The legacy of war exposure on political radicalization

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**Abstract.** This article investigates the long-run impact of war participation on political identification. I make use of original data of former French citizens forcibly conscripted to the Wehrmacht during WWII.

At the end of the War these veterans, fighting on the German side and commonly called the "Despite our

will", had to re-integrate a state that they felt had let them down. I find that, in municipalities where

more men were incorporated, radical right-wing candidates still receive today more electoral support.

To establish a causal link I take advantage of a spatial discontinuity in the conscription rule. I provide

evidence that war exposure resulted in reduced diffuse political support amongst ex-combatants, also

known as political alienation. This attitude was transformed into observable electoral support with the emergence of radical parties with an anti-establishment discourse. These findings suggest that particular

attention should be held on the demobilization and reintegration of veterans in war-torn countries in

order to ensure long-term political stability.

**Keywords:** War exposure, political identification, political radicalization, persistence

JEL classification: N34, N44, D72, Z13

1 Introduction

A recent OECD study has stressed the importance of political support for the implementation

of the necessary reforms following the outburst of the financial crisis (OECD, 2013). Identifi-

cation with the polity however, in the sense of the attachment or loyalty of individuals to the

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features an on-line appendix containing additional results and data description.

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political system, is not only a necessary condition for public sector reforms; it has also long been considered a key component of political stability (Almond and Verba, 1963; Easton, 1967; Schwartz, 1973). Such a political attitude becomes of even greater gravity when taking into account the disastrous effects of political instability on economic development (Barro and Sala-I-Martin, 1995; Alesina and Perotti, 1996). It is therefore particularly relevant in the state-building procedure of developing countries. Yet, several developing countries, especially in Africa, have a long (and often ongoing) history of civil conflict. Understanding thus whether the experience of individuals participating in a war leads to political identification or estrangement, the persistence of such attitudes, and their behavioural consequences is of central importance.

This paper provides empirical evidence of the long-run impact of war exposure on political attitudes and their behavioural consequences. I make use of a particular historical context: the annexation of the Eastern Borderlands of France by the Third Reich during WWII and the consequent forcible conscription of men from these regions in the Wehrmacht<sup>1</sup>. At the end of the War these veterans, fighting on the "wrong" side and commonly called the "Despite our will" (Malgré-nous), had to re-integrate a state that they felt had let them down.

In recent years there has been an increasing support for radical right-wing parties all over Europe<sup>2</sup>. A key characteristic of these parties has been the building of the concept of political establishment and their fight against it (Swyngedouw and Ivaldi, 2001). Since the 1980s, Alsace and Moselle have been amongst the strongholds of the radical right in France (Figure 1). My hypothesis is that forced conscription in the German military forces led to high levels of political alienation amongst ex-combatants once these regions were annexed back to France. This attitude remained latent until the emergence of these parties, when it was transformed into observable support for the radical right.

This hypothesis is in line with research in political behaviour of ex-combatants that flourished following the reports of returning Vietnam veterans maladjustments. Research in social psychol-

<sup>&</sup>lt;sup>1</sup>The Alsace region and the Moselle department. Alsace is a region that consists of two departments: the Bas-Rhin and the Haut-Rhin; Moselle is a department belonging to the Lorraine region. Regions are the second level of administrative division in France (NUTS-2); departments are the third (NUTS-3). In France in 2014 there were 27 regions consisting of 101 departments. The Alsace region and the Moselle department are simply referred to as Alsace and Moselle from this point on.

<sup>&</sup>lt;sup>2</sup> In this paper, radical parties are defined as the ones that "radically criticize the existing social and economic order" (Backes, 2009). In France, the National Front has increased it vote share in the European parliament elections from 11% in 1984 to 25% in the 2014. During the same period, the Freedom Party of Austria has increased its vote share in the National Elections from 5% (1983) to 21% (2013). Parties in Belgium (Vlaams Blok) and Denmark (Danish People's Party) have experienced a similar electoral success.

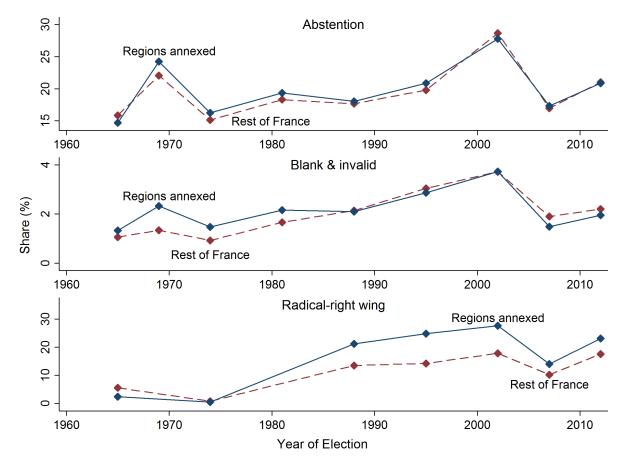


Figure 1: Voting Behaviour Evolution: 1965-2012

Note: Evolution of voting in France from 1965 to 2012. Data comes from the Centre de données socio-politiques, SciencesPo. The top graph presents the evolution of abstention rates; the centre of blank and invalid ballots; the bottom of support for radical-right wing candidates. The solid line represents the regions annexed by the Third Reich (Alsace, and Moselle); the dashed line represents the average vote in the rest of the country.

ogy has shown that veteran alienation is a multidimensional phenomenon typically associated with (i) frustration in readjustment to civilian life, (ii) a sense of political normlessness, (iii) rejection of prevailing social mores, and (iv) distrust of established political authorities (Finifter, 1970). This estrangement can be either active, or passive. Active political alienation is related to a marked hostility toward the polity; passive alienation leads to a withdrawal from political matters (Johnson, 1976). Meanwhile, more cynical views of the conflict are related to high levels of alienation (Jenning and Markus, 1977). Furthermore, individuals with the lowest levels of political trust have been shown in favour of most radical candidates (Aberbach, 1969).

In the first part of the paper, I combine historical evidence with administrative data and

estimate the effect of war exposure on the vote share of radical right-wing candidates. I find evidence that localities that vote more in favour of extreme right-wing candidates today are the ones with the higher shares of the population actively exposed to conflict during the Second World War.

An alternative explanation for these results could be that compliances rates were higher in places that were already more radical prior to the War and that these political views still persist today. Or that unobserved cultural traits such as religiousness are correlated both with fertility and political conservatism. If that was the case, conscription and political preferences would be co-determined by municipality unobservable characteristics, introducing an omitted variable bias in the OLS estimation.

To deal with these issues I take advantage of a discontinuity in the rule determining incorporation. While cohorts born from 1908 to 1927 were drafted in Alsace only men born from 1914 to 1927 were conscripted in Moselle. I make use of this discontinuity in the conscription rule to establish an instrumental variables approach. Furthermore, I restrict the sample to municipalities close to the border with a common cultural background to increase comparability of the localities on both sides of the administrative border. The 2SLS estimates are highly significant and very similar to the OLS ones. To test the exclusion restriction I compare observable characteristics on both sides of the administrative border, and run reduced form regressions in territories that have experienced the same level of conscription, or no conscription at all. Municipalities on both sides of the border have quasi-identical characteristics. Furthermore, there is no systematic difference in voting behaviour in regions that experienced the same or no incorporation.

In the second part of this paper I try to disentangle the attitude reflected in this behaviour. I first make use of electoral manifesto data to figure out whether increased support is related to the anti-establishment rhetoric of the radical right. The 2SLS estimates confirm that there is increased support not only for the radical right-wing candidates, but overall for candidates more critical towards the political system. This result is robust to running within election and within party OLS regressions.

I then turn to survey data to figure out the argument of the radical right-wing candidate's programme that is most attractive for residents of municipalities where more men were conscripted. The radical right-wing programme in France traditionally consists of the following topics: immigration, security, the defence of traditional values, the critique of political classes,

the suppression of income taxes, and the exit from the EU. Only the critique of political classes component of this discourse correlates with WWII exposure.

The question on the effect of war exposure on political behaviour was first asked by social psychologists on the aftermath of WWII, and gained ground due to the widespread belief of maladjustments to civic society amongst Vietnam War veterans<sup>3</sup>. During the last decade a literature has emerged in both economics and political sciences that tries to tackle the identification issue that comes from self-selection in the army by focusing on exogenous sources of exposure to violence. The tragic experience of youth abduction in some African countries has allowed such identification. Blattman (2009) finds that violence witnessed, but not perpetrated, has a positive impact on political participation in Uganda, while Bellows and Miguel (2009) present evidence for an increase in the likelihood of participation in local political and community groups of individuals that experienced more intense war violence in Sierra Leone<sup>4</sup>. While increased participation is encouraging per se, the question on whether this results from increased support for the polity (identification) or from a will to revamp the system (alienation) remains unanswered. Furthermore, since the political system in those countries is not developed, these studies fail to provide evidence on the effects of war exposure on actual voting behaviour.

A different strand of literature has focused on the long-run persistence of values and beliefs and intergenerational cultural transmission. Bisin and Verdier (2001) and Doepke and Zilibotti (2008) have proposed models of preference transmission from parents to their offspring. Voigtländer and Voth (2012) show local continuity of anti-Semitic attitudes in Germany for over 600 years. Fernández and Fogli (2009) and Algan and Cahuc (2010) use the epidemiological approach to identify the long-run effects of culture on work and fertility behaviour and growth respectively. The main drawback of this literature is that while it has well documented the persistence of attitudes and beliefs through a very long period, and the conditions under which they are reinforced, it has provided no answer on the origin of these attitudinal differences.

This paper contributes to both these currents of literature in several ways. I establish a link from war exposure to an aspect of political behaviour, voting, using actual electoral outcomes. I do so in a developed country, France, using a major historical event, the Second World War. I

<sup>&</sup>lt;sup>3</sup>See Stouffer et al. (1949) for the political behaviour of U.S. World War II veterans; Gillingham (1972); Browne (1973); Lifton (1973); Levy (1974); Polner (1971) for Vietnam War veteran maladjustment; Fendrich and Axelson (1971); Johnson (1976); Jenning and Markus (1977) for Vietnam War veteran political behaviour.

<sup>&</sup>lt;sup>4</sup>Voors et al. (2012) and Gilligan et al. (2014) find similar evidence using behavioural games in Burundi and a lab-in-the field experiment in Nepal.

provide evidence that this difference in behaviour results from an attitude of political alienation. Furthermore, I propose a novel source of exogenous war exposure, forcible conscription to the Wehrmacht. Finally, I show that the shock in political preferences that occurred in the 1940s, still persists today.

The structure of the paper is the following: Section 2 presents the historical context and data. Section 3 presents the estimation strategy and results. In Section 4 I provide evidence on the mechanism proposed and Section 5 concludes.

## 2 Historical background & data

## 2.1 Historical background

Shortly after the French capitulation on June 22, 1940, the Treaty of Frankfurt borders were reinstated and Alsace and Moselle were annexed to the Third Reich<sup>5</sup>. The inhabitants of these territories were considered of Germanic origin by the Reich authorities, they therefore became liable to German military service following the example of Austria and other annexed regions<sup>6</sup> (INSEE, 1956). The original policy of the German High Command was to voluntarily recruit "racially Germanic" people, in order to keep the Wehrmacht nationally "pure". In 1941 however, with the failure of the invasion of the Soviet Union, voluntary recruitment became compulsory and the service of foreigners had to be brought under a more rigid supervision (USWD, 1945).

On August 25, 1942, after a one-year voluntary recruitment attempt had failed<sup>7</sup>, a decree of the head of civil administration ordered the introduction of a mandatory military service for "people of Germanic race in Alsace". The draft in Alsace followed the annual class system. Conscription initially concerned the youth born from 1922 to 1924 but was soon extended to all cohorts born from 1908 to 1927. In total, 20 cohorts of former French citizens from Alsace were drafted to the Wehrmacht. An estimated 100,000 men, were incorporated in the German military forces (MACVG, 1954).

