

ARTICLE

Dieu dans la commune: religion and voting in the 2017 French election

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Abstract

European political parties, particularly radical right parties (RRPs), increasingly use religious symbols during elections. Despite the prevalence of these symbols, evidence on the association between religion and far-right vote share is mixed. We compare two leading arguments explaining the relationship between religion and RRP. We hypothesize that the number of religious buildings, identifiable as Islamic or Catholic, will be associated with higher RRP support. We test this as a most likely crucial case using results from the French 2017 presidential election. Controlling for other demographic factors, more Catholic buildings in a commune are associated with a decrease in votes for the *Front Nationale* (FN). An increase in the number of mosques in non-urban communes is associated with increased support for FN. We argue these findings are evidence that RRP use religious symbolism to draw on nativist or anti-Islamic support rather than traditional religious support.

Keywords: Catholicism; France; Islam; volunteered geographic information; voting

Introduction

Religious practice in Europe has dramatically decreased (*Being Christian in Western Europe* 2018). At the same time, Christian nationalist parties have steadily increased in visibility and political viability (“Europe and Right-Wing Nationalism” 2019; Bieber 2019). European *Radical Right Parties* (RRPs) regularly use Christian cultural references in election campaigns, from Viktor Orban’s call for Europe to turn from liberal democracy to “Christian democracy,” to the *Front Nationale*’s (National Front or FN) use of Joan of Arc as a party symbol.¹ These parties present religion as an important facet of party identity.

Despite the use of Christian symbolism and language by RRP, evidence on whether Christians vote for these parties is mixed (Tamadonfar and Jelen, 2013; Montgomery and Winter, 2015; Papastathis and Litina, 2018; Rydgren, 2018). A separate literature has emerged that argues the use of religion by the far-right is not about religion at all but is about immigration and Islamophobia (Brubaker, 2017;

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Roy, 2020). In this article, we address both of these literatures in a novel way. Utilizing data from *L'Institut national de la statistique et des études économiques* (INSEE) as well as volunteered geographic information (VGI) on the locations of Catholic and Islamic religious buildings across France, we attempt to evaluate both the religion and immigration theories of far-right support using the 2017 French presidential election as a test case.

We test the relationship between local religious presence and support for RRP by examining the results of the 2017 French Presidential election. We argue that the 2017 election is a most-likely case for traditional, Catholic voters to vote for an RRP due to unique events that led to the early loss of the primary Catholic candidate, Francois Fillon. These events rendered Catholic voters a choice of voting for either a new, secular and moderate-left movement or for the historically fundamentalist, Catholic and nationalist party, *FN*, run by Marine Le Pen. We hypothesize that if the religious majority is supporting the RRP, then small towns with a higher density of Catholic buildings will have higher levels of support for *FN*. If it is not Catholic voters but voters mobilized along anti-Islamic lines who support *FN*, we expect towns with a greater Muslim presence as measured by the number of mosques in town to report higher support for the *FN*. The analysis is conducted at the commune level, which is the smallest and oldest administrative unit in France. We demonstrate evidence in support of our theory as the number of mosques in a commune corresponds with a statistically significant increase in vote share for Le Pen. This association is particularly noticeable in communes with small populations. We also run robustness checks on outlier regions with many religious buildings as well as *zones urbaine sensibles* (ZUS), some of which have a higher number of foreign inhabitants. Our findings lend further support for the anti-Islamic theory of far-right support.

Literature on RRP and religion

Scholars have found mixed evidence that religion positively affects the likelihood of individuals voting for the far-right. Van der Brug *et al.* (2009) suggest that the role of religious identity on voting is inconsistent and context-dependent. Arzheimer and Carter (2009), using a structural model of Christian identity on far-right attitudes, find that there is no relationship between RRP party choice and holding orthodox, religious beliefs. Building off of Arzheimer and Carter, Montgomery and Winter (2015) find evidence that religious practice and belief decrease votes for European RRP. Papastathis and Litina (2018), alternatively, find that religious beliefs enhance both mainstream right and far-right attitudes in voters. Additionally, Schwörer and Fernández-García (2021), when examining the religious language of European election manifestos, find that references to “Christian roots” and exclusionary language around Islam has steadily increased since the 1980s. Furthermore, they find that this increased emphasis on religion has become salient beyond the far-right as more mainstream parties adopt religious language in their own manifestos.

