction of the radio slant (according to the estimate presented in Column 4).

Columns 5 and 6 of Table 3 present the results with radio subscription rate as a measure of radio exposure. As mentioned above, the timing of the measurement of subscription rate at the district level allows matching only in two time periods in a panel (and only imperfectly). Thus, we use the first differences so that the change in the Nazi vote share between September 1930 and November 1932 is regressed on the change in the subscription rate between April

1931 and April 1932.³² Column 5 reports OLS and column 6 – IV estimate, with the change in the subscription rate instrumented by the change in the predicted subscription rate between April 1931 and 1932. Both specifications give the predicted negative coefficient, but only IV is significant (at 5%). The magnitude of the effect implied by the IV estimates is much bigger than both the magnitudes implied by the OLS. The IV regression is better identified both because listenership is an endogenous variable and because the subscription rate measures listenership with an error.³³ One standard deviation in the change in actual subscription rate between 1931 and 1932 (equal to a 2.3 percentage point increase) led to a decrease in the share of votes for NSDAP of 4.9 percentage points according to the IV specification, which is larger but still consistent with magnitudes in the reduced form specifications.

Table 4 presents the estimates of the effects of the two changes in radio content that took place in 1929 and 1933 (as in equation 2). In particular, we regress the change in the Nazi vote share from the previous election on the measures of radio exposure for two parliamentary elections: September 1930 and March 1933. In Panel A, we use the signal strength and the predicted subscription rate as measures of exposure to radio and use OLS for the estimation; in Panel B, the actual subscription rate is used in OLS and IV framework.

The results confirm that radio availability had the opposite effect on political support for the Nazi Party depending on the direction of the political slant. As radio content shifted from neutral to having a pro-Weimar government slant with no airtime given to the Nazis, i.e., between elections of 1928 and 1930, the radio became associated with a significantly slower growth in the Nazi vote share. In contrast, when radio content shifted from being pro-Weimar coalition to pro-Nazi, i.e., between elections in November 1932 and March 1933, radio exposure led to a significant increase in the Nazi vote share. An 8.2 percentage point increase in the predicted radio subscription rate (equal to a one standard deviation increase in the actual subscription rate) in 1930 led to a 1.8 percentage point smaller increase in the share of votes for NSDAP between 1928 and 1930 and a similar-sized increase in the radio subscription rate in 1933 led to a one percentage point larger increase in the Nazi vote share between November

³² The results are similar if we look at the change in the Nazi vote share between September 1930 and July 1932.

³³ Note that the bias from the endogeneity of listenership may go either way as at that time the decisions to listen to the radio depended primarily on the non-political content (such as sports, entertainment and culture), whereas political news constituted only a small part of the overall broadcast.

1932 and March 1933 elections.³⁴ (Figures A5 and A6 in the online appendix indicate that these results are not driven by outliers and reflect a shift in the distribution of votes.) As in the panel estimation, the cross-sectional IV estimates are substantially larger in magnitude compared to both the OLS and the reduced-form estimates: A one standard deviation increase in the subscription rate in a district led to a decrease in the Nazi vote share by 2.9 percentage points in 1930 and an increase in the Nazi vote share by 2.0 percentage points in 1933, in comparison to their results in previous elections.³⁵

To assess the relative effectiveness of radio during the times when it had a pro-Weimar government slant and a pro-Nazi slant, we compute persuasion rates, i.e., the fraction of the audience, who were convinced to change their behavior as a result of being exposed to radio (see section 3 of the online appendix for detailed calculations). Under the assumption of four voters-listeners per subscription on average, we find that the persuasion rates of the messages “*do not vote for the extremist parties (including the Nazis)*” in September 1930 and “*vote for the Nazis*” in March 1933 were 36.8% and 9.8%, respectively. (We present the sensitivity of persuasion rates to the assumption about the number of listeners who are eligible voters per subscription in online appendix Figure A7.)³⁶ At first glance, the fact that the political campaign on the radio in the Weimar republic in 1930 appeared to be more persuasive than the first Nazi radio campaign of 1933 looks surprising. However, a combination of two important factors contributed to the relative ineffectiveness of the Nazi first radio campaign. First and most importantly, the effect of radio in 1933 was limited by the pattern of radio listenership. In

³⁴ The comparisons with the counterfactual vote shares for the Nazis in the absence of radio, presented in the introduction, are obtained by comparing the observed outcome with a counterfactual scenario, in which the predicted share of radio subscriptions is set to zero. Namely, in September 1930, the Nazis actually got 18.25% of the total vote, whereas in the counterfactual scenario, they would have 4.1 percentage points more ($=0.217$ [negative of the respective point estimate, Table 4, Panel A, Column 2] * 18.76 [mean district value of the predicted signal strength in 1930, Table A1]). In March 1933, the Nazis got 43.9%, whereas in the counterfactual scenario, they would have 2.9 percentage points less ($=-0.128$ [negative of the respective point estimate, Table 4, Panel A, Column 4] * 22.83 mean district value of the predicted signal strength in 1933, Table A1]).

³⁵ We also examine how radio affected voter turnout. Tables A3 and A4 in the online appendix present the results using the same specifications as in Tables 3 and 4, respectively. We find only marginally significant effects of radio on turnout and only in few specifications. In particular, there is a small (and not very robust) positive effect of radio availability on turnout after the Nazis got control over radio.

³⁶ If the mean number of listeners per subscription was between three and six, the persuasion power of German political radio during the campaigns of 1930 and 1933 was comparable in size to the persuasion power of the modern media found in the literature in different settings: 12% persuasion rate for the Fox News Channel (DellaVigna and Kaplan 2007), 20% – for the Washington Post (Gerber, Karlan, and Bergan 2009), and 65% – for the “negative” message, “do not vote for the government party,” broadcasted by an independent Russian TV channel in 1999 (Enikolopov et al. 2011).

particular, the Nazi 1933 election campaign was primarily targeted at uneducated working poor (Paul 1990[1933]). This was the social group, which had the largest share of voters, who switched to voting for NSDAP in 1933 (King et al. 2008), but inside which the ownership of radio sets was less common, albeit not negligible.³⁷ And second, the campaign of March 1933 election was shorter than that of the September 1930 elections, which may also have contributed to its relative ineffectiveness. However, a direct comparison of persuasion rates for 1930 and 1933 should be exercised with caution because, as shown by the previous literature on media persuasion, it is harder to persuade voters to vote for a particular party than not to vote for it, as the latter includes the option of not turning out to vote (see, e.g., Ansolabehere et al. 1999 and Enikolopov et al. 2011).

Evidence in favor of the identifying assumptions and robustness checks. In order to provide evidence that our cross-sectional results are unlikely to be driven by unobserved cross-district heterogeneity, we follow Altonji, Elder, and Taber (2005) to predict signal strength in each district with observables by taking the fitted value from the regressions of the signal strength and its non-linear transformation on the full set of baseline controls, with the exception of the most fundamental structural determinants of the transmitter location, namely, the fifth-order polynomial of population (for which we control directly). Then, we regress the change in Nazi vote share as of 1930 and 1933 on this fitted value controlling for the fifth-order polynomial of population. The results are presented in Panel C of Table 4. All but one of these regressions show no significant correlation between the indices of observables, which best predict the signal strength or its logistic transformation, and the change in the Nazi vote share. The one exception is a negative and significant (at 10% level) correlation between the index of observables, predicting non-linear transformation of the signal strength, and the change in Nazi vote share in 1933. As the sign of this correlation is the opposite to the baseline results, under a reasonable assumption that unobservables are positively correlated with observables, this test suggests that our cross-sectional results are not driven by

³⁷ We present historical data on radio listenership by social group in section 5 of the online appendix. We also investigate differential effects of radio during this campaign depending on the social structure of the population. Consistent with King et al. (2008), we find that the effect of the radio was stronger in communities with larger parts of the population comprised of groups that gave larger political support to the Nazis in 1933, i.e., districts with higher share of self-employed workers, helping family members, and agricultural workers (see Table A5 in the online appendix).

unobserved heterogeneity among districts, and in 1933 they may be biased downwards.³⁸ We also test whether the change in the sign of cross-sectional estimates between 1930 and 1933 is driven by the change in the radio availability rather than the change in the radio content. We fix radio signal strength at different points in time between 1928 and 1933 and re-estimate equation (2) for both 1930 and 1933 replacing contemporaneous signal with its lags and leads. This exercise allows us to compare the effect of the change in radio content holding the signal constant. Figure 5 summarizes the results by plotting the coefficient estimates. Consistent with our previous findings, the effect of radio exposure on the change in the Nazi vote share changes sign from negative in 1930 to positive in 1933 irrespective of the time at which we measure radio signal.³⁹

We also examine robustness of our results to using other electoral outcomes. Namely, we study the effects of radio on the voting “yes” during the 1929 Nazi-supported referendum for the “Law against the Enslavement of German People,” i.e., against the Treaty of Versailles, and on the results of presidential election in 1932. The radio programing was slanted against voting “yes” in the referendum and in favor of Hindenburg and against Hitler in the presidential elections. In particular, we estimate a cross-sectional specification (3) for

³⁸ Table A6 in the online appendix illustrates how the point estimates of the coefficients of interest are affected by changes in the list of covariates. For both September 1930 and March 1933 elections, the magnitude of the estimated effects does not change much with additional covariates after we control for region fixed effects, population, and urban district dummy. Most notably, controlling for the distance to large cities, which may proxy for the exposure to alternative sources of political information, has a very limited effect on the magnitude of the estimated coefficients. Moreover, the results are robust to controlling directly for the alternative sources of political information such as the number of newspapers, the number of cinemas, as well as the number of public speeches made by Adolf Hitler (the results are presented in Table A7 in the online appendix). We also check that our results are not driven by specific parametric assumptions. In Panel A of Table A8 in the online appendix, we verify that the results are robust to using a binary measure of signal strength. Panel B of Table A8 reports the results of nearest neighbor matching performed on all controls with exact matching by region and urban/rural district status. We also checked that the results are robust to excluding regions with a very low and very high signal strength. Specifically, we drop regions for which the slope of the generalized logistic function of the signal presented in Figure 4 is smaller than 0.1 or 0.2. The results for these subsamples become even stronger (see Table A9). Table A10 in the online appendix presents the results of the specification, in which the changes in the vote share for the Nazis in 1930 and 1933 are related to the lagged signal strength and its change from the previous election (i.e., the specification described in footnote 28). As predicted, the estimates coefficients both at lagged signal strength and its change are negative in 1930 and positive in 1933. Three out of four coefficients are statistically significant. In Table A11 of the online appendix, we verify that the results of the panel regressions, presented in the columns 3 and 4 of Table 3, are robust to replacing the contemporaneous radio signal strength by the signal strength measured in 1928 in the interaction between radio signal and the pro-Nazi slant.

³⁹ Since the effect of political predispositions (measured by voting in 1924) and the geographical factors are not expected to vary over time, for this exercise, we use a more parsimonious set of controls, which includes region fixed effects, fifth polynomial of population, urban district dummy, shares of Jews and Catholics, and shares of blue-collar and white-collar workers.

these outcomes controlling for our baseline set of controls and the NSDAP vote share in 1928 (to account for the pre-existing political preferences). Panel A of Table 5 presents these results. The support of the referendum is significantly negatively related to radio exposure, measured both by radio signal strength and its non-linear transformation. An 8.2 increase in the predicted radio subscription rate (equal to a one standard deviation of the actual subscription rate) led to a 2 percentage point, i.e., 11.4 percent, decrease in the support of the referendum. The estimated effect of radio on the results of the presidential elections is less precise, but also has the predicted sign: positive for the vote share of incumbent von Hindenburg, and negative for the vote share of Hitler. Only one out of four estimated coefficients is statistically significant, however. Panel B of Table 5 presents the results of the test à la Altonji, Elder, and Taber (2005), which confirm that the index of observables that best predicts radio availability is not significantly correlated with the outcomes of interest, controlling for the fifth-order polynomial of population, urban district dummy, and pre-existing political preferences, with one exception of the marginally significant effect of the index of observables predicting non-linear transformation of signal strength on the vote for von Hindenburg, for which the sign of the effect is the opposite to the baseline, suggesting that the baseline coefficient may be biased downwards.

Discrimination against Jews. To examine the effect of radio on the spread of anti-Semitism before the full consolidation of power by the Nazis we look at the incidents of discrimination and violence against Jews across German cities during the period between 1929 and 1934. At that time, the most common manifestations of anti-Semitism took the form of harassment. We estimate equation (1) with city and year fixed effects, in which the unit of analysis is city-year, the dependent variable is a dummy for the occurrence of an anti-Semitic action, and the main independent variable is the plain signal strength. We cannot use non-linear transformation of signal strength because the data on subscription rate are not available at city level (and subscription rate was very different in cities than in rural areas).

The results are presented in Table 6. During the 1929–1932 period when the Nazis had no access to radio, radio had a negative, but statistically insignificant effect on discrimination against Jews (column 1). In 1933–1934, when the Nazis already had control over content, discrimination against Jews was positively and significantly associated with the radio availability (column 2). Note that the variation in the signal strength is insufficient to estimate

the effect of radio with city fixed effects for 1933–1934; and therefore, we estimate the effect on a pooled cross-section of cities. If we take into account both the radio expansion between 1929 and 1933 and the change in the radio content between 1932 and 1933 (column 3), we find that the coefficient on the radio availability interacted with the measure of pro-Nazi slant is positive and significant.⁴⁰ Overall, the results indicate that radio had a significant effect on anti-Semitism even before the Nazis were able to fully consolidate power and started to broadcast the message of global Jewish conspiracy on the radio, with the sign of the effect depending on the direction of the radio slant.

Nazi party membership. We also consider whether radio helped the Nazis to recruit new party members. The results are reported in Table 7. The sample consists of 613 (out of 958) districts with information on party membership.⁴¹ We find that in 1932, when radio was pro-Weimar government, the number of party members was not significantly related to radio availability (columns 1 and 2). It is not surprising that the Weimar republic’s radio did not have an effect on the Nazi party membership, as, presumably, those who joined the party at that time were mostly the core Nazi supporters, whose preferences for the party were relatively strong and could not be much affected by political news on the radio. In contrast, in February-May of 1933, after the Nazis took over the radio, party membership became positively and significantly associated with radio signal strength (columns 3 and 4). Columns 5 and 6 show that party membership in February-May of 1933 increased faster in places where the 1932 growth rate was higher, however, controlling for new party membership in 1932 does not alter the results: coefficients on the radio exposure remain positive and significant. The magnitude of the effect implies that 58 percent of new NSDAP members, who joined the party during the first two months of the Nazi control over the broadcast, were persuaded by radio propaganda.⁴² Panel B of Table 7 presents the results of the Altonji, Elder, and Taber (2005) tests; they yield no statistically significant association between the indices of observables and the new Nazi party membership.

⁴⁰ The results of cross-sectional analysis year by year are presented in Table A12 in the online appendix. Radio availability was associated with significantly lower discrimination against Jews in 1930 and significantly higher in 1933. The effects are not significant in all other years taken separately. Table A13 in the online appendix verifies that the results of the panel specification are robust to fixing the signal strength at 1928 level.

⁴¹ Results are robust to using the full sample, treating missing observations as zeros.

⁴² As in the other counterfactual scenarios, this estimate is obtained by comparing the observed outcome with a scenario, in which the logistic transformation of signal strength is set to zero.

Overall, our results are consistent with the hypothesis that, before Germany became fully consolidated dictatorship, radio played a role in slowing down (before 1933) and facilitating (after 1933) the rise of the Nazis to power.

6.2. Did radio help the Nazis maintain political support after they fully consolidated power?

In order to examine whether and how radio helped the Nazis to maintain public support for their policies during the dictatorship, we focus on the following measures of anti-Semitism: deportations of Jews between 1933 and 1942, anti-Semitic letters to the Nazi newspaper, *Der Stürmer* from 1935-1938, and attacks on synagogues during the Night of Broken Glass in 1938 (*Reichskristallnacht*). We estimate equation (3) with these outcomes as dependent variables and radio signal strength in 1937 as the main explanatory variable.⁴³ Since the variable measuring the number of letters to *Der Stürmer* is right-skewed, we use negative binomial distribution maximum likelihood estimation. Regressions with attacks on synagogues as the dependent variable are run on a subsample of cities with a synagogue.

The results presented in Panel A of Table 8 indicate that, on average, the exposure to Nazi radio propaganda in the second half of the 1930s significantly increased both the number of deportations of Jews and the number of letters to *Der Stürmer*. The magnitudes of these effects are as follows. A one standard deviation increase in the radio signal strength in 1937 led to a 21 percent increase in the number of deportations from the mean level of 11.7 people deported from an average city. It also led to a 22 percent increase in the number of letters to *Der Stürmer* (or additional 0.38 letters per city) from the mean level of 1.76 letters. The effect of radio on the attacks on synagogues is insignificant (while the point estimate has the predicted positive sign).⁴⁴ The Altonji, Elder, and Taber (2005) tests presented in the Panel B of Table 8 show no statistical association between the indices of observables that best predict signal strength and deportations or anti-Semitic letter, suggesting that unobserved

⁴³ As mentioned above, the data for subscription rates are not available after April 1933 at district level or at any point in time at city level. Therefore, we cannot estimate the S-shape relationship between the signal strength and listenership for the second half of the 1930s, as listenership almost doubled between 1933 and 1937 (Vaessen 1938). The results are robust to using signal strength for later periods.

⁴⁴ A possible reason for why we do not find a significant effect on the attacks on synagogues is that it was organized and largely executed by the Nazis. Historians suggest that the Nazis staged this event as a popular act despite low participation of the ordinary Germans. E.g., according to Somerville (2012), the violence was “organized by party officials, not a spontaneous outbreak of anti-Jewish violence by ordinary Germans or even violence encouraged by propaganda” (p. 124).

heterogeneity is not driving these results. There is a statistically significant relationship between the index of observables that best predict signal strength and the attacks on synagogues, but for this outcome, baseline results are insignificant.

The average effect of radio exposure on the expressions of anti-Semitism masks an important heterogeneity of the effect of radio propaganda depending on listeners' priors with regard to the broadcasted message and on the general susceptibility to propaganda. To unveil this heterogeneity, we estimate equation (4), which adds the measures of predispositions to the Nazi propaganda or general susceptibility to propaganda and their interaction with radio signal strength as additional covariates to specification (3). We proxy predisposition to anti-Semitism with two alternative variables: (i) pogroms in 1349 during the Black Death in the subsample of cities with historical Jewish settlement and (ii) the vote in May 1924 election for the National Socialist Freedom Party (NSFP), a right-wing party with an anti-Semitic rhetoric which was formed as a coalition of the German *Völkisch* Freedom Party (DVFP, a spinoff of DNVP) and the then-banned NSDAP. We measure the general susceptibility of the population to extremist messages, e.g., due to high levels of anxiety during the economic hardships of the early 1930s, with land inequality measured in 1895 (Ziblatt 2008, 2009), hypothesizing that in places with higher wealth inequality the general public was particularly dissatisfied during the severe economic crisis, and, thus, was more easily persuaded by the Nazi messages.

Table 9 presents the results. Panel A focuses on the effect of pogroms in 1349 with sample confined to the cities with Jewish settlements in 1349 (as this measure of historical anti-Semitism is meaningful only in this subsample, Voigtländer and Voth 2012). Panel B reports results for the vote for NSFP in 1924 for the population of districts. We find that the coefficients on the interaction terms between our measures of predispositions to anti-Semitism, namely, pogroms in 1349 and the vote for NSFP in 1924, on the one hand, and the radio availability in 1937, on the other hand, are positive and statistically significant for the deportations and the letters to *Der Stürmer*. The coefficients on these interaction terms in regressions for the attacks on synagogues are also positive, but imprecisely estimated. These results indicate that Nazi radio propaganda had a larger effect on the expressions of anti-Semitism in cities with *ex-ante* more anti-Semitic population. Propaganda of anti-Semitic actions was much more effective for cities which witnessed historical pogroms compared to the average city: the point estimates of the effect of the radio propaganda on the expressions of

anti-Semitism are 2.6 to 3.8 times larger in cities with pogroms in 1349 (as seen from the comparison of the first rows of Tables 8 and Panel A of Table 9). Propaganda was also more persuasive on average in cities with higher vote for NSFP in 1924. The effect of radio propaganda on deportations in places with the vote for NSFP in 1924 one standard deviation above the mean was 2.1 times larger compared to the level in places with the average political support for NSFP. In addition, a one standard deviation increase in the vote for NSFP in 1924, led to a 1.8 times larger the effect of radio propaganda on the letters to *Der Stürmer*.

Panel C of Table 9 focuses on the historical land inequality. We find a positive and statistically significant effect of the interaction term between the historical land inequality and radio signal strength for all three outcomes. This evidence is consistent with the prediction that propaganda is more effective on people with higher levels of anxiety, to which population in unequal societies is particularly prone during economic recessions. The effects are sizable. The effect of radio propaganda on both deportations and anti-Semitic letters in places where historical land inequality was one standard deviation above the mean was two times larger than in places with the mean level of land inequality. Radio did not have an effect on the attacks on synagogues in places with the mean level of land inequality and it had a positive (although not large in magnitude) and significant at 10 percent level effect at the level on land inequality one standard deviation above the mean.

We also explore at what levels of vote for NSFP in 1924 and historical land inequality propaganda starts to matter using a more flexible specification, in which we estimate the effect of radio availability separately in each quartile of the distribution of these proxies for the predisposition to propaganda. Figure A8 in the online appendix presents the results. Typically, we find no effect of radio propaganda on the expressions of anti-Semitism for the first of the four quartiles of the distributions of these two measures; with the effect in the top quartile being the largest in most cases. Overall, the coefficients on the interaction between signal strength with various measures of susceptibility to propaganda confirm that propaganda has a much stronger effect when falls on a fertile ground.

Importantly, the results presented in Panel A of Table 9 also show that propaganda can backfire and lead to a higher level of resistance to the dictator, if propaganda messages contradict the prior of the listeners regarding the message. In particular, in cities where pogroms did not occur during the Black Death despite having historical Jewish settlement, the

effect of radio signal strength was negative as reflected in the negative and significant coefficients on the radio signal strength (second row of Panel A of Table 9) for both the deportations and the letters to *Der Stürmer*. Again, the result for the attacks on synagogues has a sign consistent with the other results, but statistically insignificant. We find that in cities that had historical Jewish settlement, but did not experience pogroms during Black Death, a one standard deviation increase in radio availability led to a 28 percent decrease in deportations and 45 percent decrease in the number of letters to *Der Stürmer*. Intuitively, when listeners hear propaganda messages that they know are false, they use this information to negatively update their prior assessment of the quality of the regime. In the case of the Nazi anti-Semitic propaganda of the later 1930s, such an update must have led to a better understanding of the dangers of the regime among non-anti-Semitic population and, thus, lower susceptibility to other means of persuasion by the Nazis and possibly even triggered higher resistance and willingness to hide Jews among Nazi opponents.⁴⁵

In sum, the results presented in Tables 8 and 9 confirm that the exposure to Nazi radio propaganda increased the frequency of expressions of anti-Semitism by ordinary Germans on average and that the effect of the propaganda varied with the listeners' predisposition to the message and general susceptibility to propaganda. Listeners in places with historically high anti-Semitism (and, therefore, positive predisposition to the Nazi anti-Semitic messages) and high land inequality (and, therefore, higher anxiety in times of economic crises) were more receptive to the Nazi radio propaganda. In contrast, when the listeners were negatively predisposed to anti-Semitic messages, propaganda was actually dissuasive, rather than persuasive.

6.3. Additional placebo tests

To provide additional evidence in favor of our identification assumptions, we test whether German radio was associated with outcomes that it was not supposed to affect. In section 5.3,

⁴⁵ In contrast to the historical pogroms variable, we do not expect a negative direct effect of the radio propaganda in localities with zero vote for NSFP in 1924, as it does not indicate the absence anti-Semitism in these cities. To explore further a possibility that propaganda may backfire, we calculate the effect of the signal strength at the lowest land Gini in our sample and report it in third row from the bottom of the table. The effect of radio propaganda at the minimum level of land Gini (45 in our sample) is negative and statistically significant for the attacks on synagogues.

we already discussed the placebo tests, in which the results of all elections between 1920 and 1928 as well as the change in the vote share of extreme nationalists between 1924 and 1928 were related to the level of signal strength between 1928 and 1933 (see Table A2). We also verified that the past changes in electoral outcomes between December 1924 and May 1928 elections and between May and December 1924 elections are unrelated to future changes in the signal strength for all periods analyzed (see Table A14 in the online appendix). Overall, in these two sets of placebo tests combined we find significant effects at 1, 5, and 10% level in 0.6, 3.2, and 7.7% out of 156 regressions, respectively.

We also estimate a set of placebo regressions for the city sample. Analogous to our estimation of the effect of radio on the expressions of anti-Semitism, we test for the effect of signal strength in 1930, 1932, 1933, 1935, and 1937 on the crime rates from 1900 to 1920 and on the anti-Jewish pogroms in 1920s in the cross-section of cities (see Table A15 in the online appendix). In addition, we estimate the interaction effects between pogroms in 1349 and the signal strength for these outcomes. We find no significant coefficients in 20 regressions, estimating direct placebo effects of radio, and one marginally significant (and very small in magnitude) coefficient in 20 regressions on the interaction with historical pogroms, which is well within the margin of statistical error. Overall, the placebo tests suggest that there is no unobserved heterogeneity or pre-trends that could drive our results.

7. Conclusions

We examine the role mass media played before and during the fall of democracy in the Weimar Republic and after the full consolidation of dictatorship in the Third Reich. We find that the introduction of a pro-Weimar government slant in the radio news programs in 1929 was effective in reducing the growth of the Nazi Party vote share in the three consecutive parliamentary elections between 1930 and 1932. During the campaign for the March 1933 election, when the Nazis took control over the radio and began broadcasting pro-Nazi messages, the effect of the previous four years of the pro-Weimar radio was undone in just one month. During the establishment of the Nazi regime in early 1930s, Nazi radio convinced a large number of Germans to engage in discrimination and violence against Jews and to join the Nazi party.

After the consolidation power in the second half of the 1930s, when radio propaganda took its full strength, radio encouraged denunciations of Jews, leading to their deportation to concentration camps, and open expressions of anti-Semitism, such as writing anti-Semitic letters to a national newspaper. The effects of the anti-Semitic propaganda on the expressions of anti-Semitism were particularly pronounced when the message was aligned with listeners' predispositions: a more anti-Semitic audience, as measured by the historical anti-Semitism, was more easily convinced by Nazi radio propaganda. In contrast, propaganda was counter-productive when the message contradicted the listeners' priors: the least anti-Semitic audience, measured by the absence of historical anti-Semitism, reacted negatively to the Nazi radio showing lower levels of support for the regime as a result of radio exposure.

Overall, the evidence suggests that mass media can play a role in the fall or preservation of an immature democracy. In particular, the restrictions of extremist speech are an important element helping mass media to serve as a safeguard of democracy. Without such restrictions, mass media can become a catalyst for the establishment of a dictatorial rule. Propaganda in an established dictatorial regime contributes to its stability and dictator's popularity on average, but it is effective only among audiences that are positively predisposed to the propaganda's message.

References

- Acemoglu, Daron, and James Robinson (2006) *Economic Origins of Dictatorship and Democracy*. Cambridge, UK: Cambridge University Press.
- Acemoglu, Daron, and James Robinson (2012) *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*. New York: Random House LLC.
- Alicke, Klaus-Dieter (2008) *Lexikon der jüdischen Gemeinden im deutschen Sprachraum: Bd.1: Aachen—Groß-Bieberau, Bd.2: Großbock—Ochtendung, Bd. 3 Ochtrup—Zwittau*. Gütersloher: Gütersloher Verlagshaus.
- Ansolabehere, Stephen, Shanto Iyengar, and Adam Simon (1999) "Replicating Experiments Using Aggregate and Survey Data: The Case of Negative Advertising and Turnout." *American Political Science Review*, 93(4): 901–909.
- Antonji Joseph, Todd Elder and Christopher Taber (2005) "Selection on Observed and Unobserved Variables: Assessing the Effectiveness of Catholic Schools." *Journal of Political Economy*, 113(1), 151–184.
- Bramsted, Ernest K.(1965) *Goebbels and national socialist propaganda 1925–1945*, Michigan State University Press.

- Bausch, Hans (1956) *Der Rundfunk im politischen Kräftespiel der Weimarer Republik 1923–1933*. J.C.B. Mohr (Paul Siebeck): Tübingen.
- Besley, Timothy, and Andrea Prat (2006) “Handcuffs For The Grabbing Hand: Media Capture And Government Accountability.” *American Economic Review*, 96 (3): 720–736.
- Brader Ted, Valentino Nicholas A., and Suhay Elizabeth (2008). What triggers public opposition to immigration? Anxiety, group cues, and immigration threat. *American Journal of Political Science*, 52 (4) 959–978.
- Brustein, William, and Jürgen Falter (1995) “ Who Joined the Nazi Party? Assessing Theories of the Social Origins of Nazism”, *Zeitgeschichte*, 22 (3/4): 83–108.
- Bundesarchiv (2007) *Gedenkbuch Opfer der Verfolgung der Juden unter der Nationalsozialistischen Gewaltherrschaft in Deutschland, 1933–1945*. Koblenz: Bundesarchiv.
- Cebulla, Florian (2004) *Rundfunk und ländliche Gesellschaft 1924–1945*. Ruprecht GmbH & Company: Göttingen.
- Childers, Thomas (1983) *The Nazi Voter: The Social Foundations of Fascism in Germany, 1919–1933*. Chapel Hill: University of North Carolina Press.
- DellaVigna, Stefano, and Ethan Kaplan (2007). “The Fox News Effect: Media Bias And Voting.” *Quarterly Journal of Economics*, 122(3): 807–860.
- DellaVigna, Stefano, Ruben Enikolopov, Vera Mironova, Maria Petrova, and Ekaterina Zhuravskaya (2014). “Cross-Border Effects Of Foreign Media: Serbian Radio And Nationalism In Croatia.” *American Economic Journal: Applied Economics*, 6(3): 103–132.
- DellaVigna, Stefano and Matthew Gentzkow (2010), “Persuasion: Empirical Evidence.” *Annual Review of Economics*, 2(1): 643–669.
- Diller, Ansgar (1980) *Rundfunkpolitik im Dritten Reich*. München.
- Domarus, Max (1962) “*Hitler Reden und Proklamationen 1932–1945*”, Band 1, Würzburg.
- Durante, Ruben and Brian Knight (2012). “Partisan Control, Media Bias, and Viewer Responses: Evidence from Berlusconi’s Italy,” *Journal of the European Economic Association*, 10(3): 451–481.
- Dusik, Bärbel (ed.) (1992) *Hitler, Adolf, Reden, Schriften, Anordnungen*, Institut für Zeitgeschichte, München.
- Dussel, Konrad (1999) *Deutsche Rundfunkgeschichte: eine Einführung*, Konstanz: UKV.
- Dussel, Konrad (2006) “Radio Programming, Ideology and Cultural Change: Fascism, Communism and Liberal Democracy, 1920s–1950s,” in Führer, Karl Christian, Ross, Corey (2006) *Mass Media, Culture And Society In Twentieth-Century Germany*, Basingstoke: Palgrave Macmillan
- Egorov, Georgy, Sergei Guriev and Konstantin Sonin (2009). “Why Resource-Poor Dictators Allow Freer Media: A Theory And Evidence From Panel Data.” *American Political Science Review*. 103(4): 645–668.

- Enikolopov, Ruben, Maria Petrova, and Ekaterina Zhuravskaya (2011). "Media And Political Persuasion: Evidence From Russia." *American Economic Review*, 111(7): 3253–3285.
- Falter, Jurgen (1991) *Hitlers Wähler*. C. H. Beck, Munich.
- Falter, Jürgen and Dirk Hänisch (1990). "Wahl- und Sozialdaten der Kreise und Gemeinden des Deutschen Reiches von 1920 bis 1933." *GESIS Datenarchiv, Köln. ZA8013 Datenfile Version 1.0.0*, doi:10.4232/1.8013.
- Ferguson, Thomas and Hans-Joachim Voth (2008). "Betting On Hitler: The Value Of Political Connections In Nazi Germany." *Quarterly Journal of Economics*, 123(1): 101–137.
- Fuge, Janina. (2009) An den Funkpranger gestellt und mit dem Wellendetektiv gejagt. Die Schwarz Hörer als Konstante der Rundfunkgeschichte, Nordwestdeutsche Hefte zur Rundfunkgeschichte, no. 7.
- Führer, Karl Christian (1997) "A Medium of Modernity? Broadcasting in Weimar Germany, 1923–1932, *The Journal of Modern History*, 69 (4), pp.722–753.
- Gellately, Robert (2001) *Backing Hitler*. Oxford University Press.
- Gehlbach, Scott, and Konstantin Sonin (2014) "Government Control Of Media," *Journal of Public Economics*. 118, pp. 163–171.
- Gentzkow, Matthew (2006) "Television And Voter Turnout." *Quarterly Journal of Economics* 121(3), 931–972.
- Gentzkow, Matthew, Jessy Shapiro and Michael Sinkinson (2011) "The Effect of Newspaper Entry and Exit on Electoral Politics," *American Economic Review*. 101 (7).
- Gerber, Alan, Dean Karlan and Daniel Bergan, D. (2009). "Does The Media Matter? A Field Experiment Measuring The Effect Of Newspapers On Voting Behavior And Political Opinions." *American Economic Journal: Applied Economics*, 1(2): 35–52.
- Hänisch, Dieter (1988) *Wahl- und Sozialdaten der Kreise und Gemeinden des Deutschen Reiches 1920–1933, Database ZA8013* (Berlin: Leibniz-Institut für Sozialwissenschaften-GESIS, 1988).
- Hufford, George A. (2002) The ITS Irregular Terrain Model, Version 1.2.2 the Algorithm. Available: <http://flattop.its.blrdoc.gov/itm.html>.
- King, Gary, Ori Rosen, Martin Tanner, and Alexander Wagner (2008) "Ordinary Economic Voting Behavior In The Extraordinary Election Of Adolf Hitler." *Journal of Economic History*, 68(4): 951–996.
- Knight Brian, Chiang Chun-Fung (2011) "Media Bias And Influence: Evidence From Newspaper Endorsements." *Review of Economic Studies*, 78(3), 795–820.
- Lacey, Kate (2006) "The Invention of a Listening Public: Radio and its Audiences" in Führer, Karl Christian, Ross, Corey (2006) *Mass Media, Culture And Society In Twentieth-Century Germany*, Basingstoke: Palgrave Macmillan.
- Lerg, Winfried (1980). *Rundfunkpolitik in der Weimarer Republik*. Deutscher Taschenbuch Verlag.