<sup>&</sup>lt;sup>5</sup>The Alsace region and the Moselle department were ceded to the German Empire with the Treaty of Frankfurt in 1871 ending the Franco-Prussian War of 1870-1871. They remained a part of the Empire until 1918 and the end World War I.

<sup>&</sup>lt;sup>6</sup>Territories with "Germanic" populations annexed by the Third Reich included Austria (1938), the Sudentenland in the former Czechoslovakia (1938), the Luxembourg (1942), and Wartheland, Upper Silesia, East and West Prussia in Poland (1939).

<sup>&</sup>lt;sup>7</sup>Voluntary recruitment for the Wehrmacht started on October 1941. According to G.R. Clément, by March 16, 1942, only 267 men from Alsace and Moselle had volunteered for the German military forces (Clément, 1945).

The situation in Moselle differed. The germanisation of the population was much lower, to the point that the Westmark Gauleiter openly considered deporting the agricultural population of the "French belt" to install German farmers<sup>8</sup> (Latest News of Strasbourg, April 30, 1942). Approximately 15% of the population was eventually deported, a stark contrast to the 3% deported from Alsace (INSEE, 1956). The mandatory military service was nevertheless introduced on August 1942 as well. While the 1914 to 1927 classes were drafted at the same time as the Alsace youth, the 1908 to 1913 men were never drafted.

The lack of trust of the German military command towards former French citizens led to several special arrangements concerning the incorporation of the latter. A decree on September 1942 ordained the deportation of defectors' families inside the Reich and the establishment of a restricted area along the frontier with France and Switzerland to discourage evasion. The success of the surveillance service of this area was such that, as explained in the local news, "to try to illegally cross the border is a suicide attempt" (Latest News of Strasbourg, August 28, 1942). On June 1943, the decision was taken that soldiers from Alsace and Moselle should be solely sent to the Eastern Front, leaves should be restricted, and access at the transmission units and aviation would be prohibited. Isolation from other former French citizens within units was also broadly documented by returning soldiers.

The particularities of the conscription in Alsace and Moselle had a dual effect. On one hand, the fact that soldiers were exclusively sent on the Eastern Front and isolated within units led to their scattering across the Eastern Front, resulting in an allocation process that was as good as exogenous. On the other hand, severe repression of evasion and harsh punishment of defectors' families led to very high compliance rates; nearly nine men out of ten served if eligible<sup>9</sup>.

The story of Camille offers a good example on how incorporation took place<sup>10</sup>. Camille, a tailor prior to the War, was born in Marmoutier, Alsace, in 1922. He was thus part of the first cohort drafted to the Wehrmacht and was incorporated on October 12, 1942. After passing the

<sup>&</sup>lt;sup>8</sup>The "French belt" refers to the territories on the borders of Moselle with the rest of France. Inhabitants of these region were not considered by German authorities to be "Germanic", their dialect being of French origin.

<sup>&</sup>lt;sup>9</sup>Eligible men, based on the 1936 population census, were approximately 173,000 (INSEE, 1956). Of those, 14,000 were deported, mainly due to racial reasons (Romani, Jewish). 130,000 men were estimated incorporated. 4% of the men in the dataset used for the empirical analysis are born in years not drafted (always-takers). The overall compliance rate would then be 78.6%. This is however a lower bound for compliance. Out of the 29,000 men not incorporated, only 13,000 are estimated to have fled incorporation, while the remaining difference of 16,000 could be due to the estimation being based on the 1936 instead of the 1942 population. The upper bound for compliance would therefore be 87.4%.

<sup>&</sup>lt;sup>10</sup>I interviewed Camille in December 2014

Review Board in Saverne, Alsace, he was sent to Innsbruck, Austria, for a brief training. On November 29, 1942, he was sent to Murmansk, Russia, to get his main training. Even though he could not ski prior to the War, Camille was chosen for the 139th Alpini Regiment. Furthermore, as he recalled, the unit was solely composed of Austrians and Poles, with him being the only soldier from France<sup>11</sup>. He was sent to the Kandalaktcha Front on March 12, 1944, where he fought until he was wounded on February 8, 1945.

At the end of the War the re-founded French state initiated a large process of repatriation and demobilization of soldiers from Alsace and Moselle. A first special census to relocate men that had not returned from the front took place in October 1945; 40,716 men were declared missing. A second version of the same census came to light on April 1946; 55,013 men were now declared missing<sup>12</sup>. Two-and-a-half years later, in November 1948, a second special census took place; 18,259 men were declared missing. By the time Jean-Jacques Remetter, the last soldier from Alsace to return, crossed the Rhine in 1955, 100,000 men had returned from the front. Around 25,000 men fell on the battlefield, while more than 5,000 never returned home, a big part of whom presumably perished in captivity.

### 2.2 Incorporation data

Data on incorporation comes from the *Index of French Nationals Compelled into German Armed Forces*. The Index resulted from an official census organised by the Ministry of Veterans and War Victims in October 1945. Its purpose was to repatriate prisoners of War held in allied camps, whose French nationality could be recognised. This list, edited in French and translated in 19 languages, was transmitted to all countries potentially holding Axis' prisoners of War in November 1945 and April 1946.

There are several advantages in using the Index data. The census took place to liberate potential prisoners of war and not for any kind of compensation, there was hence no incentive to over- or under-report incorporation<sup>13</sup>. The fact that it contains municipality information on last

<sup>&</sup>lt;sup>11</sup>A very similar story, that of Auguste Ritter, born in 1923 in Colmar, Haut-Rhin, can be found on www.memoire-orale.org. As A. Ritter recalls, his unit was primarily composed of Austrians, only higher ranks being German.

<sup>&</sup>lt;sup>12</sup>The Ministry of Veterans and War victims explains in 1954 that, "While this number is higher than the one of October 1945, this results from the fact that the (second version of the) census was unfortunately made a little too hastily and a profound examination of the established lists could reveal that several men incorporated declared missing, had either already returned, or were already diseased before this date" (MACVG, 1954).

<sup>&</sup>lt;sup>13</sup> In March 1946 the first official post-War population census took place in France. A question on incorporation was added for the three departments concerned. Yet, while at that moment an estimated 92,500 had returned

Table 1: Summary Statistics: Index Data

	Alsace		Moselle		Total	
	Obs	Mean	Obs	Mean	Obs	Mean
Individual data (Binary)						
Residence info	32483	1.000	12041	0.962	44524	0.989
Birth info	32483	0.997	12041	0.979	44524	0.992
Born year drafted	32469	0.968	11585	0.911	44054	0.953
$Aggregate\ data$						
Declared missing (Binary)	904	0.991	730	0.807	1634	0.909
- of whom drafted	904	0.991	730	0.799	1634	0.905
- of whom not drafted	904	0.362	730	0.300	1634	0.334
Declared missing (Men)	904	35.9	730	15.9	1634	27.0
- of whom drafted	904	34.8	730	14.5	1634	25.7
- of whom not drafted	904	1.2	730	1.4	1634	1.3
Declared missing (%)	904	3.06	730	1.40	1634	2.32
(std.dev.)		1.29		1.27		1.52

Notes: Table 1 presents the raw Index data. Data comes from the Index of French Nationals Compelled into German Armed Forces. The upper Panel presents the disaggregated (individual) data; the lower Panel presents the data after collapsing at the municipality level. Residence info, Birth info, and Born year drafted are binary variables taking the value 1 when information is available. Born year drafted are men born in 1908-1927 for Alsace, and 1914-1927 for Moselle; only individuals that have been matched to municipalities are included. Declared missing (Binary), Declared missing of whom drafted (Binary), and Declared missing of whom not drafted (Binary) are variables that take the value 1 when there is at least one individual in the municipality belonging to this group. Declared missing of whom not drafted (Binary) includes individuals with birth information missing. Declared missing, Declared missing of whom drafted, and Declared missing of whom not drafted is the number of individuals belonging to each category by municipality. Declared missing (%) is the fraction of men declared missing over 1936 municipality population; standard deviation in parenthesis; both mean and std.dev. are weighted by population to reflect aggregate, not average, statistics

known residence, allows for disaggregated estimations at different levels of locality, keeping the institutional and cultural background fixed. Furthermore, men included in the Index were almost exclusively sent on the Eastern Front, which allows to retrace military war exposure, cleared of any potential violence witnessed or exposed to as a civilian.

The Index comprises 44,524 individuals. This indicates that in the beginning of 1946, approximately one year after the War had ended, the fate of one-third of all men incorporated remained unknown. The introduction of the Index contains a comprehensive list of municipalities in 1945, both in French, and German. 44,054 men (98.9%) are matched to contemporary municipalities, while 470 remain unmatched and have to be dropped. In Alsace, residence information is missing for 7 men, while 4 localities, where 7 men come from, remain unmatched. The Moselle list is unfortunately less precise; residence information is missing on 171 men, and 285 men are

from the front, only 65,500 men declared having been incorporated (INSEE, 1956). The arguments given by the statistical office for this under-reporting are: migration into other regions, incorporation but no displacement, and omission of incorporation.

unmatched to contemporary municipalities<sup>14</sup>

Of the 44,054 individuals matched to contemporary municipalities, 41,966 were born in years drafted to the Wehrmacht. 1,792 men were born in years that were not eligible for conscription, 1,475 of them being born before 1908 or 1914 (depending on the region), and 317 after 1927. Birth date information is missing on 296 men.

After identifying the locality of residence, the data is aggregated at the municipality level and normalized by the closest pre-War population census available, that of 1936. Out of 1,634 the municipalities existing in 2014, 1,485 (90.9%) have at least one man declared missing. As shown in Table 1, on average, 2.32% of the 1936 population was declared missing (s.d. 1.52%). The spatial distribution of men declared missing is presented in Figure 5 in the Appendix; there was substantial variation both between the two regions and at a local level; neighbouring municipalities had significantly different incorporation histories.

### 2.3 Measuring war exposure

The only available data on Wehrmacht conscription comes from the *Index of French Nationals Compelled into German Armed Forces* <sup>15</sup>. The population of interest however is not men declared missing, but those that actually returned from the front, once the conflict was over. I therefore make use of the particularities of the conscription in Alsace and Moselle to infer from men declared missing to men that actually returned from the front. The rationale and assumptions allowing for this approximation are presented in this Section.

Men form municipality m that returned were men incorporated that survived the front, while the overall dead were the sum of soldiers that perished in combat and those that died in allied camps:

$$exposed_m = incorporated_m - dead_{war,m} - dead_{camp,m}$$

or,

<sup>&</sup>lt;sup>14</sup>There are for example, 58 men declared residing in Paris. Most of these men are not even born in Moselle; 15 out of these 58 men were born in Mulhouse, Alsace. Furthermore, the Moselle data contains several individuals that have already been reported in the Alsace data, and were neither born, nor lived in Moselle prior to the War.

<sup>&</sup>lt;sup>15</sup>Direct information on incorporation does not exist. The reason is two-fold: firstly, the decline of the German administration and the overall destruction of archives that took place towards the end of the war; secondly, the topic is extremely sensitive; French public opinion after the war was divided on whether these men were actually victims or perpetrators.

$$exposed_m = \left[1 - \underbrace{P(dead_{war,m})}_{\text{Dead in War}} - \underbrace{P(dead_{camp,m}) \times P(prison_m)}_{\text{Dead in camps}}\right] \times incorporated_m \qquad (1)$$

Men figuring in the Index, were either imprisoned, or had perished before the end of the war, but their relatives had not been informed:

$$missing_m = prison_m + dead_{unknown,m}$$

or,

$$missing_m = \left[\underbrace{P(prison_m)}_{\text{Emprisoned}} + \underbrace{\left(1 - P(dead_{known,m})\right) \times P(dead_{war,m})}_{\text{Dead but thought missing}}\right] \times incorporated_m \qquad (2)$$

Combining equations (1) and (2) then implies

$$exposed_m = \frac{1}{\theta_m} \times missing_m \tag{3}$$

where

$$\theta_{m} = \frac{\left[P(prison_{m}) + (1 - P(dead_{known,m})) \times P(dead_{war,m})\right]}{\left[1 - P(dead_{war,m}) - P(dead_{camp,m}) \times P(prison_{m})\right]}$$

Men declared missing are therefore a good approximation of men exposed to WWII conflict as far as  $\theta_m$  is orthogonal to individual, and consequently municipality, characteristics.