One possible reason for these mixed findings is the different measures used to capture “religiosity” in the literature.² Survey questions may capture different aspects of religion and are thus relaying different types of information about religion on the individual level (Dargent, 2019). For example, self-reported church attendance may

capture the practice of religious rites, but it does not specify theological differences, even among members of the same sect. Church attendance is also a public and social practice, in contrast to other forms of religious behavior, such as individual time spent in prayer. Along similar lines, Hackett (2014) suggests that surveys on religion are prone to definitional problems and responses may be subject to social desirability bias. The mixed results may demonstrate a problem in defining indicators of religiosity and religious identity.

While individuals may vary in their reasons for behaving religiously, it is also known that religious behavior adds new dimensions to the political values of voters. De La O and Rodden (2008) find evidence that suggests religious identity adds a *moral values* dimension to political ideology. Religious institutions promote moral rules which can motivate religious voters to support conservative parties. It may be the case that religious individuals vote for more conservative parties in general as a result—leading to a rise in support for both traditional conservative but also far-right movements across Europe.

In summary, religious behavior and belief may play a role in growing support for far-right parties, but measurement issues of individual-level “religiosity” can obfuscate straightforward conclusions. It may be the case that religious individuals, driven by an additional set of moral policy commitments, are more supportive of conservative parties or parties that claim to defend “traditional values,” including RRP. The literature on the far-right also presents an alternative theory which suggests that religion is not a driving factor in far-right support. Instead, the far-right draws on nativist or anti-immigrant attitudes.

Nativism versus religion: support for Le Pen where Muslims are present but few

It may be the case that religious individuals are more likely to support the far-right because religious voters lean conservative. Another possibility is that religious identity provides an avenue to promote nativist policies while simultaneously appealing to historically democratic values, such as *laïcité*.

A prominent proponent of the latter argument, Brubaker (2017), argues that nationalists use religious symbols to frame international politics as a clash of civilizations where the far-right fights for “Christian civilization.” Molle (2019) finds that religious cultural symbolism affects RRP vote patterns despite the lack of religiosity in Europe. This suggests that RRP can appeal to religious sentiment to win votes, even if surveys indicate a decline in religious belief. Schwörer and Romero-Vidal (2020) find that RRP use religious language primarily to suggest that Muslim immigrants present a threat to the European in-group defined by “Christian heritage.” These findings offer evidence that the importance of religion itself may be incidental to the politics of RRP. In the religion-as-civilization framework, far-right nationalist groups that try to signal their religious commitments are not doing so to capture true believers but rather true patriots. In this way, the signaling of Christian culture takes on an ethno-religious, nationalist bent as opposed to a signal that the party represents piety.

There is support for the theory that the RRP support is related to immigration. In the 1980s, with rising immigration and growing economic inequality, RRP emerged

that promoted cultural nationalism, and ethno-centrist policies (Rydgren, 2007). Votes for RRP are higher in states with higher immigration numbers (Knigge, 1998; Lubbers *et al.*, 2002; Swank and Betz, 2003; Van der Brug *et al.* 2005). These national-level findings, however, have the potential to lead researchers down an ecological fallacy, where sub-national votes do not correspond with similar findings (Rydgren, 2007). It is also unclear what the mechanism for RRP support is if the primary issue for voters is immigration. It could be related to perceived economic disparities between members of the middle class as a result of modernization (Gurr, 2015), a loss of identity as a result of globalization (Koopmans and Statham, 1999), or protest against perceived failure of mainstream political parties (Lubbers *et al.*, 2002; Norris, 2005). The narrative of civilizational nationalism often defines non-nationalists as a threat. As the literature on *laïcité* suggests, FN may be making a concerted effort to re-frame immigration issues precisely in this way. By turning the conversation into one about defending France's secular culture from religious extremism, the party is able to maintain its general policy position while avoiding explicit discussion of ethnocentric or nativist topics.

In parts of Europe that are already more religiously diverse, such as large urban and commercial centers, it is likely that general support for RRP will be lower as these areas tend to have a longer history of and exposure to immigration (Warf and Winsberg, 2008). It is also likely that RRP know this and generally target specific areas where long-term integration has not occurred (Ivaldi and Dutozia, 2018). While some parts of Europe have grown increasingly urban and globalized, it is also true that this change has not been uniform. Fitzgerald (2018), looking at the 2002 election campaign of Marine Le Pen's father, Jean-Marie Le Pen, notes similar findings about the appeal of RRP to Brubaker but refined the analysis at a more local level. While the debates about globalization and civilization are international in nature, Fitzgerald suggests that support for RRP has more to do with local politics. Specifically, European support for RRP is higher in homogenous, rural towns that have not seen growth from globalization or that are economically declining. Fitzgerald demonstrates that rootedness to a town, a measure created by indexing long-term homeownership and residential zoning, has a positive association with far-right voting. The localized version of the civilization theory suggests that it is the appearance of losing to forces of globalization that drives local support for RRP. We combine Brubaker and Fitzgerald's theories to gain a more nuanced understanding as to the relationship between religious in-out groups in elections at the local level. We suggest that local demographics, framed as "civilizational" issues, increase support for RRP.