- Marcus, George., Sullivan, John, Theiss-Morse, Elizabeth, and Stevens, Daniel (2006) "The Emotional Foundation of Political Cognition: The Impact of Extrinsic Anxiety on the Formation of Political Tolerance Judgments," *Political Psychology* 26(6), 1467–9221
- Olken Benjamine (2009). "Do TV And Radio Destroy Social Capital? Evidence From Indonesian Villages." *American Economic Journal: Applied Economics*, 1(4): 1–33.
- Paul, Gerhard (1990 [1933]) *Aufstand der Bilder, Die NS-Propaganda vor 1933*. Bonn.
- Pickett, Kate, and Richard Wilkinson (2011) *The Spirit Level: Why Greater Equality Makes Societies Stronger*. Bloomsbury Press, New York.
- Pohle, Heinz (1955) *Der Rundfunk als Instrument der Politik: Zur Geschichte d. Dt. Rundfunks von 1923/1938*. Verlag Hans Bredow-Inst.: Hamburg.
- Reichs-Kino-Adreßbuch (1932) Berlin: Verlag der Lichtbildbühne, Berlin, vol. 11.
- Roller, Walter (1977) *Tondokumente zur Zeitgeschichte 1888–1932*, Frankfurt am Main.
- Ross, Corey (2006a) "Mass Politics And The Techniques Of Leadership: The Promise And Perils Of Propaganda In Weimar Germany." *German History*, 24(2), 184–211.
- Ross, Corey (2006b) "Mass Culture and Divided Audiences: Cinema and Social Change in Inter-War Germany," *Past and Present*, 193 (1): 157–195.
- Ross, Corey (2008) *Media and the making of modern Germany: mass communications, society, and politics from the Empire to the Third Reich*. Oxford University Press.
- Satyanath, Shanker, Nico Voigtländer, Nico, and Hans-Joachim Voth (2013) "Bowling For Fascism: Social Capital And The Rise Of The Nazi Party In Weimar Germany, 1919–33," NBER working paper 19201.
- Schallaufnahmen der Reichs-Rundfunk-GmbH, (ca. 1989), vol. 1: *Von Ende 1929 bis Anfang 1936, 1: Politik, Gespräche, Hörspiele, Veranstaltungen, Orchester- und Kammermusik us.*, Reichs-Rundfunk-Gesellschaft, Düsseldorf
- Schulthess (1932) in Thürauf, Ulrich (ed.), *Schulthess' Europäischer Geschichtskalender*, München.
- Shirer, William (1960). *The Rise and Fall of the Third Reich: A History of Nazi Germany*. Simon & Schuster.
- Schütte, Wolfgang (1971) "Regionalität und Föderalismus im Rundfunk." *Die geschichtliche Entwicklung in Deutschland 1923–1945*. Knecht.
- Sington, Derrick and Arthur Weidenfeld (1943). *The Goebbels Experiment: A Study of the Nazi Propaganda Machine*. New Haven.
- Somerville Keith (2012). *Radio Propaganda and the Broadcasting of Hatred*. Palgrave MacMillan, New York.
- Spector, Samuel, and Geoffrey Wigoder, (Eds.). (2001). *The Encyclopedia of Jewish Life Before and During the Holocaust*, New York, NYU Press.
- Steinweis, Alan E., 2009, *Kristallnacht 1938*, Cambridge, Harvard University Press.
- Strömberg, David (2004). "Radio's Impact On Public Spending." *Quarterly Journal of*

Economics, 119(1): 189–221.

Vaessen, Kurt (1938) “Daten aus der Entwicklung des Rundfunks. Mit Vergleichszahlen aus der Geschichte des Films, der Presse und des Verkehrswesens” Würzburg: Triltsch.

Voigtländer, Nico, and Hans-Joachim Voth (2012). “Persecution Perpetuated: Medieval Origins Of Anti-Semitic Violence In Nazi Germany.” *Quarterly Journal of Economics*, 127(3): 1339–1392.

Voigtländer, Nico, and Hans-Joachim Voth (2014). “Highway to Hitler,” NBER Working Paper 20150.

Vollmann, Heinz (1936). *Rechtlich-wirtschaftlich-soziologische Grundlagen der deutschen Rundfunk-Entwicklung*. Leipzig.

von Saldern, Adelheid (1990) “The Hidden History of Mass Culture.” *International Labor and Working-Class History*, 37, pp. 32–40.

von Saldern, Adelheid (2004) "Volk and Heimat Culture in Radio Broadcasting during the Period of Transition from Weimar to Nazi Germany." *The Journal of Modern History* 76 (2), 312–346.

Weiss, Heinz (1934) *Rundfunk im Aufbruch. Handbuch des deutschen Rundfunks 1934 mit Funkkalender. Mit einem Geleitwort von Reichsminister Pg. Dr. Goebbels*, Reichsverband Deutscher Rundfunkteilnehmer (R.D.R.) E.V. Berlin.

Welch, David (2002) *The Third Reich: politics and propaganda*. Routledge.

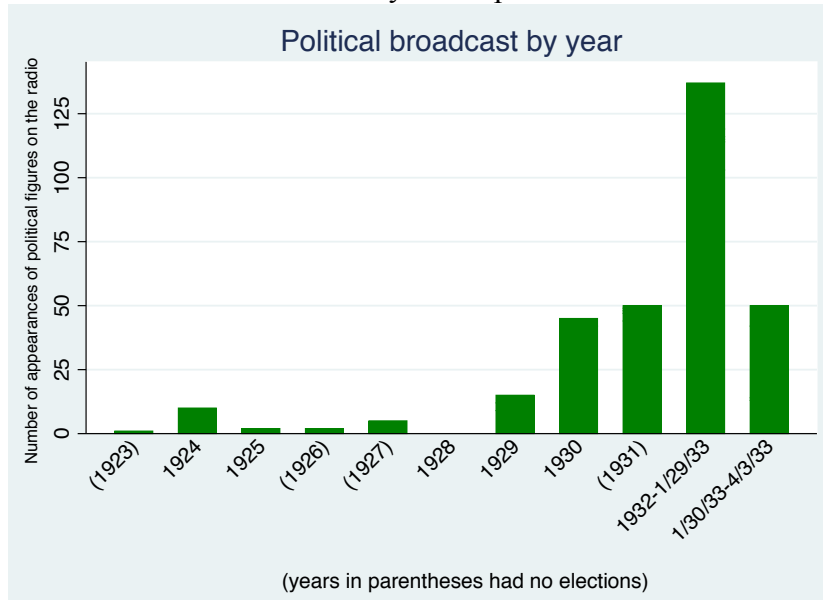
Yanagizawa-Drott, David (2014) “Propaganda And Conflict: Theory And Evidence From The Rwandan Genocide.” *Quarterly Journal of Economics*, 129(4): 1947–1994.

Ziblatt, Daniel (2008) "Does Landholding Inequality Block Democratization? The "Bread and Democracy" Thesis and the Case of Prussia" *World Politics* 60 (4): 610–641.

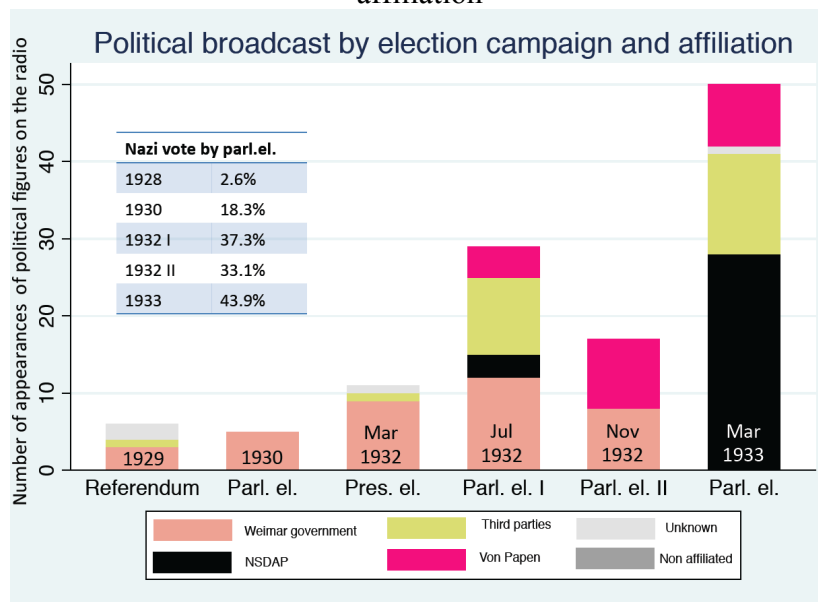
Ziblatt, Daniel (2009) "Shaping Democratic Practice and the Causes of Electoral Fraud" *American Political Science Review* 103 (1): 1–21.

Zimmermann, Clemens (2006) “From Propaganda To Modernization: Media Policy And Media Audiences Under National Socialism.” *German History*, Vol. 24 No. 3.

Figure 1. Timing and political orientation of radio broadcast
Panel A. The intensity of the political broadcast

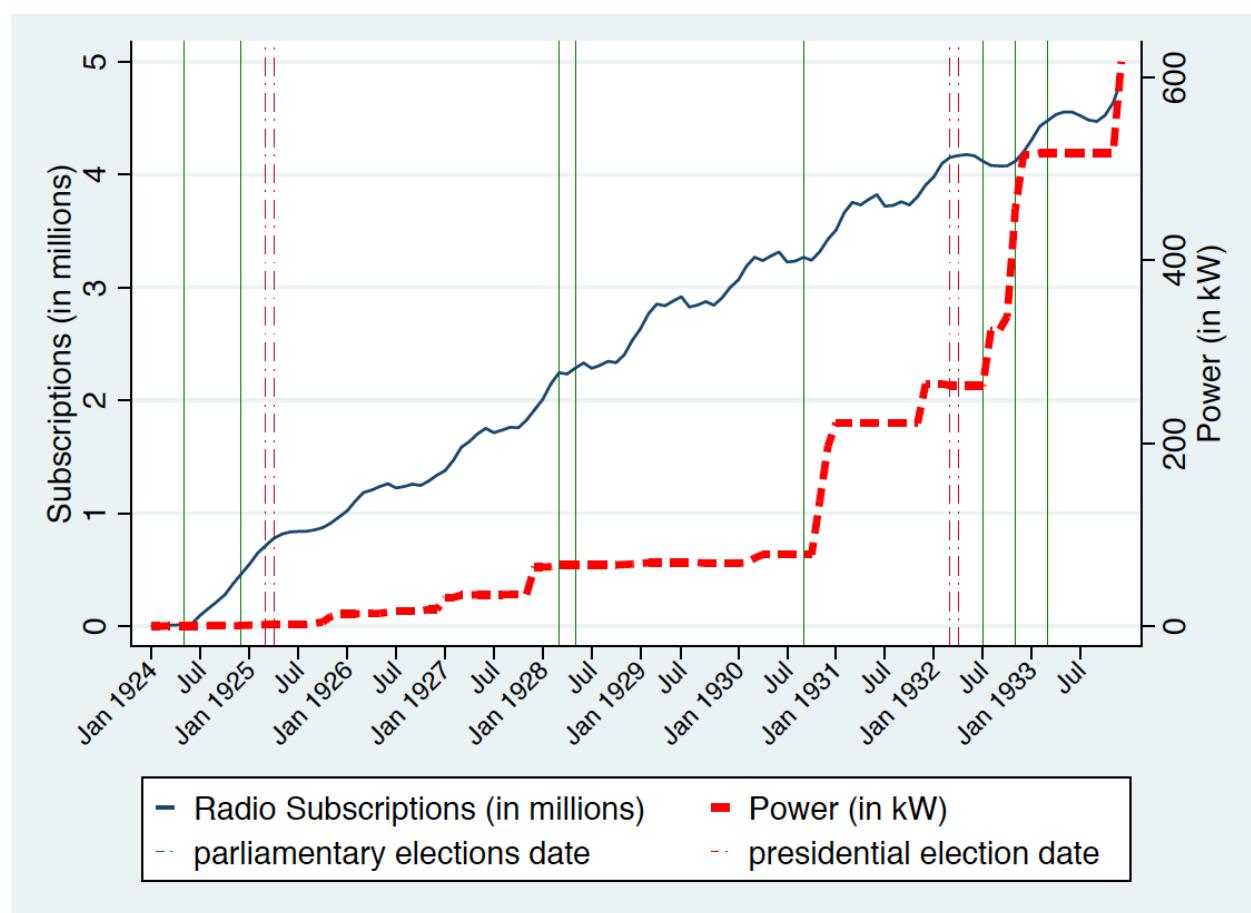


Panel B. Access of political figures to radio by election campaign and affiliation



Note: Figure 1b zooms into the election campaigns at the time when radio became political and aggregates political affiliation of speakers into three main groups. “Weimar government” indicates all parties in the Weimar coalition government at the time of the campaign. Figure A1 in the appendix presents information on the timing for the entire political broadcast separately for all political parties. Von Papen’s speeches are presented as separate category and not as non-affiliated since he was an important person on the political scene. Appendix “Anecdotal Evidence” gives quotes from Von Papen’s radio appearances during 1932 and 1933 election campaigns, which show that in 1932 he campaigned against the Nazis and in 1933 he was mildly pro incumbent Nazi government. Source: see Data Sources chapter of the online appendix: Data on the composition of the political broadcast.

Figure 2. Number of radio subscriptions and cumulated power of transmitters in Germany, 1924–1933



Source: Vaessen 1938 (subscriptions) and the authors' data on transmitters (see online appendix: data sources).

Figure 3. The timing of the measurement of outcome variables and of the change in radio content

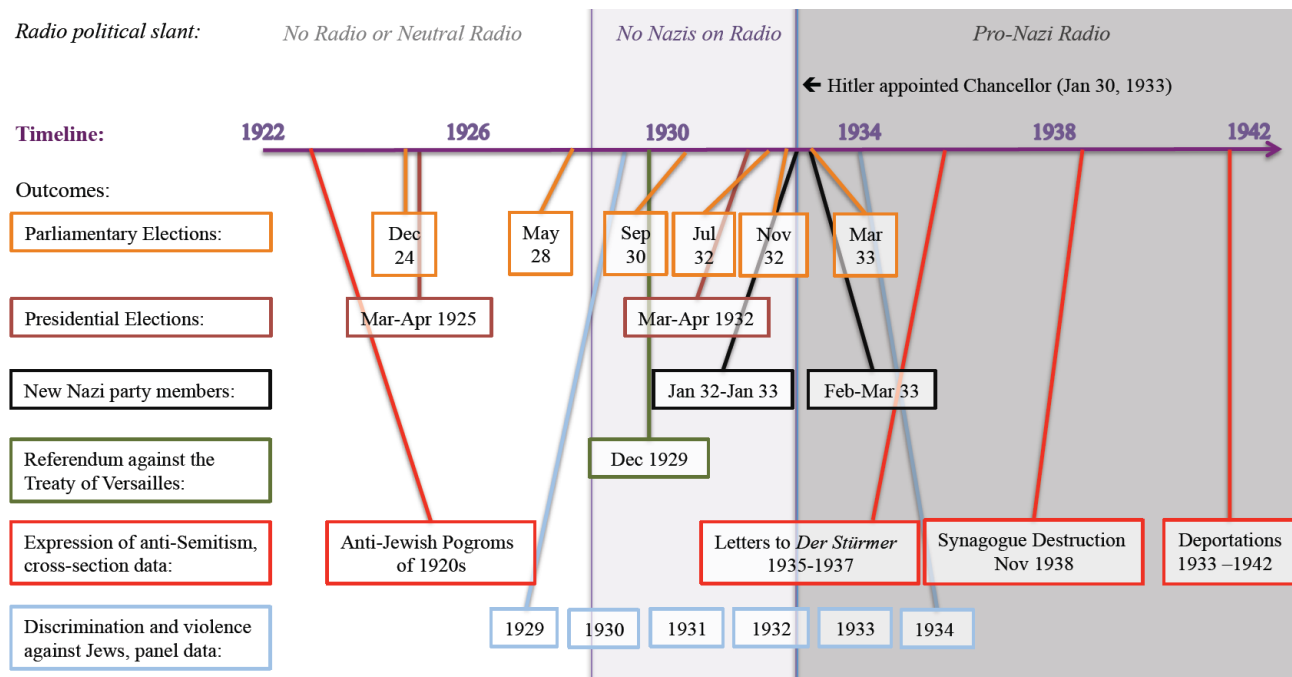
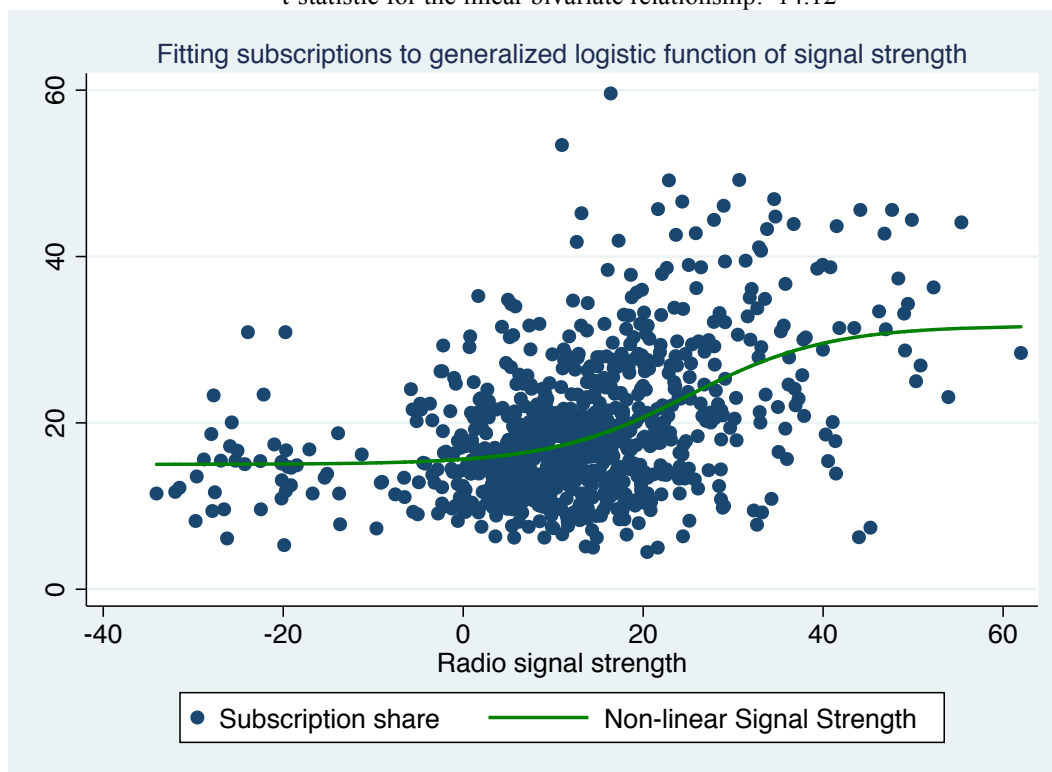
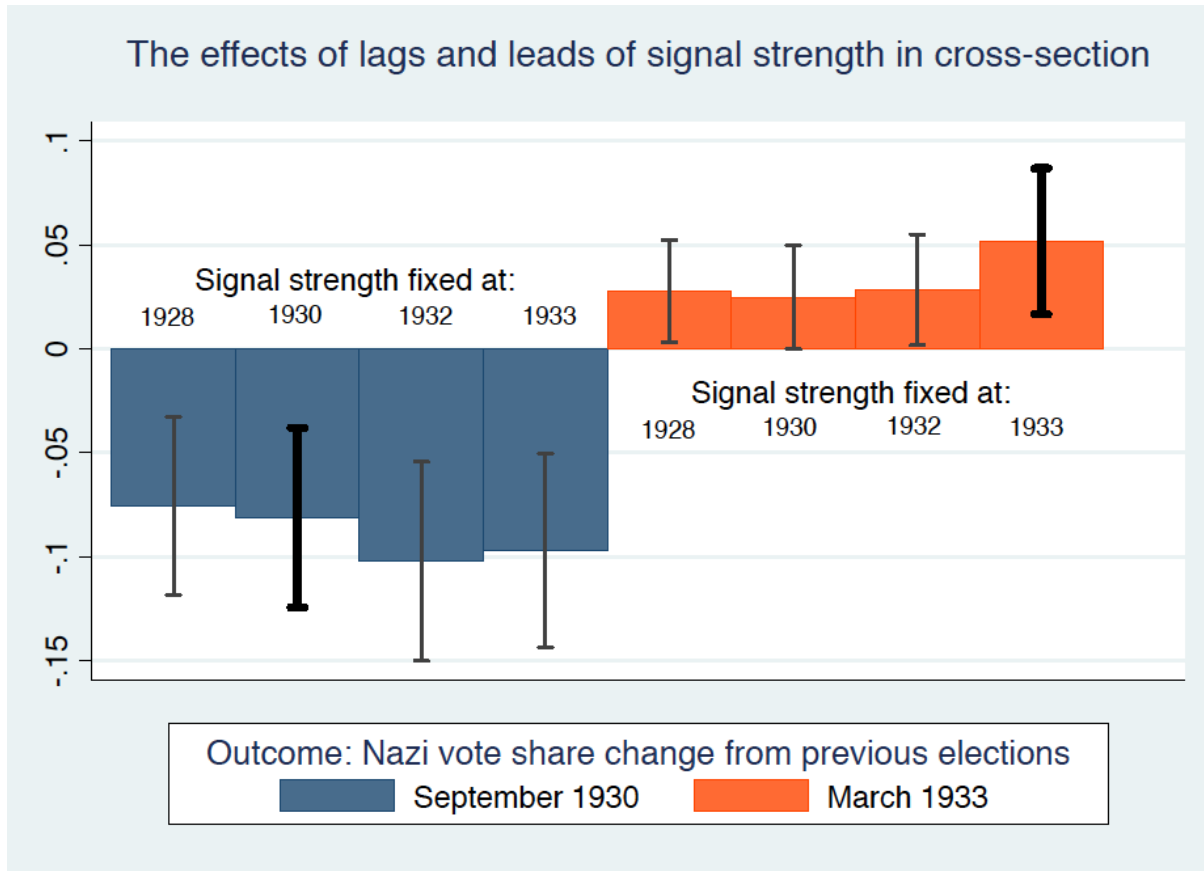


Figure 4. Radio Subscriptions and Signal Strength, 1931 (no controls)
t-statistic for the linear bivariate relationship: 14.12



Source: "Teilnahme am Rundfunk in den einzelnen OPD-Bezirken in Orten mit mehr als 2500 Einwohnern am 1. April 1933," *Veröffentlichungen des Verbandes der Funkindustrie e.V.*, 12, 1933, data for the year 1931.

Figure 5. Leads and lags of the signal strength in cross-section



Note: Dependent variable: change in vote share for Nazi party since previous elections. Different colors correspond to different elections; different bars of the same color represent coefficient estimates on the signal strength fixed at May 1928, July 1932, and March 1933 along with their confidence intervals. Thick CI lines indicate specifications with contemporaneous signal. Control variables include province fixed effects, fifth polynomial of population, urban district dummy, shares of Jews and Catholics, shares of blue-collar and white-collar workers. 90% confidence intervals are shown. Source: own calculations.

Table 1. Radio Subscriptions and Signal Strength

Share of households with radio subscription at a given date				
Panel A.	(1)	(2)	(3)	(4)
<i>The date for the subscription rate variable:</i>	<i>Apr 1931</i>	<i>Apr 1932</i>	<i>Apr 1932</i>	<i>Apr 1933</i>
<i>The date for the signal strength variable:</i>	<i>Sep 1930</i>	<i>Jul 1932</i>	<i>Nov 1932</i>	<i>Mar 1933</i>
Radio signal strength	0.218*** [0.030]	0.175*** [0.028]	0.161*** [0.031]	0.163*** [0.036]
Distance to the nearest big city, city dummy, altitude	Yes	Yes	Yes	Yes
Socioeconomic controls	Yes	Yes	Yes	Yes
Population, fifth-order polynomial	Yes	Yes	Yes	Yes
Voting controls, 1924	Yes	Yes	Yes	Yes
Region fixed effects	Yes	Yes	Yes	Yes
Observations	858	883	883	885
R2	0.576	0.531	0.526	0.514
F-stat for the signal strength variable	50.19	36.13	24.53	20.30
Panel B.				
<i>The date for the subscription rate variable:</i>	<i>Apr 1931</i>	<i>Apr 1932</i>	<i>Apr 1932</i>	<i>Apr 1933</i>
<i>The date for the signal strength variable:</i>	<i>Sep 1930</i>	<i>Jul 1932</i>	<i>Nov 1932</i>	<i>Mar 1933</i>
Radio Signal Strength, non-linear transformation	0.671*** [0.096]	0.683*** [0.100]	0.656*** [0.120]	0.602*** [0.123]
Distance to the nearest big city, city dummy, altitude	Yes	Yes	Yes	Yes
Socioeconomic controls	Yes	Yes	Yes	Yes
Population, fifth-order polynomial	Yes	Yes	Yes	Yes
Voting controls, 1924	Yes	Yes	Yes	Yes
Region fixed effects	Yes	Yes	Yes	Yes
Observations	858	883	883	885
R2	0.579	0.533	0.525	0.513
F-stat for the signal strength variable	46.62	42.41	26.38	23.05

Note: Standard errors clustered by Region (Wahlkreis) in parentheses. * p<0.1, ** p<0.05, *** p<0.01. Dependent variable is the

Table 2. Determinants of Radio Availability

<i>Election date:</i>	Radio Signal Strength					Radio Signal Strength, non-linear transformation				
	<i>March</i>	<i>September</i>	<i>July</i>	<i>November</i>	<i>March</i>	<i>March</i>	<i>September</i>	<i>July</i>	<i>November</i>	<i>March</i>
	<i>1928</i>	<i>1930</i>	<i>1932</i>	<i>1932</i>	<i>1933</i>	<i>1928</i>	<i>1930</i>	<i>1932</i>	<i>1932</i>	<i>1933</i>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Region fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<u>Determinants of transmitter location</u>										
(population, distance to the nearest city with population over 50k, city dummy, altitude):										
Distance to the nearest city, log	-3.187***	-3.531***	-2.747***	-2.580***	-2.662***	-1.040***	-1.180***	-0.619***	-0.538***	-0.612***
	[0.650]	[0.655]	[0.599]	[0.568]	[0.482]	[0.221]	[0.233]	[0.166]	[0.140]	[0.140]
Altitude	-0.007*	-0.006	-0.009**	-0.008**	-0.008*	-0.002	-0.002	-0.002*	-0.002	-0.002**
	[0.004]	[0.004]	[0.004]	[0.004]	[0.004]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]
City (Stadtkreis) dummy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Population, fifth-order polynomial	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
F-stat for determinants of transmitter location	9.184	9.392	10.85	8.271	13.55	9.230	10.28	12.28	11.03	13.88
<u>Socioeconomic controls</u>										
(shares of Jews and Catholics, shares of blue-collar and white-collar workers, share of war participants, share of welfare recipients, share of renters of social housing, property tax, unemployment, share of unemployed, partial employment):										
Socioeconomic controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
F-stat for socioeconomic variables	5.008	4.668	2.867	2.453	3.104	5.423	5.509	6.282	3.666	3.495
<u>Voting results in 1924</u>										
(turnout and shares of vote received by DNVP, NSFP, SPD, and Zentrum):										
Voting results in 1924	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
F-stat for voting in 1924	2.863	3.224	5.981	6.822	5.896	1.358	1.993	3.248	2.039	4.192
R-squared	0.668	0.680	0.598	0.609	0.570	0.545	0.555	0.573	0.532	0.489
Observations	959	959	959	959	959	959	959	959	959	959
<u>The share of the total explained variation, explained only by:</u>										
Determinants of transmitter location	38.62%	41.18%	43.81%	37.11%	51.93%	57.98%	62.52%	44.85%	47.37%	57.06%
Determinants of transmitter location and Region fixed effects	97.75%	97.50%	97.16%	98.36%	97.02%	98.90%	98.20%	98.08%	99.62%	97.14%
Socio-economic controls and voting results in 1924	30.69%	30.15%	29.26%	28.74%	34.21%	37.61%	36.94%	30.54%	32.89%	39.88%

Table 3. Radio Availability and Voting for the Nazis: District Fixed Effects

	Nazi Vote Share				Change in the Nazi Vote Share	
	<i>September 1930, July 1932, and November 1932</i>		<i>All parliamentary elections 1928 – 1933, combined</i>		<i>Between September 1930 and November 1932</i>	
	<i>Specification:</i>	<i>Panel: OLS</i>	<i>Panel: OLS</i>	<i>Panel: OLS</i>	<i>Panel: OLS</i>	<i>First differences: OLS</i>
		(1)	(2)	(3)	(4)	(5)
Radio Signal Strength		-0.079** [0.034]				
Radio Signal Strength, non-linear transformation			-0.227** [0.088]			
Radio signal strength x pro-Nazi slant				0.028*** [0.007]		
Non-linear transformation of signal strength x pro-Nazi slant					0.123*** [0.027]	
Change in subscription rate between April 1931 and April 1932					-0.104 [0.098]	-2.127** [0.873]
Baseline controls, interacted with time fixed effects	Yes	Yes	Yes	Yes	No	No
Baseline controls	No	No	No	No	Yes	Yes
District fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	No	No
Observations	2,836	2,836	4,713	4,713	827	827
Number of districts	959	959	959	959	827	827
R-squared	0.939	0.939	0.972	0.972	0.658	
F-statistics for instrumental variable						26.44

Note: Standard errors clustered at the region level in parentheses. * p<0.1, ** p<0.05, *** p<0.01. Pro-Nazi slant equals 0 in 1928, -1 between 1930 and 1932, +1 in 1933. Controls include fifth-order polynomial of population, share of Jewish and Catholic population, shares of blue- and white-collar workers in 1925, city dummy, number of war participants per 1,000, number of welfare recipients per 1,000, number of renters of social housing per 1,000, log of average property tax, altitude, share of unemployed and partially employed, distance to the nearest city with population over 50k, turnout and vote shares of DNVP, NSFP, SPD, and Zentrum in 1924. Number of observations changes between elections because of redistricting. In column 8 change in radio subscription rate is instrumented using change in non-linear transformation of the signal strength.

Table 4. Radio and an Increase in Nazi Vote Share

Panel A. Reduced form estimation				
	Change in Vote Share of the Nazi Party Since Previous Elections			
	<i>Election dates:</i>			
	<i>Sep 1930</i>		<i>Mar 1933</i>	
	<i>(Change from May 1928)</i>		<i>(Change from Nov 1932)</i>	
	(1)	(2)	(3)	(4)
Radio signal strength	-0.061***		0.044**	
	[0.022]		[0.020]	
Radio Signal Strength, non-linear transformation		-0.217***		0.126*
		[0.071]		[0.070]
Region fixed effects	Yes	Yes	Yes	Yes
Baseline controls	Yes	Yes	Yes	Yes
Observations	958	958	918	918
Panel B. OLS and IV results				
	Change in Vote Share of the Nazi Party Since Previous Elections			
	<i>Election dates:</i>			
	<i>Sep 1930</i>		<i>Mar 1933</i>	
	<i>(Change from May 1928)</i>		<i>(Change from Nov 1932)</i>	
	OLS	IV	OLS	IV
<i>Date for the subscription rate variable:</i>	<i>Apr 1931</i>		<i>Apr 1933</i>	
Radio subscription rate, %	-0.086*	-0.347***	0.031*	0.218*
	[0.045]	[0.095]	[0.017]	[0.115]
Region fixed effects	Yes	Yes	Yes	Yes
Baseline controls	Yes	Yes	Yes	Yes
Observations	857	855	853	851
F-statistic for the exclusion of the instrument		50.43		20.48
Panel C. Altonji-Elder-Taber Tests				
	Change in Vote Share of the Nazi Party Since Previous Elections			
	<i>Election dates:</i>			
	<i>Sep 1930</i>		<i>Mar 1933</i>	
	<i>(Change from May 1928)</i>		<i>(Change from Nov 1932)</i>	
Index of observables (predicted signal strength)	-0.037		-0.043	
	[0.070]		[0.049]	
Index of observables (predicted non-linear signal strength)		0.014		-0.341*
		[0.209]		[0.199]
Population, fifth-order polynomial	Yes	Yes	Yes	Yes
Observations	958	958	918	918
R-squared	0.432	0.432	0.573	0.576

Note: Standard errors clustered by Region (Wahlkreis) in parentheses. * p<0.1, ** p<0.05, *** p<0.01. Baseline controls include fifth-order polynomial of population, share of Jewish and Catholic population, shares of blue- and white-collar workers in 1925, city dummy, number of war participants per 1,000, number of welfare recipients per 1,000, number of renters of social housing per 1,000, log of average property tax, altitude, share of unemployed and partially employed, distance to the nearest city with population over 50k, turnout and vote shares of DNVP, NSFP, SPD, and Zentrum in 1924. Number of observations changes between elections because of redistricting. In Panel B radio subscription rate is instrumented using non-linear transformation of the signal strength.