Men incorporated were scattered across the Eastern front, and their individual characteristics were not taken into account in this allocation. This should result in both the mortality and imprisonment rate being independent of municipality of residence characteristics. Casualties in camps can be assumed to be a constant fraction of prisoners of war; the camp imprisoned depended on where caught. Assuming then that casualties were not systematically communicated in some municipalities more than in others, the deaths not communicated should be a fraction of the total number of casualties, and therefore

$$\theta_m \perp (\varepsilon_m | X_m)$$

Using aggregate data can give a rough approximation of  $\theta_m$ . 130,000 men were incorporated in Alsace and Moselle of whom 30,000 perished during the war or never came back and are presumed dead. In 1946 approximately 44,000 men were declared missing. This implies that the  $\theta_m$  parameter would be on average equal to 0.44. This average  $\theta$  is used to construct an approximation of  $exposed_m$ , by inflating  $missing_m$  by  $1/\overline{\theta}$ .

#### 2.4 Capturing political alienation

As a first approach, political alienation is approximated by electoral support for radical right-wing candidates. Reducing extreme right-wing vote to its protest dimension yields the risk of omitting the other ideological aspects of such electoral behaviour such as the authoritarian values it advocates and its anti-universalism (Schwengler, 2003). The extreme right-wing has nevertheless positioned itself as the ultimate anti-system party since the 1980s, referring to the French political system as a corrupt system that only benefits a closed circle of parties (Davies, 2002).

Ideological preferences are better captured in elections with high stakes. The intuition behind focusing on such elections is that high stakes lead to polarization. There is a tendency not to disperse votes and true preferences are more likely to be revealed, making localities with more radical views easier to detect (Voigtländer and Voth, 2012). Furthermore, focusing on a decision-making process with only two alternatives has been shown to be robust to strategic voting (Persson and Tabellini, 2000). The 2002 Presidential Election second round offers such a context.

In the 2002 Presidential Election there were two clear first round favourites; Jacques Chirac, the incumbent President, and Lionel Jospin, the holding Prime Minister. A presidential election-record of 16 candidates participated. The extreme right-wing was represented by its leader, Jean-Marie Le Pen, that had been presenting himself in every presidential election since 1974<sup>16</sup>. One of the main arguments of Le Pen's political statement was that "Corruption reigns at the head of the Republic" and that voters should discard discredited politicians.

The certainty of the public opinion concerning the candidates to face-off in the second round<sup>17</sup>

<sup>&</sup>lt;sup>16</sup>With the exception of 1981, where there was no ERW candidate.

<sup>&</sup>lt;sup>17</sup>The 12 polls published preceding the first-round election gave an average difference of 5.3 points between

led to a great dispersion of votes, which in turn led Le Pen to a surprise second seat, ahead of Jospin. Le Pen ranked first in both Alsace and Moselle. In the two weeks between the two election rounds, the so-called "Republican disclaimer" took place: all eliminated candidates urged electors to vote for Chirac, Jospin himself calling his electors to bar the way to the extreme right (Cole, 2002).

In the second round participation jumped by 8.5 percentage points to 80.1%. The result was quasi-unanimous: Le Pen's vote share retreated by 1.3% to 17.85% of votes<sup>18</sup>, while Chirac increased his from 19.9% to 82.15%. Out of 19,680,091 votes available in the second round, Le Pen only received 29,884 additional ballots<sup>19</sup>.

There was nevertheless substantial variation both overall, and at the local level. The villages of Zarbeling and Destry in Moselle offer a good example of this variation. In the second round of the 2002 presidential election Le Pen received 4.4% of votes in Zarbeling, one of his lowest scores in the two regions; his highest score was in Destry (46%), the latter being only 11.8 kilometres away from the former.

# 3 Estimation strategy & results

## 3.1 Baseline specification

To evaluate the impact of exposure to violence on political behaviour, I use data on the incorporation of former French citizens to the Wehrmacht during WWII and contemporary vote, while taking into account several pre-War and contemporary socio-economic characteristics. The effect is at first estimated by OLS using the following specification:

$$voteshare_m = \alpha + \delta_{OLS} exposed_m + X'_m \beta + Z'_m \gamma + \zeta_d + \varepsilon_m$$
 (4)

 $voteshare_m$  represents the score of the radical right-wing candidate in municipality m.  $exposed_m$  are men that returned home after being exposed to WWII violence as a fraction of the 1936 population.  $X_m$  and  $Z_m$  are column vectors of the pre-War and contemporary characteristics.  $\zeta_d$ 

Jospin (second) and Le Pen (third), and no poll gave a difference smaller than 4 percentage points between the two candidates (Durand et al., 2004).

<sup>&</sup>lt;sup>18</sup> From a combined 19.2% with Bruno Mégret, his former number two in the National Front, in the first round. <sup>19</sup> In the second round there were 30,818,961 valid votes; Le Pen received 5,502,314 of them. In the first round Chirac received 5,666,440 votes; Le Pen 4,805,307; Mégret 667,123.

are district<sup>20</sup> (or sub-district in some specifications) and dialect origin fixed effects<sup>21</sup>, to ensure comparing municipalities that are close-by both spatially and culturally. All fraction variables are transformed in natural logarithms to facilitate the interpretation of coefficients. Since many of the pre-War characteristics only vary at the sub-district level, standard errors are clustered at this level to correct for potential serial correlation.

The historical covariates vector  $X_m$  is included to ensure comparability between municipalities before the War. It consists of geographical endowments, sociocultural aspects and electoral outcomes. The geographical endowments are intended to approximate soil rigidity that might be affecting agricultural output and techniques used, historical trade openness, and the distance to Germany and the rest of France. The sociocultural aspects are religious affiliation, languages spoken, and educational attainment<sup>22</sup>. The 1936 election was the last election prior to the War. Its outcomes are introduced to capture pre-War political views. The descriptives of pre-War characteristics are presented in Table 9 in the Appendix.

The vector of contemporary control variables  $Z_m$  is intended to pick up short- and mediumterm municipality characteristics that might affect voting behaviour. It includes demographic characteristics, and socioeconomic aspects. The demographic characteristics are included to grasp urbanization, the demographic pyramid, immigration, and whether a municipality is isolated. The socioeconomic controls are composed by the sectoral employment distribution and labour market conditions, educational attainment, and wealth. The descriptives of contemporary covariates are presented in Table 10 in the Appendix.

#### 3.2 Baseline results

Table 2 presents the OLS estimates from the regression of Equation (4) for the second round of the 2002 Presidential election. Column (1) reports the estimates of the effect of WWII exposure on contemporary political radicalization when only including district and dialect origin fixed effects. The effect is positive and highly significant.

<sup>&</sup>lt;sup>20</sup>Districts (*Arrondissements*) and Sub-districts (*Cantons*) are the third- and second-lowest administrative units in France respectively, municipalities being the first. A 1936 district consists of 78 municipalities on average (min=30, max=143); a 1936 sub-district of 18 (min=5, max=36). In 1936 there were 21 districts and 89 sub-districts in the annexed regions.

<sup>&</sup>lt;sup>21</sup>Localities in the south of Moselle historically spoke a dialect of French origin, while the north of Moselle and the Alsace dialects are of Germanic origin. This linguistic frontier that dates back to the 5th century C.E. (Lévy, 1929), was still very present in the 1930s.

<sup>&</sup>lt;sup>22</sup>German was the official language in Alsace and Moselle from 1871 to 1918. French was the official language after WWI. I assume that people that speak no official language have little or no education.

Table 2: Baseline Specification: OLS Estimates for 2002R2 Election

	(1)	(2)	(3)	(4)
$Dep.\ Variable:$		Vote Sha	re (%)	
Exposed (%)	0.281***	0.178***	0.167**	0.174**
	(0.066)	(0.066)	(0.069)	(0.067)
Sociocultural aspects (1936)				Yes
Ideological preferences (1936)				Yes
Geographical endowments		Yes	Yes	Yes
Demographic charact. (Contemp.)		Yes	Yes	Yes
Socioeconomic aspects (Contemp.)		Yes	Yes	Yes
District F.E. (1936)	Yes	Yes		Yes
Sub-district F.E. (1936)			Yes	
Dialect origin F.E.	Yes	Yes	Yes	Yes
Observations	1634	1634	1634	1634
Adjusted $R^2$	0.12	0.24	0.29	0.26
Variance explained	0.17	0.11	0.10	0.10

Notes: OLS estimates of the effect of Second World War exposure on support for the radical right wing in the 2002 presidential election second round. Sample includes all municipalities from Alsace and Moselle. All regressions run at the municipality level. Robust standard errors in parentheses, clustered at the sub-district level. Variance explained is the estimate resulting from a regression analysis that has been standardized so that the variances of dependent and independent variables are 1. All regressions include the full set of controls of Equation (4). All variables constructed as described in Tables 9 and 10 in the Appendix. District (1936), Sub-district (1936), and Dialect origin F.E. presented in Figures 6, 7, and 8 in the Appendix. \* significant at 10%; \*\* at 5%; \*\*\* at 1%.

In Column (2), the contemporary covariates vector  $Z_m$  is introduced to control for the fact that incorporation might have affected other contemporary outcomes that in turn affect voting. Even after controlling for these differences the effect remains positive and highly significant. A within district 1 percentage point increase in men exposed to war leads to a 0.18 percentage points increase in extreme right-wing votes in 2002.

In Column (3), the same regression is run as in Column (2), only this time including subdistrict, instead of district, fixed effects. This specification is particularly demanding since it requires the estimation of 103 fixed effects. Furthermore, while the average distance between two municipalities in the same district is 17 kilometres, in the same sub-district it is only 7 kilometres. The point estimate remains nevertheless quasi-identical to the one in Column (2).

Finally, in Column (4), the historical covariates vector  $X_m$  is included. By doing so, I can control for the fact that pre-War differences might be driving both incorporation and voting behaviour. Since most pre-War characteristics are only available at the sub-district level, district fixed effects are introduced. Results remain robust, positive and highly significant<sup>23</sup>. The radical

<sup>&</sup>lt;sup>23</sup>This suggests that there is little heterogeneity in pre-War characteristics when refining estimations at this

right wing vote share in the second round of the 2002 Presidential Election is on average 0.17 percentage points higher in municipalities that had 1 percentage point more men returning form WWII. A 1 standard deviation increase in war exposure (3.2 p.p.) increases support for radical right-wing candidates by 0.10 std.dev. (0.5 p.p.).

Are these effects of considerable magnitude? Results from Column (4) imply that incorporation can explain up to 10% of the variability in radical-right wing voting in 2002. Performing a counter-factual exercise can help understanding the magnitude of this effect. Should these regions not experience this incorporation history, the predicted Le Pen vote share in 2002 would drop by 1%, reducing the difference between these regions (21%) and the National average (18%) by one-third.

#### 3.3 Threats to identification

The intuition behind results shown in Table 2 is that the variation in the age distribution in the 1930s led to some municipalities having more men eligible than others. This, in turn, resulted in different incorporation histories, which had a differential effect on post-War political behaviour. These OLS estimates however are only valid as long as the error term is orthogonal to the explanatory variables. Understanding the sources of variation in men that returned from the front can therefore help detect potential endogeneity issues.