Recent work on political parties and political geography supports the theory of local change framed as a greater threat leading to increased RRP support. Hafez (2014) and Hafez and Heinisch (2018) find that RRP have recently sought more mainstream support across Europe by relying on an "anti-Muslim" political agenda. Specifically, they argue that a shared support for Islamophobic policies has connected disparate RRP across Europe. Gravelle *et al.* (2021) examine the relationship between Islamic presence and support for a Dutch RRP, finding that *visible* diversity, measured by mosques with minarets, is associated with greater support for the RRP among right-leaning voters.

Recent qualitative work conducted in France further supports the civilizational-nationalist theory. Weitzel (2020) finds that even the sound of mosques playing prayer music can lead to perceptions of out-group differences for French Muslims. Beaman (2017) finds that despite French law and society not recognizing ethnicity and race as valid demographic categories, North African immigrants face marginalization along racial lines in France. Furthermore, this marginalization is spatial, tied to specific, local areas where the “otherness” of non-white residents is more apparent. Following this line of reasoning, we suggest that another measure of diversity is the number of religious buildings in a town. Muslim religious centers help approximate the size or presence of Muslim communities as well as highlight areas where Muslim culture is visible in a way that mirrors Weitzel’s perceived outgroup theory of sound in French towns. Areas where a small number of mosques exist could, similar to Weitzel’s study, be spaces which are culturally contested, prompting reactionary engagement with the far-right.

Under this theory, religion is not a primary factor in driving RRP support—but it may offer an instrumental means for RRP to gain support without sounding anti-immigrant. Particularly, in the case of the *FN*, the party has recently started to frame anti-Islamic policy positions and statements as a defense of *laïcité*.

French secularism and far-right framing of ethnocentrism

While France is a historically Catholic country, the modern state is secular (Dargent, 2019). The French conception of state secularism, *laïcité*, is rooted in the establishment of separation between the Catholic Church and French rulers who saw each other as threats to political hegemony over the state (Baubérot, 1998; Belorgey, 2006). Over time, however, the definition and political salience of *laïcité* has changed as France faced issues related to religious education and immigration (Baubérot, 2016; Davis, 2020).

The earliest successful, modern RRP was *FN*, however, it was not until the 2000s that the party became a political contender at the national level (Mudde, 2002, 2013; Rydgren, 2005, 2007; von Beyme, 2013). Beginning in the 2000s, *FN*, particularly under the leadership of Marine Le Pen, began to promote *laïcité*. Unlike previous iterations of the concept, which were originally related to Catholic overreach into state politics, *FN* framed *laïcité* around Islam and its incompatibility with the ideals of French Republicanism (Almeida, 2017). Marine Le Pen would eventually call for a separation of “mosque and state,” as well as restrictions on immigration (Larquier, 2011).

This is further supported by scholarly work on the *FN* and the speeches of Le Pen that suggest her leadership has led to a change of the party lingo from an overt Catholic integralist stance to a more secular but anti-Islamic position (Alduy and Wahnich, 2015; Fieschi, 2020). Thus, the connection between religion and RRP support may be less about Catholic religiosity and more about anti-Islamism. This reframing as to what *laïcité* means in contemporary French politics ultimately provides an avenue for promoting nativist policy positions while claiming to uphold “traditional” French values. The next section outlines why we have chosen to examine the French 2017 election as a test case for studying whether far-right support is related to the religious or nativist theory of RRP.