Table 5. Radio Availability and Voting in Anti-Versailles-Treaty Referendum and April 1932 Presidential Elections.

Panel A. Radio availability and other voting outcomes.						
	Referendum on the "Law against the Enslavement of the German People"		1932 Presidential Elections, 1st round			
	Voted "Yes" in the Referendum (share of eligible voters)		Von Hindenburg Vote Share		Hitler Vote Share	
	(1)	(2)	(5)	(6)	(7)	(8)
Radio signal strength	-0.063*		0.054**		-0.048	
	[0.032]		[0.026]		[0.036]	
Radio Signal Strength, non-linear transformation		-0.241**		0.194		-0.239
		[0.096]		[0.119]		[0.149]
Nazi party vote share in 1928	0.644***	0.636***	-0.459***	-0.459***	0.580***	0.581***
	[0.089]	[0.089]	[0.070]	[0.071]	[0.065]	[0.065]
Region fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Baseline controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	949	949	952	952	952	952
R-squared	0.729	0.730	0.788	0.788	0.796	0.797
Panel B. Altonji-Elder-Taber tests						
	Voted "Yes" in the Referendum (share of eligible voters)		Von Hindenburg Vote Share		Hitler Vote Share	
Index of observables (predicted signal strength)	-0.143		-0.100		-0.165	
	[0.134]		[0.174]		[0.159]	
Index of observables (predicted non-linear transformation of signal strength)		-0.530		-1.290*		-0.116
		[0.393]		[0.694]		[0.637]
Nazi party vote share in 1928	1.275***	1.282***	-1.490***	-1.509***	1.490***	1.526***
	[0.091]	[0.090]	[0.129]	[0.118]	[0.128]	[0.123]
Population, fifth-order polynomial	Yes	Yes	Yes	Yes	Yes	Yes
Observations	949	949	952	952	952	952
R-squared	0.561	0.562	0.553	0.559	0.527	0.526

Note: Standard errors clustered by Region (Wahlkreis) in parentheses. * p<0.1, ** p<0.05, *** p<0.01. Controls include fifth-order polynomial of population, share of Jewish and Catholic population, shares of blue- and white-collar workers in 1925, city dummy, number of war participants per 1,000, number of welfare recipients per 1,000, number of renters of social housing per 1,000, log of average property tax, share of unemployed and partially employed, altitude, distance to the nearest city with population over 50k, turnout and vote shares of DNVP, NSFP, SPD, and Zentrum in 1924, and Nazi party vote share in 1928.

Table 6. Discrimination and violence against Jews

	Incidence of discrimination and violence against Jews		
	1929-1932	1933-1934	1929-1934
	Panel (1)	Pooled cross-section (2)	Panel (3)
Radio Signal Strength	-0.0020 [0.0019]	0.0024** [0.0011]	
Radio signal strength x pro-Nazi slant			0.0013** [0.0006]
Baseline controls, interacted with time fixed effects	Yes		Yes
City fixed effects	Yes		Yes
Time fixed effects	Yes	Yes	Yes
Region fixed effects, baseline controls		Yes	
Observations	5,328	2,664	7,992
Number of cities	1332	1332	1332
R-squared	0.129	0.334	0.407

Note: Standard errors clustered by city in parentheses. * p<0.1, ** p<0.05, *** p<0.01. Pro-Nazi slant equals -1 between 1929 and 1932 and +1 between 1933 and 1934. Baseline controls include log(population), altitude, dummy for being located on a navigable river, share of Jewish population in 1925, share of Catholic population in 1925, share of blue-collar workers in 1925, share of white-collar workers in 1925, dummy for the data source, number of war participants per 1,000, number of welfare recipients per 1,000, number of pensioners with social assistance per 1,000, turnout and vote shares of DNVP, NSFP, SPD, and Zentrum in 1924.

Table 7. Radio Availability and Nazi Party Membership

Panel A. Cross-sectionalestimates						
Log of the Number of New Party Members of NSDAP						
	<i>Time period:</i> Jan 1932 - Jan 1933		Feb - May 1933			
	(1)	(2)	(3)	(4)	(5)	(6)
Radio Signal Strength	0.0031 [0.0020]		0.0053** [0.0019]		0.0052** [0.0020]	
Radio Signal Strength, non-linear transformation		0.0001 [0.0098]		0.0202** [0.0077]		0.0203** [0.0079]
Log of new party membership in 01/1932-01/1933					0.0545* [0.0291]	0.0580* [0.0288]
Region fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Baseline controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	613	613	613	613	613	613
R-squared	0.676	0.676	0.345	0.345	0.348	0.349
Panel B. Altonji-Elder-Taber tests						
Log of the Number of New Party Members of NSDAP						
	<i>Time period:</i> Jan 1932 - Jan 1933		Feb - May 1933			
	(1)	(2)	(3)	(4)	(5)	(6)
Index of observables (predicted signal strength)	0.0002 [0.006]		0.0006 [0.004]		0.0009 [0.004]	
Index of observables (predicted non-linear signal strength)		0.0051 [0.032]		0.0025 [0.016]		0.0033 [0.016]
Log of new party membership in 01/1932-01/1933					0.0269 [0.027]	0.0269 [0.027]
Population, fifth-order polynomial	Yes	Yes	Yes	Yes	Yes	Yes
Observations	613	613	613	613	613	613
R-squared	0.608	0.608	0.305	0.305	0.306	0.306

Note: Standard errors clustered by Region (Wahlkreis) in parentheses. * p<0.1, ** p<0.05, *** p<0.01. Controls comprise fifth-order polynomial of population, share of Jewish and Catholic population, shares of blue- and white-collar workers in 1925, city dummy, number of war participants per 1,000, number of welfare recipients per 1,000, number of renters of social housing per 1,000, log of average property tax, share of unemployed and partially employed, altitude, distance to the nearest city with population over 50k, turnout and vote shares of DNVP, NSFP, SPD, and Zentrum in 1924, dummy for pogroms in 1349 and a dummy for a Jewish settlement in 1349. Number of observations changes between elections because of redistricting.

Table 8. Radio Availability and Anti-Semitism

Panel A. Baseline results.			
	Log(deportations before 1942)	Letters to <i>Der Stürmer</i>	Attacks on synagogues
<i>Model:</i>	OLS	ML	OLS
<i>Sample:</i>	<i>All cities</i>	<i>All cities</i>	<i>All cities with synagogues in 1933</i>
	(1)	(2)	(3)
Radio signal strength in 1937	0.019*** [0.007]	0.019*** [0.007]	0.001 [0.001]
Log (population)	0.250*** [0.074]	0.363*** [0.055]	-0.007 [0.014]
Altitude	-0.001* [0.001]	-0.001 [0.001]	-0.000 [0.000]
City located at navigable river	0.363*** [0.070]	0.750*** [0.120]	0.048** [0.019]
Socioeconomic controls	Yes	Yes	Yes
Voting controls, 1924	Yes	Yes	Yes
Region fixed effects	Yes	Yes	Yes
Observations	1,325	1,391	1,134
R-squared	0.374		0.102
B. Altonji-Elder-Taber style test.			
	Log(deportations before 1942)	Letters to <i>Der Stürmer</i>	Attacks on synagogues
<i>Model:</i>	OLS	ML	OLS
<i>Sample:</i>	<i>All cities</i>	<i>All cities</i>	<i>All cities with synagogues in 1933</i>
Index of observables	-0.001	0.035	0.003
(Prediction of signal strength)	[0.027]	[0.028]	[0.007]
Population	Yes	Yes	Yes
Geographic variables	Yes	Yes	Yes
Region fixed effects	Yes	Yes	Yes
Observations	1,325	1,391	1,133
R-squared	0.197		0.0613

Note: Results of ordinary least squares estimation in columns (1) and (3) ; Results of negative binomial maximum likelihood estimation in column (2). Standard errors are clustered by Region (Wahlkreis). * p<0.1, ** p<0.05, *** p<0.01. Unit of observation is city in Voigtländer and Voth (2012) sample. Socioeconomic controls include share of Jewish and Catholic population, shares of blue- and white-collar workers in 1925, number of war participants per 1,000, number of welfare recipients per 1,000, number of renters of social housing per 1,000, log of average property. Voting controls include voter turnout and vote shares of DNVP, NSFP, SPD, and Zentrum in 1924. Geographic controls include altitude and dummy for being located on a navigable river.

Table 9. Radio Availability and Anti-Semitism, the Role of Historic Predispositions

	Log(deportations before 1942)	Letters to <i>Der Stürmer</i>	Attacks on synagogues
<i>Model:</i>	OLS	ML	OLS
	(1)	(2)	(3)
Panel A. Interactions with pogroms			
<i>Sample:</i>	Sub-sample of cities with historical Jewish settlement		
Pogroms in 1349 * Radio signal strength, demeaned	0.049*** [0.015]	0.082*** [0.018]	0.004 [0.007]
Radio signal strength, 1937	-0.035* [0.017]	-0.065*** [0.019]	-0.005 [0.007]
Pogroms in 1349	0.844*** [0.185]	0.656*** [0.234]	0.173** [0.069]
All baseline controls	Yes	Yes	Yes
Region fixed effects	Yes	Yes	Yes
Observations	296	319	274
R-squared	0.626		0.241
B. Interaction with NSFP vote in 1924			
<i>Sample:</i>	Full sample of cities	Sample of cities with synagogues	
Vote for NSFP in 1924*Radio signal strength, demeaned	0.182** [0.081]	0.175*** [0.040]	0.015 [0.017]
Radio signal strength, 1937	0.007 [0.008]	0.007 [0.008]	-0.000 [0.002]
Vote for NSFP in 1924	6.447** [3.079]	8.890*** [2.624]	0.861* [0.456]
All baseline controls	Yes	Yes	Yes
Region fixed effects	Yes	Yes	Yes
Observations	1,325	1,391	1,134
R-squared	0.385		0.105
Panel C. Interactions with historical inequality			
<i>Sample:</i>	Full sample of cities	Sample of cities with synagogues	
Land inequality in 1895 *Radio signal strength, demeaned	0.133*** [0.040]	0.099*** [0.036]	0.032*** [0.010]
Radio signal strength, 1937	-0.072** [0.027]	-0.049* [0.026]	-0.022*** [0.007]
Land inequality in 1895	1.730* [0.944]	0.124 [1.177]	-0.441* [0.230]
All baseline controls	Yes	Yes	Yes
Region fixed effects	Yes	Yes	Yes
Full radio effect for minimal level of inequality (Gini index 45)	-0.011	-0.004	-0.007***
Observations	1,306	1,372	1,116
R-squared	0.367		0.113

Note: Results of ordinary least squares estimation in columns (1) and (3) ; Results of negative binomial maximum likelihood estimation in column (2). Standard errors are clustered by Region (Wahlkreis). * p<0.1, ** p<0.05, *** p<0.01. Unit of observation is city in Voigtländer and Voth (2012) sample. For panel A, sample includes only cities with jewish settlements in 1349. Baseline controls include log(population), altitude, dummy for being located on a navigable river, share of Jewish population in 1925, share of Catholic population in 1925, share of blue-collar workers in 1925, share of white-collar workers in 1925, dummy for Jewish settlement in 1349, number of war participants per 1,000, number of welfare recipients per 1,000, number of pensioners with social assistance per 1,000, turnout and vote shares of DNVP, NSFP, SPD, and Zentrum in 1924.

Online Appendix

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Sources used in the Appendix Chapter “Anecdotal Evidence”:	69

1. Data sources

Data on transmitters: *Rundfunk Jahrbuch 1929*, 1929, Sept 1930 – *Mitteilungen der Reichs-Rundfunk-Gesellschaft*, 211, 1930, April 1932 – *Mitteilungen der Reichs-Rundfunk-Gesellschaft*, 303, 1932, October 1932 – *Mitteilungen der Reichs-Rundfunk-Gesellschaft*, 330, 1932, March 1933 – *Mitteilungen der Reichs-Rundfunk-Gesellschaft*, 351, 1933, and others till 1938. All those sources cite as a primary source "Union Internationale de telecommunications." – Brundjak, Andreas (2010) *Die Geschichte der deutschen Mittelwellen-Sendeanlagen von 1923 bis 1945*. Funk Verlag Bernhard Hein e.K., Table p. 109ff. Signal strength has been calculated using Irregular Terrain Model (Hufford 2002, Olken 2008)

Electoral and socio-demographic data: "Wahl- und Sozialdaten der Gemeinden und Kreise des Deutschen Reiches 1920 – 1933" (ZA study number 8013). Principal investigator: J.W. Falter; available through the Zentralarchiv für empirische Sozialforschung in Köln, Germany, (March/April 1988).

Data on the number of subscription: "Teilnahme am Rundfunk in den einzelnen OPD-Bezirken in Orten mit mehr als 2500 Einwohnern am 1. April 1933," *Veröffentlichungen des Verbandes der Funkindustrie e.V.*, 12, 1933. We use data from the appendix: the number of registered listeners in April of 1931, 1932, and 1933 (paying a radio license fee or exempt from paying) divided, respectively, by the number of households for the years 1931, 1932, and 1933. The absolute number of subscriptions per month presented in Figure 2 comes from Vaessen 1938.

Data on deportations: *Gedenkbuch*, Bundesarchiv.

Letters to *Der Stürmer*, pogroms in 1349, and attacks on synagogues: Voigtländer and Voth (2012).

Hitler's electoral speeches: Dusik, Bärbel (ed.), 1992 Hitler, Adolf, Reden, Schriften, Anordnungen, Institut für Zeitgeschichte, München [u.a.] : see volumes 2(2) to 5(2) for the years 1928-1933 – Domarus, Max (1962) "Hitler Reden und Proklamationen 1932 – 1945", Band 1, Würzburg, p. 115ff., p. 139ff for the years from 1932.

Data on woodland: "Ergebnisse der Forstwirtschaftlichen Erhebung," *Statistik des Deutschen Reichs*, Band 386 (1927).

Data on welfare: "Die öffentliche Fürsorge im Deutschen Reich in den Rechnungsjahren 1927 bis 1931," *Statistik des Deutschen Reichs*, Band 421, Berlin, 1933, Verlag Hobbing. We use data from *Statistik der Bezirksfürsorgeverbände. Einzelergebnisse*, Tabelle 5. *Gesamter Personenkreis der unterstützten Hilfsbedürftigen und Fürsorgekosten im Rechnungsjahr 1929*, Spalten: Einwohnerzahl in 1000, 3- Auf 1000 Einwohner, 4- Kriegsbeschädigte, Kriegshinterbliebene und Gleichgestellte, 5- Sozialrentner, 6- Kleinrentner und Gleichgestellte, S. 114-135

Data on income tax: "Die Einkommen- und Körperschaftssteueranlagen für 1932 und 1933," *Statistik des Deutschen Reichs*, Band 482, Berlin, 1936, Verlag für Sozialpolitik,

Wirtschaft und Statistik. We use data from Teil I Abschnitt A, *Einkommensteuerveranlagung, Steuerpflichtige, Einkünfte und festgesetzte Steuer 1932 und 1933*, S. 62 – 93.

Data on corporate tax: “*Die Einkommen- und Körperschaftssteuerveranlagungen für 1932 und 1933*,” *Statistik des Deutschen Reichs*, Band 482, Berlin 1936, *Verlag für Sozialpolitik, Wirtschaft und Statistik*. We use data from Teil II Abschnitt A, *Körperschaftsteuerveranlagung*, S. 302 – 310.

Data on property tax: “*Die Hauptveranlagung der Vermögensteuer nach dem Stand vom 1 Januar 1935*,” *Statistik des Deutschen Reichs*, Band 519, Berlin, 1938, *Verlag für Sozialpolitik, Wirtschaft und Statistik*. We use data from Anhang, Abschnitt A, *Vermögensteuerveranlagung* 1931, S. 194 – 209

Data on NSDAP Party membership: Project by Prof. Falter: “NSDAP-Members in Germany Who Joined the Party in the Years Before 1933 – 1934”. The samples were taken at random by members of the *Arbeitsbereich Vergleichende Faschismusforschung des ZI6 der FU Berlin*, in cooperation with the Department of Sociology, University of Minnesota, Minneapolis. Sample description: *Historical Social Research*, Vol. 16, 1991, No. 3, 113 – 151. We use only 1932 and 1933 data.

Data on newspapers: number of newspapers in each place for 1932 from *Handbuch der deutschen Tagespresse*, Deutsches Institut für Zeitungskunde, 1932

Data on cinemas: number of cinemas in each place for 1932 from *Reichs-Kino-Adreßbuch*, 1932, also (in part) available online: <http://allekinos.pytalhost.com/kinowiki/index.php?title=1932> (retrieved 07/15/2014, corrected and updated using the original source)

Data on the composition of the political broadcast (appearances of political figures on the radio):

We have collected all available information on the appearances of political figures (including, government officials at every level of government, representatives of different political parties, and the members of parliament) as well as programs, officially dedicated to explaining the government policies by government officials. The most important sources of these data are 3 catalogues with radio recordings: *Reichs-Rundfunk-Gesellschaft* (1936), *Landesstelle Berlin* (1967), and *Roller, Walter* (1977).

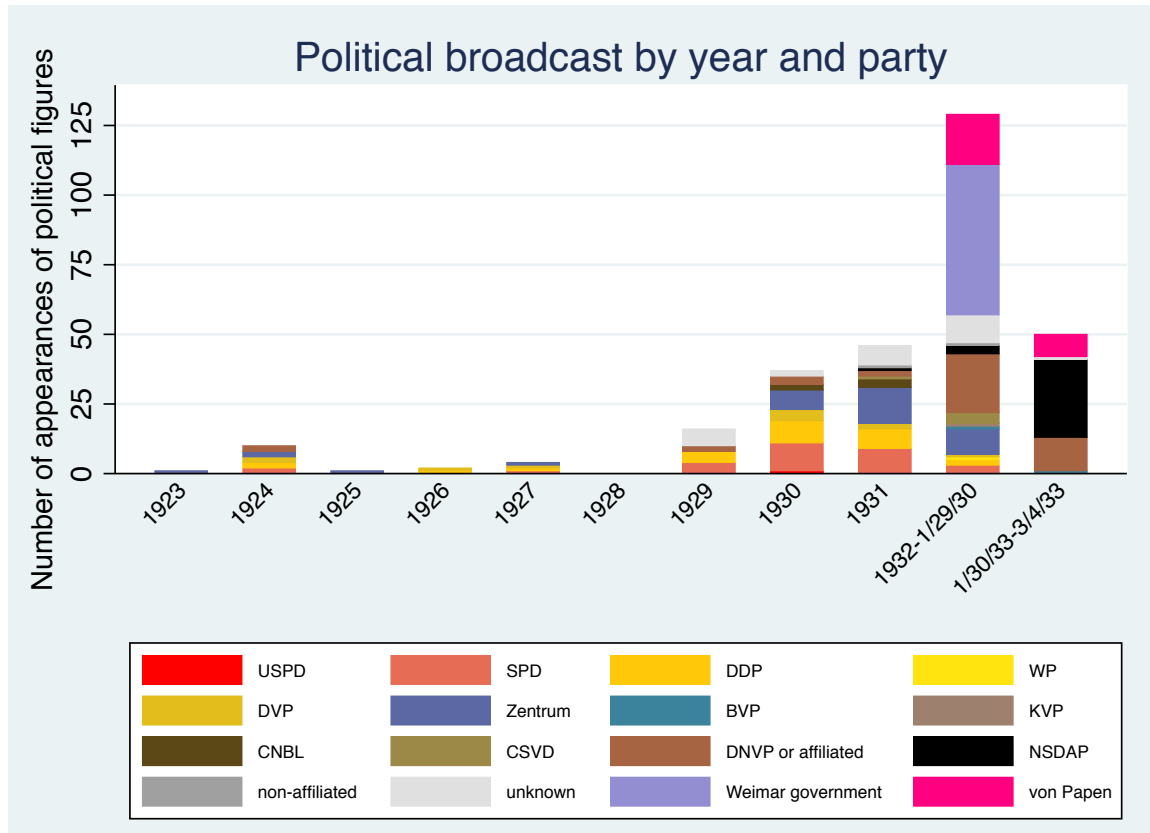
These catalogues contain recorded broadcast only. We supplemented these data by the information on the unrecorded broadcast, e.g., “the government hour,” which was introduced in the second half of 1932. We collected information about “the government hour” from *Reichs-Rundfunk-Gesellschaft* (1933), *Rundfunkjahrbuch 1933*. Additional information about electoral campaign broadcast after Hitler came to power comes from *Bundesarchiv Berlin Lichterfelde* (BA R78). The information from these sources was verified and augmented using other sources for two reasons: 1) there were unexpected short-term changes in the programming that are not well reflected in the catalogues of recorded broadcasts and 2) not all recordings were actually aired.

The complete list of sources used to comprise the list of appearances of political figures is as follows:

- Bausch, Hans (1956) Der Rundfunk im politischen Kräftespiel der Weimarer Republik 1923-1933. J.C.B. Mohr (Paul Siebeck): Tübingen.
- Bundesarchiv Berlin Lichterfelde BA R78.
- Der Deutsche Rundfunk, various volumes.
- Deutscher Bundestag (2012) Erste Rundfunkübertragung einer Reichstagsrede. http://www.bundestag.de/dokumente/textarchiv/2012/37876400_kw08_bruening/ (Accessed on 11/10/2013).
- Diller, Ansgar (1980) Rundfunkpolitik im dritten Reich. München.
- Landesstelle Berlin (1967) Tondokumente zur Politik und Zeitgeschichte.
- Pohle, Heinz (1955) Der Rundfunk als Instrument der Politik. Zur Geschichte des deutschen Rundfunks von 1923/38. Hans Bredow Institut: Hamburg.
- Reichs-Rundfunk-Gesellschaft (1933), Rundfunkjahrbuch 1933, Berlin.
- Reichs-Rundfunk-Gesellschaft (1936) Schallaufnahmen der Reichs-Rundfunk-GmbH von Ende 1929 bis Anfang 1936. Schallarchiv d. Reichs-Rundfunk.
- Roller, Walter (1977) Tondokumente zur Zeitgeschichte 1888-1932. Deutsches Rundfunkarchiv.

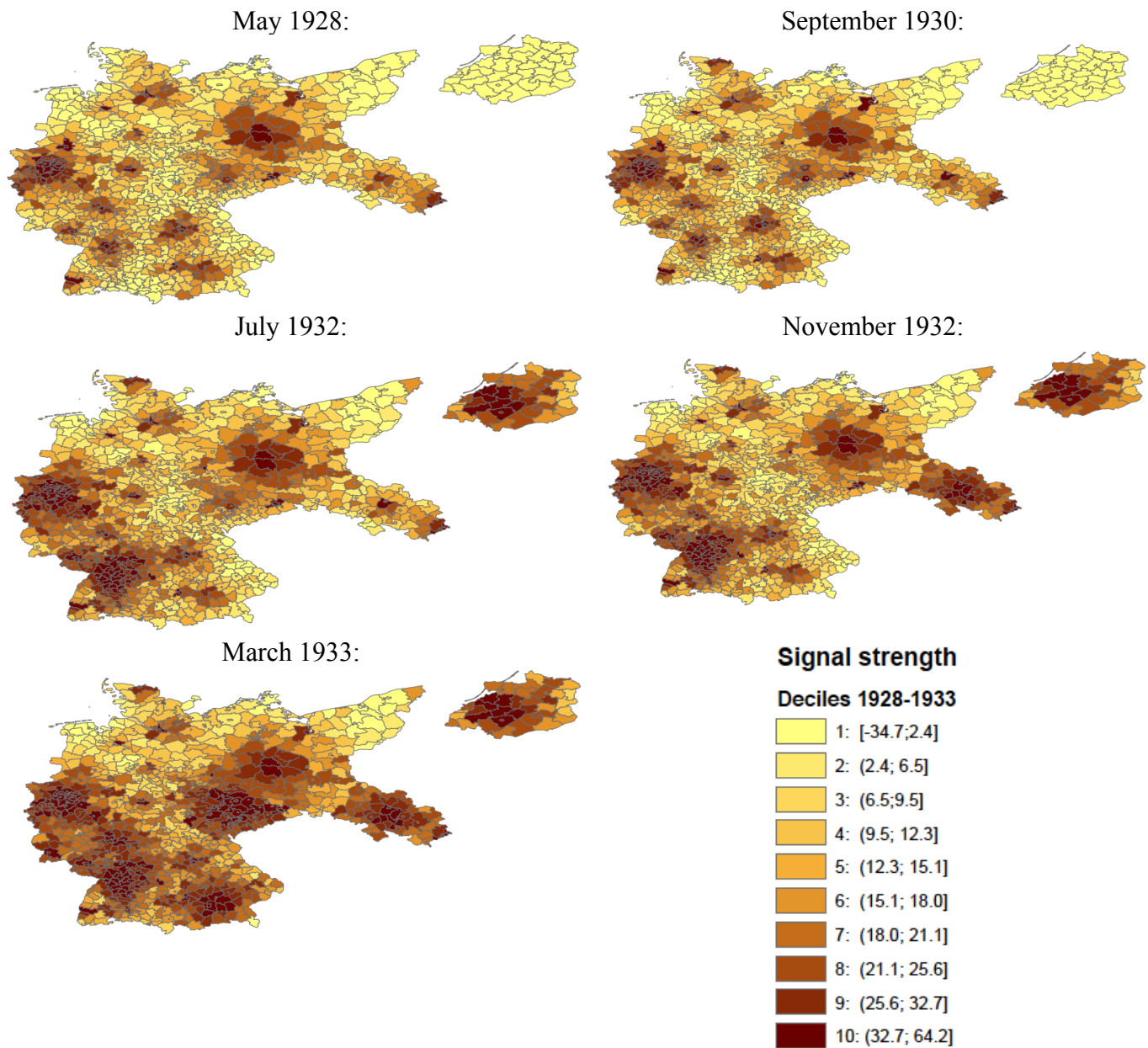
2. Additional Figures and Tables

Figure A1. Political broadcast by political parties.



Note: Von Papen broadcast is presented as separate category and not as non-affiliated since he was an important person on the political scene. Appendix “Anecdotal Evidence” gives quotes from Von Papen’s radio speeches during 1932 and 1933 election campaigns, which show that in 1932 he campaigned against the Nazis and in 1933 he was mildly pro incumbent Nazi government. . Weimar government stands for the “government hour” program, which was an important part of the political broadcast in favor of the government. Source: see Data sources chapter of this appendix (Data on the composition of the political broadcast subsection).

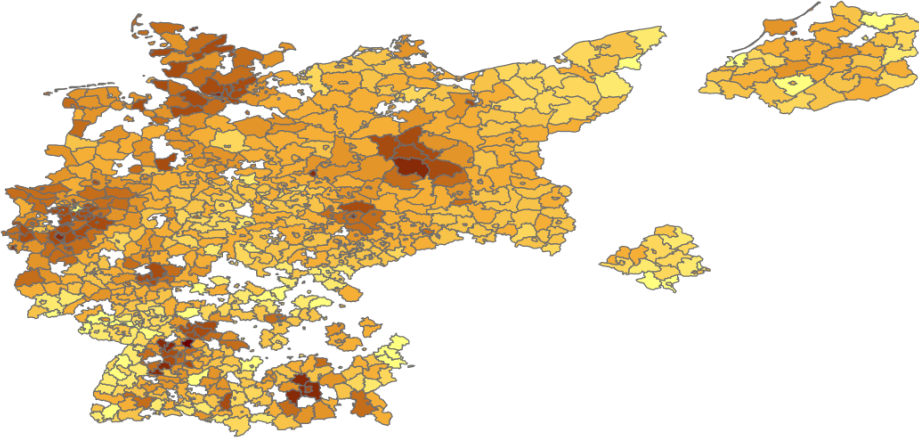
Figure A2. Signal strength over time, deciles defined over the pooled sample of May 1928-March 1933.



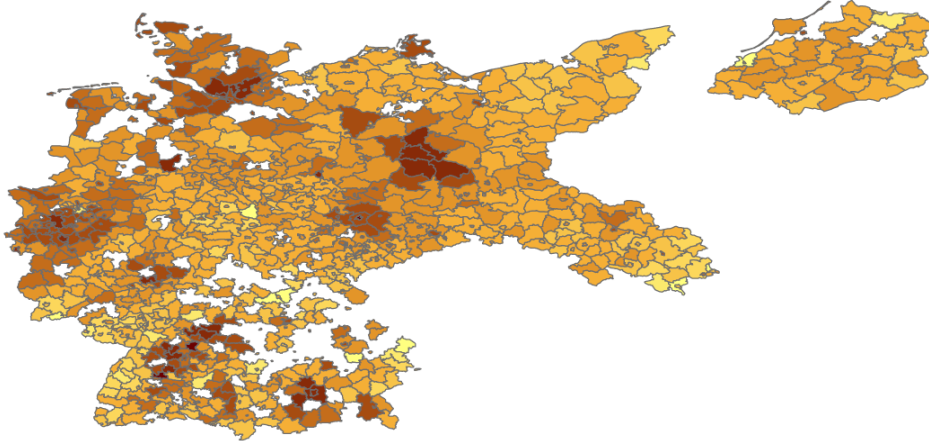
Note: The legend provides threshold levels of signal strength for each decile. Source: own calculations, see Data sources chapter of this appendix (Data on transmitters subsection).

Figure A3. Radio subscription rate over time.

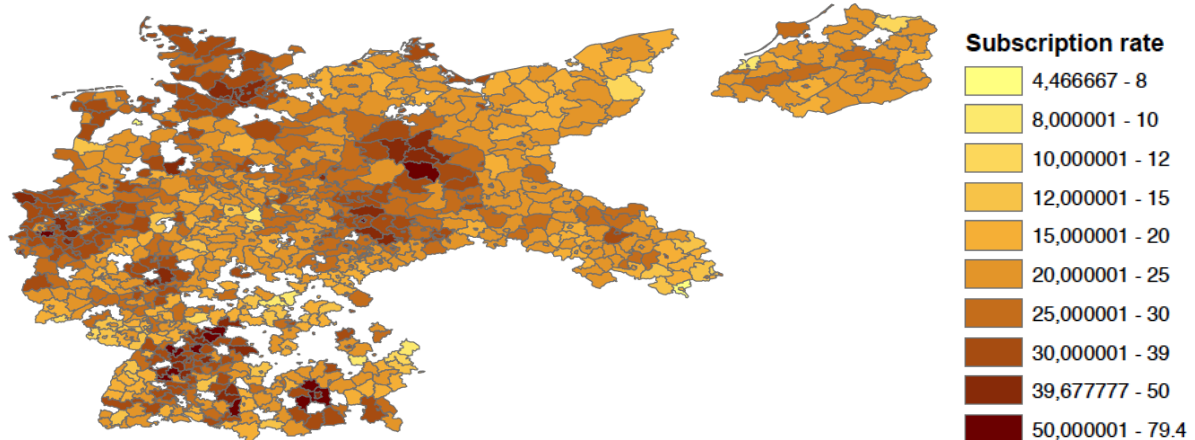
April 1931:



April 1932:



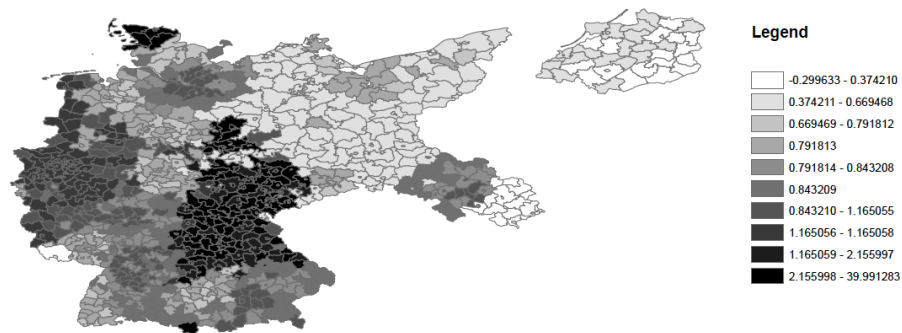
April 1933:



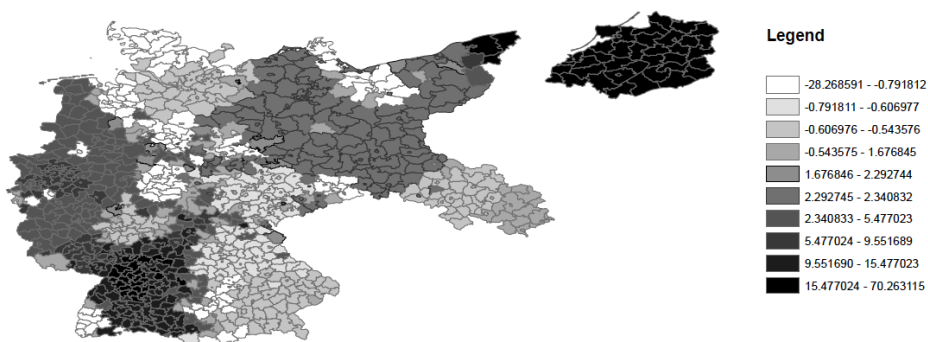
Note: Subscription rate is missing for a number of districts, indicated as blank on the maps. Source: see Data sources chapter of this appendix (Data on the number of subscription subsection)

Figure A4. Changes in the radio signal strength over time.