The particularities of the draft to the Wehrmacht led to an allocation in units and fronts that was as good as exogenous, as argued in Section 2.3. The men that returned from the front can be considered to be the following fraction of all men incorporated:

$$exposed_m = \underbrace{\left[1 - P(dead_{war}) - P(dead_{camp}) \times P(prison)\right]}_{\text{Exogenous allocation}} \times incorporated_m \tag{5}$$

Since mortality and imprisonment rates are independent of municipality characteristics, variation should come from men overall incorporated. Men overall incorporated are in turn defined by the compliance rate  $(P(incorp \mid yob = draft))$ , and the eligibility rate (P(yob = draft)):

$$incorporated_{m} = \underbrace{P(incorp \mid yob = draft)}_{\text{Compliance variation}} \times \underbrace{P(yob = draft)}_{\text{Demography variation}} \times population_{m}$$

$$\underbrace{P(yob = draft)}_{\text{Demography variation}} \times population_{m}$$

$$\underbrace{P(yob = draft)}_{\text{Exposure component}} \times population_{m}$$

level of locality.

So far I have assumed that the relationship described in Equation (6) is driven by the eligibility rate, and that variation in demography is exogenous to political behaviour. In other words, I have assumed that compliance stays constant because of the forcible conscription, and that demographic differences leading to differences in eligibility, are unrelated to contemporary political views. Exposure endogeneity could therefore stem from these two sources.

Compliance variation could result from pre-War differences not captured by the historical covariates vector. Should a latent sentiment that determines compliance persist and be correlated with contemporary voting attitudes, the OLS estimates would suffer from an omitted variable bias. If for example conscription monitoring was more severe in municipalities with a stronger attachment to France, and these same municipalities are more nationalistic today, the estimates would be upward biased.

Demography variation could reflect long-run cultural traits. Fertility has been shown to be endogenous to culture (Fernandez et al., 2004). If fertility was historically higher in more conservative municipalities and these places vote more in favour of radical right-wing candidates nowadays, this would once again result in an upward bias of the OLS estimates.

#### 3.4 Instrumental variables approach

To correct for these potential biases, I take advantage of the difference between the administrative rules dictating incorporation in Alsace and Moselle. While cohorts 1908 to 1927 were drafted in Alsace, only cohorts 1914 to 1927 were incorporated in Moselle. This should result in more men being incorporated in the Alsace than in Moselle:

$$\underbrace{P(yob = draft \mid reg = Alsace)}_{\text{Alsace: born 1908-1927}} > \underbrace{P(yob = draft \mid reg = Moselle)}_{\text{Moselle: born 1914-1927}}$$
(7)

The difference in the incorporation rule is presented in Figure 2. There is a clear jump in the number of men declared missing in years eligible for the draft, resulting in almost no men born in years 1908 to 1914 drafted in Moselle. Taking advantage of the discontinuity in the conscription rule can thus allow establishing a causal link between war exposure and contemporary extremeright wing voting by applying an instrumental variable strategy.

The necessary conditions for an instrumental variables approach to be valid are the instrument relevance and exogeneity. The administrative rule should be relevant to the fraction of men

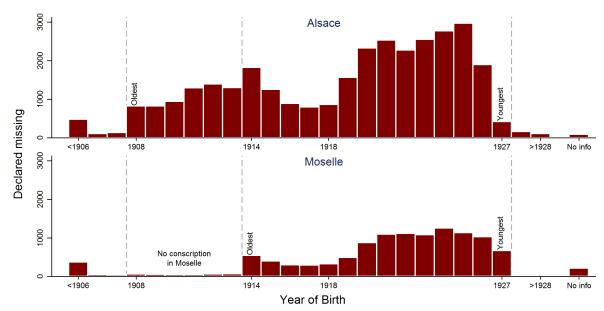


Figure 2: Index Data: Men Declared Missing YoB Distribution

Note: Graph of the year of birth distribution of men declared missing. Data comes from the Index of French Nationals Compelled into German Armed Forces. Declared missing is the total number of men born in each cohort and listed in the Index. Only men matched to contemporary municipalities are included. Oldest and Youngest refer to the cohorts drafted. The dashed lines represent the incorporation rules.

returning from War since, due to the particularities of the conscription, compliance rates were very high. The administrative rule should at the same time be exogenous to contemporary voting behaviour, meaning that it should be correlated to electoral outcomes only through conscription to the Wehrmacht.

As already explained in Section 2.1, the difference in the administrative rule comes from a difference in the overall level of "germanization" of the two regions. The instrument might therefore not be exogenous when taking into account the entire regions; it can however be considered as good as exogenous when considering municipalities close to the administrative border. Furthermore, restricting geographical and cultural proximity can help deal with this issue, since comparing municipalities that are neighbouring has been shown to resolve omitted variable biases (Card and Krueger, 1995)<sup>24</sup>.

The identifying assumption is therefore that the difference in men exposed to WWII between municipalities close, but on different sides of the administrative border, comes from the differ-

<sup>&</sup>lt;sup>24</sup> An important assumption on the instrument exogeneity is the exogenous construction of the administrative border. Departments in France were created after the Revolution, in 1790. The department borders where altered in 1918 to account for the 1871-1918 German annexation; Moselle was expanded to the south, the Bas-Rhin expanded in the south-west (a part of the Vosges department), and the Haut-Rhin lost the Belfort territory.

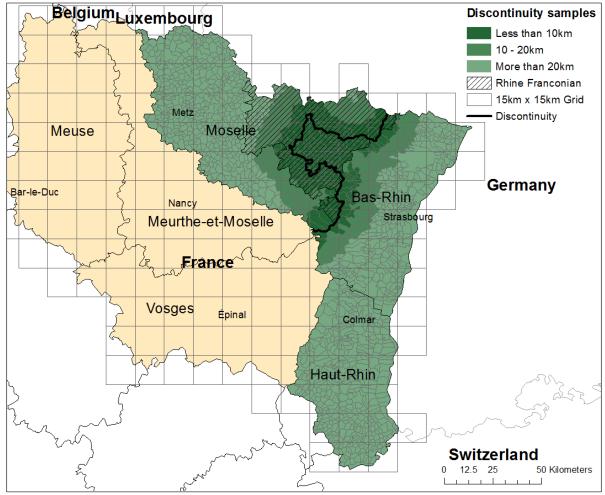


Figure 3: Instrumental Variables: Discontinuity Sub-Samples

Note: Map of the discontinuity sub-samples in the Alsace and Moselle regions. Less than 10km, 10 - 20km, and More than 20km indicate the distance to the discontinuity. Distance from the discontinuity measured as bird-fly distance to the location of the closest municipality on the other side of the border. Rhine Franconian indicates municipalities that share the same dialect origin.  $15km \times 15km$  Grid FE resulting from the above grid presented in Figure 9 in the Appendix. Municipality limits valid as of Jan 1, 2014.

ent conscription rule (conditional on covariates), and that unobservable characteristics of these municipalities do not differ.

To implement the instrumental variables approach I run the following 2-Stage Least Squares estimation:

$$voteshare_m = \alpha + \delta_{2SLS} exposed_m + X'_m \beta + Z'_m \gamma + \zeta_g + \varepsilon_m$$
(8)

where  $exposed_m$  is estimated from the First-Stage regression:

$$\widehat{exposed}_m = \alpha + \delta_{FS} alsace_m + X'_m \beta + Z'_m \gamma + \zeta_a \tag{9}$$

 $exposed_m$  is the predicted fraction of men returning from the front. Since districts and subdistricts do not vary with the exogenous instrument, to preserve geographical locality, 15km Grid fixed effects ( $\zeta_g$ ) are included, constructed as shown in Figure 3<sup>25</sup>. Furthermore, 20km and 10km distance from the discontinuity border and common cultural inheritance sample restrictions are applied.

 $alsace_m$  is the exogenous instrument, an indicator taking the value 1 when municipality m in grid g is in Alsace. The coefficient  $\delta_{FS}$  therefore captures the average difference in men returned from war between municipalities from Alsace and Moselle within a 15km grid.

In Columns (3) and (4) of Table 2 I have shown that when refining to small levels of locality pre-War characteristics do not fluctuate much. To prevent creating artificial discontinuities from the fact that pre-War electoral and socio-cultural characteristics data are only available at the sub-district level, I exclude these covariates form both stages<sup>26</sup>. The estimation of the instrumental variables approach is therefore the 2SLS equivalent of the OLS regression in Column (3) of Table 2.

#### 3.5 2-Stage Least Squares estimates

Table 3 presents the results from the two-stage least squares estimation. Panel A reproduces the OLS estimates of Column (3) of Table 2, using grid instead of sub-district fixed effects. Panel B presents the First-Stage 2SLS estimates of Equation (9). Panel C presents the Reduced-Form estimates from regressing extreme right-wing votes on the Alsace indicator. Panel D presents the Second-Stage 2SLS estimates, hence the estimated coefficients of Equation (8).

In Column (1) I use the full sample. The OLS estimate is identical to the estimate using

 $<sup>^{25}</sup>$ The arbitrary choice of  $15 \times 15$  km grid is made to approximate the average size of sub-district F.E. that is of 150 squared kilometres.

<sup>&</sup>lt;sup>26</sup>This creates an additional threat to the 2SLS identification: pre-War comparability. Part of this threat is corrected by including the dialect FE; only neighbouring municipalities with the same dialect are compared. The main remaining threat is therefore religion (protestant vs catholic). As shown in (Schwengler, 2003), municipalities where there are more protestants appear to vote less in favour of radical right-wing candidates. Taking into account that municipalities in Alsace have globally more protestants, this would bias downwards the reduced form estimates and therefore the 2SLS estimates as well.

sub-district fixed effects (Table 2). Municipalities in Alsace have on average 3 percentage points more men returning from War than those in Moselle. The First-Stage F-statistic of 29 largely surpasses the rule of thumb F-stat of 10 that is usually required to have a valid First-Stage. 2SLS estimators indicate that a 1 percent increase in men exposed to WWII violence causes an increase of radical-right wing votes by 0.47 percentage points.

There is reasonable doubt however in assuming the conscription rule change is exogenous when considering the entire regions. Should this not be the case, it would render the estimation strategy invalid. Column (2) addresses this issue by restricting the sample to municipalities within 20 kilometres from the closest municipality on the other side of the administrative border. This reduces average distance from the frontier from 44km to just 11km. The First-Stage remains valid (F-stat=18). The effect is of similar magnitude and the potential bias in the OLS estimate is relatively smaller.

In Column (3) I introduce dialect fixed effects to reinforce cultural proximity; places that have the same language origin are typically not separated by any large natural obstacles, such as mountains<sup>27</sup>. Furthermore, since these dialects date back to the 5th century C.E., these fixed effects result in comparing municipalities that share a very long common history (Lévy, 1929). The 2SLS estimate after controlling for these dialects is very similar to that of Columns (1) and (2).

In Column (4) the sample is further restricted to municipalities no more than 10km from the border. This results in comparing municipalities that are on average 6km apart. Results indicate that a 1 percent increase in men returning from the front leads to a 0.51 percentage point increase in radical support in the second round of the 2002 Presidential Election. The effect is highly significant and the point estimate is identical to the OLS estimate. Results imply that a 1 standard deviation increase in war exposure in these municipalities (3%) can explain up to 0.31 standard deviations (4.7%) of political radicalization.

A counter-factual exercise indicates that in the absence of WWII experience, extreme right-wing voting in municipalities within 10km from the Alsace-Moselle border (Column (4)), would drop from 26% to 22.5%. Transposing this effect to the rest of the region, results in a reduction of radical-right wing votes by 2.9 percentage points, which is very close to the difference from the national average.

<sup>&</sup>lt;sup>27</sup>Only few dialects are spoken on both sides of the border; Rhine Franconian is the most popular.