A most-likely crucial case for religious votes

While single-case approaches to political analysis face the challenge of generalizability, we suggest that, per Seawright and Gerring (2008), the 2017 election was a most-likely crucial case where an RRP could attract religious voters. Despite the challenge of generalizability, it is possible that the theory of this study is applicable in either non-majority Christian contexts or other regions outside of Western Europe. Research by Jamal (2005, 2007), Livny (2020), and Mecham (2017) suggest similar theories are applicable in Islamic contexts, with evidence suggesting that Islamic electoral advantage is related to in-group trust rather than overt religiosity. As a most-likely crucial case, we believe France's 2017 election is one in which the response variable in question is expected to return a specific result (Przeworski and Teune, 1970; George *et al.*, 2005; Gerring 2008). We suggest that this is a most-likely case for two main reasons. First, the state has an increasingly popular national RRP, The *FN*, which has steadily increased support in both local and national elections for the past twenty years (Auberger, 2008; Stockemer, 2014, 2019; Stockemer and Amengay, 2015; Zaretsky, 2016; Almeida, 2017; Buhr, 2017; Dumitrescu, 2017; Bastow, 2018).³ Second, the 2017 election was unique for France because, due to scandals involving the major center-right candidate, Francois Fillon, the second round of the election came down to a newcomer party and *FN*. This scenario left Catholic voters, who were largely mobilized under Fillon, an avowed conservative Catholic, with no clear party choice.

The 2017 French presidential election

French presidential elections are conducted in two rounds. The first round is open to many parties but if there is no single candidate with the majority of the votes then the second round occurs two weeks after the first. In the second round, the top two candidates from the first round compete in a run-off.

France has a presidential-parliamentary system with a number of parties across the political spectrum. In general, the two most powerful parties have been *Les Republicains* (The Republicans), a moderate, conservative party, and *La Partie Socialiste* (The Socialist Party or *PS*).⁴ In the 2017 election, the Republican candidate was Francois Fillon, former Prime Minister as well as the Deputy Mayor of Paris. He appealed to conservative Catholic voters because of his conservative social policies (Beardsley, 2017).

The typical *PS-Republicains* fight did not occur as usual. The leftist vote was split as former *PS* member Jon-Luc Melenchon created a new party called *La France Insoumise* (France Unbowed). This split among the leftist elite led to a near collapse of the traditional left parties and a loss in the first round (Clift and McDaniel, 2017).

Additionally, Emmanuel Macron began gaining political momentum with another new party *En Marche!*. Macron's centrist policies focused on renewing and improving European integration and promoting populist sentiment focused on modernizing French politics (Kuhn, 2017). Fillon was also facing a major scandal regarding accusations of misuse of public funds. It is clear that these scandals had an effect on the likelihood of his winning (Lees, 2017). Fillon ultimately lost, as did Melenchon to the newcomer, Macron.

This election is an ideal case for studying the relationship between religious affiliation on RRP vote share. The two candidates in the second round did not have clear connections to the existing religious electorate. One option was Emmanuel Macron, a non-religious candidate. On the other side was Le Pen, running a nationalist party with a history of Catholic fundamentalism. It was unclear at this time whether Catholics would move to the more conservative candidate with controversial opinions regarding immigration or toward the centrist candidate. In the following section we outline how we combined both voting data and geographic data to help elucidate voting patterns among those who ultimately supported *FN*.

Number of religious buildings per commune

We use religious VGI as a means of measuring the visibility and presence of religion at the commune level in France. Religious buildings, such as mosques, prayer houses, and churches, exist to support the spiritual needs of a religious community. It follows that areas with more religious buildings for a given denomination have a stronger social, cultural, or historical affiliation with that denomination. Comparatively, areas with no or few religious buildings belonging to a given denomination have less of an overt, visible affiliation. Similar assumptions about the presence of religious buildings are used in examining the link between religion and social outcomes, with recent work arguing that local religious institutions provide public goods and information bridges (Cao *et al.*, 2018). While gazetteers of religious buildings are not always available, many religious communities in the digital era rely on online tools for believers to connect with local religious centers. These websites are designed to accurately provide religious individuals with information as to where they can visit, worship, and connect with the local religious community. We leverage the publicly available information on these websites to create novel datasets on the frequency and location of Catholic and Islamic religious buildings across France.

The reason why we collected data on both Catholic buildings and mosques is to examine not only if greater Islamic presence in a commune increases RRP support, but if Catholic presence does as well. If it is true that *FN* uses Catholic cultural symbols to appeal to religious voters, then we should expect areas with a greater number of Catholic buildings to at least have a non-negative relationship with *FN* vote share.

Hypotheses

If the theory of religion and support for RRP is correct, then we can expect that areas which have a higher number of Catholics will have more support for far-right parties.

Hypothesis 1. The number of Catholic buildings in a commune will have a positive relationship with the town's vote share for *FN*.