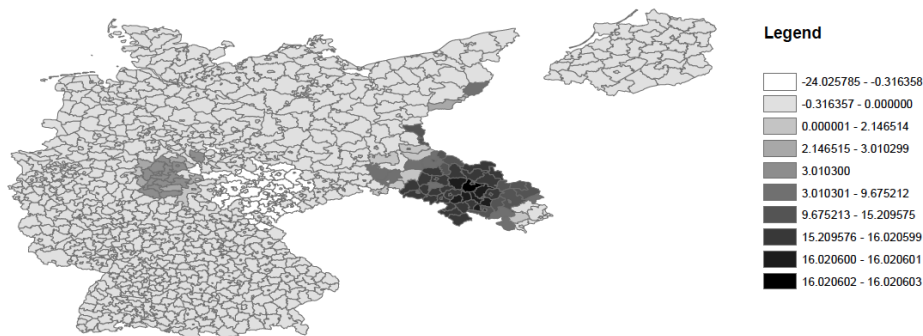
September 1930 (change from May 1928), deciles:



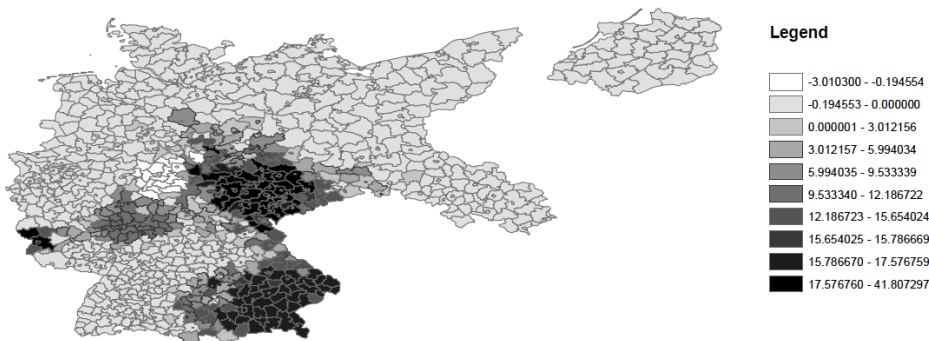
July 1932 (change from September 1930), deciles:



November 1932 (change from July 1932), deciles:

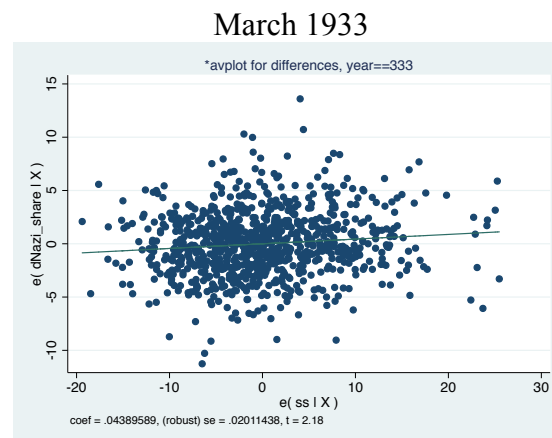
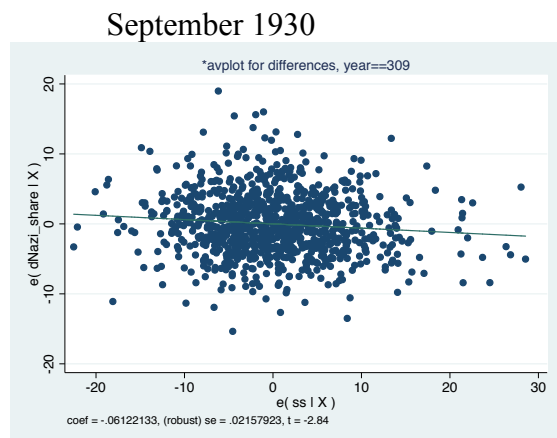


March 1933 (change from November 1932), deciles:



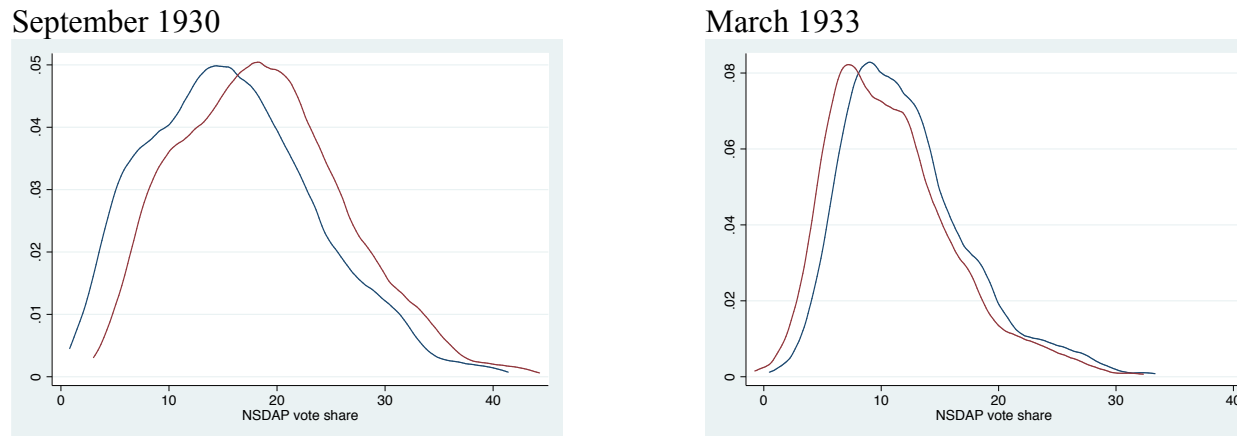
Note: The cut-offs for deciles are calculated separately for each snapshot, they are presented in the legends. Source: see Data sources chapter of this appendix (Data on transmitters subsection).

Figure A5. Changes in Nazi vote share: Residual plots.



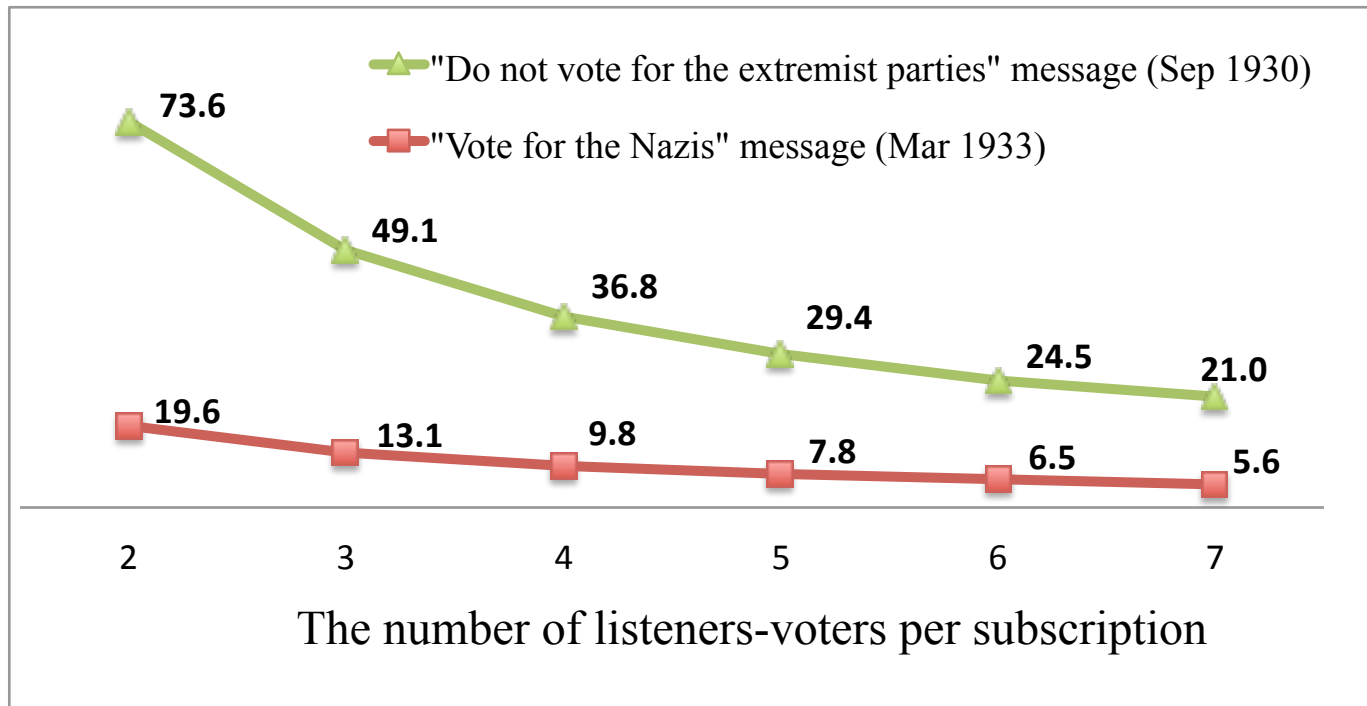
Source: own calculations

Figure A6. Changes in Nazi party vote share.



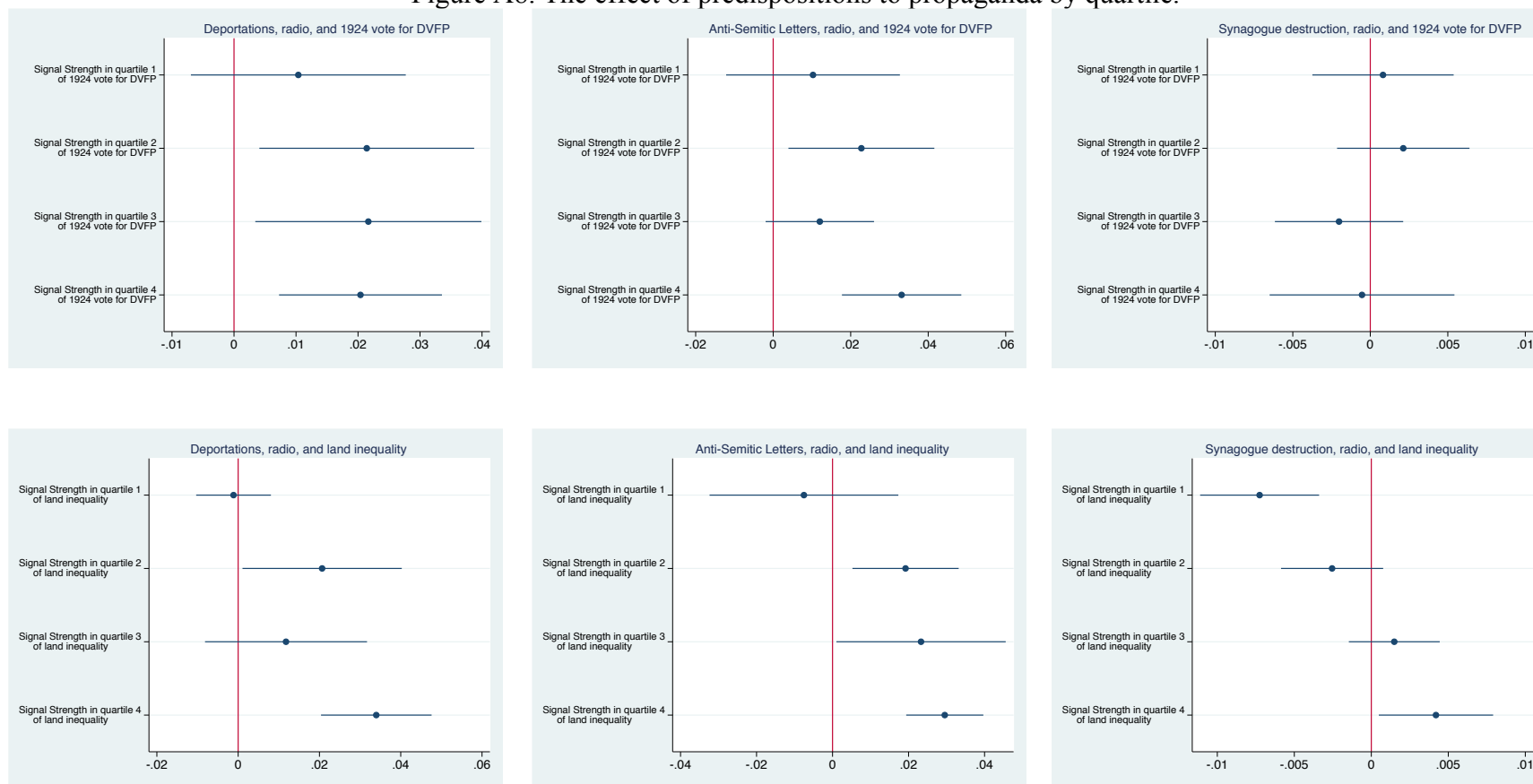
Note: The graphs show the distribution of the actual NSDAP vote share and the predicted NSDAP vote share for signal strength set to a sample minimum. Kernel density estimates. Blue lines – raw data, red lines – prediction for the case of minimal signal strength. Source: own calculations

Figure A7. Sensitivity of the estimates of the persuasion rates.



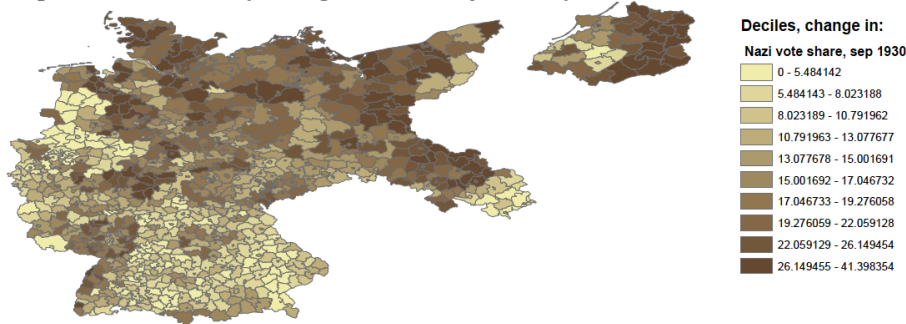
Note: The graph shows persuasion rates for the radio messages "vote for the Nazis in March 1933" and "do not vote for the extremist parties (including the Nazis) in September 1930" for different assumptions about the number of listeners-voters per subscription. Source: own calculations

Figure A8. The effect of predispositions to propaganda by quartile.

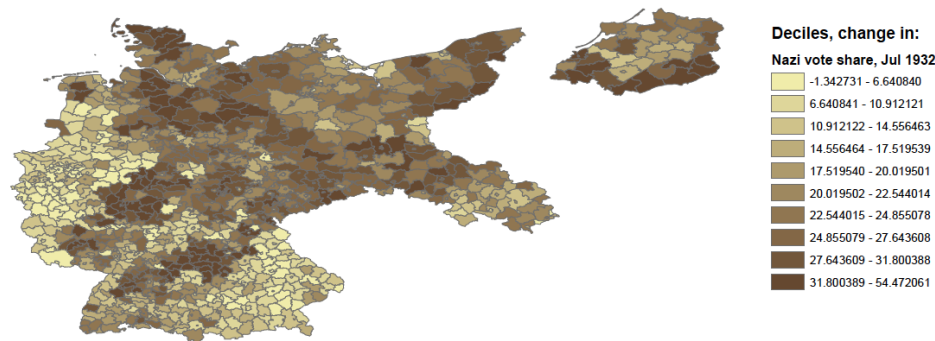


Note: The figure portrays the point estimates and their 90 percent confidence intervals from the estimation of a specification similar to the one presented in Panel A of Table 8, in which the interactions of signal strength with dummies for each quartile of the distribution in the vote for NSFP or in land inequality replace the interactions of signal strength with the corresponding continuous variables.

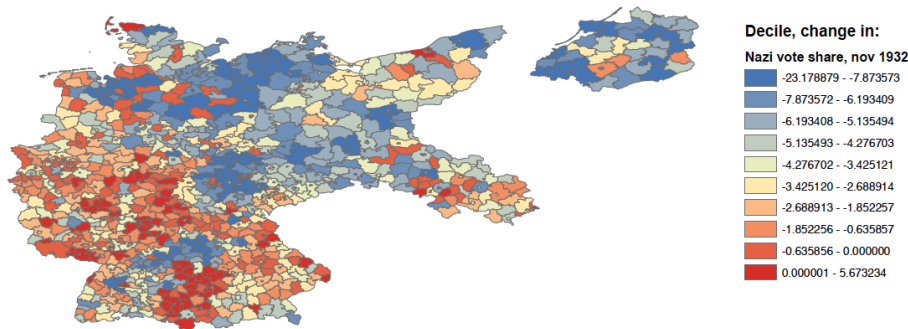
Figure A9. (not referred to in the main text)
The change in the Nazi vote share from the previous elections, deciles.
September 1930 (change from May 1928), deciles:



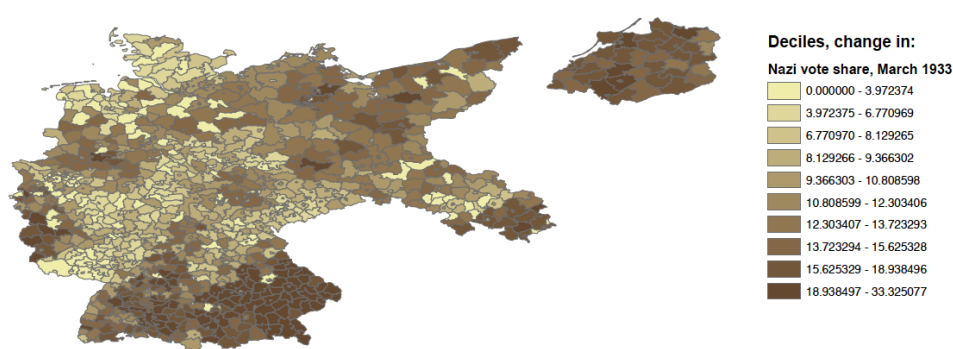
July 1932 (change from September 1930), deciles:



November 1932 (change from July 1932), deciles:

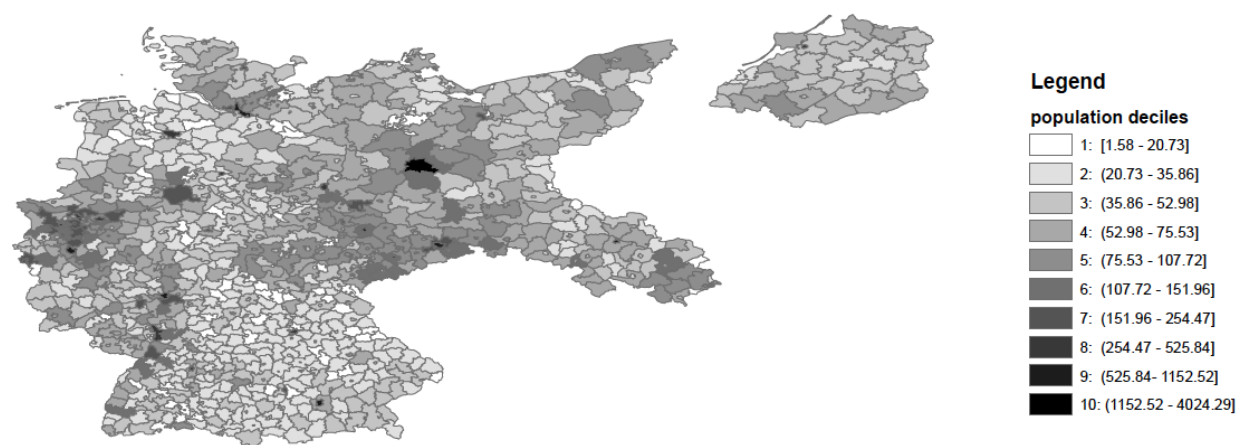


March 1933 (change from November 1932), deciles:



Note: The cut-offs for deciles are calculated separately for each snapshot, they are presented in the legends. We use a different color scheme for elections in November 1932, because these were the only elections, such that the Nazis lost their vote share compared to the previous elections. Source: own calculations.

Figure A10. (not referred to in the main text) Population size, deciles



Note: The legend provides threshold levels of population size for each decile. Source: see Data sources (Electoral and sociodemographic data).

Table A1. Summary Statistics

Panel A. District-Level Variables					
Variable	Observations	Mean	Std. Dev.	Min	Max
Vote share of SPD, 1924	958	22.51	11.95	0.68	55.05
Vote share of KPD, 1924	958	6.10	5.86	0.22	42.68
Vote share of DNVP, 1924	958	20.62	15.69	0.62	84.81
Vote share of Zentrum, 1924	958	14.53	23.61	0.00	92.17
Turnout, 1924	958	78.88	6.82	55.45	92.97
Turnout, April 1925	952	75.53	11.28	24.47	99.30
Vote share of von Hindenburg, 1925	952	53.47	19.68	5.51	96.47
Vote share of Marx, April 1925	952	42.20	19.69	3.35	94.06
Vote share of Thälmann, 1925	952	4.27	4.87	0.12	36.37
Vote share of NSDAP, 1928	958	3.24	4.07	0.14	36.15
Vote share of SPD, 1928	958	25.93	12.96	1.26	59.14
Vote share of KPD, 1928	958	6.20	6.38	0.06	42.53
Vote share of DNVP, 1928	958	14.62	13.36	0.51	78.72
Vote share of Zentrum, 1928	958	20.49	22.86	0.09	81.11
Turnout, 1928	958	74.54	7.92	45.80	91.30
Approval of anti-Treaty referendum, 1929	949	12.46	12.55	0.02	64.72
Share of votes "yes" for anti-Treaty referendum, 1929	949	17.44	13.75	0.21	76.06
Vote share of NSDAP, 1930	958	18.84	8.99	1.01	58.80
Vote share of SPD, 1930	958	21.65	11.68	1.19	55.80
Vote share of KPD, 1930	958	8.49	6.99	0.16	44.36
Vote share of DNVP, 1930	958	6.88	7.41	0.34	49.22
Vote share of Zentrum, 1930	958	20.15	22.62	0.06	83.20
Turnout, 1930	958	80.71	6.44	56.70	94.97
Vote share of von Hindenburg, 1932	952	53.98	15.05	12.03	90.19
Vote share of Hitler, 1932	952	39.09	14.71	8.56	87.72
Vote share of Thälmann, 1932	952	6.91	5.43	0.23	36.47
Turnout, April 1932	952	83.27	4.97	64.08	96.60
Vote share of NSDAP, July 1932	957	39.21	14.83	5.87	83.00
Vote share of SPD, July 1932	957	18.43	10.09	0.94	49.51
Vote share of KPD, July 1932	957	10.06	6.75	0.36	39.53
Vote share of DNVP, July 1932	957	5.80	4.30	0.29	32.00
Vote share of Zentrum, July 1932	957	20.60	22.73	0.13	86.36
Turnout, July 1932	957	83.50	6.11	56.06	94.81
Vote share of NSDAP, November 1932	918	34.92	13.54	5.33	76.42
Vote share of SPD, November 1932	918	17.66	9.57	1.19	50.20
Vote share of KPD, November 1932	918	12.21	7.08	0.46	43.60
Vote share of DNVP, November 1932	918	7.93	5.93	0.50	35.81
Vote share of Zentrum, November 1932	918	20.34	22.32	0.16	82.62
Turnout, November 1932	918	79.70	7.08	49.19	98.27
Vote share of NSDAP, 1933	918	47.21	12.26	13.29	83.01
Vote share of SPD, 1933	918	15.49	9.11	0.66	46.43
Vote share of KPD, 1933	918	8.25	6.07	0.24	36.05
Vote share of Zentrum, 1933	918	17.80	19.13	0.10	77.74
Turnout, 1933	918	88.54	3.70	69.75	96.05
NSDAP new members, 1932	958	1.67	0.90	0.00	6.17
NSDAP new members, 1933	958	0.17	0.36	0.00	3.47
Radio signal strength, 1928	958	10.77	12.65	-34.75	61.20
Radio signal strength, 1930	958	11.99	12.83	-34.08	61.99
Radio signal strength, July 1932	958	17.02	11.21	-20.22	61.20
Radio signal strength, November 1932	958	17.42	11.37	-20.22	64.21
Radio signal strength, 1933	958	21.63	10.93	-6.82	61.20
Radio signal strength, 1937	958	25.55	10.34	-1.99	73.06
Radio subscriptions per 100 households, 1931	857	18.88	8.23	4.47	59.60
Radio subscriptions per 100 households, 1932	882	22.27	8.20	4.87	71.80
Radio subscriptions per 100 households, 1933	884	26.46	8.81	0.00	79.34
Radio signal strength, non-linear transformation 1930	958	18.76	3.66	15.02	31.55
Radio signal strength, non-linear transformation 1933	958	22.83	2.62	20.20	33.97

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Table A1. Summary statistics (continued)

Panel A. District-Level Variables					
Variable	Observations	Mean	Std. Dev.	Min	Max
Population (in thousands), 1924	958	58.45	140.03	2.37	3832.20
Population (in thousands), 1928	958	61.79	149.00	2.74	4024.17
Population (in thousands), 1930	958	63.44	150.96	2.74	4024.29
Population (in thousands), July 1932	958	63.70	151.10	2.74	4024.29
Population (in thousands), November 1932	958	65.44	151.12	2.74	4024.29
Population (in thousands), 1933	958	65.46	151.15	2.74	4024.29
Share of Jewish population, 1925	958	0.00	0.01	0.00	0.05
Share of Catholic population, 1925	958	0.37	0.38	0.00	1.00
Share of blue-collar workers, 1925	958	0.38	0.13	0.11	1.61
Share of white-collar workers, 1925	958	0.12	0.07	0.02	0.38
War participants per 1,000, 1930	958	0.60	1.95	0.00	28.78
Welfare recipients per 1,000, 1930	958	25.43	15.35	3.50	100.60
Pensioners with social assistance per 1,000, 1930	958	8.75	5.15	0.04	36.88
Log of average property tax payment, 1930	958	6.20	0.73	2.23	8.45
City (<i>Stadtkreis</i>) dummy	958	0.21	0.41	0.00	1.00
Altitude	958	259.95	207.41	-1.87	1172.28
Distance to the nearest city, log	958	10.17	1.16	5.30	13.12
Panel B. City-Level Variables					
Variable	Observations	Mean	Std. Dev.	Min	Max
Population	1391	46.08	71.64	5.03	1129.31
Pogroms in 1349	1264	0.18	0.39	0.00	1.00
Jewish settlement in 1349	1391	0.28	0.45	0.00	1.00
Log(deportations before 1942)	1325	2.46	1.53	0.00	10.93
Letters to Der Stürmer	1391	1.76	11.11	0.00	354.00
Attacks on synagogues	1391	0.66	0.47	0.00	1.00
Vote for NSFP in 1924	1391	0.06	0.07	0.00	0.47
Land inequality in 1895	1372	0.66	0.11	0.46	0.95
City located at navigable river	1391	0.32	0.47	0.00	1.00
Altitude	1391	197.34	134.62	-3.00	709.00

Table A2. Placebo Tests. Radio availability and previous elections. District-Level.

	Radio signal strength measured at:				
	May 1928	Sep 1930	Jul 1932	Nov 1932	Mar 1933
Panel A: The change in Nazi vote share b/w 1924 and 1928					
Change between votes for Nazi Party in May 1928 and vote for DNVP in December 1924	-0.008 [0.080]	-0.002 [0.078]	0.007 [0.080]	-0.012 [0.078]	0.047 [0.061]
Change between votes for Nazi Party in May 1928 and vote for NSFP in December 1924	0.002 [0.017]	0.001 [0.017]	0.027 [0.023]	0.022 [0.024]	0.014 [0.021]
Change in turnout between December 1924 and May 1928	0.022 [0.019]	0.013 [0.017]	0.003 [0.015]	0.000 [0.015]	0.028 [0.018]
Panel B: Voting results in 1928					
Vote share of NSDAP in 1928	-0.00010 [0.00015]	-0.00012 [0.00015]	0.00002 [0.00020]	-0.00003 [0.00020]	-0.00003 [0.00019]
Vote share of DNVP in 1928	0.00012 [0.00028]	0.00012 [0.00028]	0.00017 [0.00029]	0.00021 [0.00027]	0.00015 [0.00027]
Vote share of KPD in 1928	-0.00004 [0.00026]	-0.00017 [0.00025]	-0.00014 [0.00023]	-0.00010 [0.00019]	-0.00019 [0.00025]
Vote share of SPD in 1928	-0.00010 [0.00015]	-0.00006 [0.00015]	-0.00016 [0.00014]	-0.00016 [0.00013]	-0.00008 [0.00017]
Vote share of Zentrum in 1928	0.00000 [0.00029]	0.00003 [0.00030]	0.00002 [0.00027]	0.00004 [0.00026]	-0.00060* [0.00034]
Voter turnout in 1928	0.00003 [0.00017]	-0.00006 [0.00016]	-0.00021 [0.00015]	-0.00023* [0.00014]	-0.00002 [0.00018]
Panel C: Voting results in 1924					
Vote share of DNVP in 1924	-0.00057 [0.00043]	-0.00059 [0.00043]	-0.00063 [0.00052]	-0.00061 [0.00051]	-0.00106** [0.00046]
Vote share of KPD in 1924	-0.00002 [0.00020]	-0.00012 [0.00019]	-0.00003 [0.00018]	0.00003 [0.00016]	-0.00009 [0.00025]
Vote share of SPD in 1924	-0.00001 [0.00029]	-0.00005 [0.00030]	-0.00000 [0.00029]	-0.00013 [0.00028]	0.00043 [0.00030]
Vote share of Zentrum in 1924	-0.00015 [0.00021]	-0.00014 [0.00020]	-0.00029 [0.00029]	-0.00027 [0.00029]	-0.00044 [0.00027]
Vote share of NSFP in 1924	-0.00015 [0.00014]	-0.00016 [0.00014]	-0.00042** [0.00016]	-0.00041*** [0.00015]	-0.00034* [0.00017]
Voter turnout in 1924	0.00030 [0.00019]	0.00033 [0.00020]	0.00024 [0.00020]	0.00021 [0.00021]	0.00023 [0.00020]
Panel D: Voting results in 1920					
Vote share of DNVP in 1920	0.00080* [0.00042]	0.00073* [0.00041]	0.00061 [0.00044]	0.00068 [0.00043]	0.00089** [0.00043]
Vote share of KPD in 1920	0.00011 [0.00019]	0.00003 [0.00019]	0.00003 [0.00016]	-0.00003 [0.00015]	0.00006 [0.00016]
Vote share of SPD in 1920	0.00048 [0.00049]	0.00038 [0.00048]	0.00025 [0.00044]	0.00044 [0.00046]	-0.00053 [0.00034]
Vote share of Zentrum in 1920	0.00015 [0.00019]	0.00016 [0.00019]	0.00031 [0.00029]	0.00030 [0.00029]	0.00046 [0.00028]
Voter turnout in 1920	0.00004 [0.00020]	-0.00001 [0.00021]	0.00009 [0.00022]	0.00013 [0.00023]	0.00020 [0.00020]

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Table A2. Placebo Tests. Radio availability and previous elections. District-Level (Continued).

	Radio signal strength measured at:				
	May 1928	Sep 1930	Jul 1932	Nov 1932	Mar 1933
Panel E: Voting results in 1925 Presidential Elections					
Vote share of von Hindenburg in 1925	0.001 [0.030]	0.009 [0.030]	0.011 [0.029]	0.008 [0.029]	0.031 [0.039]
Vote share of Marx in 1925	-0.005 [0.025]	-0.001 [0.024]	-0.009 [0.026]	-0.002 [0.027]	-0.024 [0.034]
Vote share of Thälmann in 1925	0.003 [0.016]	-0.008 [0.015]	-0.002 [0.014]	-0.006 [0.013]	-0.007 [0.017]
Voter turnout in 1925	-0.012 [0.021]	-0.004 [0.022]	0.007 [0.022]	0.000 [0.021]	-0.034* [0.020]

Note: Each cell reports results of a separate regression. All specifications are of the following form: $p_{it_0} = \mu_0 + \mu_1 \text{Exposure}_{it} + \mathbf{X}_i' \boldsymbol{\theta} + \epsilon_i$, where p_{it_0} is a placebo outcome measured before the radio could have had any effect (listed in the left column) and Exposure_{it} is the signal strength at 5 different election times between 1928 and 1933. The list of controls \mathbf{X}_i is as described in the main text, with the following exceptions: in Panel A the list of controls excludes the vote for DNVP and NSFP in 1924, as they are used to construct the dependent variable; in Panel C, voting controls (i.e., turnout and vote shares of DNVP, SPD, KPD, and Zentrum) are measured in 1920. (Note that NSFP did not take part in 1920 elections).