Table 3: Instrumental Variables: 2SLS Estimates for 2002R2 Election

	(1)	(2)	(3)	(4)
$Proximity \ measure$	Geographical	Geographical	Cultural &	Cultural &
	_	_	Geographical	Geographical
Panel A: 0	OLS estimates. Dep	pendent variable: '	Vote Share (%)	
Exposed (%)	0.167***	0.262**	0.262**	0.525***
	(0.063)	(0.124)	(0.125)	(0.182)
Panel B: First-	stage 2SLS estimat	tes. Dependent var	riable: Exposed (%	)
Alsace dummy	3.024***	2.817***	2.825***	2.739***
	(0.557)	(0.664)	(0.661)	(0.622)
First-stage F-statistic	29.49	18.00	18.25	19.42
Panel C: Reduced	-form 2SLS estima	tes. Dependent va	riable: Vote Share	(%)
Alsace dummy	1.416**	1.414**	1.340**	1.403*
•	(0.610)	(0.618)	(0.608)	(0.715)
Panel D: Second	l-stage 2SLS estima	ates. Dependent va	ariable: Exposed (%	<b>%</b> )
Exposed (%)	0.468**	0.502**	0.474**	0.512**
	(0.191)	(0.217)	(0.205)	(0.210)
Geographical endowments	Yes	Yes	Yes	Yes
Contemp. cov. vector	Yes	Yes	Yes	Yes
15km Grid F.E.	Yes	Yes	Yes	Yes
Dialect origin F.E.	Yes	Yes		
Dialect F.E.			Yes	Yes
Sample restrictions	None	$20 \mathrm{km}$	$20 \mathrm{km}$	$10 \mathrm{km}$
Observations	1634	482	482	212
Mean distance from Frontier	44.1	11.1	11.1	5.7
2SLS/OLS coefficient ratio	2.80	1.91	1.81	0.98
Variance explained	0.28	0.30	0.29	0.31

Notes: 2SLS estimates of the effect of Second World War exposure on support for the radical right wing in the 2002 presidential election second round. Panel A: OLS estimates (Equation (4)). Panel B: First-stage 2SLS estimates (Equation (9)). Alsace dummy is a binary variable that takes the value 1 when a municipality is in Alsace and 0 otherwise. Panel C: Reduced-form estimates from regressing support for the radical right wing candidates on the Alsace dummy variable. Panel D: Second-stage 2SLS estimates (Equation (8)). All regressions run at the municipality level. Robust standard errors in parentheses, clustered at the sub-district (canton) level. Column (1) includes all municipalities from Alsace and Moselle; Columns (2) & (3) within 20km; Column (4) within 10km. Discontinuity sub-samples constructed as described in Figure 3. Mean distance from Frontier is the average distance from the closest municipality on the other side of the border. First-stage F-statistic is the Kleibergen-Paap rk Wald F-statistic of the First-stage regression presented in Panel B. 2SLS/OLS coefficient ratio is the ratio of the coefficients presented in Panel D and Panel A. Variance explained is the estimate resulting from a regression analysis that has been standardized so that the variances of dependent and independent variables are 1. All regressions include the full set of controls of Equation (4), with the exception of Pre-War covariates vector. All variables constructed as described in Tables 9 and 10. Dialect origin, 15km Grid, and Dialect F.E. presented in Figures 8, 9, and 10 in the Appendix. \* significant at 10%; \*\* at 5%; \*\*\* at 1%.

#### 3.6 Robustness checks

To evaluate whether results are driven by the arbitrarily chosen distances from the border, I apply the instrument variables approach on all potential samples ranging from less than 20km

Table 4: Instrumental Variables: Reduced-form falsifications

	(1)	(2)	(3)	(4)	
$Dep.\ Variable:$	Vote Share (%)				
Discontinuity	Bas-Rhin	Bas-Rhin	Meurthe-et-M.	Meurthe-et-M.	
	& Moselle	& Haut-Rhin	& Meuse	& Vosges	
Bas-Rhin dummy	1.403*	-1.477			
	(0.715)	(1.795)			
Meurthe-et-Moselle dummy			-1.919	2.494	
			(1.456)	(1.896)	
Geographical endowments	Yes	Yes	Yes	Yes	
Contemp. cov. vector	Yes	Yes	Yes	Yes	
15km Grid F.E.	Yes	Yes	Yes	Yes	
Dialect origin F.E.	Yes	Yes	Yes	Yes	
Dialect F.E.	Yes	Yes	Yes	Yes	
Observations	212	149	232	236	
Mean dist. from Frontier	5.7	11.3	5.9	5.7	

Notes: Reduced-form estimates of the effect of Second World War exposure on support for the radical right wing in the 2002 presidential election second round. All regressions run at the municipality level. Robust standard errors in parentheses, clustered at the sub-district (canton) level. Column (1) includes municipalities from the Bas-Rhin and Moselle within 10km from the departments' common border; Column (2) from the Bas-Rhin and Haut-Rhin within 20km (larger border because data limitations when restricting to 10km (63 observation); results hold nevertheless when restricting to 10km (p-value=0.324); Column (3) from the Meurthe-et-Moselle and Meuse within 10km; Column (4) from the Meurthe-et-Moselle and Vosges within 10km. Discontinuity sub-samples constructed as described in Figure 6. Department limits presented in Figure 6. Mean distance from Frontier is the average distance from the closest municipality on the other side of the border. All regressions include the full set of controls presented in Table 3. All variables constructed as described in Tables 9 and 10. Dialect origin, 15km Grid, and Dialect F.E. presented in Figures 8, 9, and 10 in the Appendix. \* significant at 10%; \*\* at 5%; \*\*\* at 5%; \*\*\* at 1%.

to the border up to 10km from the border. The results from running these 2SLS regressions are depicted in Figure 11 in the Appendix instead of a table for simplicity. For all potential samples the estimated coefficient ranges from 0.45 to 0.5. All coefficients are statistically significant. Results shown in Table 3 are therefore not driven by the arbitrary choice of a 20 and 10km threshold, but hold for several other proximity levels.

Reduced form estimates from Table 3 indicate that the radical candidate received a higher share of votes in Alsace municipalities within 10km from the Alsace-Moselle border. This is consistent with the fact that more men were exposed to WWII in Alsace and that war exposure has an effect on voting behaviour. If the exclusion restriction holds, being in Alsace should only have an effect on support for radical candidates through war exposure; there should be no effect on votes from administrative borders when there is no variation in war exposure.

To assess the validity of the exclusion restriction I perform falsification tests on other departments' borders that have experienced the same level or no incorporation. Results are presented

in Table 4. In Column (1) I replicate the reduced form regression using the sub-sample of municipalities within 10km from the Bas-Rhin-Moselle border<sup>28</sup> (Table 3, Column (3), Panel D). Localities in the Bas-Rhin vote on average 1.4 percent more in favour of radical candidates than their Moselle counterparts.

In Column (2) I run the same regression, this time using the two departments in Alsace. Men born from 1908 to 1927 in both the Bas-Rhin and Haut-Rhin were incorporated in the Wehrmacht. If department limits only affect voting through war exposure, there should be no difference in the way neighbouring municipalities vote in these departments. This is indeed the case; there is no systematic difference in radical support within 20km of the Bas- and Haut-Rhin border<sup>29</sup>.

Columns (3) and (4) present the results from the same reduced form regression for the other 3 departments of the Lorraine region: Meurthe-et-Moselle, Meuse, and Vosges. Since none of these departments has experienced the incorporation history Alsace and Moselle have, there should be no systematic difference in support on either side of the frontier. Results in Table 4 are in line with this prediction. Bordering municipalities in the Meuthe-et-Moselle department do not vote differently than their Meuse or Vosges neighbours.

A last threat to identification that needs to be addressed is comparability of municipalities on both sides of the border. Table 11 in the Appendix presents the difference-in-means of the observable municipality characteristics for the four samples presented in Table 3. Municipalities in Alsace and Moselle only significantly differ with respect to some geographical endowments (longitude and elevation std.dev.), and population density. Reassuringly, these characteristics do not correlate with incorporation, as shown in Table 10 in the Appendix.

<sup>&</sup>lt;sup>28</sup> In the Alsace region, only municipalities from the Bas-Rhin are within 10km from the Alsace-Moselle border, as shown in Figure 3 in the appendix. This results in the Bas-Rhin dummy being collinear to the Alsace dummy when restricting to municipalities within 10km of the border.

<sup>&</sup>lt;sup>29</sup> The Bas-Rhin and Haut-Rhin discontinuity border is larger because of data limitations when restricting to 10 km (63 observation); results hold nevertheless when restricting to this distance (p - value = 0.324)

## 4 Proposed mechanism

#### 4.1 Theoretical framework

Findings in Section 3 establish a causal link between WWII participation and support for radical candidates 70 years after the end of the conflict. While these findings present the behavioural consequences of being actively exposed to war, they fail to explain the attitudes driving this relationship. This section tests whether the support for radical candidates presented in the previous section is resulting from a lack of support for the system or regime, also known as political alienation.

The theoretical framework behind the proposed mechanism draws from research in social psychology. Upon returning from the front these veterans had to reintegrate the re-founded French state. The lack of understanding of the reasons they had to fight this abominable war, and the feeling of being let down by the French state, led to a distrust of the established political authorities. This distrust was transmitted to the following generations, through both oblique and vertical transmission (Bisin and Verdier, 2001).

As long as there was no political discourse able to capture this hostility towards the policy, this attitude was hardly reflected in electoral outcomes. With the emergence however of the radical right-wing and its anti-establishment discourse, this political alienation was transformed into increased support for these candidates.

#### 4.2 Manifesto data evidence

A first approach to testing the proposed mechanism is to investigate electoral campaign manifestos. The *Manifesto Project Dataset* contains information on the share of quasi-sentences spent by major parties on several topics, ranging from external relations to the political system and welfare and life quality. Manifestos have been coded for legislative elections since 1946 and European parliament elections since 1979, in several European countries. The political system section includes 5 variables: decentralization, centralization, governmental and administrative efficiency, political corruption, and political authority. I focus on political corruption, which counts the number of cases where a candidate has referred to the "need to eliminate political corruption and associated abuses of political and/or bureaucratic power".

Table 5: Proposed Mechanism: 2SLS Estimates for Political Corruption

	(1)	(2)	(3)	(4)
Dep. Variable:			political corruption	
Proximity measure	$\operatorname{Geographical}$	Geographical	Cultural &	Cultural &
			Geographical	Geographical
1965 Presidential Election				
Exposed (%)	1.435***	1.341***	1.330***	1.116***
	(0.405)	(0.415)	(0.410)	(0.285)
1995 Presidential Election				
Exposed (%)	0.580	0.491	0.466	0.439
	(0.405)	(0.419)	(0.399)	(0.312)
2002 Presidential Election				
Exposed (%)	1.365***	1.516***	1.534***	1.627***
	(0.221)	(0.313)	(0.309)	(0.248)
2007 Presidential Election				
Exposed (%)	0.468**	0.478**	0.474**	0.164
	(0.230)	(0.215)	(0.213)	(0.294)
2012 Presidential Election				
Exposed (%)	1.121***	1.278***	1.305***	1.250***
	(0.245)	(0.268)	(0.284)	(0.246)
Geographical endowments	Yes	Yes	Yes	Yes
Contemp. cov. vector	Yes	Yes	Yes	Yes
15km Grid F.E.	Yes	Yes	Yes	Yes
Dialect origin F.E.	Yes	Yes	Yes	Yes
Dialect F.E.			Yes	Yes
Sample restrictions	None	$20 \mathrm{km}$	$20 \mathrm{km}$	$10 \mathrm{km}$
Observations	1634	482	482	212

Notes: 2SLS estimates of the effect of Second World War exposure on support for candidates with above the median mentions of political corruption in the 1965 to 2012 Presidential Election first rounds. Each coefficient is the 2SLS estimate of a separate regression. The dependent variable is the sum of votes for candidates with above the median mentions of political corruption in their manifesto. Robust standard errors in parentheses, clustered at the sub-district level. Column (1) includes all municipalities from Alsace and Moselle; Columns (2) & (3) within 20km; Column (4) within 10km. Discontinuity sub-samples constructed as described in Figure 6. All regressions include the full set of controls of Equation (4). with the exception of Pre-War covariates vector. All variables constructed as described in Tables 9 and 10. Dialect origin, 15km Grid, and Dialect F.E. presented in Figures 8, 9, and 10 in the Appendix. \* significant at 10%; \*\* at 5%; \*\*\* at 1%.