It is possible that the number of Catholic buildings does not directly correspond with the number of religious voters in a commune. This is partially

because Catholic buildings in France are not always active houses of worship. They often represent a cultural and historical presence of Catholicism at the local level but may exist as local, historical monuments rather than active religious buildings.

Alternatively, if it is the case that support for an RRP like *FN* is related to the anti-immigration/civilizational perspective presented by Brubaker then we should expect that smaller towns with some minority presence should see higher support for *FN*. In our operationalization, we use the number of religious buildings in a town as an approximate estimate of this cultural presence of Islam. This leads us to our second hypothesis:

Hypothesis 2. The number of mosques in a commune will have a positive relationship with the town's vote share for *FN*.

We next explain the data gathered to evaluate these hypotheses.

Collecting a dataset of Catholic buildings and mosques across France

This study leverages VGI and web-scraping techniques to build a novel dataset representing Catholic buildings and mosques across the entire nation of France. Information on Catholic buildings was collected from The Catholic Directory (*catholicdirectory.com*), a website of community-contributed information on Catholic churches, organizations, and businesses worldwide. We scraped The Catholic Directory for religious buildings, which can include churches, abbeys, chapels, and more. Similarly, we turned to another community-contributed website called *Trouve ta Mosquée* (*trouvetamosquee.fr*) to gather information exclusively on mosques. The information present on these websites is user-generated, volunteered content generated by members of Catholic and Muslim religious communities to serve as a utility for individuals to find local places for worship (Goodchild, 2007). As such, we suggest that the data presented in these collections is accurate as it was created to provide information for members of the communities themselves.⁵ Both *catholicdirectory.com* and *trouvetamosquee.fr* are regularly updated and represent large, free, online repositories of data on Catholic buildings globally and mosques in France. In particular, the latter has been used in several recent publications examining Islam in France (Ivaldi and Dutozia, 2018; Drouhot, 2020).

From these websites we collected the name and address of each building located within the continental borders of France. The address of each building was then geocoded using the Google Maps API to obtain longitude and latitude. We then counted the number of Catholic buildings and mosques, separately, located in each commune. At the time of web-scraping (July 2021), we were able to collect, locate, and map 2445 mosques and 9478 Catholic buildings across France (Figure 1).

Response variables: commune election data

Data on French elections are publicly available from the *Ministère de l'Intérieur* and the open platform for French public data (*data.gouv.fr*). We downloaded the final results for the first and second Wave of the 2017 French presidential election. For

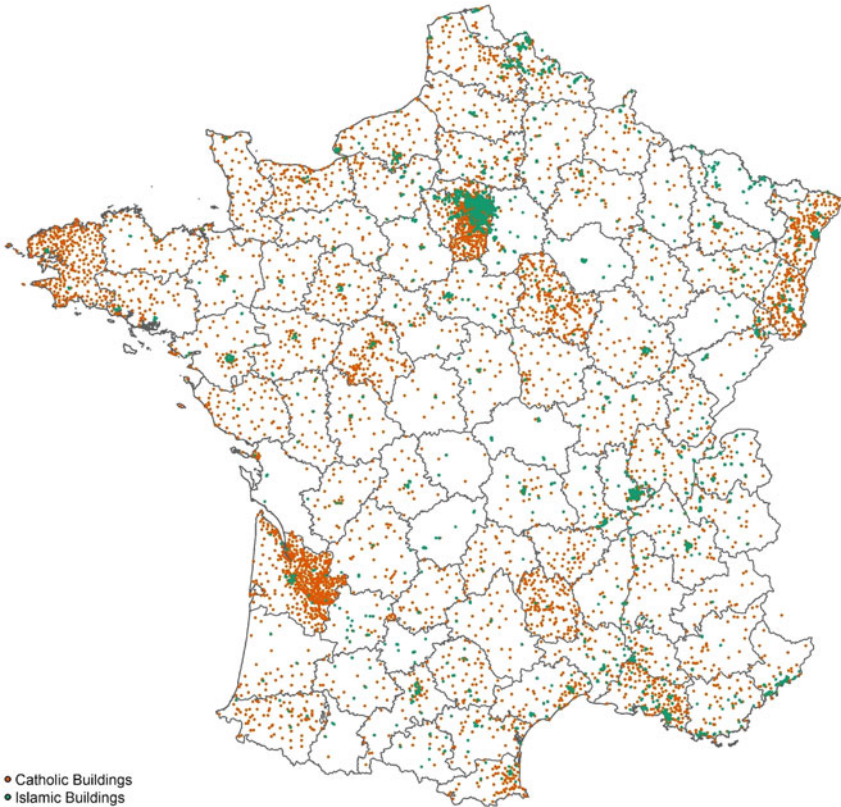


Figure 1. Point locations of Catholic (orange) and Islamic (green) buildings across the nation of France. Gray lines indicate department boundaries. Data on Catholic buildings from The Catholic Directory (*catholicdirectory.com*) and data on mosques from *Trouve ta Mosquée* (*trouvetamosquee.fr*)