Table A3. Radio Availability and Turnout: District Fixed Effects

	Turnout				Change in turnout	
	September 1930, July 1932, and November 1932		All parliamentary elections 1928 – 1933, combined		Between September 1930 and November 1932	
	Panel: OLS	Panel: OLS	Panel: OLS	Panel: OLS	First differences: OLS	First differences: IV
	(1)	(2)	(3)	(4)	(7)	(8)
Radio Signal Strength	-0.036*					
	[0.021]					
Radio Signal Strength, non-linear transformation		-0.049				
		[0.058]				
Radio signal strength x pro-Nazi slant			0.008			
			[0.005]			
Non-linear transformation of signal strength x pro-Nazi slant				0.028		
				[0.018]		
Change in subscription rate between April 1931 and April 1932					0.032	-0.206
					[0.059]	[0.460]
Baseline controls, interacted with time fixed effects	Yes	Yes	Yes	Yes	No	No
Baseline controls	No	No	No	No	Yes	Yes
District fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	No	No
Observations	2,836	2,836	4,713	4,713	827	827
Number of districts	959	959	959	959	827	827
R-squared	0.677	0.677	0.881	0.881	0.570	
F-statistics for instrumental variable						26.44

Note: Standard errors clustered at the region level in parentheses. * p<0.1, ** p<0.05, *** p<0.01. Controls include fifth-order polynomial of population, share of Jewish and Catholic population, shares of blue- and white-collar workers in 1925, city dummy, number of war participants per 1,000, number of welfare recipients per 1,000, number of renters of social housing per 1,000, log of average property tax, altitude, share of unemployed and partially employed, distance to the nearest city with population over 50k, turnout and vote shares of DNVP, NSFP, SPD, and Zentrum in 1924. Number of observations changes between elections because of redistricting.

Table A4. Radio Availability and Turnout

Panel A. Reduced form estimation				
	Change in Turnout Since Previous Elections			
	<i>Election dates:</i>			
	<i>Sep 1930</i> (Change from May 1928)		<i>Mar 1933</i> (Change from Nov 1932)	
	(1)	(2)	(7)	(8)
Radio signal strength	-0.009 [0.022]		0.025* [0.014]	
Radio Signal Strength, non-linear transformation		-0.036 [0.062]		0.072 [0.053]
Region fixed effects	Yes	Yes	Yes	Yes
Baseline controls	Yes	Yes	Yes	Yes
Observations	958	958	918	918
R-squared	0.60	0.60	0.67	0.67
Panel B. OLS and IV results				
	Change in Turnout Since Previous Elections			
	<i>Election dates:</i>			
	<i>Sep 1930</i> (Change from May 1928)		<i>Mar 1933</i> (Change from Nov 1932)	
	<i>Specification:</i>			
	OLS	IV	OLS	IV
<i>Date for the subscription rate variable:</i>	<i>Apr 1931</i>		<i>Apr 1933</i>	
Radio subscription rate, %	0.016 [0.024]	-0.040 [0.093]	0.010 [0.012]	0.114 [0.084]
Region fixed effects	Yes	Yes	Yes	Yes
Baseline controls	Yes	Yes	Yes	Yes
Observations	857	855	853	851
R-squared	0.61		0.66	
F-statistic for the exclusion of the instrument		46.62		23.05

Note: Standard errors clustered at the region level in parentheses. * p<0.1, ** p<0.05, *** p<0.01. Controls include fifth-order polynomial of population, share of Jewish and Catholic population, shares of blue- and white-collar workers in 1925, city dummy, number of war participants per 1,000, number of welfare recipients per 1,000, number of renters of social housing per 1,000, log of average property tax, altitude, share of unemployed and partially employed, distance to the nearest city with population over 50k, turnout and vote shares of DNVP, NSFP, SPD, and Zentrum in 1924. Number of observations changes between elections because of redistricting.

Table A5. Effect of radio in different groups of population, 1933

<i>Election date:</i>	Change in Vote Share of the Nazi Party Since Previous Elections		
	<i>Mar 1933 (Change from Nov 1932)</i>		
	(1)	(2)	(3)
Signal strength * share of agricultural workers	0.188** [0.069]		
Share of agricultural workers	8.889*** [2.091]		
Signal strength * share of self-employed workers		0.650*** [0.194]	
Share of self-employed workers		11.385** [5.477]	
Signal strength * share of helping family members			0.496** [0.188]
Share of helping family members			4.402 [5.367]
Observations	918	918	918
R2	0.713	0.709	0.700

Note: Standard errors clustered by Region (Wahlkreis) in parentheses. * p<0.1, ** p<0.05, *** p<0.01. Baseline controls include fifth-order polynomial of population, share of Jewish and Catholic population, shares of blue- and white-collar workers in 1925, city dummy, number of war participants per 1,000, number of welfare recipients per 1,000, number of renters of social housing per 1,000, log of average property tax, altitude, share of unemployed and partially employed, distance to the nearest city with population over 50k, turnout and vote shares of DNVP, NSFP, SPD, and Zentrum in 1924.

Table A6. Radio Availability and Voting for the Nazis: The Effect of Adding Controls

Change in Vote Share of the Nazi Party Since Previous Election							
Panel A		September 1930 (Change from 1928)					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Radio signal strength	-0.105*** [0.038]	-0.068* [0.038]	-0.064 [0.041]	-0.083*** [0.028]	-0.079*** [0.028]	-0.081*** [0.026]	-0.061*** [0.022]
R-squared	0.031	0.431	0.437	0.605	0.609	0.612	0.657
Radio signal strength, Non-linear transformation	-0.273** [0.133]	-0.199* [0.112]	-0.187 [0.117]	-0.261*** [0.078]	-0.246*** [0.080]	-0.253*** [0.085]	-0.219*** [0.071]
R-squared	0.017	0.431	0.436	0.605	0.610	0.612	0.658
Observations	958	958	958	958	958	958	958
Region fixed effects		Yes	Yes	Yes	Yes	Yes	Yes
Population, fifth-order polynomial			Yes	Yes	Yes	Yes	Yes
City (<i>Stadtkreis</i>)			Yes	Yes	Yes	Yes	Yes
Share of Jews, Catholics, blue- and white-color workers				Yes	Yes	Yes	Yes
Other socioeconomic controls					Yes	Yes	Yes
Distance to big cities						Yes	Yes
Altitude						Yes	Yes
Voting controls, 1924							Yes
Panel B		March 1933 (Change from Nov 1932)					
Radio signal strength	0.015 [0.037]	0.018 [0.021]	0.040* [0.023]	0.050** [0.021]	0.054** [0.020]	0.047** [0.021]	0.044** [0.020]
R-squared	0.001	0.570	0.601	0.658	0.670	0.671	0.694
Radio signal strength, Non-linear transformation	-0.020 [0.137]	0.002 [0.072]	0.094 [0.084]	0.144* [0.079]	0.167** [0.075]	0.139* [0.078]	0.123* [0.071]
R-squared	0.000	0.570	0.599	0.656	0.667	0.669	0.692
Observations	918	918	918	918	918	918	918
Region fixed effects		Yes	Yes	Yes	Yes	Yes	Yes
Population, fifth-order polynomial			Yes	Yes	Yes	Yes	Yes
City (<i>Stadtkreis</i>)			Yes	Yes	Yes	Yes	Yes
Share of Jews, Catholics, blue- and white-color workers				Yes	Yes	Yes	Yes
Other socioeconomic controls					Yes	Yes	Yes
Distance to big cities						Yes	Yes
Altitude						Yes	Yes
Voting controls, 1924							Yes

Note: Standard errors clustered by Region (Wahlkreis) in parentheses. * p<0.1, ** p<0.05, *** p<0.01. Other socioeconomic controls include, number of war participants per 1,000, number of welfare recipients per 1,000, number of renters of social housing per 1,000, log of average property, share of unemployed and partially employed. Voting controls include turnout and vote shares of DNVP, NSFP, SPD, and Zentrum in 1924.

Table A7. Robustnes: additional controls

Same specification as in Table 4 with additional controls for newspaper and cinema penetration and Hitler's speeches

Panel A. Signal Strength and Change in Nazi Vote Share (Table 4A)												
<i>Dependent Variable:</i>		Change in Vote Share of the Nazi Party Since Previous Elections										
<i>Election dates:</i>		<i>Sep 1930 (Change from May 1928)</i>						<i>Mar 1933 (Change from Nov 1932)</i>				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Radio signal strength	-0.059*** [0.021]		-0.062*** [0.021]		-0.060*** [0.021]		0.045** [0.020]		0.046** [0.020]		0.045** [0.020]	
Radio signal strength, non-linear transformation		-0.213*** [0.072]		-0.220*** [0.071]		-0.215*** [0.071]		0.128* [0.071]		0.131* [0.072]		0.128* [0.071]
Log(1+number of newspapers)	0.104 [0.113]	0.104 [0.117]					0.006 [0.069]	0.003 [0.070]				
Log (1+number of cinemas)			0.214 [0.281]	0.207 [0.281]					-0.351 [0.243]	-0.336 [0.240]		
Log(1+number of Hitler's speeches)					0.742 [0.440]	0.711 [0.440]					0.319 [0.247]	0.362 [0.254]
Panel B. Panel A. Signal Strength and Change in Nazi Vote Share, OLS and IV (Table 4B)												
<i>Dependent Variable:</i>		Change in Vote Share of the Nazi Party Since Previous Elections										
<i>Election dates:</i>		<i>Sep 1930 (Change from May 1928)</i>						<i>Mar 1933 (Change from Nov 1932)</i>				
<i>Specification:</i>	OLS	IV	OLS	IV	OLS	IV	OLS	IV	OLS	IV	OLS	IV
<i>ate for the subscription rate variable:</i>		<i>Apr 1931</i>						<i>Apr 1933</i>				
Radio subscription rate, %	-0.085* [0.045]	-0.346*** [0.096]	-0.086* [0.045]	-0.353*** [0.091]	-0.085* [0.045]	-0.345*** [0.095]	0.032* [0.017]	0.222* [0.117]	0.031* [0.017]	0.227* [0.118]	0.032* [0.017]	0.222* [0.117]
Log(1+number of newspapers)	0.074 [0.120]	0.017 [0.119]					-0.011 [0.076]	-0.003 [0.077]				
Log (1+number of cinemas)			0.138 [0.315]	0.173 [0.359]					-0.312 [0.216]	-0.283 [0.218]		
Log(1+number of Hitler's speeches)					0.626 [0.503]	0.437 [0.524]					0.327 [0.262]	0.370* [0.207]
F-stat for instrument		50.19		50.19		50.19		20.30		20.30		20.30

Note: Standard errors clustered by Region (Wahlkreis) in parentheses. * p<0.1, ** p<0.05, *** p<0.01. Baseline controls include fifth-order polynomial of population, share of Jewish and Catholic population, shares of blue- and white-collar workers in 1925, city dummy, number of war participants per 1,000, number of welfare recipients per 1,000, number of renters of social housing per 1,000, log of average property tax, altitude, share of unemployed and partially employed, distance to the nearest city with population over 50k, turnout and vote shares of DNVP, NSFP, SPD, and Zentrum in 1924. Number of observations changes between elections because of redistricting. In Panel B radio subscription rate is instrumented using non-linear transformation of the signal strength.

**Table A8. Radio Availability and an Increase in Nazi Vote Share.
Specification with Binary Explanatory Variable.**

Panel A. OLS.				
	Change in Vote Share of the Nazi Party Since Previous Elections			
<i>Election dates:</i>	<i>Sep 1930 (Change from May 1928)</i>		<i>Mar 1933 (Change from Nov 1932)</i>	
	(1)	(2)	(4)	(5)
Radio signal strength greater than 10	-0.144 [0.334]		1.258*** [0.449]	
Radio signal strength greater than 20		-1.607*** [0.554]		0.869** [0.354]
Baseline controls	Yes	Yes	Yes	Yes
Observations	958	958	918	918
R-squared	0.653	0.658	0.694	0.694
Panel B. Matching.				
	Change in Vote Share of the Nazi Party Since Previous Elections			
<i>Election dates:</i>	<i>Sep 1930 (Change from May 1928)</i>		<i>Mar 1933 (Change from Nov 1932)</i>	
Radio signal strength greater than 10	-0.436 [0.416]		1.001** [0.434]	
Radio signal strength greater than 20		-1.819*** [0.524]		0.222 [0.252]
Observations	958	958	918	918

Note: Baseline controls include fifth-order polynomial of population, share of Jewish and Catholic population, shares of blue- and white-collar workers in 1925, city dummy, number of war participants per 1,000, number of welfare recipients per 1,000, number of renters of social housing per 1,000, log of average property tax, altitude, share of unemployed and partially employed, distance to the nearest city with population over 50k, turnout and vote shares of DNVP, NSFP, SPD, and Zentrum in 1924, and Region fixed effects. Number of observations changes because of redistricting. Panel B presents the results of the nearest neighbor matching estimation of the average treatment effect. Matching on all the control variables. Matching on all dummy variables is exact. Standard errors in Panel A are clustered by Region (Wahlkreis) in parentheses. Heteroskedasticity-consistent standard errors using seven matches in Panel B. * p<0.1, ** p<0.05, *** p<0.01.

Table A9. Robustness to exclusion of flat regions

Panel A. Signal Strength and Nazi Vote share, District Fixed Effects (as in Table 3)				
		Nazi Vote Share		
<i>Time span of the sample:</i>		<i>September 1930, July 1932, and November 1932</i>	<i>All parliamentary elections 1928–1933, combined</i>	
<i>Exclude slope:</i>		<0.1	<0.2	<0.1 <0.2
Radio Signal Strength		-0.075*** [0.029]	-0.148*** [0.046]	
Radio signal strength x pro-Nazi slant (0 for 1928, -1 for 1930 – 1932, +1 for 1933)				0.039*** [0.009] 0.047*** [0.012]
Observations		2,298	1,327	3,807 2,301
R-squared		0.933	0.943	0.960 0.963
Panel B. Signal Strength and Change in Nazi Vote Share (as in Table 4A)				
		Change in Vote Share of the Nazi Party Since Previous Elections		
<i>Election dates:</i>		<i>Sep 1930 (Change from May 1928)</i>	<i>Mar 1933 (Change from Nov 1932)</i>	
<i>Exclude slope:</i>		<0.1	<0.2	<0.1 <0.2
Radio signal strength		-0.093*** [0.030]	-0.136*** [0.042]	0.050** [0.021] 0.050** [0.022]
Observations		694	345	857 659
R-squared		0.668	0.690	0.311 0.357

Table A10. Radio and an Increase in Nazi Vote Share, disaggregated signal changes

<i>Dependent variable:</i>	Change in Vote Share of the Nazi Party Since Previous Elections	
	<i>Election dates:</i>	
	Sep 1930 (Change from May 1928)	Mar 1933 (Change from Nov 1932)
	(1)	(7)
Radio signal strength, 1-period lag	-0.059*** [0.021]	0.033* [0.018]
Radio Signal Strength, change since last period	-0.119 [0.093]	0.092* [0.048]
Region fixed effects	Yes	Yes
Baseline controls	Yes	Yes
Observations	958	918
R-squared	0.657	0.696

Table A11. Panel results, fixing signal strength at 1928.

	Nazi Vote Share	
	<i>All parliamentary elections 1928 – 1933, combined</i>	
	<i>Panel: OLS</i>	<i>Panel: OLS</i>
<i>Time span of the sample:</i>	(1)	(2)
<i>Specification:</i>		
Radio signal strength in 1928 x pro-Nazi slant	0.018*** [0.007]	
Non-linear transformation of signal strength in 1928 x pro-Nazi slant		0.076*** [0.019]
Baseline controls, interacted with time fixed effects	Yes	Yes
Baseline controls	No	No
District fixed effects	Yes	Yes
Time fixed effects	Yes	Yes
Observations	4,713	4,713
Number of districts	959	959
R-squared	0.972	0.972

Note: Standard errors clustered at the region level in parentheses. * p<0.1, ** p<0.05, *** p<0.01. Pro-Nazi slant equals 0 in 1928, -1 between 1930 and 1932, +1 in 1933. Controls include fifth-order polynomial of population, share of Jewish and Catholic population, shares of blue- and white-collar workers in 1925, city dummy, number of war participants per 1,000, number of welfare recipients per 1,000, number of renters of social housing per 1,000, log of average property tax, altitude, share of unemployed and partially employed, distance to the nearest city with population over 50k, turnout and vote shares of DNVP, NSFP, SPD, and Zentrum in 1924.

Table A12. Discrimination and Violence against Jews: Cross-Section year-by-year

Incidence of Anti-Jewish Discrimination and Violence						
Year:	1929	1930	1931	1932	1933	1934
	(1)	(2)	(3)	(4)	(5)	(6)
Radio Signal Strength	-0.0004 [0.0004]	-0.0013** [0.0006]	0.0006 [0.0005]	0.0006 [0.0008]	0.0028* [0.0016]	0.0013 [0.0012]
Baseline controls	Yes	Yes	Yes	Yes	Yes	Yes
Region fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,332	1,332	1,332	1,332	1,332	1,332
R-squared	0.04	0.12	0.02	0.08	0.14	0.05

Note: Standard errors clustered by Region (Wahlkreis) in parentheses. * p<0.1, ** p<0.05, *** p<0.01. Baseline controls include log(population), altitude, dummy for being located on a navigable river, share of Jewish population in 1925, share of Catholic population in 1925, share of blue-collar workers in 1925, share of white-collar workers in 1925, dummy for the data source, number of war participants per 1,000, number of welfare recipients per 1,000, number of pensioners with social assistance per 1,000, turnout and vote shares of DNVP, NSFP, SPD, and Zentrum in 1924.

Table A13. Discrimination and violence against Jews

	Incidence of discrimination and violence against Jews
<i>Time span of the sample:</i>	1929-1934
<i>Specification:</i>	<i>Panel</i>
Radio signal strength in 1928 x pro-Nazi slant	0.0010* [0.0006]
Baseline controls, interacted with time fixed effects	Yes
City fixed effects	Yes
Time fixed effects	Yes
Region fixed effects, baseline controls	
Observations	7,992
Number of cities	1332
R-squared	0.410

Note: Standard errors clustered by city in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Pro-Nazi slant equals -1 between 1929 and 1932 and +1 between 1933 and 1934. Baseline controls include log(population), altitude, dummy for being located on a navigable river, share of Jewish population in 1925, share of Catholic population in 1925, share of blue-collar workers in 1925, share of white-collar workers in 1925, dummy for the data source, number of war participants per 1,000, number of welfare recipients per 1,000, number of pensioners with social assistance per 1,000, turnout and vote shares of DNVP, NSFP, SPD, and Zentrum in 1924.

Table A14. Placebo test for pre-trends: changes in electoral outcomes and future changes in signal strength*Change in signal strength between: Sep 1930 and May 1928 Jul 1932 and Sep 1930 Jul 1932 and Mar 1933***Panel A: Future Change in Radio Availability and (Past) Change in Vote Shares of Parties between December 1924 and May 1928**

Change between Votes for Nazi Party in May 1928 and vote for DNVP in December 1924	-0.0283 [0.0541]	0.0507 [0.0347]	0.0084 [0.0100]
Change between Votes for Nazi Party in May 1928 and vote for NSFP in December 1924	-0.0283 [0.0541]	0.0507 [0.0347]	0.0084 [0.0100]
Change between votes for SPD Party between December 1924 and May 1928	0.0006 [0.0004]	-0.0003 [0.0003]	0.0001 [0.0002]
Change between votes for KPD Party between December 1924 and May 1928	0.0001 [0.0001]	-0.0002 [0.0002]	-0.0000 [0.0001]
Change between votes for Zentrum Party between December 1924 and May 1928	0.0003 [0.0006]	-0.0000 [0.0004]	-0.0010* [0.0006]
Change between votes for DNVP Party between December 1924 and May 1928	-0.0002 [0.0003]	0.0002 [0.0004]	-0.0002 [0.0002]

Panel B: Future Change in Radio Availability and (Past) Change in Vote Shares of Parties between May 1924 and December 1924

Change between votes for SPD Party between May 1924 and December 1924	-0.0002 [0.0002]	0.0001 [0.0002]	0.0002 [0.0001]
Change between votes for KPD Party between May 1924 and December 1924	0.0003** [0.0001]	-0.0000 [0.0002]	-0.0001 [0.0001]
Change between votes for Zentrum Party between May 1924 and December 1924	-0.0000 [0.0001]	-0.0004 [0.0003]	-0.0000 [0.0001]
Change between votes for DNVP Party between May 1924 and December 1924	0.0000 [0.0002]	0.0004 [0.0003]	0.0000 [0.0002]
Change between votes for DVP Party between May 1924 and December 1924	-0.0001 [0.0004]	-0.0001 [0.0002]	-0.0000 [0.0001]
Change between votes for BVPX Party between May 1924 and December 1924	-0.0001 [0.0003]	-0.0002 [0.0004]	-0.0001 [0.0002]

Table A15. Placebo Tests. City-Level Results

Panel A. Crime rate 1900-1920, all cities										
<i>Radio signal strength from:</i>	<i>Mar 1937</i>		<i>Sep 1930</i>		<i>Nov 1932</i>		<i>Mar 1933</i>		<i>Jan 1935</i>	
Coefficient on signal strength	-0.0001	-0.0001	-0.0001	-0.0000	-0.0000	0.0000	-0.0001	-0.0000	-0.0001	-0.0000
	[0.0001]	[0.0001]	[0.0001]	[0.0001]	[0.0001]	[0.0001]	[0.0001]	[0.0001]	[0.0001]	[0.0001]
Coefficient on the interaction of signal strength and pogroms in 1349		-0.0001		-0.0004		-0.0002		-0.0003		-0.0002
		[0.0002]		[0.0002]		[0.0002]		[0.0002]		[0.0002]
Coefficient on pogroms in 1349		0.0068		0.0090*		0.0076		0.0100*		0.0100
		[0.0054]		[0.0051]		[0.0046]		[0.0059]		[0.0062]
Panel B. Pogroms in 1920s, all cities										
<i>Radio signal strength from:</i>	<i>Mar 1937</i>		<i>Sep 1930</i>		<i>Nov 1932</i>		<i>Mar 1933</i>		<i>Jan 1935</i>	
Coefficient on signal strength	0.0002	-0.0002	0.0009	-0.0003	0.0006	-0.0001	0.0009	-0.0002	0.0009	-0.0004
	[0.0006]	[0.0005]	[0.0010]	[0.0006]	[0.0011]	[0.0006]	[0.0010]	[0.0006]	[0.0011]	[0.0005]
Coefficient on the interaction of signal strength and pogroms in 1349		0.0004		0.0039*		0.0025		0.0028		0.0033
		[0.0016]		[0.0021]		[0.0021]		[0.0024]		[0.0024]
Coefficient on pogroms in 1349		0.0496		-0.0013		0.0044		-0.0090		-0.0305
		[0.0530]		[0.0376]		[0.0517]		[0.0647]		[0.0722]
Panel C. Crime rate 1900-1920, subsample of cities existing in 1349										
<i>Radio signal strength from:</i>	<i>Mar 1937</i>		<i>Sep 1930</i>		<i>Nov 1932</i>		<i>Mar 1933</i>		<i>Jan 1935</i>	
Coefficient on signal strength	-0.0001	-0.0001	-0.0003	0.0000	-0.0001	0.0001	-0.0002	0.0001	-0.0002	-0.0001
	[0.0002]	[0.0003]	[0.0003]	[0.0002]	[0.0002]	[0.0002]	[0.0003]	[0.0003]	[0.0003]	[0.0003]
Coefficient on the interaction of signal strength and pogroms in 1349		-0.0001		-0.0005		-0.0003		-0.0004		-0.0003
		[0.0003]		[0.0003]		[0.0003]		[0.0004]		[0.0004]
Coefficient on pogroms in 1349		0.0071		0.0107		0.0100		0.0122		0.0110
		[0.0103]		[0.0072]		[0.0085]		[0.0104]		[0.0117]
Panel D. Pogroms in 1920s, subsample of cities existing in 1349										
<i>Radio signal strength from:</i>	<i>Mar 1937</i>		<i>Sep 1930</i>		<i>Nov 1932</i>		<i>Mar 1933</i>		<i>Jan 1935</i>	
Coefficient on signal strength	0.0009	0.0003	0.0024	0.0024	0.0016	0.0021	0.0024	0.0028	0.0025	0.0013
	[0.0016]	[0.0020]	[0.0019]	[0.0019]	[0.0022]	[0.0019]	[0.0020]	[0.0020]	[0.0021]	[0.0019]
Coefficient on the interaction of signal strength and pogroms in 1349		0.0001		0.0007		0.0002		-0.0004		0.0013
		[0.0018]		[0.0023]		[0.0025]		[0.0023]		[0.0021]
Coefficient on pogroms in 1349		0.0577		0.0457		0.0502		0.0653		0.0214
		[0.0447]		[0.0350]		[0.0573]		[0.0601]		[0.0566]

Note: Each column in every panel reports results of a separate regression, with dependent variable mentioned in the name of each panel. Specifications are exactly the same as in corresponding regressions with real rather than placebo outcomes. Odd columns report specifications analogous to those reported in Table 8. Even columns report specifications analogous to those reported in Panel A of Table 9.

3. Persuasion rates

This appendix chapter describes how persuasion rates reported in the main text were obtained.

To compute persuasion rates, we use the formula for a continuous measure of radio exposure introduced by Enikolopov et al. (2011). This formula differs from the first formula for persuasion rates derived by DellaVigna and Kaplan (2007) in the following three respects: (1) it focuses on the case of continuous exposure by analyzing the effect of an infinitesimal change in radio exposure; (2) it allows turnout to increase or decrease for voters exposed to radio broadcasts, as some people who would have voted in the absence of the message may decide to abstain from turning up for the election, which is the case in our data; (3) it allows us to compute separately persuasion rates for a positive message (i.e., encouragement to vote for a specific party) or for a negative message (i.e., discouragement to vote for a specific party). Note that the difference between the effects of positive and negative messages is particularly important in a multiparty system such as Germany's.

It yields the effect of an infinitesimally small change in media exposure taking into account the effect of turnout and controlling for the fraction of people who could potentially be persuaded (i.e., who would not have voted in favor of the message without being exposed).

For the March 1933 election, we compute the persuasion rate for the message of the Nazi propaganda—“*vote for the Nazi Party*”—using the following formula:

$$f = \frac{1}{1-v_0t_0} \left(t \frac{dv}{de} + v \frac{dt}{de} \right) = \frac{1}{1-v_0t_0} \cdot \frac{1}{de/ds} \left(t \cdot dv/ds + v \cdot dt/ds \right), \quad (A1)$$

where v is vote share of NSDAP, t is turnout, v_0 and t_0 are Nazi vote share and turnout in the absence of radio, which is computed by subtracting from actual NSDAP vote (turnout) the mean value of the measure of exposure multiplied by dv/ds (dt/ds). dv/ds is the effect of the change in radio signal strength on Nazi vote share (columns 3 and 4 of Table 4). As de/ds we take the effect of the change in radio signal strength on the listenership share in 1933 (column 4 of Table 1). dt/ds is the corresponding effect for turnout. As there is no robust evidence of the effect of radio signal strength on turnout in any of the years (see Tables A3 and A4 in this online appendix) we take $dt/ds = 0$ and set $t = t_0$.

In contrast, voters who potentially could respond to the message of the Weimar government—“*do not vote for the extremist parties (including the Nazis), vote for other (government) parties*”—are only those who in the absence of radio would have voted for the Nazis. Thus, the formula for this negative message takes the following form:

$$f = \frac{1}{-v_0t_0} \left(t \frac{dv}{de} + v \frac{dt}{de} \right) = \frac{1}{-v_0t_0} \cdot \frac{1}{de/ds} \left(t \cdot dv/ds + v \cdot dt/ds \right), \quad (A2)$$

As in the case of the message of the Nazi propaganda, we estimate persuasion rate at $t = t_0$ and $\mu = \mu_0$. As dv/ds we take the coefficient on the effect of radio signal strength on change in Nazi vote share from columns 1 and 2 in Table 3, as de/ds we take the effect of the change in radio signal strength on

the listenership share in 1931 (column 1 of Table 1). Again, we take $dt/ds = 0$, and set $t = t_0$, so that t_0 does not enter the calculation.

Note that our out best proxy for listenership is the radio subscription rate. Thus, in order to calculate persuasion rates, we need to multiply the subscription rate by the estimate of an average number of eligible voters per subscription. According to the official statistics there were approximately 2.5 registered voters per household (see online appendix for more information on listenership). In addition, as was mentioned in section 2.3, certain groups were exempt from paying the fee, which, along with fee evasion and collective ds further increased the number of listeners per subscription. Under the assumption of four eligible voters listening to the radio with one subscription, the persuasion rates of the messages “*vote for the Nazis*” in March 1933 and “*do not vote for the extremist parties*” in September 1930 were 10.9% and 31.5%, respectively.

For signal strength:

$$f_{1933} = [1/(1-0.429*0.885)] * [1/(0.00163*4)] * (0.045*0.885) = 9.8\%; \text{ and}$$

$$f_{1930} = -[1/0.190] * [1/(0.00218*4)] * (-0.061) = 36.8\%.$$

Results for non-linear transformation of signal strength are similar:

$$f_{1933} = [1/(1-0.410*0.885)] * [1/(0.00602*4)] * (0.128*0.885) = 7.4\%; \text{ and}$$

$$f_{1930} = -[1/0.223] * [1/(0.00671*4)] * (-0.217) = 36.3\%.$$

However, these estimates are sensitive to the assumption of the number of voters exposed to the radio per subscription, as reported in Figure A7 in this online appendix, which plots the estimates of the persuasion rates as a function of assumed number of listeners-voters per subscription. For the March 1933 campaign, the estimates of persuasion rate range from 5.6% for 7 listeners per subscription to 19.6% for 2 listeners; whereas for the message of the 1930 campaign, the corresponding range is between 21.0% and 73.6%.

4. History of radio expansion

This appendix chapter summarizes historical information about radio expansion and placement of transmitters. This is the extended description of data presented in Figure 2.

At the end of 1924, there were only 12 transmitters scattered around the country with a cumulative power of 3.45kW. By the parliamentary election of 1928, there were already 27 transmitters in operation with the cumulative power of 67.75kW. By September 1930 elections, the number and the location of transmitters did not change from the previous election, but many of the existing transmitters had a substantial power upgrade, so that the cumulative power of transmitters increased to 81.5 kW. By the next election in July 1932, four 60kW transmitters were in operation (some new, some upgraded old ones) and the cumulative power of transmitters increased to 262.25kW. By the next election, which took place just a few months later, namely, in November 1932, the cumulative power of transmitters increased to 315kW and by the March 1933 election campaign, the cumulative power of transmitters increased to 514.75kW with the total of 25 transmitters in operation, among which six with power of 60kW and one - 120kW. The Nazis continued upgrading the power of transmitters and added several new transmitters after consolidating political power. As a result of further expansion, the cumulative power of transmitters increased to 960kW by 1938.

Initially, the country was divided into nine broadcasting districts, each with a diameter of about 200–300 km. To make the signal available to as many people as possible, transmitters were initially built in the center of the major city of each broadcasting district. The range and quality of the signal was insufficient to provide uniform radio signal coverage over the country. The demands for more localized content from areas with the signal and for radio availability from areas with no signal led to the construction of additional transmitters. The Geneva Frequency Plan, which came into effect in November 1926, reduced the number of available radio frequencies and led to the creation of single-frequency networks in each of the nine broadcasting districts. The technical upgrades of the more powerful transmitters required moving them from the city center to the outskirts (Schütte 1971) and a study of population densities was conducted to determine the optimal location of the most powerful transmitters to reach the maximum number of potential listeners.¹ An additional important rationale for upgrading the power of existing transmitters and building new ones was to reduce signal disturbances from foreign transmitters near the border.²

¹ Neuordnung des Rundfunks in Deutschland. Der Deutsche Rundfunk, Nr. 49, 6.12.1929, p. 1545f.

² For example, the transmitter in Flensburg was constructed in December 1928 as a response to a nearby Danish transmitter. The transmitter in Gleiwitz was built in 1925 because of a Polish transmitter in nearby Kattowitz, and its power was increased to 12 kW in 1927 after the power of the Kattowitz transmitter was increased to 10kW. This upgrade made the “supplementary” transmitter in Gleiwitz the third most powerful in Germany at that time (Schütte 1971).