Each variable in the Manifesto Project Dataset is constructed as a share of the program spent on the specific topic. A first approach is to separate candidates into those with above and below the median mentions of corruption, and run the 2SLS estimation presented in Section 3. Since there are only two candidates in the second round of the 2002 Presidential Election, the estimated coefficients for this election would be identical to the coefficients presented in Table

3. I thus turn to the first round of Presidential Elections in 1965 and 1995-2012<sup>30</sup>. While first round ballots are more prone to strategic voting, this should primarily be an issue post-2002, as explained in Section 2.4.

The strategy I use is the following: I first identify, by presidential election, which candidates refer more to political corruption. I then sum up the number of votes acquired these candidates. This strategy therefore takes into account variation in support across candidates in a particular election.

Results from running the 2SLS estimation are presented in Table 5. Each coefficient is resulting from a different regression. War exposure has a positive, and statistically significant in most cases, effect on support for candidates that refer most to political corruption in their discourse for all elections presented in Table 5. Furthermore, this effect is strongest in 1965, a finding that is consistent with an intergenerational transmission mechanism.

A second strategy used to identify the effect of war exposure on political identification is to take advantage of the variation between and *within* parties<sup>31</sup>. Political discourse evolves with time, allowing therefore to identify the effect of a party not mentioning political corruption in its manifesto any more.

Table 6 presents results from within election and within party regressions. Column (1) presents the within election effect of war exposure on support for candidates with an antiestablishment program. Anti-establishment candidates receive on average 2.3 percent of votes less than candidates that do not mention corruption. A 1 percentage point increase in war exposure however, is associated to a 0.14 percentage point increase in support for anti-establishment candidates. The coefficient on war exposure is not without significance either; since all candidates are included in these regressions, it simply captures the average number of valid, non-blank ballots in the municipality. This implies that a 1 percent increase in war exposure is associated with a 0.07 percentage point increase in blank ballots<sup>32</sup>.

Column (2) of Table 6 presents the results within party. It therefore captures variation in the program of a single party through time. Results are quasi-identical to those in Column (1).

<sup>&</sup>lt;sup>30</sup>The choice of elections is data driven. Radical candidates were present at the 1974 and 1988 elections as well. Data for these elections however is only available upon special request. I plan to include these elections in my analysis in the future.

<sup>&</sup>lt;sup>31</sup>I use parties instead of candidates, since candidates representing a party change in most elections.

<sup>&</sup>lt;sup>32</sup>Since electoral outcomes are transformed in natural logarithms this coefficient could also be capturing political fractionalization, meaning it could partially result from increased support for minor candidates.

Table 6: Proposed Mechanism: Pooled OLS Estimates for Political Corruption

	(1)	(2)	(3)	(4)
$Dep.\ Variable:$		Vote Sh	nare (%)	
$\overline{Corruption_{c>med}}$	-3.378***	-7.320***	-5.232***	-3.044***
	(0.193)	(0.183)	(0.121)	(0.089)
$Military_{c>med}$				8.326***
				(0.114)
$Tradition_{c>med}$				-13.351***
				(0.154)
Exposed $(\%)$	-0.070***	-0.093***	-0.070***	-0.126***
	(0.015)	(0.021)	(0.007)	(0.010)
$\times Corruption_{c>med}$	0.142***	0.141***	0.142***	0.121***
	(0.031)	(0.021)	(0.015)	(0.011)
$\times Military_{c>med}$				0.082***
				(0.011)
$\times Tradition_{c>med}$				0.072***
				(0.011)
Election F.E.	Yes			
Party F.E.		Yes		
Election $\times$ Nuance F.E.			Yes	Yes
Pre-War covariates vector	Yes	Yes	Yes	Yes
Geographical endowments	Yes	Yes	Yes	Yes
Contemp. cov. vector	Yes	Yes	Yes	Yes
Sub-district F.E. (1936)	Yes	Yes	Yes	Yes
Dialect origin F.E.	Yes	Yes	Yes	Yes
Observations	89870	89870	89870	89870
Adjusted $R^2$	0.27	0.51	0.56	0.63

Notes: OLS estimates of the effect of Second World War exposure on support for candidates with above the median mentions of political corruption in the 1965 to 2012 Presidential Election first rounds. Pooled regressions. The dependent variable is the vote share for each candidate. Robust standard errors in parentheses, clustered at the municipality × election level. Column (1) includes election year fixed effects; Column (2) party fixed effects; Columns (3) and (4) election year × nuance fixed effects; Parties are: CPNT (Saint-Josse (2002), Nihous (2007)), FN (Le Pen JM (1995-2007), Le Pen M (2012)), LCR (Besancenot (2002, 2007), Poutou (2012)), LO (Laguiller (2002-2007), Gluckstein (2002), Arthaud (2012)), MDC (Chevènement (2002)), MPF (de Villiers (1995, 2007), Cheminade (1995)), PCF (Hue (1995, 2002), Laguiller (1995), Buffet (2007), Mélenchon (2012)), PRG (Barbu (1965), Taubira (2002)), PS (Mitterrand (1965), Jospin (1995, 2002), Royal (2007), Hollande (2012)), PdT (Schivardi (2007)), RPR (de Gaulle (1965), Chirac (1995, 2002), Boutin (2002), Sarkozy (2007, 2012), Dupont-Aignan (2012)), SP (Cheminade (2012)), UDCA (Tixier-Vignancour (1965)), UDF (Lecanuet (1965), Balladur (1995), Bayrou (2002-2012)), UDI (Marcilhacy (1965), Lepage (2002), Madelin (2002)), VEC (Voynet (1995, 2007), Mamère (2002), Bové (2007), Joly (2012)). Nuances are: DVD (CPNT, MPF, SP, UDF, UDI), DVG (MDC, PRG), EXD (FN, UDCA), EXG (LCR, LO, PdT), PCF, PS, RPR, VEC. All regressions include the full set of controls of Equation (4). All variables constructed as described in Tables 9 and 10. Sub-district (1936), and Dialect origin F.E. presented in Figures 7, and 8 in the Appendix. \* significant at 10%; \*\* at 5%; \*\*\* at 1%.

Column (3) presents the same regression including election times nuance fixed effects. Variation therefore comes solely from parties that are ideologically close, in the same election. Results are almost identical. The only difference comes from the fact that within nuance, parties that talk more about political corruption actually receive higher vote shares, as captured by the coefficient on the  $Corruption_{c>med}$  dummy variable.

Finally in Column (4) I test whether I am actually capturing some other aspect of the discourse of radical right-wing parties, such as a taste for authority, or its anti-universalism. I therefore use positive mentions of the military, and traditional morality and separate candidates above/below the median in the exact same way as with political corruption. Results could therefore be either interpreted as ones controlling for these discourse aspects, or as a horse-race regression. Results are robust to the inclusion of these binary variables and their interaction term with war exposure. The interaction of both mentions of the military and traditional morality with war exposure are positive as well, but of smaller magnitude than the one with political corruption. The effect of war exposure on support for candidates that have an anti-establishment discourse does not appear to be driven by a taste for authority or an in-group bias.

#### 4.3 Survey data evidence

I then turn to electoral survey data. The 2002 French Electoral Panel, organised by the CEVIFOP<sup>33</sup> follows the long tradition of post-electoral surveys that have been taking place in France since 1978. The purpose of these surveys is to better understand the voting behaviour of French citizens following elections.

The 2002 Electoral Panel consists of three waves; the first wave took place right before the Presidential Election first round (8-20/4); the second between the Presidential Election second round and the Legislative Election (15-21/5); the third took place after the Legislative Election (20-28/6). Given the surprising 2002 Presidential Election first-round results, questions on the JM Le Pen discourse were included in the second wave of the survey.

The second wave of the 2002 French electoral panel contains socio-demographic informations, and most importantly, the municipality where the respondents live. The survey consists of 4,017 individuals. Of those, 287 come from the regions annexed by the Germans during WWII, from 52 different municipalities.

The question concerning the ERW discourse (Q232) is phrased in the following way: Do you approve or disapprove of the position taken by JM Le Pen on: (a) Immigrants, (b) Security, (c) The defence of traditional values, (d) The critique against the political class, (e) The suppression of income tax, (f) The exit of France from the EU. There are four possible answers to this question: totally approve, rather approve, rather disapprove, and totally disapprove.

<sup>&</sup>lt;sup>33</sup> Centre de recherches politiques de Sciences Po.

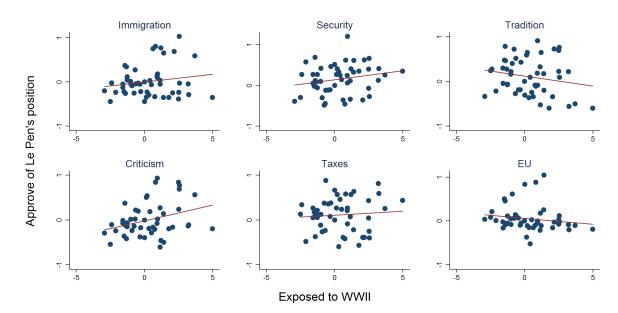


Figure 4: Proposed Mechanism: Le Pen Positions and War Exposure

Note: Correlation between relative approval of Le Pen positions and relative war exposure at the municipality level. Data on approval of Le Pen's positions comes from the 2002 French Electoral Panel (CEVIFOP). Data on war exposure comes from comes from the Index of French Nationals Compelled into German Armed Forces. Reference municipality is Strasbourg.

The estimation strategy used to relate the survey to the historical data follows Algan and Cahuc (2010). I start by constructing an approval indicator that takes the value 1 if the respondent answered "I totally approve" or "I rather approve" for each of the six Le Pen positions. By doing so I make a separation between respondents that are more or less in favour of a Le Pen position from the ones that are more or less against it. This also simplifies interpretation of the coefficients of regressions.

At a second step, I run regressions of the six constructed indicators on municipality fixed effects, age-gender groups, education (to approximate income), religion (to approximate origin), and most importantly 2002 Round 2 vote fixed effects. I then create a new variable using the municipality fixed effect coefficient. This variable captures the approval of Le Pen's positions in municipality m relative to the reference municipality, conditional on covariates. These constructed variables are then combined with the historical and administrative data<sup>34</sup>.

Figure 4 presents the correlation between the approval of Le Pen's position on the six different

<sup>&</sup>lt;sup>34</sup> All variables in the historical and administrative data are transformed with respect to the reference municipality as well.

Table 7: Proposed Mechanism: OLS Estimates for Le Pen's Positions

	(1)	(2)	(3)	(4)	(5)	(6)
$Dep.\ Variable:$	App	m prove/disappro	ove of position	taken by JM ${\bf I}$	Le Pen on	
	Immigration	$\operatorname{Security}$	$\operatorname{Tradition}$	$\operatorname{Criticism}$	Taxes	$\mathrm{EU}$
Exposed (%)	0.039	0.048	-0.049	0.064**	0.022	-0.029
	(0.033)	(0.030)	(0.040)	(0.031)	(0.032)	(0.022)
Population density	Yes	Yes	Yes	Yes	Yes	Yes
Foreigners' fraction	Yes	Yes	Yes	Yes	Yes	Yes
Blue collar workers	Yes	Yes	Yes	Yes	Yes	Yes
Unemployment rate	Yes	Yes	Yes	Yes	Yes	Yes
Observations	50	50	50	48	49	49
Adjusted $R^2$	-0.05	0.01	-0.06	0.10	-0.06	-0.02
Variance explained	0.20	0.24	-0.22	0.30	0.11	-0.18

Notes: OLS estimates of the effect of war exposure on approval of Le Pen's positions All regressions run at the municipality level. Reference municipality is Strasbourg. Column (1): Do you approve or disapprove of the position taken by JM Le Pen on immigrants? Column (2): on security? Column (3): on the defence of traditional values? Column (4): on the critique against the political class? Column (5): on the suppression of income tax? Column (6): on the exit of France from the EU? Robust standard errors in parentheses. \* significant at 10%; \*\* at 5%; \*\*\* at 1%. Variance explained is the estimate resulting from a regression analysis that has been standardized so that the variances of dependent and independent variables are 1.

topics and war exposure, relative to Strasbourg. As shown in this Figure, the only Le Pen position that appears correlated with war exposure is his position on "the critique against the political class".