5. Listenership

This appendix chapter summarizes historical information about radio subscriptions and their relationship to actual listenership, the number of voting age individuals per subscription, and time variation in the number of subscriptions. This information is used in the paper to assess the quality of radio subscriptions data as a proxy for the listenership and provide estimates of the number of listeners per radio subscription that are used to calculate persuasion rates. The chapter also provides some information on the availability of radio sets and basic characteristics of radio listeners that are used in the paper to infer which groups of population were more likely to be exposed to radio propaganda.

Cost of listening

- In the beginning of 1930s, the cheapest crystal radio receiver was available for 25 to 30 marks, while more sophisticated vacuum detectors ranged from 110 to 380 marks.
- In 1931, slightly over the half of the radio audience still used the less expensive crystal receiver, 45.5% owned more powerful set, i.e. a set with several valves (Führer 1997, p. 740-41).
- Nazis tried to enlarge the audience of radio. The *Volksempfänger* (people's receiver) model VE301 was launched on August 18, 1933, during the international radio exhibition in Berlin. The price of this radio set was 76 marks.
- During the radio exhibition in 1938 a new, even cheaper version of people's receiver (DKE38) was presented. The price of this model was 36 marks. By May 1939 0.9 million receivers had been sold with another 1.9 million followed by 1943 (Dussel 1999, p. 101).
- Listenership was low in rural areas because few citizens had the more powerful radio sets needed to capture broadcasts. Radio listenership was further hindered in rural areas by the widespread lack of electricity, as 96.5% of receivers required electric power supply in 1930s (Vollmann 1936).
- The monthly radio subscription fee of 2 marks was routinely collected up to 1933; it was roughly equivalent to the price of a monthly newspaper subscription, two hours of skilled labor, or four hours of unskilled labor.
- The prices of radio receivers declined over time and the number of households that could afford them increased. The annual average household budget for radio related expenditures among lower-income households (below RM 3,000) increased from RM 4.11 in 1927-1928 to RM 15.75 in 1937 (Ross 2006b, p.185).³

Discrepancies between the number of subscriptions and actual number of listeners

This subsection provides historical evidence regarding three reasons why the number of subscriptions underestimates the actual number of listener: collective listening, subscription fee exemptions, and illegal listenership.

1. Collective listening

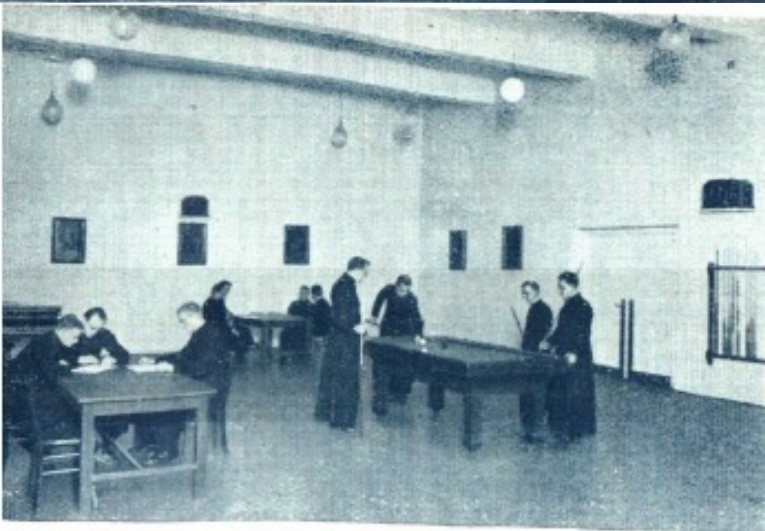
Collective listening had been popular since the onset of civic radio broadcasting.

³ Note that certain groups of population were exempted from paying radio fees: mentally and physically disabled since 1929, unemployed, pensioners, benefit recipients, and people with many children under certain conditions since 1931.

- “The earliest were probably radio hams (*Bastler*) who built their own receivers too, and some were offshoots of existing organizations, for example the churches, women's union groups... School radio had begun in Germany in 1927, with communal evenings extended to parents' evenings and fairs. The unions, too, were keen to promote collective listening to enable workers to exchange views and interpretations on what they heard over the radio,” (Lacey 2006, p.71).
- In glamour magazines there was “...surprising number of images of people listening in groups, and listening in public places - for example, in school, on the beach, on picnics, and in restaurants,” (Lacey 2006, p.71).



The radio as part of school education, Rundfunkjahrbuch 1930



The radio in seminary, Rundfunkjahrbuch 1930

One particular way collective listenership was promoted occurred was through “*Listening communities*.”

- Generally, these groups were organized by well-meaning professionals who were explicitly concerned to teach people how to listen 'properly' in order to make the most of the radio as an instrument of personal improvement (Ross, 2008).
- According to Cebulla (2004, p. 82), there were around 2,000 listening communities around the year 1930, most of them in rural areas.
- According to Ross 2008 (p. 183), in June 1932 there were over 749 listening communities counted by *Hamburger Echo*. Ross (2008) mentions that “the first dedicated 'listening

communities' (*Hörgemeinde*) were reported in spring 1929, mostly in villages, led by teachers involved in adult education.

- Ross (2008) mentions that “the national radio service, the *Deutsche Welle*, began broadcasting experimental programmes for collective listening on Tuesday evenings in the autumn of 1931”
- For listening communities “well over half (479) of them in rural areas, mostly led by teachers associated with the *Deutscher Schul-Funk-Verein*, some by priests” (Ross, 2008). The stations in Leipzig (Mirag) and Berlin (Funkstunde) ran similar programmes, and by 1932 there were 500 listening groups reported among the growing ranks of the unemployed.

2. *Illegal listenership*

- As the result of the first amnesty in 1924 between 54,000-75,000 subjects registered their illegal sets (Fuge 2009, p.15, p.56).
- Since the beginnings of radio till 1931 9.500 individuals were convicted for illegal listening (Fuge 2009, p. 17).

3. *Home-made radios*

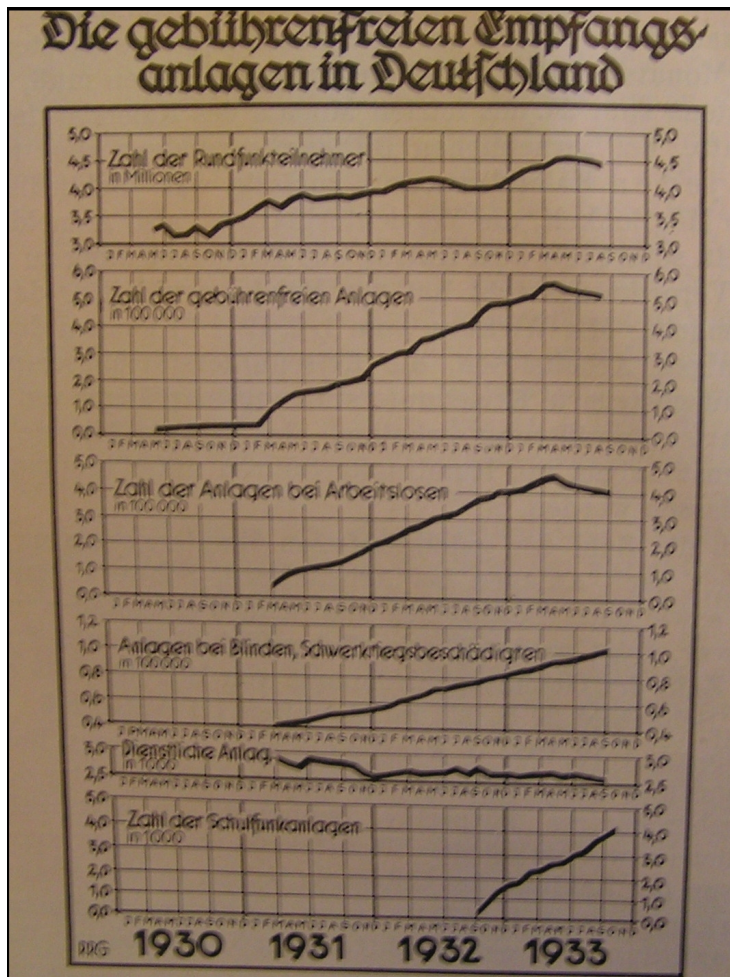
- Some German houses in the 1920s and 1930s were equipped with homemade radios. During the First World War, 4,000 radio operators were trained to assemble their own receivers, and members of many local radio clubs also made their own receivers. According to Lerg (1980, p. 105), after 1932, when the prices for radios declined, the scale of home-making of new radios declined; however, the home upgrades of radios leading to a better reception increased.

4. *Subscription fee exemptions*

- Mentally and physically disabled persons were exempted from radio fee since 1929 (Postler 1991, p.120).
- Since 1931 unemployed, pensioners, benefit recipients and people with many children could be under certain conditions exempted as well (Postler 1991, p.120).

The figure below presents information on the evolution of the number of receivers that were exempt from paying the subscription fees by type between 1930-1933. It shows that during this period the number of exempt receivers was growing in almost all the categories.

Figure L1. The number of receivers free of subscription fee in Germany (Source: Reichs-Rundfunk-Gesellschaft 1933).



The number of subscriptions, in Million

The number of receivers free of subscription fee, in 100,000

The number of receivers owned by unemployed, in 100,000

The number of receivers owned by blind or war veterans, in 100,000
Receivers in public institutions, in 1,000

The number of school receivers, in 1,000

Social structure of radio listeners

Table L1. Social structure of radio subscribers

Social group:	1928		1930		Oct. 1, 1934	
	%	Number of subscribers	%	Number of subscribers	%	Number of subscribers
Entrepreneur/ free profession	28.2	743,230	30	1,052,853	30.3*	1,687,058*
Civil servant	18.1	477,038	13.5	473,784	14	779,658
Employee	22.2	585,096	22	772,092	18.1	1,008,865
Worker	22.5	593,003	25.6	898,434	28.6	1,592,224
Without profession	9	237,201	8.9	312,346	9.1	506,196
Total	100	2,635,567	100	3,509,509	100	5,574,001
Source:	Führer 1997	Calculation based on Führer 1997	Führer 1997	Calculation based on Führer 1997	Pohle 1955, p.335	

* self-employed and helping family members, including

Note: The category “Entrepreneur/free profession” includes both self-employed/entrepreneurs, who were mostly poor blue-collar shopkeepers, but also doctors, lawyers, dentists, and vets, i.e., high-income free professionals. However, the Table L2 below shows that high-income free professionals inside this category comprise at most 119470, i.e., 3.6% of all radio listeners.

Table L2. Sectoral structure of radio subscribers within each social group

Cross-tabulation of social and sectoral structure of radio listeners in 1930 and sectoral structure of radio listeners in 1927									
				1927	1930				
					Social structure of radio listeners				
					Total: a+b+c+d	a) self- employed and small businesses	b) civil servants and employees	c) workers	d) other
	In English:	In German:							
Sectoral (industrial) structure of radio listeners	i. Agriculture and forestry, gardening, animal breeding and fish farming	Land- und Forstwirtschaft, Gärtnerei, Tier- u. Fischzucht, Weinbau	number of listeners	61,991	193,352	135,401	27,337	30,614	
			share of all listeners	4.20%	5.90%	4.10%	0.80%	0.90%	
	ii. Industry and craft	Industrie und Handwerk, einschl. Bergbau, Baugewerbe, Wasser-, Gas- und Elektrizitätsgewinnung und -versorgung	number of listeners	496,057	1,221,303	361,352	296,352	563,599	
			share of all listeners	33.70%	37.40%	11.10%	9.10%	17.20%	
	iii. Trade and transport	Handel und Verkehr, einschl. Gast- und Schankwirtschaft	number of listeners	452,146	939,899	341,330	456,454	145,115	
			share of all listeners	30.70%	28.70%	10.40%	14.00%	4.40%	
	iv. Administration, defence, church, free professions	Verwaltung, Heerwesen, Kirche, freie Berufe	number of listeners	211,833	405,720	53,515	328,703	23,502	
			share of all listeners	14.40%	12.40%	1.60%	10.10%	17.20%	
	v. Healthcare, hygiene	Gesundheitswesen, hygienische Gewerbe, Wohlfahrtspflege	number of listeners	57,144	109,760	65,955	34,075	9,730	
			share of all listeners	3.90%	3.40%	2.00%	1.00%	0.30%	
	vi. Domestic service/ other	Häusliche Dienste und Erwerbstätigkeit ohne feste Stellung oder ohne Angabe der Betriebszugehörigkeit	number of listeners	59,499	106,250	27,106	33,710	45,434	
			share of all listeners	4.00%	3.20%	0.80%	1.00%	0.70%	
	vii. Without profession or profession not stated	Ohne Beruf und ohne Berufsangabe einschl. Studierende und Schüler	number of listeners	132,078	293,595				293,595
			share of all listeners	9.00%	9.00%				9.00%
	Total: i+ii+iii+iv+v+vi+vii		number of listeners	1,470,748	3,269,879	984,659	1,176,631	817,994	293,595
			share of all listeners		100%	30%	36%	25%	9%

Source: Blauner, Jakob, Wer hört, und wer hört nicht? Funk 1931, vol.33, pp. 257-259. Statistic based on radio membership cards (registered receivers: fee or fee exemption).

Note: The total numbers in the last row of the Table do not exactly correspond to numbers in Table L1 above because the sources are different.

Table L3. Share of radio subscribers among all members of each social/sectoral group

Share of radio listeners among people in a particular social group and sector, 1930						
			Social group of radio listeners			
			Total: a+b+c+d	a) self-employed and small businesses	b) civil servants and employees	c) workers
	In English:	In German:				
Sector of radio listeners	i. Agriculture and forestry, gardening, animal breeding and fish farming	Land- und Forstwirtschaft, Gärtnerei, Tier- u. Fischzucht, Weinbau	6.80%	6.40%	37.50%	4.70%
	ii. Industry and craft	Industrie und Handwerk, einschl. Bergbau, Baugewerbe, Wasser-, Gas- und Elektrizitätsgewinnung	19.70%	26.40%	41.10%	13.70%
	iii. Trade and transport	Handel und Verkehr, einschl. Gast- und Schankwirtschaft	34.30%	34.90%	46.00%	18.70%
	iv. Administration, defence, church, free professions	Verwaltung, Heerwesen, Kirche, freie Berufe	46.70%	37.20%	53.2%	22.00%
	v. Healthcare, hygiene	Gesundheitswesen, hygienische Gewerbe, Wohlfahrtspflege	49.30%	55.40%	62.8%	19.70%
	vi. Domestic service/ other	Häusliche Dienste und Erwerbstätigkeit ohne feste Stellung oder ohne Angabe der Betriebszugehörigkeit	na	na	na	na
	vii. Without profession or profession not stated	Ohne Beruf und ohne Berufsangabe einschl. Studierende und Schüler	na	na	na	na

Source: Blauner, Jakob, Wer hört, und wer hört nicht? Funk 1931, vol.33, pp. 257-259. Statistic based on radio membership cards (registered receivers: fee or fee exemption).

Voting age individuals per radio subscription

The table below shows the number of eligible voters, the number of radio subscriptions, and the average number of voters per household for all the elections under considerations, which provides information on the number of eligible voters per radio subscription used in the calculation of persuasion rates.

Table L4. Radio subscriptions and voting age individuals per households

Parliamentary elections	Eligible voters	Radio subscriptions	Average number of voters per household
May 1928	41 224 678	2 286 616	*
September 1930	42 957 675	3 267 320	*
July 1932	44 211 216	4 119 531	2.56
November 1932	44 374 085	4 118 244	2.57
March 1933	44 664 825	4 480 251	2.52
Source:	Falter et al. 1986, p. 41.	Vaessen, 1938	Rothenbacher 1997, p. 51.

(here *average number of voters per household* = $\frac{\text{eligible voters}}{\text{no of households}}$)

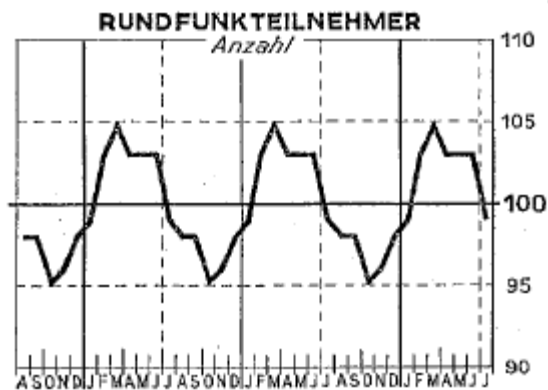
Changes in the number of subscriptions

This subsection provides information on the significant amount of seasonal variations in the number of radio subscriptions, as well as the variation in time trends in radio subscription across regions in earlier period (1926-1929).

Seasonal variation

The figure below shows that the number of subscriptions exhibited significant seasonal variation with subsriptions. In particualr, approximately 10% of all subscriptions were cancelled during the summer time. Anecdotal evidence suggests that this was because of listeners involved in agricultural work, which becomes more intense during the harvest.

Figure L5. Seasonal variation in subscriptions (Source: Der Markt, 1933, p. 9).

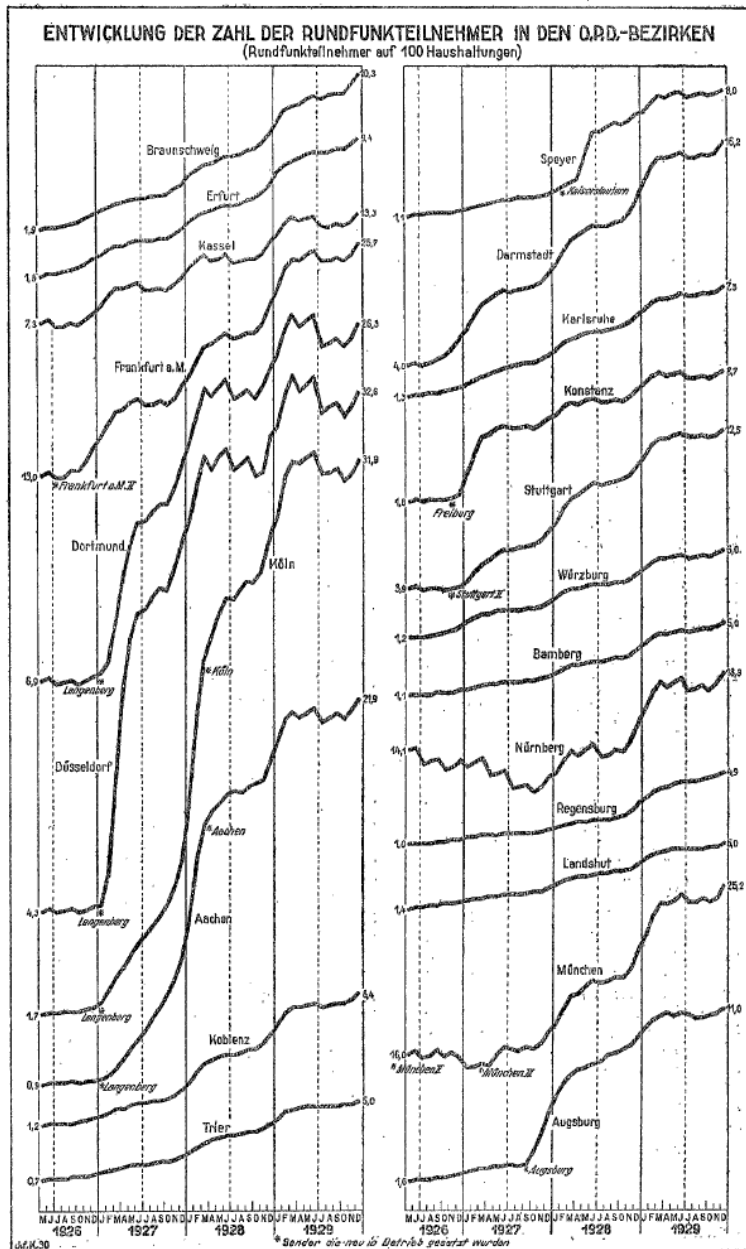


Notes: Percentage of the yearly average between August 1929 and July 1932

Time trend in the number of subscriptions

The figure below shows that the number of subscriptions was growing steadily between 1926 and 1929 in all the regions, although the speed of the growth significantly varied across the regions.

Figure L6. Radio subscriptions over time in 1926-1929, by region (examples). (Source: Zur Lage der Funkindustrie, 1930, p.38).



References for the Online Appendix chapter „Listenership“

- Cebulla, Florian (2004) *Rundfunk und ländliche Gesellschaft 1924–1945*. Ruprecht GmbH & Company: Göttingen.
- Der Markt für Rundfunkempfangsgeräte in Deutschland: Das Angebot (1933) *Veröffentlichungen des Verbandes der Funkindustrie e. V.* no.10, Berlin.
- Dussel, Konrad (1999) *Deutsche Rundfunkgeschichte: eine Einführung*, Konstanz: UKV.
- Falter, Jürgen W., Thomas Lindenberger, and Siegfried Schumann (1986) *Wahlen und Abstimmungen in der Weimarer Republik: Materialien zum Wahlverhalten, 1919-1933*. München: Beck.
- Fuge, Janina (2009) An den Funkpranger gestellt und mit dem Wellendetektiv gejagt. Die Schwarzhörer als Konstante der Rundfunkgeschichte, *Nordwestdeutsche Hefte zur Rundfunkgeschichte*, no. 7.
- Lacey, Kate (2006) The Invention of a Listening Public: Radio and its Audiences, in Führer, Karl Christian and Corey Ross (eds.) (2006), *Mass Media, Culture And Society In Twentieth-Century Germany*. Palgrave.
- Führer, Karl Christian (1997) “A Medium of Modernity? Broadcasting in Weimar Germany, 1923–1932, *The Journal of Modern History*, 69 (4), pp.722–753.
- Lacey, Kate (2006) “The Invention of a Listening Public: Radio and its Audiences” in Führer, Karl Christian, Ross, Corey (2006) *Mass Media, Culture And Society In Twentieth-Century Germany*, Basingstoke: Palgrave Macmillan.
- Pohle, Heinz (1955) *Der Rundfunk als Instrument der Politik: Zur Geschichte d. Dt. Rundfunks von 1923/1938*. Verlag Hans Bredow-Inst.: Hamburg.
- Postler, Frank (1991), *Die historische Entwicklung des Post- und Fernmeldewesens in Deutschland vor dem Hintergrund spezifischer Interessenkonstellationen bis 1945: eine sozialwissenschaftliche Analyse der gesellschaftlichen Funktionen der Post*, Frankfurt am Main.
- Reichs-Rundfunk-Gesellschaft (1933) *Rundfunkjahrbuch 1933*, Berlin.
- Ross, Corey (2008) *Media and the making of modern Germany: mass communications, society, and politics from the Empire to the Third Reich*. Oxford University Press.
- Rothenbacher, Franz (1997) *Historische Haushalts-und Familienstatistik von Deutschland 1815–1990*. Campus Verlag.
- Vaessen, Kurt (1938) “Daten aus der Entwicklung des Rundfunks. Mit Vergleichszahlen aus der Geschichte des Films, der Presse und des Verkehrswesens” Würzburg: Triltsch.
- Zur Lage der Funkindustrie (1930) *Veröffentlichungen des Verbandes der Funkindustrie e. V.* no.1, Berlin.
- “Teilnahme am Rundfunk in den einzelnen OPD-Bezirken in Orten mit mehr als 2500 Einwohnern am 1 April 1933,” (1933) *Veröffentlichungen des Verbandes der Funkindustrie e.V.*, 12.

6. Anecdotal Evidence

Anecdotal evidence on the content of radio broadcasts and the importance of radio for the Nazis

This appendix chapter consists of four parts:

- 1) quotes from political speeches broadcasted on the radio at different points in time;
- 2) quotes from the historical literature about the content of the radio programs;
- 3) quotes from Goebbels dairies illustrating that the Nazis were thinking ahead in 1932 about the times when they would take control over radio;
- 4) quotes from Goebbels dairies showing that propaganda on the radio was an important priority in the campaign of March 1933 elections.

1) Quotes from speeches broadcasted on the radio

Campaign before the referendum against the Treaty of Versailles in 1929 on the radio:

1.1. Reich Minister of Home Affairs Carl Severing:

10/09/1929: "The primitive consideration shows that the referendum against the enslavement of the German people would achieve exactly the opposite of what it combats. The referendum relies on completely false premises, conceals crucial facts and uses methods which undermine the moral foundations of a self-aware people shaped by democracy. [...] § 1 of the referendum is unnecessary and harmful." (Vossische Zeitung, 10/10/1929, p.1)⁴

1.2. Reich Nutrition Minister Dietrich argues against the referendum:

10/18/1929: "The farmers' unions, the "German peasantry" and the Farmers' association reject the referendum, while the Reich Farming Association justifies its commitment to the Hugenberg action [referendum] with a misleading argument. [...] Especially those who hold the liberty and national greatness of Germany close to their hearts should weigh the political progress yielded by the Young Plan more heavily than financial concerns: Liberty holds more for the people than monetary burdens!" (Schulthess, 1929, p.192)⁵

Campaign for the September 1930 parliamentary elections on the radio:

1.3. Reich Minister of Home Affairs Josef Wirth speaks to the youth during the celebrations of the constitution and refers to the upcoming parliamentary elections:

⁴ Original text: „Die primitive Überlegung zeigt, daß das Volksbegehren gegen die Versklavung des deutschen Volkes genau das Gegenteil von dem erreichen würde, was es bekämpft, daß es ferner von völlig falschen Voraussetzungen ausgeht, entscheidende Tatsachen verschweigt und mit Methoden arbeitet, die die moralischen Grundlagen eines in der Demokratie selbstbewußten Volkes unterhöhlen. [...] Der § 1 des Volksbegehrens ist überflüssig und schädlich.“

⁵ Original text: „Die Bauernvereine, die „Deutsche Bauernschaft“ und der Bauernbund lehnen das Volksbegehren ab, während der Reichslandbund sein Eintreten für die hugenbergsche Aktion mit einer irreführenden Argumentation begründe. [...] Gerade für den, dem die Freiheit und nationale Größe Deutschlands am Herzen liege, müsse der politische Fortschritt, den der Youngplan bringe, mehr wiegen als finanzielle Bedenken: Höher als geldliche Lasten gilt für ein Volk die Freiheit!“

08/11/1930: “[...] Radicalism has always killed its own children. It does not improve, it destroys, there is no fruitfulness in political hatred. Never and nowhere! Do not incapacitate the future parliament with your hatred and with your radicalism. You yourself would have no benefit from it, much less the German people. German democracy is for everyone, all of good will have a place in it.” (Vossische Zeitung Berlin 08/11/1930, p. 1)⁶

Presidential election campaign of 1932 on the radio:

1.4. Paul von Hindenburg on Hitler while announcing and justifying his candidature in the radio for the 1932 presidential election:

3/10/1932: “The election of a party man, who is an advocate for a one-sided and extreme political ideology and who would turn the majority of the German people against him, would lead our homeland into a deep and extraordinary crisis. It is my duty to prevent this.” (Schulthess 1932, p.55)⁷

1.5. Brüning, the chancellor, gave a speech in support of Hindenburg in Berliner Sportpalast broadcasted on the radio during the 1932 presidential campaign:

3/11/1932: “I strongly ask all of you who are listening to deploy all of your strength and energy, so that March 13 will be a decisive victory for the president and all of Germany. And I conclude by saying: Hindenburg has to win because Germany has to live.” (Schulthess 1932, p. 58)⁸

1.6. Hans Schlange-Schöningen, agriculture minister and the commissioner for relief in the East, gave a speech in Königsberg broadcasted on the radio, he campaigned for Hindenburg during the 1932 presidential campaign:

6/4/1932: “This policy [in East Prussia] cannot be realized in the political turmoil in the long run, it can only be realized under domestic political stability. That is why I am here today to talk afterwards at a rally for the re-election of Field Marshal von Hindenburg in the firm belief that, under his presidency, in tough work, the salvation of the East and of the whole nation will be achieved, as the rescue of East Prussia and the German East was achieved under his military command at Tannenberg.” (DRA Tonträger, order number 2590029; see also Roller, p.103).⁹

1.7. Chancellor Brüning held a speech in Königsberg broadcasted on the radio in favor of Paul von Hindenburg during the 1932 presidential campaign:

4/9/1932: “I hold intentionally the last meeting before the crucial day here, in the homeland of Hindenburg, to bear witness for him. [Applause] If one has heard and read in the past days about the extent the agitation not only against the government and against the policies of the Reich government

⁶ Original text: “[...] Der Radikalismus hat immer noch seine eigenen Kinder getötet. Er bessert nicht, er zerstört, es lebte keine Fruchtbarkeit im politischen Haß. Nimmer und nirgendwo! Macht den kommenden Reichstag nicht arbeitsunfähig mit eurem Haß, mit eurem Radikalismus. Ihr selber würdet keinen Gewinn davon haben, noch weniger das deutsche Volk. Das Gebäude der deutschen Demokratie ist für alle da, alle haben Raum, die guten Willens sind.“

⁷ Original text: „Die Wahl eines Parteimannes, der Vertreter einer einseitigen und extremen politischen Anschauung sei und hierbei die Mehrheit des deutschen Volkes gegen sich haben würde, hätte aber unser Vaterland in schwere, nicht absehbare Erschütterungen versetzt. Das zu verhindern, gebot mir meine Pflicht.“

⁸ Original text: „... Ich richte an Sie alle, die zuhören, die inständige Bitte, die letzte Kraft und Energie einzusetzen, daß der 13. März für den Reichspräsidenten zu einem entscheidenden Siege wird, der auch ein entscheidender Sieg für Deutschland sein wird. Und ich schließe damit, daß ich sage: Hindenburg muss siegen, weil Deutschland leben muß.“

⁹ Original text: „Diese Politik [in Ostpreußen] auf lange Sicht lässt sich nicht durchführen im politischen Trubel, sie lässt sich nur durchführen bei Innenpolitischer Stabilität. Darum bin ich heute hier, um nachher in einer Kundgebung für die Wiederwahl des Feldmarschalls von Hindenburg zu sprechen in der festen Überzeugung, dass wie einst unter seiner Feldherrschaft bei Tannenberg die Rettung Ostpreußens und des deutschen Ostens überhaupt geschehen ist, so unter seiner Präsidentschaft in zäher Arbeit die Rettung des Ostens und der ganzen Nation erfolgen wird.“

has been used—we are used to it as politicians—but again and again against the personality of the esteemed field Marshal [Hindenburg]. I have observed situations in which shameless claims has been made concerning the motivations of the president's candidacy. For example, at a meeting in Stuttgart, where even the Nazi newspaper was ashamed afterwards about the printed content of the speech of its party speaker.” (DRA Tonträger, order number 2590030; see also Roller 1977, p.104, Schallaufnahmen, p. 23)¹⁰

1.8. Statement by the Minister of the Interior, Wilhelm Freiherr von Gayl, on the use of broadcast time by the government:

6/15/1932: "The new Reich government places great value on directly communicating its intentions and actions to the German people through the use of modern means of broadcasting. We feel obliged to speak to those millions of German people who listen to the radio in all parts of our country. [...] We will henceforth speak directly to the German people by means of radio about these and all future measures of the national government, so they know what is happening and because they have a right to hear about it. The Minister of Labor will begin after my opening remarks today, tomorrow at the same time a spokesperson for the Reich Finance Minister, who himself is currently in Lausanne, will talk about the new tax regulation and on Friday I will talk as Reich Minister of the Interior about the decree to fight political violence. No one needs to fear that we will talk every day and disturb the evening rest of our fellow citizens. We will only talk when we have something new and important to say to everybody." (Roller, p. 113, DRA Tonträger, order number 2590034)¹¹

Franz von Papen's speeches on the radio during the campaign for the November 1932 parliamentary elections:

1.9. Franz von Papen at the meeting of the Farmers Association in Münster:

8/28/1932 (broadcasted on 8/29/1932): “When, today, I campaign against Hitler, for the rule of law, for the national community and for order in governance, I am thus following the goal—and he is not—that millions of his followers have for years longed for burning hearts in the struggle against party rule, against arbitrariness, and injustice.” (Schallaufnahmen, p. 28, Roller, p. 129-130, Schulthess, p. 144-149)¹²

1.10. Franz von Papen on the governmental plan after the dissolution of parliament:

¹⁰ Original text: „In dem ich hier nicht ohne Absicht die letzte Versammlung abhalte vor dem entscheidenden Tage um auch hier in der Heimat Hindenburgs für Ihn Zeugnis abzulegen. [Beifall] Wenn man in den vergangenen Tagen gehört und gelesen hat, welche Form die Agitation angenommen hat nicht nur gegen die Reichsregierung und gegen die Politik der Reichsregierung, daran sind wir als Politiker gewöhnt, sondern immer erneut und erneut auch gegen die Persönlichkeit des Hochverehrten Feldmarschalls. Ich habe Fälle festgestellt, wo das schamloseste behauptet worden ist über die Beweggründe der Kandidatur des Herrn Reichspräsidenten, zum Beispiel auf einer Versammlung in Stuttgart, wo selbst das nationalsozialistische Blatt sich geschämt hat später die Ausführung ihres Parteiredners gegen Hindenburg zu bringen.“

¹¹ „die neue Reichsregierung liegt Wert darauf ihre Absichten und Handlungen dem deutschen Volke durch Benutzung der neuzeitlichen Einrichtung des Rundfunks unmittelbar mitzuteilen. Wir fühlen uns verpflichtet uns auch an die Millionen deutscher Menschen zu wenden, die den Rundfunk in allen Teilen unseres Vaterlandes hören. [...] Über diese und später kommende Maßregeln der Reichsregierung werden wir hinfür durch den Rundfunk unmittelbar zum deutschen Volk sprechen, damit es weiß, woran es ist und weil es ein Recht hat uns zu hören. Der Reichsarbeitsminister wird nach meinen einleitenden Worten heute den Anfang machen, morgen um die gleiche Stunde wird der Vertreter des nach Lausanne gereisten Reichsfinanzministers über die neue Steuerverordnung sprechen und am Freitag werde ich als Reichsinnenminister über die Verordnung zur Bekämpfung politischer Ausschreitungen reden. Es braucht niemand zu fürchten, dass wir alle Tage reden und unseren Mitbürgern die Abendruhe verderben wollen. Wir werden nur dann sprechen, wenn wir etwas neues und für alle wichtiges zu sagen haben.“ (DRA Tonträger, order number 2590034)

¹² “Wenn ich heute gegen Hitler für den Rechtsstaat, für die Volksgemeinschaft und für eine Ordnung in der Staatsführung eintrete, so verfolge ich und nicht er das Ziel, das Millionen seiner Anhänger im Kampfe gegen Partei Herrschaft, gegen Willkür und Ungerechtigkeit jahrelang mit heißem Herzen herbeigeseht haben.”

9/12/1932: „...and if the gentlemen of the NSDAP think it is necessary to bring forth the old requisites of socialist class struggle of the past years, if they believe they will achieve electoral successes by struggling against the upper class, against the “barons”, against the Herrenschicht [a German word for upper class or ruling class], if they think to return to the methods of class struggle which they themselves abominate, then I fear that they will experience a bitter disappointment because Marxism of all colors is far more superior to them when it comes to this fighting method. But they will - and this matters most – distort and destroy their goals, their aim to unite the nation on a nationalist basis! They will put themselves at odds with the great achievements of their past, of a time in which they brought back honor to the idea of the nationalism in the eyes of the German people.”

(Bundesarchiv, Online-Dokumente: http://www.bundesarchiv.de/aktenreichskanzlei/1919-1933/0000/vpa/vpa2p/kap1_1/para2_6.html (retrieved on Nov 21 2013))¹³

1.11. Franz von Papen’s speech at industrialist’s association meeting in Munich:

10/12/1932: “Even if Mr. Hitler has declared, with an easy gesture, that the economic program in light of all the existing signs can already be considered as having failed, the facts I have pointed out about the design of the labor market speak clearly and persuasively against his claim.” (Schulthess 1932, p. 176-180, Roller 1977, p. 138, Schallaufnahmen, p. 30)¹⁴

1.12. Franz von Papen’s speech at the meeting of the Chamber of Industry and Commerce:

10/16/1932: „With Hindenburg for a new and better Germany!“ (Roller 1977, p. 140, Schallaufnahmen, p. 30)¹⁵

1.13. Franz von Papen’s speech on the radio before the November 1932 elections:

11/4/1932: Broadcast of the address before the elections on November 6, 1932: “Back then we rejoiced about the battle cry of Hitler for national revival and against Marxism! We hoped that he would regain the working class afflicted by bolshevist ideas for the national movement. However, his advancements on the red frontline remained minor. And that is certainly not the fault of this government, which opened all doors for him and his propaganda methods in the last elections and still allows him to proceed. But his nonexistent gains in these ranks are not surprising if Mr. Hitler uses the same methods of class struggle, defamation and insult to recruit for his national movement. They [the communists] are far more superior in these matters than he. [...] But I have to make something very clear: The sabotage that emanates out of pure party egoism and is carried on against the program, the fierce disputes which are even brought about by the national socialists and communists together to disrupt the economic stability are a crime against the entire Nation, which has used all of its remaining strength.[...] However, if one wishes the unification of all German national forces, then one cannot declare the liberation of the convicted Beuthener murderers to be a matter of honor for his party. One has to accept the norms of the constitutional state as it has evolved over hundreds of years. If Hitler wants to be part of the great

¹³ „[...] und wenn die Herren von der NSDAP heute die schon etwas verstaubten Requisiten des sozialistischen Klassenkampfes vergangener Jahre glauben hervorholen zu müssen, wenn Sie glauben, daß Sie mit einem Kampf gegen die „feinen Leute“, gegen die sogenannten „Barone“, gegen die „Herrenschicht“, wie Sie es nennen, neue Wahlerfolge erzielen werden, wenn Sie, kurz gesagt, zu den Methoden des von Ihnen perhorreszierten Klassenkampfes glauben zurückkehren zu sollen, so fürchte ich, daß sie eine bittere Enttäuschung erleben werden, denn in dieser Kampfmethodik ist Ihnen der Marxismus aller Schattierungen weit überlegen. Aber Sie werden dabei – und das ist das Wesentliche – Ihr Ziel verfälschen und zerschlagen, Ihr Ziel, die Nation um der Nation willen auf einer nationalen Basis zu einen! Sie werden sich selbst in Gegensatz setzen zu der großen Leistung Ihrer Vergangenheit, in der Sie den nationalen Gedanken im deutschen Volk wieder zu Ehren gebracht haben.“

¹⁴ “Wenn Herr Hitler mit einer leichten Handbewegung erklärt hat, das wirtschaftliche Programm könne nach allen vorhandenen Anzeichen bereits jetzt als erledigt gelten, so sprechen die von mir wiedergegebenen Tatsachen über die Gestaltung des Arbeitsmarktes wohl ausreichend und deutlich überzeugend gegen diese Behauptung.”

¹⁵ “Mit Hindenburg für ein neues und ein besseres Deutschland.”

national Germany then he needs to quit the unscrupulous act of stabbing the government in the back, which is fighting for the emancipation and military sovereignty of the nation.” (Deutsches Rundfunkarchiv, Frankfurt am Main, <http://www.dhm.de/lemo/html/dokumente/papen/index.html> (retrieved on 21.11.2013), Schulthess 1932, p.194ff, Roller 1977, p. 141)¹⁶

Franz von Papen’s speeches on the radio during the campaign for the March 1933 parliamentary elections:

1.14. Franz von Papen’s speech in Dortmund, broadcasted in the region of Cologne:

2/24/1933: “For this purpose three large pillars of the national movement have come together under one government, which is headed by the leader [Hitler] of the largest popular movement. I am well aware that this coalition of the mass movement, as it is embodied in the present government, is a necessary concession to the democratic anti-spirit of our time.” (Von Papen, p. 35-36)¹⁷

1.15. Franz von Papen’s speech in Stuttgart on 3.3.1933, broadcasted in all regions:

3/3/1933: “I’m not fighting for a party, but for an idea and the freedom of creative work for the new government.” (Von Papen, p. 63)¹⁸

Hitler’s speeches on the radio during the electoral campaign for March 1933 election:

1.16. In his first speech on the radio, Hitler criticizes Weimar governments:

2/1/1933: „In 14 years the November parties have ruined the German peasantry. In 14 years they have created an army of millions of unemployed.” (Domarus 1962, p. 193)¹⁹

1.17. In a speech in Berliner Sportpalast, Hitler criticizes the Weimar governments:

2/10/1933: „They have destroyed everything they could. [...] That is how Germany looks today under the rule of these parties that have ruined our nation over the last 14 years. The only question is how much longer? [...] German People! Give us four years time, then evaluate and judge us. German nation,

¹⁶ „Wie hatten wir seinerzeit den Kampf mit Hitlers gegen den Marxismus und für die nationale Erneuerung begrüßt! Wie hatten wir gehofft, daß er die der bolschewistischen Lehre verfallene Arbeiterschaft der nationalen Sammlung zuführen sollte! Indes, sein Einbruch in die Reihen der Roten Front ist nur gering geblieben. Und das ist sicherlich nicht die Schuld dieser Regierung, die ihm und seinen Propagandamethoden zum letzten Wahlkampf und auch heute so freie Hand wie nur möglich gelassen hat. Aber es ist nicht verwunderlich, daß Herr Hitler in jenen Reihen keine Eroberungen macht, wenn er für die nationale Sammlung die gleichen Methoden des Klassenkampfes, der Verleumdung und Verhetzung anwendet, in denen jene ihm weit überlegen. [...] „Aber ich muss hier unmissverständlich feststellen: Die Sabotage, die aus reinem Parteiegoismus gegen das Programm geführt wird, die wilden Streiks, die auch von den Nationalsozialisten Arm in Arm mit den Kommunisten vom Zaun gebrochen werden, um den Wirtschaftsfrieden zu stören, sind ein Verbrechen gegen die Gesamtheit der Nation, die hier ihre letzten Kraftreserven eingesetzt hat sind. [...] Allerdings, wenn man eine Zusammenfassung aller nationalen deutschen Kräfte wünscht und will, dann kann man nicht die Befreiung der wegen feiger Mordtat verurteilten Beuthener Mörder feierlich zur Ehrensache seiner Partei erklären. Dann muss man die Normen des Rechtsstaates anerkennen, wie er in jahrhundertalter Bindung geworden ist. Wenn sich Hitler in den gemeinsamen Zug mit dem großen nationalen Deutschland setzen will, dann darf er auch nicht die Skrupellosigkeit besitzen, die Stellung der um die Gleichberechtigung und Wehrhoheit der Nation kämpfenden Regierung durch einen Dolchstoß in den Rücken zu schwächen.“

¹⁷ „Zu diesem Zwecke haben sich drei große Heersäulen der nationalen Bewegung zusammengefunden unter einer Regierung, die vom Führer der größten deutschen Volksbewegung geleitet wird. Ich bin mir darüber klar, dass diese Koalition der Massenbewegung, wie sie sich in der heutigen Regierung verkörpert ein notwendiges Zugeständnis an den demokratischen Ungeist unserer Zeit ist.“

¹⁸ „Ich kämpfe nicht für eine Partei, sondern für eine Idee und für die Schaffensfreiheit der neuen Regierung.“

¹⁹ „In 14 Jahren haben die November-Parteien den deutschen Bauernstand ruiniert. In 14 Jahren haben sie eine Armee von Millionen Arbeitslosen geschaffen.“

give us four years, and I swear to you that just as we, and as I, came into this office, I will go then.” (Domarus 1962, p. 204-207)²⁰

1.18. In a speech in Stuttgart, Hitler criticizes the Weimar government:

2/15/1933: „You have failed in all areas, your work is a single sequence of terrible delusions. [...] But concerning one thing there must be no doubt: the time of the international Marxist-pacifist disintegration and destruction of our country is over. On 5 March the German people are once again called to make the decision. It is to decide whether they want to undergo the last 14 years again or if they want to march with us into a future that we will shape with the power lying within us.” (Domarus 1962, p. 210-213)²¹

Anti-Semitism on the radio in 1933:

1.19. Joseph Goebbels speech in Frankfurt am Main during election campaign for the parliamentary elections on March 5, 1933 (broadcasted on the radio):

02/22/1933: “Now the times are over, when the national press was banned by the Jewish police chief, when Jews could empty their dirt and dustbin over German front-line soldiers and over everything that is holy for German people. [...] Now these nation-wrecking forces of Marxism must clear the way for the spirit of national awakening.”

(Roller, 1996, p.20)²²

1.20. Karl Kaufmann, NSDAP district leader Gauleiter about anti-Semitic occurrences in Hamburg:

03/29/1933: “While today’s middle class stands at the grave of its existence and simultaneously Jewish stores spring up like mushrooms, and while Germany’s academic youth, degraded to proletariat, waits in vain for employment possibilities, the Jewry in the judiciary, in the medical profession and in the advocacy is represented to an extent that bears no relation to the Jewish population in Germany. Therefore the Germans’ demand for equality in their own fatherland cannot be equated with anti-Semitism. This demand towards the Jewish guest people is an inviolable and inalienable right of the German fellows. [...] The postulation that the Jewish people in future can enter the occupations only in numbers relative to their population is therefore not a matter of a deprivation of rights to Jews, but merely of a restoration of the equality of the Germans in their own fatherland.”

(Roller, 1996, p.21-2)²³

²⁰ „Sie haben vernichtet, was sie vernichten konnten. [...] So sieht es heute in Deutschland aus unter dem Regiment dieser Parteien, die 14 Jahre lang unser Volk ruinierten. Es ist nur die Frage, wie lange noch? [...] Deutsches Volk! Gib uns vier Jahre Zeit, dann richte und urteile über uns. Deutsches Volk, gib uns vier Jahre, und ich schwöre dir: So wie wir, und so wie ich in dieses Amt eintrat, so will ich dann gehen.”

²¹ „Ihr habt versagt auf allen Gebieten; eine einzige Reihenfolge von furchtbaren Irrungen ist euer Werk. [...] Aber über eines darf kein Zweifel sein: Die Zeit der internationalen marxistisch-pazifistischen Zersetzung und Zerstörung unseres Vaterlandes ist vorbei. Am 5. März ist das deutsche Volk noch einmal selbst zur Entscheidung aufgerufen. Es soll sich entscheiden, ob es noch einmal die 14 vergangenen Jahre erleben oder mit uns in eine Zukunft marschieren will, die wir aus unserer Kraft, die in uns liegt, formen werden.“

²² Original text: „Jetzt sind die Zeiten vorbei, daß die nationale Presse vom jüdischen Polizeipräsidenten verboten wurde, daß Juden ihre Schmutz- und Dreckkübel über deutsche Frontsoldaten, und über alles, was deutschen Menschen heilig ist, ausgießen konnten. [...] Jetzt müssen diese volkszerstörenden Kräfte des Marxismus dem Geiste der nationalen Wiedergeburt weichen.“

²³ Original text: „Wenn heute der Mittelstand am Grabe seiner Existenz steht und in gleicher Zeit jüdische Warenhäuser wie Pilze aus der Erde schießen, wenn Deutschlands akademische Jugend zum Proletariat erniedrigt, vergeblich auf Anstellung wartet, während das Judentum in Justiz, in der Ärzteschaft, in der Anwaltschaft, in einem Prozentsatz vertreten ist, der in keinem Verhältnis zur Zahl der jüdischen Bevölkerung in Deutschland steht, so kann man die Forderung der Deutschen nach Gleichberechtigung im eigenen Vaterland nicht als Antisemitismus bezeichnen. Diese Forderung gegenüber dem Gastvolk der Juden ist ein unantastbares und unveräußerliches Recht der deutschen Volksgenossen. [...] Es handelt sich also keineswegs um eine Rechtlosmachung der Juden, sondern lediglich um die Wiederherstellung der Gleichberechtigung der Deutschen im eigenen Vaterlande, wenn die Forderung erhoben wird, daß in Zukunft das Judentum sich nur noch entsprechend seiner zahlenmäßigen Stärke im Verhältnis zur Gesamtbevölkerung betätigen darf.“

1.21. Saxony's Minister of Justice Otto Thierack announces on the radio the restructuring of criminal justice in Saxony:

04/01/1933: "It can no longer be expected of these awakening German people that judges of Jewish origin pass judgments and impose penalties on them. It also seems untenable to me, that public prosecution is executed by officials of Jewish origin. I assume that the same applies to labor and marriage courts in cases of German comrades."

(Roller, 1996, p.23)²⁴

1.22. Julius Streicher, Gauleiter in Franconia, on the referendum on November 12, 1933:

10/25/1933: "Who is the one who does not want the world to be at peace? Who is the one who needs the strife between people to pursue selfish goals? It is the Jewish people. [...] It is those people who pretend to be the chosen ones: It was chosen, to be the master in the world. It was chosen, to devour the peoples!"

(Roller, 1996, p.28)²⁵

1.23. Arthur Gütt, director of the department on public health, in the ministry of Home Affairs on the occasion of the upcoming referendum on November 12, 1933:

10/30/1933: "[...] the more the public takes all the weaknesses into account due to the past ideology, the more people with a low physical, mental, and racial capability reach the fertile age and pass on their inferior human qualities."

(Roller, 1996, p.29)²⁶

²⁴ Original text: „Es kann diesem erwachenden Volke nicht mehr zugemutet werden, daß Richter jüdischer Abstammung über deutsche Volksgenossen in Strafsachen Urteile fällen und Strafen verhängen. Ebenso wenig tragbar erscheint es mir, daß die Geschäfte der Staatsanwaltschaft von Beamten jüdischer Abstammung wahrgenommen werden. Das gleiche möchte ich annehmen in Ehesachen und in Arbeitsgerichtssachen deutscher Volksgenossen.“

²⁵ Original text: „Wer ist es, der nicht haben will, daß in der Welt Friede sei? Wer ist es, der den Unfrieden unter den Menschen braucht, um selbstsüchtigen Zielen nachjagen zu können? Es ist das Volk der Juden. [...] Es ist jenes Volk, das sich als Verheißung gab: Es sei auserwählt, Herr zu sein in der Welt. Es sei auserwählt, die Völker zu fressen!“

²⁶ Original text: „[...] je mehr die Öffentlichkeit aus der bisherigen Weltanschauung heraus auf alles Schwache Rücksicht nimmt, umso mehr gelingt es auch Menschen mit geringer leiblicher und geistiger Rassetüchtigkeit das Fortpflanzungsalter zu erreichen und ihre minderwertigen Eigenschaften zu vererben.“

2) Quotes from the historical literature

2.1. On the radio content before 1929:

2.1.1. (before 1929)

Pohle 1955, p. 93: “Finally we see that this so-called “nonpolitical phase” of broadcasting, as this period 1926 to 1928 was often characterized, did not in any sense imply the total absence of broadcast concerned with the political issues of the nation. Therefore, let us summarize again: As was the case before the enactment of the new guidelines, there were numerous lectures about constitutional, judicial, financial, social issues and questions of political economy in order to introduce the listener to civic-political thinking. In that context the social question was particularly emphasized, either from a scientific perspective focusing on historical, economic and psychological issues or in lectures by professionals about cooperatives and trade unionism, about worker protection tasks, workers’ education and social services. Foreign affairs were discussed in the lectures as well. Lecture topics included the treaty of Versailles and its possible amendment, the question of reparation payments and war guilt, the necessity of German colonies, the Germans in the borderland and foreign countries, the League of Nations, the relations of the Great Powers, the question of disarmament and political, economic and social questions.”²⁷

2.2. On government’s control of content 1929-1933:

2.2.1. (1929)

Bausch 1956, p.170-171: “The educational lectures against the referendum are not only a striking milestone for politicizing broadcasting but also the first example of the use of radio in the fight against the heterogeneous antidemocratic front by the forces of the Weimar Republic governmental forces represented by the grand coalition.”²⁸

2.2.2. (1930)

Bausch 1956, p. 171: “In the week prior to the Reichstag elections on September 14, 1930 four lectures were given in German broadcasters by government officials. ... Not only the date of those speeches, but also the balanced consideration of the parties represented in the national government leads to the conclusion that the government spokesman held election speeches that were not approved as such and could be enforced only by using the governmental rights.”²⁹

²⁷ Original text: „So sehen wir schließlich, daß diese sog. "unpolitische Phase" des Rundfunks, wie die Zeit von 1926 bis 1928 oft genug Charakterisiert wurde, keineswegs ein völliges Abseitsstehen des Rundfunks von den Fragen des politischen Lebens der Nation bedeutete. Fassen wir deshalb noch einmal zusammen: Wie auch vor dem Erlaß der Richtlinien sollen zahlreiche Vorträge über Verfassungsfragen, über Rechts-, Finanz-, Sozial- und Wirtschaftspolitik dem Hörer eine Einführung in das staatsbürgerlichpolitische Denken geben. Dabei wird besonders das Thema der sozialen Frage gepflegt, sei es in wissenschaftlicher Betrachtung unter historischem, nationalökonomischem und psychologischem Aspekt oder sei es in Vorträgen aus der Praxis über das Genossenschafts- und Gewerkschaftswesen, über Aufgaben des Arbeiterschutzes, der Arbeiterbildung und der Volkswohlfahrt. Aber auch Probleme der Außenpolitik werden im Vortragsteil weitgehend erörtert. Vorträge über den Versailler Vertrag und seine mögliche Abänderung, über Reparationsfragen und die Kriegsschuldfrage, über die Notwendigkeit eines deutschen Kolonialbesitzes, über das Grenzland- und Auslandsdeutstums sowie außerdem über den Völkerbund, die Beziehungen zwischen den Großmächten, die Abrüstungsfrage und über die politische, wirtschaftliche und soziale.“ (Pohle, p. 93)

²⁸ Original text: „Die Aufklärungsvorträge gegen das Volksbegehren sind nicht nur ein auffällender Markstein für die Politisierung des Programms, sondern zugleich auch das erste Beispiel für die Ausnützung des Rundfunks durch die von der Großen Koalition repräsentierten staatstragenden Kräfte der Weimarer Republik im Kampf gegen die heterogene antidemokratische Front.“ (Bausch 1956, p.170-171)

²⁹ Original text: „In der Woche vor der Reichstagswahl am 14. September 1930 wurden von Regierungsvertretern vier Vorträge im deutschen Rundfunk

2.2.3. (1931)

Bausch 1956, p. 171: “If initially only certain occasions suggested political use of the radio by the government the use of broadcasting became common from 1931 onwards.”³⁰

2.2.4. (1930-1931)

Ross 2006, p. 201: “Throughout 1930-31, then, the publicity efforts of the RfH [Reichszentrale für Heimatdienst]³¹ and Reich Press Office continued in the established vein of rational 'instruction' and argumentation. Despite having its budget cut by well over half, the RfH continued to organize dozens of lectures and exhibitions, as well as help arrange several radio addresses in support of the government.”

2.2.5. (1932)

Bausch 1956, p. 178: “Hitler did not succeed in his quest to talk on the radio as a presidential candidate, because the German government, as pointed out, kept to the prohibition of election broadcasts, but it made use of its governmental rights in order to make propaganda for Hindenburg.”³²

2.2.6. (1932)

Pohle 1955, p.106: „The stance of broadcasters in the presidential elections of April 1932 was not very compatible with nonpartisanship but entirely in line with the notion of broadcasting as a government body. In view of increasing radicalization of party life a governmental decree forbade the broadcasting of electoral speeches, however, this did not prove to be a hindrance for government members who repeatedly gave electoral speeches on the radio. The following are examples of larger election events that were transmitted as governmental broadcast: A speech of Generalfeldmarschall Hindenburg about the upcoming election is aired on March 1 from the palace of the president; on March 10 the president speaks from the same location about his acceptance of the candidature; in the following days the speech of the chancellor held at a pro-Hindenburg rally in the Sportpalast in Berlin is aired, and on April 9 Chancellor Brüning talks specifically about the upcoming presidential election.”³³

2.2.7. (June 1932-Jan 1933)

Rundfunkjahrbuch 1933, p.7: “Over the last eight months [June 1932-January 1933] a total of 108 official programs have been broadcasted in Germany. We heard the Reich President twice, the Chancellor eighteen times, Reich Minister of the Interior and Reich Minister of Food and Agriculture eight times each. Other governmental representatives spoke 32 times, representatives of the state

gehalten. ... Nicht nur der Termin dieser Reden, sondern auch die paritätische Berücksichtigung der in der Reichsregierung vertretenen Parteien läßt den Schluß zu, dass die Regierungssprecher Wahlreden hielten, die als solche nicht zugelassen waren und nur mit Hilfe des Auflagerechts erwirkt werden konnten.“ (Bausch 1956, p. 171)

³⁰ Original text: „Waren zunächst nur bestimmte Anlässe ein Signal für die rundfunkpolitische Aktivität der Regierung, so wurde die Benutzung des Rundfunks von 1931 an zu einem Gewohnheitsrecht.“ (Bausch 1956, p. 171)

³¹ Reich Central Office for Domestic Service.

³² Original text: „Hitler gelang es auch als Präsidentschaftskandidat nicht, im Rundfunk zu sprechen, da die Reichsregierung, wie dargestellt, an dem Verbot von Wahlsendungen festhielt und sich zur Propaganda für Hindenburg ihre gouvernementalen Rechte bediente.“ (Bausch 1956, p. 178)

³³ Original text: „Wenig mit der Überparteilichkeit zu vereinbaren, jedoch ganz im Sinne des Rundfunks als Staats- und Regierungsorgan ist die Haltung des Rundfunks zur Reichspräsidentenwahl im April 1932. Zwar sind auf Beschluß der Reichsregierung angesichts der Radikalisierung im Parteileben Wahlreden im Rundfunk verboten, doch ist dieses kein Hinderungsgrund

für die Regierungsmitglieder selbst, im Rundfunk mehrfach über die bevorstehende Wahl zu reden. Zur Illustration von größeren, als Reichssendungen verbreiteten Veranstaltungen führen wir an: Am 1. März wird aus dem Reichspräsidentenpalais eine Ansprache des Generalfeldmarschalls von Hindenburg zur bevorstehenden Reichspräsidentenwahl gesendet; am 10. März spricht vorn gleichen Ort der Reichspräsident über die Annahme der Kandidatur; am folgenden Tage wird eine Hindenburg-Kundgebung aus dem Berliner Sportpalast mit der Ansprache des Reichskanzlers übertragen, und am 9. April spricht Reichskanzler Brüning speziell zur bevorstehenden Reichspräsidentenwahl.“ (Pohle, p.106)

governments 24 times. Community representatives and representatives of foreign governments 10 times 6 times (Subsequent repetitions of recorded speeches were counted).”³⁴

2.2.8. (1932)

Ross 2006, p. 206: “...the most important changes under von Papen occurred in the area of radio, which was thoroughly reformed and brought under firm state control over the latter half of 1932. As part of this restructuring, Interior Minister von Gayl ordered a daily 'Government Hour' for all radio broadcasters, during which ministers could hold supposedly 'unpolitical' speeches in support of government policies.”

2.2.9. (1932)

Bergmeier and Lotz 1997, p. 5: “Regional committees which included a representative of the Berlin Ministry of the Interior, controlled the political programmes...”

2.2.10. (1932)

Bausch 1956, p. 134: “Papen [the chancellor] changed his policy to oppose the NSDAP before the next elections of November [1932], which turned out to be costly for the Nazis, there was just this one propaganda broadcast [given by the Nazis – Strasser for NSDAP on 31 July 1932]...”³⁵

2.2.11. (Before and after Jan 1933)

Führer and Ross 2006, p. 83: “Although German radio was organizationally very close to the state during the years of the Weimar Republic, this gave it at least one advantage: during most of that time, the National Socialist party was not permitted to use it. It was only during the final phases that there appeared a few Nazi propaganda broadcasts, beginning in mid-1932. After the National Socialists came to power, this was to be immediately and fundamentally changed... Establishing this control took time, for the complicated, multifaceted German broadcasting system that had been built up since 1923 could not be converted overnight into a compliant, obedient instrument of the Propaganda Minister. Resistance to the changes arose on a number of levels, but only a very small part of it was directly political and anti-Nazi. The easiest matter was to change the management personnel. After just a few weeks, 10 of the 11 German broadcasters had new station managers. But although most of the new men were confirmed National Socialists, this still did not mean that they unconditionally obeyed every command from Berlin.”

2.2.12. (Before Jan 1933)

Paul 1990, p. 195-198: “Until 1933, the Nazis were almost entirely kept away from broadcasting.”³⁶

2.2.13. (Before Jan 1933)

Paul 1990, p. 195-198: “No party political broadcasts were allowed ahead of the parliamentary election in November. Adolf Hitler, the crowd puller for Nazi propaganda, remained excluded from broadcasting until his take-over of power on 30th January 1933.”³⁷

³⁴ Original text: „Im Laufe der letzten acht Monate [Juni 1932 bis Januar 1933] sind insgesamt rund 108 offizielle Sendungen über die deutsche Sender gegeben worden. Wir hörten den Herrn Reichspräsidenten zweimal, den Herrn Reichskanzler achtzehnmal, die Herren Reichsminister des Inneren und für Ernährung und Landwirtschaft je achtmal. Andere Reichsvertreter sprachen 32mal, Vertreter der Länderregierungen 24mal. Gemeindevertreter 6mal und Vertreter auswärtiger Regierungen 10mal*.“ *Nachträgliche Wiederholungen von Reden durch Schallplatten wurden mitgezählt.“ (Rundfunkjahrbuch 1933, p.7)

³⁵ Original text: “Da Papen vor den nächsten, für die Nationalsozialisten verlustreichen Novemberwahlen, das Steuer seiner Politik gegen NSDAP herumgeworfen hatte, blieb es bei diesem einmaligen Propagandaauftritt [Radiowahlsendung- Strasser für NSDAP am 31.Juli 1932]...” (Bausch 1956, p. 134)

³⁶ Original text: „Fast gänzlich verschlossen blieb den Nazis vor 1933 der Rundfunk.“

2.2.14. (Before Jan 1933)

Paul 1990, p. 195-198: “The NSDAP did in fact succeed in providing their orators access to the microphones three times ahead of the election [parliamentary election on 31st July 1932].”³⁸

2.2.15. (Before Jan 1933)

Paul 1990, p. 195-198: “The attacks by journalists and the flood of parliamentary requests by National Socialists did not provide full access to the new medium for national socialist propaganda prior to 1933, but it affected the atmosphere at the broadcasting stations. Staff-placement achievements and creeping infiltration of broadcast by national socialist ideas did take place but remained limited.”³⁹

2.2.16. (Before Jan 1933)

Paul 1990, p. 195-198: “First signs of NSDAP influence were particularly noticeable in radio dramas and educational programs. Concerning the elections of 1932 however, these programs and the occasional speeches by national socialist politicians were most probably not of importance.”⁴⁰

2.2.17. (Before Jan 1933)

Paul 1990, p. 195-198: “Since access to broadcasting remained closed for the NSDAP, it concentrated its efforts on the usage of alternative media.”⁴¹

2.2.18. (Before Jan 1933 – a somewhat different view of Nazi influence in mid-1932)

Diller 1980, p. 17: “While the private media were exposed to infiltration by the Nazis, the semi-public broadcasting set certain limits to the advancement of the Nazis. The barrier to this state-controlled media of the Weimar Republic was only relaxed when the Nazi party was already at the very gates of power. Radio could only be maintained free from direct influence of the Nazis as long as the Nazi Party was kept away from government affairs. The boundaries began to blur the moment the Nazi party was seriously considered as a potential government party. With the exception of some Nazi ministers in less important regional governments from 1930 – this happened at the national level from mid-1932.”⁴²

2.3. On Hitler’s control of content between January and March 1933:

³⁷ Original text: „Für die Reichstagswahl im November wurden keine parteipolitischen. Rundfunkansprachen mehr zugelassen. Dem Zugpferd der NS-Propaganda, Adolf Hitler, blieb zu seiner Machteinsetzung am 30. Januar 1933 der Rundfunk verschlossen.”

³⁸ Original text: „Tatsächlich gelang es der NSDAP noch vor der Wahl die Mikrophone in drei Fällen, für ihre Redner zu öffnen.“

³⁹ Original text: “Die publizistischen Attacken und die Antragsflut der Nationalsozialisten in den Parlamenten öffneten der NS-Propaganda vor 1933 zwar nicht den Zugang zu dem neuen Medium, beeinflussten aber gleichwohl die Stimmung in den Funkhäusern. Personelle Erfolge und die schleichende Infiltration nationalsozialistischer Gedankenguts in die Rundfunkprogramme blieben nicht aus, erwiesen sich aber als begrenzt.“

⁴⁰ Original text: “Besonders im Hörspiel und im Schulfunkprogramm machten sich erste Einflüsse der NSDAP bemerkbar. Für die Wahlentscheidungen des Jahres 1932 aber dürften sie ebenso wenig bedeutsam gewesen sein wie die vereinzelte Ansprachen nationalsozialistischer Politiker.“

⁴¹ Original text: „Da der NSDAP der Zugang zum Rundfunk versperrt blieb, konzentrierte man sich auf die Nutzung von Ersatzmedien.“

⁴² Original text: “Während die privatwirtschaftlichen Informationsmedien der Infiltration durch den Nationalsozialismus ausgesetzt waren, zog der halbstaatliche Rundfunk dem Vordringen der NSDAP gewisse Grenzen. Der Damm dieses staatlich kontrollierten Mediums der Weimarer Republik gab der nationalsozialistischen Flut erst nach, als die Partei bereits unmittelbar vor den Toren zur Machtübernahme stand. Vor direktem nationalsozialistischem Einfluß konnte der Rundfunk nur so lange bewahrt werden, wie die NSDAP von den Regierungsgeschäften fernzuhalten war. Grenzen verwischten sich bereits in dem Augenblick, in dem ernsthaft erwogen wurde, die NSDAP an der Regierung zu beteiligen. Dieser Fall trat – von einigen nationalsozialistischen Ministern in weniger bedeutenden Länderregierungen seit 1930 abgesehen- Mitte 1932 auf Reichsebene ein.“

2.3.1. (Election campaign of 1933)

Bausch 1956, p. 174: "...Hitler's government continued the practice of previous cabinets and used German radio as a legal means of political struggle "for Public Enlightenment and Propaganda".⁴³

2.3.2. (Election campaign of 1933)

Paul 1990, p. 111: "Gaining access to broadcasting meant the RPL [Reich Propaganda Office] had, for the first time, power over a means of mass communication that had been inaccessible for years. Hein Schlecht claimed later that the radio as a "weapon" in the hands of the Nazi propagandists meant "the final destruction of political opponents and the winning over of the broad masses to Nazism."⁴⁴

2.3.2. (Election campaign of 1933)

Bergmeier and Lotz 1997, p. 5:⁴⁵ "Wilhelm Frick, one of the new chancellor's closest advisors became minister for the interior and hence responsible for the German broadcasting system. Goebbels' high-flown radio commentary on the torch-light procession organized for the Fuhrer in Berlin on the evening of 30 January provided a foretaste of the new character of German radio. [...] The competing parties were banned from the radio by cabinet decree, but in practice only the leftist parties were excluded. In spite of all the propaganda, including nearly fifty radio broadcasts and heavy-handed partiality on the part of the police, the NSDAP gained only 43.9 per cent of the poll."