To test whether this correlation is driven by systematic differences in municipalities characteristics, I run regressions on the approval of the different Le Pen positions on War exposure. Given the small sample size, I restrict the control variables to population density (to capture urbanization), foreigners' fraction, blue collar workers' fraction and the unemployment rate.

The results presented in Table 7 confirm that only the critical aspect of the Le Pen discourse is correlated with war exposure. A 1 percentage point increase in exposure (relative to Strasbourg) leads to a 0.06 percentage point increase in approval of Le Pen's criticism of the political class. The other positions of the ERW candidate are uncorrelated to war exposure.

Overall, these results indicate that the driving force between the increased support for the extreme right-wing in the regions where men were incorporated in the Wehrmacht is the antiestablishment rhetoric of its candidate. In the small sample with available data, a 1 s.d. increase in war exposure relative to Strasbourg (s.d. = 1.8) can explain up to 30% of the variation in approval of Le Pen's criticism (s.d. = 0.39).

If this correlation indeed captures low diffuse support resulting from the military war exposure

Table 8: Proposed Mechanism: OLS Estimates for Trust in Institutions

	(1)	(2)	(3)	(4)	(5)	(6)
$Dep.\ Variable:$		Do you rather	trust or mis	trust the follow	ing institutions	
	Police	$\operatorname{Army}$	$\operatorname{State}$	$\mathbf{Assembly}$	$_{ m Justice}$	Parties
Exposed (%)	0.032	0.068**	-0.023	-0.008	-0.072**	-0.040*
	(0.027)	(0.027)	(0.039)	(0.047)	(0.030)	(0.021)
Population density	Yes	Yes	Yes	Yes	Yes	Yes
Foreigners' fraction	Yes	Yes	Yes	Yes	Yes	Yes
Blue collar workers	Yes	Yes	Yes	Yes	Yes	Yes
Unemployment rate	Yes	Yes	Yes	Yes	Yes	Yes
Observations	50	50	50	50	50	50
Adjusted $\mathbb{R}^2$	0.01	0.15	-0.07	-0.07	0.03	0.12
Variance explained	0.17	0.52	-0.10	-0.04	-0.30	-0.22

Notes: OLS estimates of the effect of war exposure on approval of Le Pen's positions All regressions run at the municipality level. Reference municipality is Strasbourg. Column (1): Do you rather trust or mistrust the police? Column (2): the army? Column (3): the State? Column (4): the National assembly? Column (5): justice? Column (6): political parties? Robust standard errors in parentheses. \* significant at 10%; \*\* at 5%; \*\*\* at 1%. Variance explained is the estimate resulting from a regression analysis that has been standardized so that the variances of dependent and independent variables are 1.

of men from these regions, it should also be captured by questions measuring trust in institutions. The 2002 French Electoral Panel also includes questions on trust in the police, the army, the state, the assembly, the judicial system, and parties.

Results from running regressions using the exact same approach as approval of the radical right wing candidate's opinions are presented in Table 8. Consistently with the mechanism proposed, individuals from places where more men were exposed to war are less trustful of (nontotal) institutions, such as the judicial system and parties. On the other hand, they are more trustful of hierarchical institutions such as the police and the army.

#### 4.4 Other potential mechanisms

In the last part of this Section I test whether other characteristics of the radical right discourse correlate with war exposure. I start by testing whether forced conscription led to a need to overcompensate the national belonging of inhabitants from these regions. After fighting on the German side of the War, men from these regions might feel the need to prove to the rest of the country that they were highly attached to the French nation. If that was the case, there should be an increased support for candidates with a more traditionalist and nationalist discourse. As shown in Columns (1) and (2) of Table 12, there does not appear to be a systematic difference in support for candidates that have a stronger anti-universal discourse.

In Columns (3) and (4) I test whether I am capturing a taste for the military. As a total, hierarchically organized institution, the military socializes its members into authoritarian modes (Jenning and Markus, 1977). Le Pen, the president of the National Front, was a veteran of the Indochina and Algeria wars. It could therefore be the case that war veterans relate more with him on this dimension than with other candidates. Furthermore, the authoritarian aspect of radical right-wing parties is a constant feature of these parties across Europe (Schwengler, 2003). As shown in Table 12 in the Appendix, neither increased positive mentions to the military, nor positive mentions to law and order systematically correlate with war exposure.

## 5 Conclusions

In this paper I provide evidence that war participation has a long-run impact on political behaviour, in the context of the annexation of the French Eastern Borderlands by the Third Reich during WWII, and the consequent forcible conscription of men from these regions to the Wehrmacht. Using data on soldiers from these regions whose fate remained unknown right after the War had ended, I construct a measure of military war exposure at the municipality level. Localities where more men where exposed to WWII conflict still display today increased electoral support for radical right-wing candidates.

Within district OLS estimates indicate that war exposure can explain up to 10% of the variation in this voting behaviour. To establish a causal relationship between exposure and voting I take advantage of a discontinuity in the conscription rule. 2SLS estimates from comparing municipalities with a common cultural background within 10km from each other confirm the OLS estimates.

Evidence implies that this effect is driven from reduced diffuse political support, also known as political alienation. Since the 1960s, candidates that have been more critical towards the political system have received increased political support in these localities. Survey data regressions confirm this finding. Even after controlling for political orientation, individuals from municipalities more exposed agree on average more with the radical right-wing candidate on his critique of political classes.

These findings indicate that particular attention should be held on the demobilization and re-integration process of ex-combatants, particularly after participation in a war that has been criticized as being unjust and vicious. Several questions on the topic remain however unanswered. Political alienation is typically considered to be a combination of personal inefficacy (one's perception of being unable to influence desired political outcomes), system inefficacy (one's perception that the political system as a whole is thwarting his value satisfaction), and value conflict (the conflict between the individual's fundamental values and those represented by the polity) (Schwartz, 1973). Understanding further which of these components is most affected by the traumatizing experience of participating in a war can refine policy prescription.

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## A Figures

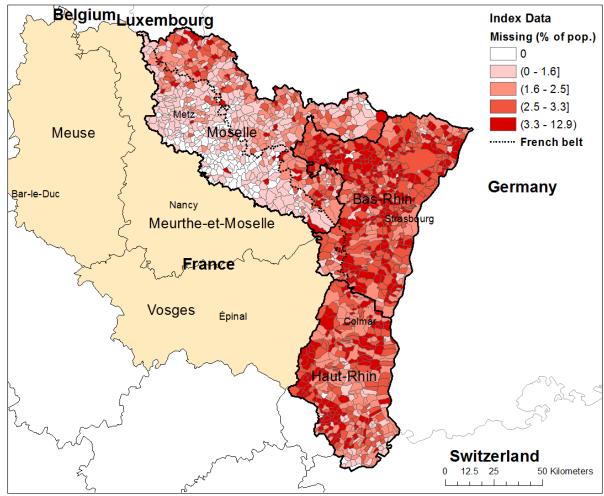


Figure 5: Index Data: Men Declared Missing by Municipality

Note: Map of the fraction of men declared missing in the Bas-Rhin and Moselle departments. Data comes from the Index of French Nationals Compelled into German Armed Forces. Fraction of men declared missing calculated using the 1936 official population census. French belt refers to municipalities with a dialect of French origin. Municipality limits valid as of Jan 1, 2014.

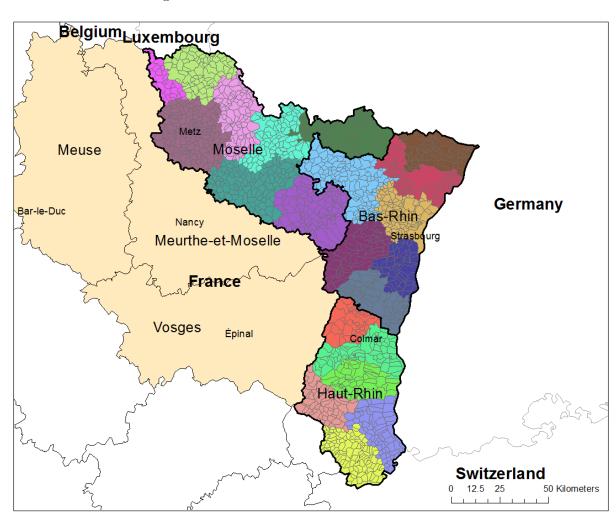


Figure 6: Baseline Specification: 1936 Districts

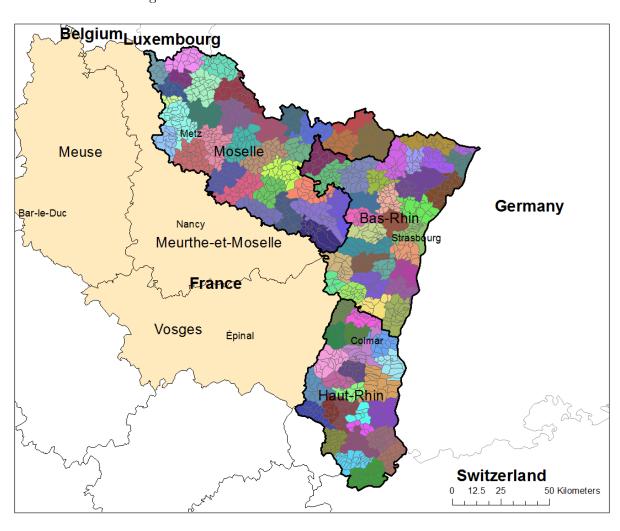


Figure 7: Baseline Specification: 1936 Sub-Districts

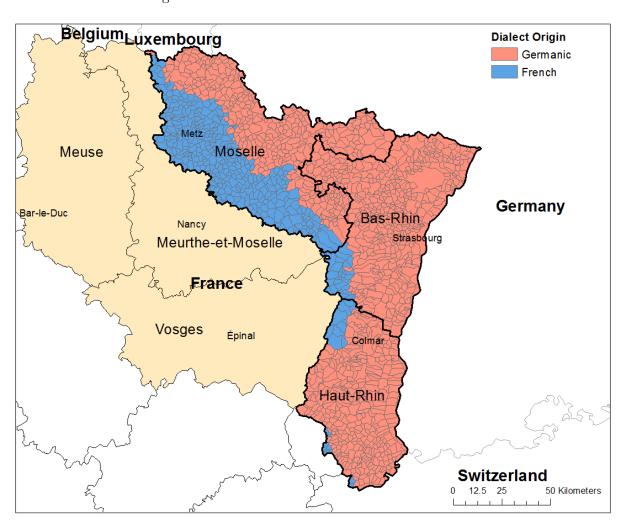


Figure 8: Baseline Specification: Dialect Origin

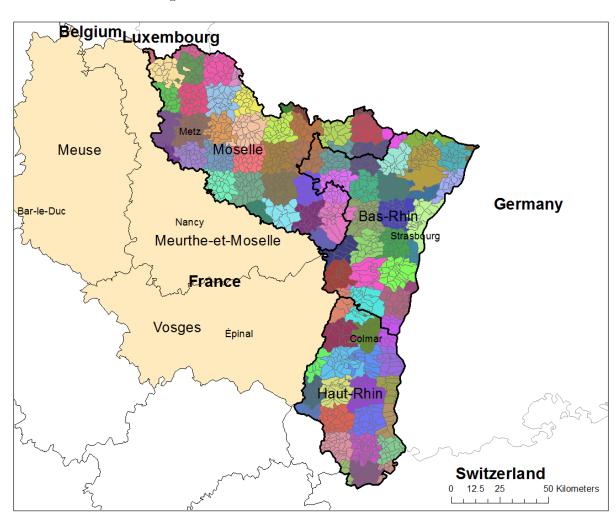


Figure 9: Instrumental Variables: 15km Grids

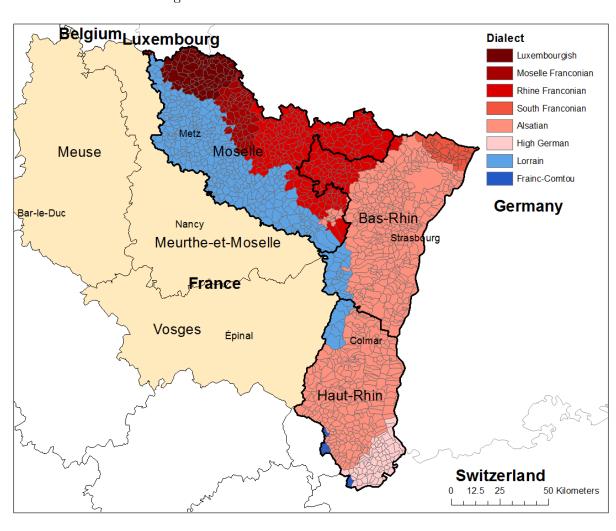


Figure 10: Instrumental Variables: Dialects

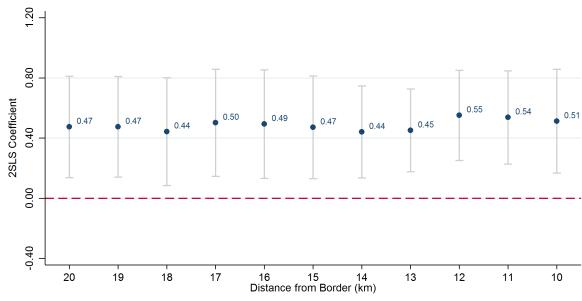


Figure 11: Instrumental Variables: 2SLS Coefficients by Sub-Sample

Note: Graph of the 2SLS estimates of the effects of WWII exposure on extreme-right wing vote in the 2002 presidential election second round when varying the distance from the discontinuity border. 2SLS Coefficient is the point estimate by sub-sample. Distance from the Border (km) is the maximum distance from the discontinuity to include a municipality in the restricted sample. Range plot indicates the confidence intervals, capped at the 10% significance level. All regressions run at the municipality level. Robust standard errors in parentheses, clustered at the sub-district (canton) level. All regressions include the full set of controls of Equation (4), with the exception of Pre-War covariates vector that consists of Returnees not drafted (%), Geographical endowments, and Population density.

## B Tables

Table 9: Summary Statistics: Pre-War Characteristics

	Summary Statistics			Corr.	
	$\overline{\mathrm{Obs}}$	Mean	Std.dev.	Exposure	p-value
WWII Exposure					
Exposed to War (%)	1634	5.27	3.45	1.00	1.00
- of whom drafted	1634	5.08	3.40	0.99	0.00
- of whom not drafted	1634	0.19	0.38	0.23	0.00
$Geographical\ endowments$					
Latitude	1634	48.64	0.53	0.13	0.00
Longitude	1634	7.07	0.51	-0.03	0.27
Waterway (Binary)	1634	0.20	0.40	-0.02	0.54
Elevation	1634	281.07	129.02	-0.01	0.77
Elevation std.dev.	1634	35.00	43.10	-0.01	0.77
$Sociocultural\ aspects$					
Protestant (%)	1634	13.88	19.31	0.05	0.07
Jewish (%)	1634	0.85	0.53	-0.03	0.22
French-speaking (%)	1634	62.80	18.69	-0.05	0.05
German-speaking (%)	1634	73.49	17.69	0.08	0.00
Dialect-speaking only (%)	1634	5.78	3.64	0.03	0.21
$Ideological\ preferences$					
Right wing (%)	1634	75.89	17.01	0.03	0.17
Extreme-right wing (%)	1634	16.62	18.89	0.04	0.12

Notes: Pre-War municipality characteristics descriptives. Correlation with Exposure is the within district and dialect origin correlation with Exposed to War (%). WWII Exposure data comes from the Index of French Nationals Compelled into German Armed Forces. Exposed (%), Exposed of whom drafted (%), and Exposed of whom not drafted (%) constructed by inflating Declared missing (%) by  $1/\bar{\theta}$ , where  $\bar{\theta}=44,000/100,000=0.44$ . Geographical endowments data comes from the European Environment Agency. Elevation and Elevation std.dev. in metres. Waterway (Binary) takes the value 1 when a river or canal crosses the municipality limits and 0 otherwise. Sociocultural aspects data comes from the Aspects particuliers des populations alsacienne et mosellane and Carte de Cassini, EHESS. Protestant (%) and Jewish (%) in 1936. French-speaking (%) and German-speaking (%) is the fraction of the population speaking French and German in 1936. Dialect-speaking only (%) is the fraction of the population speaking exclusively the dialect (no official language) in 1936. Ideological preferences data comes from the official 1936 parliamentary election results. Right wing (%) and Extremeright wing (%) candidates classified based on Dreyfus (1969) and Zanoun (2009). Sociocultural aspects and Ideological preferences available at the sub-district (canton) level only.

Table 10: Summary Statistics: Contemporary Characteristics (2002)

		Summary Statis	stics	Corr.	
	Obs	Mean	Std.dev.	Exposure	p-value
$\overline{\ Demographic\ characteristics}$	}				
Population density	1634	175.69	360.16	-0.01	0.69
Population Growth (%)	1634	40.97	101.46	0.01	0.64
Foreigners (%)	1634	3.94	4.59	-0.06	0.02
$Socioeconomic\ aspects$					
Admin. remoteness	1634	3.60	1.22	-0.01	0.80
Service remoteness	1634	3.18	1.32	0.00	0.86
Unemployment rate (%)	1634	5.88	4.83	-0.02	0.39
Blue collar workers (%)	1634	40.41	13.34	0.11	0.00
No schooling degree (%)	1634	22.28	9.11	0.08	0.00
Secondary schooling (%)	1634	23.50	8.50	-0.12	0.00
$Electoral\ outcomes$					
Radical-right wing (%)	1634	22.64	5.72	0.13	0.00

Notes: Contemporary municipality characteristics descriptives. Correlation with Exposure is the within district and dialect origin correlation with Exposed to War (%). Data comes from the 1999 census organised by the French National Statistics and Economic Studies Institute (INSEE), except for Fertility rate (average of 2003-2011), Foreigners (%) (2006), Median income (2002), and Electoral outcomes (2002R2). Population Growth (%) measured as the change from 1936 to 1999 over the 1936 population. Fertility rate is the average annual number of births for 2003-2011 by childbearing women (aged 15-49 y.o.). When no childbearing women a 0 is attributed. The definition of a foreigners by the statistical office is a person residing France that does not have the French nationality. Administrative remoteness takes the values from 0 to 12. It is constructed using the Remoteness (2001) methodology, where administrative centres are given values 1 to 4, with 1 being the head of a sub-district and 4 the head of a region. Service remoteness constructed using the same methodology; population thresholds chosen as the 95th percentile of the respective administrative group population. In 1999 these thresholds are: 2623, 15026, 40907, 103605. Blue collar workers (%) is the fraction of workforce working in agriculture and industrial labourers; No schooling degree (%) is the fraction of the population over 16 y.o. without any schooling degree; Secondary schooling (%) holding a Baccalaurreat (Bac) or University degree. Median income in Euros. Radical-right wing (%) is the vote share of Le Pen in the 2002R2 presidential election.

Table 11: Instrumental Variables: Discontinuity Sample Comparability

	Difference in means (Alsace minus Moselle)				
D					
$Proximity \ measure$	Geographical	Geographical		Cultural &	
			Geographical	Geographical	
$WWII\ Exposure$					
Exposed $(\%)$	2.995***	2.995***	2.961***	2.980***	
$Geographical\ endowments$					
Latitude	0.004	0.004	0.003	0.004	
Longitude	0.042***	0.042***	0.041***	0.037***	
Elevation	0.859	0.859	1.041	1.775	
Elevation std.dev.	5.649***	5.649***	5.725***	5.195***	
Waterway (Binary)	0.022	0.022	0.022	0.008	
$Demographic\ characteristics$					
Population density	-22.828**	-22.828**	-23.251**	-23.985*	
Population Growth (%)	-10.168	-10.168	-10.417	-10.011	
Foreigners (%)	0.122	0.122	0.140	0.109	
$Socioeconomic\ aspects$					
Admin. remoteness	-0.041	-0.041	-0.033	-0.007	
Service remoteness	-0.029	-0.029	-0.025	-0.012	
No schooling degree (%)	-0.490	-0.490	-0.445	-0.147	
Secondary schooling (%)	-0.615	-0.615	-0.558	-0.837	
Blue collar workers (%)	1.155	1.155	1.360	1.520	
Unemployment rate (%)	-0.557	-0.557	-0.588	-0.587	
Median income	-185.817	-185.817	-191.154	-272.092	
$Electoral\ outcomes$					
Radical-right wing (%)	1.518	1.518	1.439	1.370	
Observations	1634	482	482	212	

Notes: Difference in means of observable characteristics of municipalities in Alsace and Moselle. All differences include grid and dialect FE to preserve locality. Robust standard errors in parentheses. Column (1) sample includes all municipalities from Alsace and Moselle; Columns (2) & (3) within 20km; Column (4) within 10km. Discontinuity sub-samples constructed as described in Figure 6. 15km Grid, and Dialect F.E. presented in Figures 9, and 10 in the Appendix. All variables constructed as described in Tables 8 and 9. \* significant at 10%; \*\* at 5%; \*\*\* at 1%.

Table 12: Proposed Mechanism: 2SLS Estimates for Other Programme Aspects

	(1)	(2)	(3)	(4)	
$Dep.\ Variable:$	Vote Share (%): Discourse> median				
	Nationalism	Tradition	$\operatorname{Military}$	Law & Order	
Proximity measure	Cultural & Geographical				
1965 Presidential Election					
Exposed (%)	-1.105***	-1.105***	-1.105***	-2.341***	
	(0.288)	(0.288)	(0.288)	(0.633)	
1995 Presidential Election					
Exposed (%)	1.932***	1.932***	0.946**	1.932***	
	(0.504)	(0.504)	(0.445)	(0.504)	
2002 Presidential Election					
Exposed (%)	-0.074	1.164***	0.927***	0.927***	
	(0.243)	(0.390)	(0.183)	(0.183)	
2007 Presidential Election					
Exposed (%)	0.298**	-0.165	0.385***	0.255**	
	(0.132)	(0.264)	(0.083)	(0.117)	
2012 Presidential Election					
Exposed (%)	0.022	0.335	0.022	0.022	
- , ,	(0.169)	(0.229)	(0.169)	(0.169)	
Geographical endowments	Yes	Yes	Yes	Yes	
Contemp. cov. vector	Yes	Yes	Yes	Yes	
15km Grid F.E.	Yes	Yes	Yes	Yes	
Dialect origin F.E.	Yes	Yes	Yes	Yes	
Dialect F.E.	Yes	Yes	Yes	Yes	
Sample restrictions	$10 \mathrm{km}$	$10 \mathrm{km}$	$10 \mathrm{km}$	$10 \mathrm{km}$	
Observations	212	212	212	212	

Notes: 2SLS estimates of the effect of Second World War exposure on support for candidates with above the median mentions of specific topics in the 1965 to 2012 Presidential Election first rounds. Each coefficient is the 2SLS estimate of a separate regression. The dependent variable is the sum of votes for candidates with above the median mentions of the respective topic in their manifesto. Robust standard errors in parentheses, clustered at the sub-district level. All regressions include all municipalities within 10km from Alsace and Moselle border. Discontinuity sub-samples constructed as described in Figure 6. All regressions include the full set of controls of Equation (4). with the exception of Pre-War covariates vector. All variables constructed as described in Tables 9 and 10. Dialect origin, 15km Grid, and Dialect F.E. presented in Figures 8, 9, and 10 in the Appendix. \* significant at 10%; \*\* at 5%; \*\*\* at 1%.