2.3.3. (Election campaign of 1933)

Hadamovsky, 1934, S. 76.⁴⁶ Reich radio production director Hadamovsky: "We started with a fantastic wave of political influence on radio—agitation and propaganda in all forms. Almost every evening from February 10 to March 4, we broadcasted speeches by the Chancellor over some or all German radio stations."

2.4. On Hitler's control of content after March 1933:

2.4.1. (After March 1933)

Bergmeier and Lotz 1997, p. 18-19: "From 1932 Hadamovsky worked for the Party's central propaganda office (Reichspropagandaleitung) and in this capacity organized many of the Hitler's rallies and broadcasts. In recognition of his services, Hitler appointed him programme manager of the Deutschlandsender in March 1933, and promoted him to Reich Programme Director of all stations in July."

⁴³ „...Regierung Hitler die Praxis der vorangegangenen Kabinette fortsetzte und den deutschen Rundfunk als legales Mittel des politischen Kampfes „für Volksaufklärung und Propaganda“ gebrauchte.“

⁴⁴ „Mit dem Zugang zum Rundfunk verfügte die RPL [Reichspropagandaleitung] erstmals über ein Massenkommunikationsmittel, das ihr jahrelang versperrt war. Der Rundfunk als „Waffe“ in den Händen der NS-Propagandisten, so Hein Schlecht später, bedeutete „die endgültige Vernichtung des politischen Gegners und die Gewinnung der breiten Massen für den Nationalsozialismus.“

⁴⁵ Referencing Erdmann, Karl Dietrich Handbuch der deutschen Geschichte (Munich: Deutscher Taschenbuchverlag, 1980); and Diller Ansgar, Rundfunkpolitik im Dritten Reich (Munich: Deutscher Taschenbuchverlag, 1980).

⁴⁶ "Wir begannen im Rundfunk mit einer phantastischen Welle politischer Beeinflussung, Agitation und Propaganda in jeder Form. Vom 10. Februar bis zum 4. März gingen fast Abend für Abend Reden des Reichskanzlers über einzelne oder alle deutsche Sender"

2.4.2. (After March 1933)

Welch 2002, p. 30: "Although the Nazis had failed to gain access to this medium while in opposition, once in power the 'coordination' of German radio proved comparatively easy, despite a few initial setbacks. From the moment he assumed power, Goebbels recognized its propaganda potential and he was determined to make the most of this relatively new medium. In his address to representatives of the press on 15 March 1933, Goebbels had revealed that the radio would have the responsibility of bringing the people closer to the National Socialist State. He hinted that the Nazis had already gone some way to achieving this, because our radio propaganda is not produced in a vacuum, in radio stations, but in the atmosphere-laden halls of mass gatherings."

2.4.3. (After March 1933)

Sommerville 2012, p. 117: "Hitler made his hatred of the Jews part of everyday discourse on the radio."

3) Quotes from the Goebbels diaries about the preparation for take-over of the radio

These quotes show that the Nazis were preparing to change the content of the political radio programming as soon as they can get administrative control over it. This in part explains why the content of radio programs changed so sharply after Hitler's appointment as Chancellor.

Original diary entries (Reprinted in: Hermann, Angela, 2006, Tagebücher von Joseph Goebbels. Aufzeichnungen 1923-1941. Dezember 1929 - März 1934: Teil I. Band 2. Band III: Oktober 1932 - März 1934, de Gruyter, Berlin.)	Book version (Goebbels, Joseph, 1979, My part in Germany's fight. Vom Kaiserhof zur Reichskanzlei, translated by dr. Kurt Fiedler, New York, Howard Fertig, Reprint of the 1940 ed.)
20 September 1932:	
„Our preparation of the broadcast organization is striding forward powerfully, the only thing that is missing is that we can use the transmitters.” ⁴⁷	“Our broadcasting organization is getting on first rate; we need nothing now but the use of transmitter.”
9 October 1932:	
„We are just about to set up a new list of personnel for broadcasting in case we come to power overnight.” ⁴⁸	“We have already begun to draw up a list of candidates for the Staff of the Broadcasting Stations in case of our taking over the power at any moment.”
14 October 1932:	
„We are about to design a program for the takeover of broadcasting.” ⁴⁹	“We are working at a programme for taking over the whole Radio.”

⁴⁷ „Our preparation of the broadcast organization is striding forward powerfully, the only thing that is missing is that we can use the transmitters.”
(Goebbels, Joseph, Die Tagebücher von Joseph Goebbels: „Unsere Rundfunkorganisation schreitet mächtig vorwärts; es fehlt nur noch, daß wir die Sender benutzen können.“)

⁴⁸ „Wir sind schon dabei, eine neue Personalliste für den Rundfunk aufzustellen für den Fall, daß wir über Nacht an die Macht kommen.“

⁴⁹ „Wir sind an der Arbeit, ein Programm für die Übernahme des Rundfunks zu entwerfen.“

4) Quotes from Goebbels dairies during the campaign for the March 1933 elections about any means of campaigning.

The quotes show that radio propaganda was important for the Nazis during that campaign. The diary entries referring to the Radio are highlighted and, when necessary, the explanation is given in a footnote.

Original diary entries (Reprinted in: Hermann, Angela, 2006, Tagebücher von Joseph Goebbels. Aufzeichnungen 1923-1941. Dezember 1929 - März 1934: Teil I. Band 2. Band III: Oktober 1932 - März 1934, de Gruyter, Berlin.)	Book version (Goebbels, Joseph, 1979, My part in Germany's fight. Vom Kaiserhof zur Reichskanzlei, translated by dr. Kurt Fiedler, New York, Howard Fertig, Reprint of the 1940 ed.)	Refers to:
January 31:	January 30:	
I speak on the radio on all German stations. "We are immeasurably happy." [torchlight procession] ⁵⁰	For the first time the German people in demonstration is being broadcast. We speak for the first time over all transmitters. I can say nothing but that we are happy beyond words, and that we shall go on working.	radio
February 1:		
Nothing undertaken against the press yet. We want them to feel safe. ⁵¹	The Jewish Press fires a few parting shots. We retaliate in no way. We are biding our time, letting them lull themselves in security, only to catch them all the better when the right moment comes.	press ban
February 2:	February 1	
Yesterday: [...] At 10 a.m. Hitler reads on the radio proclamation to the people. Very effective. Against November. Well done. ⁵²	We listen to the Leader's proclamation to the German people broadcast. It is very convincing and full of fine argument. The "leitmotiv" is: Because of November, 1918!" It pervades the whole.	radio [1 st February: the first speech by Hitler on radio "proclamation to the German people" broadcasted over all stations, repeated several times from recordings]
February 4:	February 3:	

⁵⁰ Ich spreche im Rundfunk über alle deutschen Sender. „Wir sind maßlos glücklich.“

⁵¹ Gegen die Presse noch nichts unternommen. Wir wollen sie in Sicherheit wiegen.

⁵² Gestern: [...] Um 10h verliest Hitler am Rundfunk Proklamation an das Volk. Sehr wirkungsvoll. Gegen November. Gut gemacht.

Yesterday: [...] We apply all means. We have money, the radio belongs to us, Hitler speaks on all channels, I prepare the address. ⁵³	I talk over the beginning election campaign in detail with the Leader. The struggle is a light one now, since we are able to employ all means of the State. Radio and Press are at our disposal. We shall achieve a masterpiece of propaganda. Even money is not lacking this time.	radio and press
-	[...] We decide that the Leader is to speak in all towns having their own broadcasting stations. We transmit the broadcast to the entire people, and give listeners-in a clear idea of all that occurs at our meetings. I am going to introduce the Leader's address, in which I shall try to convey to the hearers the magical atmosphere of our huge demonstrations.	radio
Today comes emergency decree about press. ⁵⁴	-	press
Spoke to Kolb about radio. Reforms only after March 5th. ⁵⁵	The Radio causes me some trouble. All the important positions are still held by the same old-System profiteers. They have to be got rid of as soon as possible, that is before the fifth of March, lest they endanger the election.	radio
February 5:	February 4:	
Spoke quickly to Hitler about broadcasting, electoral campaign, newspaper bans etc. ⁵⁶	The Leader is back in Berlin. I talk over the questions of Radio and propaganda with him. We must take a stronger line with the Jewish gutter Press, whose tone is getting more and more insolent. We shall scarcely be able to avoid having to ban it.	radio, propaganda in general and press bans
February 6:	February 5:	
Then at home Funk. He wants to become Secretary of State for press and propaganda. ⁵⁷	At home once more I talk over the structure of our new Ministry for Enlightenment of the People and Propaganda, which is to be formed immediately after the election, with Chief of the Press Funk.	propaganda in general and press
February 10:	February 9:	
Cleaned and then dictated from bed until late at night. ⁵⁸	Dictate placards and articles right through the night, and go on with it until Friday midday.	press and placards
Instructed District Leaders and editorial office. [...] The Jews are quiet. ⁵⁹	Instruct District Leaders and members of the editorial staff of Berlin. [...] The Jews in editorial offices have become quite humble.	press

⁵³ Gestern: [...] Wir wenden alle Mittel an. Geld haben wir, der Rundfunk gehört uns, Hitler redet in allen Sendern, ich mach die Reportage dazu.

⁵⁴ Heute kommt Pressenotverordnung.

⁵⁵ Mit [K]olb Rundfunk. Reform erst nach dem 5. März.

⁵⁶ Mit Hitler schnell noch Rundfunk, Wahlkampf, Zeitungsverbote etc. durchgesprochen.

⁵⁷ Dann zu hause Funk. Will Staatssekretär für Presse und Propaganda werden.

⁵⁸ Sauber gemacht und dann vom Bett bis in die Nacht diktiert.

⁵⁹ Kr. Leiter und Redaktion aufgewiennert. [...] Die Juden sind kusch.

February 10:		
Tonight Sportpalast. Hitler talks on all German stations. Huge event. ⁶⁰	The Sportpalast is already packed by six o'clock in the evening. All the squares in the city swarm with people waiting to hear the Leader's speech. In the whole Reich twenty to thirty millions more are listening in to it.	Hitler's speech at Sportpalast, international motor show opening, on 11.02, broadcasted on the radio in most of the regions
February 11:	February 10:	
Yesterday: [...] Went to Sportpalast. Packed. Walls of people at 10 places. In the whole Reich up to 20 million listeners. I am greeted with jubilation. First I do the press. Then deliver a 20 minute address on all channels. It goes dazzlingly well. I have no stage fright. Hitler comes. I comment and then open. ⁶¹	On the Platform I first address the Press and then for twenty minutes at the microphone speak to the audience in the Sportpalast. It goes better than I had thought.	press and Hitler's speech at Sportpalast, international motor show opening, on 11.02, broadcasted on the radio in most of the regions
Hitler holds a fantastic speech. Against Marxism. At the end, great pathos. "Amen!" That has power and works well. The whole of Germany will be turned upside down. ⁶²	The Leader is greeted by frantic cheering. He delivers a fine address containing an outspoken declaration against Marxism. Toward the end he strikes a wonderful, incredibly solemn note, and closes with the word "Amen"! [...] This address will be received with enthusiasm throughout Germany. The nation will be ours almost without a struggle.	Hitler's speech at Sportpalast, international motor show opening, on 11.02, broadcasted on the radio in most of the regions
[...]Asked everyone: fabulous effect. ⁶³	Phone calls from different parts of the country report on the fine effect the speech has made even over the Radio. As an instrument for propaganda on a large scale the efficacy of the Radio has not yet been sufficiently appreciated. In any case our adversaries did not recognize its value. All the better, we shall have to explore its possibilities.	Hitler's speech at Sportpalast, international motor show opening, on 11.02, broadcasted on the radio in most of the regions
February 11:		
[...] The press foamed with rage. So that came across. ^{64, 65}	The press foams with rage at Leader's speech. It is easy to judge from that how deeply the thrust went home. One can read between the lines that the Marxist democratic Jews are really eating humble pie.	press and Hitler's speech at Sportpalast, international motor show opening, on

⁶⁰ Heute Abend Sportpalast. Hitler spricht über alle deutschen Sender. Ganz großes Ereignis.

⁶¹ Gestern: [...] Zum Sportpalast. Überfüllt. An 10 Plätzen Menschenmauern. Im ganzen Reich an die 20 Millionen Zuhörer. Ich werde mit Jubel begrüßt. Erst bürste ich die Presse ab. Dann spreche ich über alle Sender 20 Minuten Reportage. Es geht blendend. Ich habe gar kein Lampenfieber. Hitler kommt. Ich reportiere und eröffne dann.

⁶² Hitler hält eine phantastische Rede. Ganz gegen Marxismus. Zum Schluß großes Pathos. „Amen!“ Das hat Kraft und haut hin. Ganz Deutschland wird Kopf stehen.

⁶³ [...] Überall erkundigt: fabelhafte Wirkung.

⁶⁴ [...] Die Presse schäumt vor Wut. Also hat das gestern gesessen [Die Rede Hitlers im Sportpalast].

⁶⁵ This entry refers to the press reaction to the speech at Sportpalast. This speech was broadcasted on the radio; and without radio the reaction would have been much smaller.

		11.02, broadcasted on the radio in most of the regions
-	I express fully what I have to say in a series of placards, and in leading articles against Social Democracy.	press, placards
-	The entire material of propaganda to be distributed wholesale must be looked through and revised.	press (?)
February 12:		
Press about Sportpalast very good. ^{66,67}		press and Hitler's speech at Sportpalast, international motor show opening, on 11.02, broadcasted on the radio in most of the regions
[...] I have listened to the radio speeches by Hugenberg, Papen and Seldte. "Black-White-Red" coalition". All rubbish. All nonsense. But Hugenberg is a clever schemer. ⁶⁸	Hugenberg, Von Papen and Seldte speak over the Radio. They have founded a militant unit called the "Black, White and Red"; but it will not be a long-lived institution.	radio
[...] I hear Hitler's Sportpalast speech replayed on radio. Excellent! Good propaganda, the effect fantastic. ⁶⁹	I listen to the Leader's Sportpalast speech on a record. It has a splendid psychological effect. It is propaganda in the best meaning of the word.	Hitler's speech at Sportpalast, international motor show opening, on 11.02, broadcasted on the radio in most of the regions
February 13:		
-	I have now nearly completed the writing preparations for the election campaign; then comes agitation.	
February 16:	February 15:	
I have stopped printing presses. Because there is no money. ⁷⁰	-	press and money

⁶⁶ Die Presse über Sportpalast sehr gut.

⁶⁷ This entry refers to the press reaction to the speech at Sportpalast. This speech was broadcasted on the radio; and without the radio the reaction would have been much smaller.

⁶⁸ [...] Reden am Rundfunk von Hugenberg, Papen und Seldte gehört. „Kampfblock Schw. W. Rot“. Alles Mist. Alles Quatsch. Aber Hugenberg ist ein raffinierter Intrigant.

⁶⁹ [...] Eben Höre ich Hitlers Sportpalast-Rede am Rundfunk auf Platten. Ausgezeichnet! Gute Propaganda, Wirkung phantastisch.

⁷⁰ Ich habe die Maschinen gestoppt. Weil kein Geld da ist.

Newspaper bans popping just like that. Vorwärts and 8 Uhr. A blessing! ⁷¹	We can now bring a new weapon against the Press into play, and at present one ban follows another very quickly. <i>Vorwärts</i> and <i>Acht-Uhr Abendblatt</i> , and all those Jewish papers which have caused us so much worry and trouble, suddenly disappear from the face of the Berlin streets.	press ban
Yesterday: [...] All of my addresses are good. Hitler speaks well. Strident against Bolz and Zentrum. Last part of speech not transmitted. Cable destroyed. Nastiness! But we will pay them back. ⁷²	Fly with the Leader to Stuttgart in the afternoon. Introduce his address. He indicts the President of State Boltz still in office, and the intrigues of the Zentrum. A part of the speech cannot be broadcasted, because owing to the slackness of the official preparations, a cable has been destroyed by the Communists.	Hitler's speech in Stuttgart on February 15, broadcasted on the radio in the region Stuttgart
[...] I will buy the gentlemen of the Südfunk. ⁷³ Today at noon 2 of them will be unseated by telegraph. Now, the other will probably lose interest in sabotage. ⁷⁴	As we cannot fly back by night I summon the responsible gentlemen to the hotel and give them a piece of my mind, and make them tremble in their socks. The very next day two of them are to be removed from their posts by telegraph. The rest will not be tempted further to acts of sabotage in order to frustrate our work.	radio
February 18:	February 17:	
Yesterday: [...] I deliver a good address to West Germany. Hitler speaks dazzlingly ⁷⁵	I broadcast an opening speech for Western Germany, and then the Leader delivers his address, an appeal to the workman which will go straight to the "Kumpel's" (comrade, fellow-workman) hearth.	Hitler's speech in Dortmund on February 17, broadcasted on the radio in the region Cologne
February 19:		
Afternoon to Cologne. Hitler there. I deliver an address. ⁷⁶	The three huge halls in the Cologne Exhibition grounds are filled with a hundred thousand people. An indescribably great demonstration of the masses.	Hitler's speech in Cologne on February 19, broadcasted on the radio in the region of Cologne
February 20:		

⁷¹ Zeitungsverbote knallen nur so. Vorwärts und 8 Uhr. Eine Wohltat!

⁷² Gestern: [...] Ich spreche nur gute Reportage. Hitler redet gut. Scharf gegen Bolz und Zentrum. Letzter Teil der Rede nicht übertragen. Kabel zerstört. Gemeinheit! Aber wir werden ihnen.

⁷³ Radio broadcaster in the south of Germany.

⁷⁴ [...] Ich kaufe mir gleich die Herren vom Südfunk. Heute mittag werden 2 von ihnen telegraphisch abgesetzt. Nun wird den anderen wohl die Lust zur Sabotage vergehen.

⁷⁵ Gestern: [...] Ich spreche für Westdeutschland eine gute Reportage. Hitler spricht blendend.

⁷⁶ Nachmittags nach Köln. Dort Hitler. Ich Reportage. [Rundfunkrede Hitlers in Köln]

Yesterday: [...] Assembly. Three giant halls. 100 000 people. Outrageous. My commentary is magnificent. Now I can do it. ⁷⁷	I can barely manage to make my introductory remarks as the Leader is greeted by such uproarious cheering, every word of explanation is rendered superfluous.	Hitler's speech in Cologne on February 19, broadcasted on the radio in the region of Cologne
Then Hitler. Hard on Zentrum party. Devastating. This hits home. ⁷⁸	In his speech he attacks the Zentrum sharply and arraigns the political prelates. That is good, and necessary for Western Germany ⁷⁹ . It will surely not fail of its effect.	Hitler's speech in Cologne on February 19, broadcasted on the radio in the region of Cologne
February 21:	February 20:	
Saw movie. Hitler speaks in Sportpalast [recording of Hitler speech in Sportpalast]. Very well done. Excellent as propaganda weapon. ⁸⁰	I see the films of the Leader making his speech at the Sportpalast. They are very good. They will be indispensable to us for propaganda purposes.	film and radio
[...] Prepared radio speech. ⁸¹		radio
[...] Goering brings the happy message that 3 million for the election campaign is there. Great thing! I will alert the whole Propaganda department. And an hour later the printing presses rolls. Now we will crank up the election campaign. ⁸²	We collect a large sum of money, which completely frees us from all financial difficulties. I immediately notify the whole apparatus of propaganda and scarcely an hour elapses before the rotary presses are set going. Now we shall start off full speed!	press and placards
February 22:	February 21:	
Hitler speaks in Königsberg to the people. Will be really big. ⁸³	We decide to call up the German people on March 4th for a „Day of the Awakening Nation.“ The Leader is going to deliver an address to the whole Reich ⁸⁴ in the evening from Königsberg.	Hitler's speech on March 4 in Königsberg, broadcasted on the radio in all regions

⁷⁷ Gestern: [...] Versammlung. 3 Riesenhallen. 100 000 Menschen. Ungeheuerlich. Meine Reportage ist prachttvoll. Jetzt kann ich's.

⁷⁸ Dann Hitler. Scharf gegen Zentrum. Vernichtende Abrechnung. Das schlägt ein.

⁷⁹ By referring to Western Germany Goebbels refers to the radio broadcast.

⁸⁰ Film im R.I.M. angesehen. Hitler spricht Sportpalast. Sehr gut gelungen. Als Propagandawaffe vorzüglich.

⁸¹ [...] Rundfunkrede fertig gemacht.

⁸² [...] Göring bringt die freudige Mitteilung, dass 3 Millionen für die Wahl bereit liegen. Tolle Sache! Ich alarmiere die ganze Prop.Abtlg. Und eine Stunde später knattern die Maschinen. Jetzt werden wir einen Wahlkampf aufdrehen.

⁸³ Hitler redet von Königsberg aus zum Volk. Wird ganz groß.

⁸⁴ Refers to broadcasting of the speech all over Germany.

Our propaganda is exemplary. We run the show. Everyone else completely intimidated. ⁸⁵	In an unprecedented concentration of all the possibilities of propaganda, the campaign is to be brought to its culminating point. That will bring the last wobblers over to our side. Our propaganda is acknowledged not only by the German, but also the international Press, to be a model, and unique. We have gained such extensive experience in this matter during the past election campaign that we are able to win a victory over our adversaries without difficulties by our better methods. As it is, the other side is so intimidated that it hardly utters a sound. We will now show them what one can do with the Apparatus of the State, if one understands how to use it.	international press and propaganda
At home work. The printing presses roll. Material is being produced in the millions. ⁸⁶	The rotary presses are thundering and vomiting forth our election material by million.	press and posters
February 24:		
-	A few English journalists have flown with us and are dumbfounded at the sight of the gigantic demonstration.	international press
[...] In 2 hours in Frankfurt. Huge reception. Festhalle packed. I deliver a good address. Hitler speaks really well. The whole province ⁸⁷ will be bowled over. ⁸⁸	In two hours' time we arrive at Frankfurt. Superfluous to say that the Festhalle is packed. The Leader is in great form in this campaign and surpasses himself every time.	Hitler's speech on radio on February 23, broadcasted on the radio via transmitters Frankfurt, Stuttgart and Breslau
February 26:		
Yesterday: [...] Propaganda department is not getting their money. Everything gets stuck. ⁸⁹	-	money problems
With Kampmann about Situation in Angriff. Everything ok. [...] Circulation goes up. ⁹⁰	-	press
February 28:	February 27:	
Yesterday: District propaganda action for Saturday initiated. Question of money also solved in district. Everything is hunky dory. ⁹¹	The vast propaganda action for the „Day of the Awakening Nation“ has been settled in every detail. It will be a wonderful spectacle throughout Germany. ⁹²	Hitler's speech on March 4 in Königsberg,

⁸⁵ Unsere Propaganda ist vorbildlich. Wir schmeißen den Laden. Alles andere vollkommen verschüchtert.

⁸⁶ Zu Hause Arbeit. Die Maschinen rollen. Millionen-Material geht heraus.

⁸⁷ By referring to the whole province Goebbels refers to the radio broadcast.

⁸⁸ [...] In 2 Stunden nach Frankfurt. Großer Empfang. Festhalle überfüllt. Ich spreche gute Reportage. Hitler spricht ganz groß. Das haut die ganze Provinz hin.

⁸⁹ Gestern: [...] Prop. Abtlg. kommt nicht zu ihrem Geld. Alles stockt.

⁹⁰ Mit Kampmann Lage im Angriff. Alles gut. [...] Auflage geht höher.

⁹¹ Gestern: Gau Propagandaaktion für Sonnabend eingeleitet. Geldfrage auch Gau gelöst. Alles in Butter.

⁹² By referring to the spectacle throughout Germany Goebbels refers to the radio broadcast.

		broadcasted on the radio in all regions, propaganda in general
-	Give instructions to the Press for the preparation of the "Day of the Awakening Nation".	press
The entire Communist and SPD Press is banned. [...]The entire Communist and SPD Press is banned. ⁹³	Goering at once suppresses the entire Communist and Social Democrat Press. [...] The entire Communist and Democratic Press is already suppressed. [...] The Press is in order.	press ban
Press. V.B. and Angriff and N.S.K. turned up. Everything for "Day of the Awakening Nation". It will be big thing. Talked with Kampmann about the situation in Angriff. [...] We drive to V.B. It is made very badly. Hitler works here. [...] Poster and fabulous essay dictated. ⁹⁴	Drive with the Leader to the editorial office of the <i>Völkische Beobachter</i> . We both set to work there at once, writing leading articles and proclamations.	press
March 1:	February 28:	
Wild placard against K.P.D. and S.P.D. Their whole press is completely banned. ⁹⁵	Compose-an effective placard against the Socialists and Communists. No Marxist papers are published in the whole Reich any more.	placard, press ban
March 1:		
	I am just about to take over the vast sphere of the Radio . I shall have to get rid of many of the inefficient members of the staff. Essential reconstruction must be carried out, especially in the personnel of the management. Final decisions will be taken about this matter once the elections are over.	radio
Today to Breslau with Hitler. Address once more. ⁹⁶	The meeting in the overcrowded Jahrhunderthalle is a real event again. Every one of these meetings draws an entire province into its magic circle. It is my task to enable listeners over the radio to enter heart and soul into the spirit of these meetings, by means of an apt introduction. Then the leader speaks, and has a receptive audience from the very beginning.	Hitler's speech in Breslau on March 1, broadcasted on the radio in region Breslau
March 2:		
	We are deep in preparations for the „Day of the Awakening Nation“; the Department of Propaganda will outdo itself in preparation for this	radio

⁹³ Ganze K.P.D. und S.P.D. Presse verboten. [...] Ganze K.P.D. und S.P.D. Presse verboten.

⁹⁴ Presse. V.B. und Angriff und N.S.K. aufgedreht. Alles auf den „Tag der erwachenden Nation“. Wird ganz große Sache. Mit Kampmann Lage Angriff durchgesprochen. [...] Wir fahren V.B. Der ist ganz schlecht gemacht. Hitler dort gleich an die Arbeit. [...] Plakat und fabelhaften Aufsatz diktiert.

⁹⁵ Wildes Plakat gegen K.P.D. und S.P.D. Deren ganze Presse radikal verboten.

⁹⁶ Heute nach Breslau mit Hitler. Wieder Reportage.

	event. The whole German people will participate. ⁹⁷	
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March 3: Yesterday: [...] The Sportpalast and Autohallen packed. Goering speaks in Autohallen. Transmission from Sportpalast. I hear the conclusion. To much I. "I, Hitler and the German people will destroy the German Communist Party. " I give only a short address, because Goering overran. He destroyed the mood for Hitler. Hitler speaks too theoretically. He doesn't gain momentum. But the success is still there. Applause. ⁹⁸	March 2: In the evening the Sportpalast and Tennishallen are packed. The Leader speaks and is in splendid form. The old Berlin members of the Party greet him with tumultuous acclamation.	Hitler's radio speech on March 2 in Berlin, broadcasted on the radio in all regions
Hanke has badly prepared the commentary. The people in Angriff muss work harder. ⁹⁹		press
March 4:		
Today Hamburg. ¹⁰⁰	Hamburg [...] The meeting is excellently prepared, and the Leader delivers by far the best address of this campaign. He rises to marvelous heights of oratory. The audience is greatly enthused.	Hitler's speech on March 3 in Hamburg, broadcasted on the radio in region Hamburg
Tomorrow the big day in Königsberg. ¹⁰¹		Hitler's speech on March 4 in Königsberg, broadcasted in all regions
March 5:		

⁹⁷ By referring to the whole German people Goebbels refers to the radio broadcast.

⁹⁸ Gestern: [...] Sportpalast und Autohallen überfüllt. Göring spricht Autohallen. Sportpalast übertragen. Ich höre den Schluß. Zu sehr ich. „Ich, Hitler und das deutsche Volk werden die K.P.D. zerschlagen.“ Ich rede nur kurze Reportage, da Göring durchtrompetet hat. Er hat Hitler die ganze Stimmung weggenommen. Hitler redet zu theoretisch. Er kommt nicht recht in Fahrt. Aber der Erfolg ist noch da. Beifallstürme. [Hitler's radio speech on 2.3 in Berlin, all regions].

⁹⁹ Hanke hat Reportage schlecht vorbereitet. Die Angriff-Leute müssen mehr heran.

¹⁰⁰ Heute Hamburg. [Hitler's speech on radio in Hamburg (3.03), region Hamburg]

¹⁰¹ Morgen der große Tag in Königsberg. [Hitler's speech on radio in Königsberg (4.03), all regions]

Friday [4.03]: [...] evening: Address very good. Hitler fantastic. [...] 30-40 million listeners. This knocks everything out. Our big highlight. ¹⁰²	The great “Day of the Awakening Nation” has come. [...] This hymn goes throbbing on the ethereal waves of the Radio over the whole of Germany. Forty million people are now standing in the squares and in the streets, or are sitting in the Bierhallen and their homes by the Radio, and become conscious that the new era has dawned. At this moment hundreds of thousands will decide to follow Hitler, and fight in his spirit for the revival of the nation.	Hitler's speech on March 4 in Königsberg, broadcasted in all regions
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¹⁰² Freitag [4.03]: [...] Abends: Reportage ganz groß. Hitler phantastisch. [...] 30-40 Millionen hören zu. Das wirft alles hin. Unser großer Clou.

Sources used in the Appendix Chapter “Anecdotal Evidence”:

- Bausch, Hans (1956) *Der Rundfunk im politischen Kräftespiel der Weimarer Republik 1923–1933*. J.C.B. Mohr (Paul Siebeck): Tübingen.
- Bergmeier, Horst and Rainer Lotz (1997) “Hitler’s Airwaves : the inside story of Nazi radio broadcasting and propaganda swing” New Haven: Yale Univ. Press.
- Bundesarchiv, Online-Dokumente: http://www.bundesarchiv.de/aktenreichskanzlei/1919-1933/0000/vpa/vpa2p/kap1_1/para2_6.html (retrieved on Nov 21 2013).
- Deutsches Rundfunkarchiv, Frankfurt am Main, <http://www.dhm.de/lemo/html/dokumente/papen/index.html> (retrieved on 21.11.2013).
- Diller, Ansgar (1980) *Rundfunkpolitik im Dritten Reich*. München.
- Domarus, Max (1962) “Hitler Reden und Proklamationen 1932–1945”, Band 1, Würzburg Führer, Karl Christian and Corey Ross, *Mass media, culture and society in twentieth-century Germany*, 2006, Palgrave.
- Goebbels, Joseph, 1979, *My part in Germany's fight. Vom Kaiserhof zur Reichskanzlei*, translated by dr. Kurt Fiedler, New York, Howard Fertig, Reprint of the 1940 ed.
- Hadamovsky, Eugen, 1934, *Dein Rundfunk. Das Rundfunkbuch für alle Volksgenossen*, München.
- Hermann, Angela, 2006, *Tagebücher von Joseph Goebbels. Aufzeichnungen 1923–1941. Dezember 1929 - März 1934: Teil I. Band 2. Band III: Oktober 1932 - März 1934*, de Gruyter, Berlin.)
- Paul, Gerhard (1990 [1933]) *Aufstand der Bilder, Die NS-Propaganda vor 1933*. Bonn.
- Pohle, Heinz (1955) *Der Rundfunk als Instrument der Politik: Zur Geschichte d. Dt. Rundfunks von 1923/1938*. Verlag Hans Bredow-Inst.: Hamburg.
- Roller, Walter, 1977, *Tondokumente zur Zeitgeschichte 1888-1932*, Frankfurt am Main.
- Roller, Walter, Höschel, Susanne and Gerhard Hirschfeld (eds.), 1996, *Judenverfolgung und jüdisches Leben unter den Bedingungen der nationalsozialistischen Gewaltherrschaft, vol.1: Tondokumente und Rundfunksendungen 1930 - 1946*, Potsdam.
- Ross, Corey (2006). “Mass politics and the techniques of leadership: the promise and perils of propaganda in Weimar Germany.” *German History*, 24(2).
- Rundfunkjahrbuch 1933*, Reichs-Rundfunk-Gesellschaft (ed.), Berlin.
- [Schulthess 1929, 1932] Thürauf, Ulrich (ed.), 1929, *Schulthess’ Europäischer Geschichtskalender*, vols. 1929 and 1932, München.
- Von Papen, Franz, 1933, *Appell an das deutsche Gewissen : Reden zur nationalen Revolution*, Oldenburg : Stalling; vol. 32/33.
- Welch, David, 2002, *The Third Reich: politics and propaganda*, Routledge.
- Zimmermann, Clemens (2006). “From propaganda to modernization: media policy and media audiences under national socialism.” *German History*, Vol. 24 No. 3.

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