each commune we calculated the percent of votes cast for candidates of interest as the number of votes for a given candidate over the total number of votes expressed. We restrict the analysis to communes located on the continental mainland of Europe, thus excluding overseas regions and Corsica. This results in $n = 34,922$ communes with election data. Communes can vary in size but are, in general, small geographical regions, with some having populations smaller than 100 individuals.

Control variables

We rely on recent work by Fitzgerald (2018) to identify control variables relevant to local voting in France. Fitzgerald proposes a number of variables including total population, foreign population (%), unemployment (%), low education (%), high education (%), employment in large professional sectors (agricultural, artisan, high skilled, and intermediary, white collar, and manual labor), and a multidimensional index of local rootedness. The rootedness index is a measure of home ownership, residential zoning, and homes under the same owner since 1990. Fitzgerald provides detailed

information on the construction of these variables from the 1999 French census. We identified equivalent variables from the 2017 French census and downloaded publicly available tables from *Institut national de la statistique et des études économiques* (*insee.fr*). A detailed sourcing of the census tables and variable construction notes is available in the Supplementary Materials.

As a final step we reduced the combined dataset to instances where data is available across all election and control variables. There were $n = 731$ communes that did not have demographic data reported for one or more of the demographic control variables, and these removed communes were distributed across the whole of France. In addition, there were $n = 67$ communes which appeared to have erroneous data (e.g., the range of values exceeded 100%). The final dataset included $n = 34,124$ communes for analysis, encompassing 95.5% of all possible communes that reported election results in the 2017 French presidential election.

Analysis

Table 1 provides a descriptive overview of the primary response and explanatory variables at the commune-level. The mean number of mosques per commune was 0.07, which was lower than the mean number of Catholic buildings per commune at 0.27. In addition, the maximum number of Catholic buildings in a given commune far exceeded the maximum number of mosques in a given commune. Specifically, we observed the maximum of 79 Catholic buildings in *Marcoux*, an alpine commune located nearby to the departmental bishopric of *Digne*. In comparison, we observed the maximum of 26 mosques in Strasbourg, a city that is home to one of the largest mosques in France.

Moving beyond the counts of religious buildings, we also draw attention to certain commune level control variables. The Fitzgerald multivariate measure of rootedness indicates that the average level of rootedness across communes was 53.16% (std. dev. 6.46). The employment sectors of intermediate, white collar, and manual labor had the highest occupational categories. Lastly, considering education, we observe that communes reported larger proportions of high education (41.68%, std. dev. 9.62) compared to low education (22.75% std. dev. 7.35).

In the first round of voting Le Pen had the highest average commune-level vote share at 26.42%. Macron and Fillon had similar levels of average commune-level vote share at 20.41 and 19.87%, respectively. However, as we expect, Le Pen's highest average does not hold in the second round of voting. Across all communes Le Pen secured, on average, 42.18% (std. dev. 11.93) of the vote, whereas Macron attained a higher average of 57.82% (std. dev. 11.93).

The relationship between religious buildings and election results

Table 2 describes the regression estimates of the fully adjusted models for Wave 1 of the election. Of particular interest are the coefficients relating to the count of Catholic buildings and the count of mosques. We observed a negative association between the number of Catholic buildings and Le Pen vote share in Wave 1. Each additional Catholic building was associated with a -0.33% (SE: 0.04) decrease in Wave 1 Le

Table 1. Descriptive statistics of 2017 French election data

Variable category	Variable	i	Mean	St. Dev.	Min	Pctl (25)	Pctl (75)	Max
Religious building counts	Commune Mosques	34,124	0.066	0.583	0	0	0	26
	Commune Catholic buildings	34,124	0.265	1.306	0	0	0	79
R1 commune votes	R1 votes expressed	34,124	955.895	3,476.175	5	134	700	194,592
	R1 Le Pen votes	34,124	211.042	604.815	0	34	180	40,874
	R1 Macron votes	34,124	224.646	925.944	0	25	149	53,040
	R1 Fillon votes	34,124	187.463	743.909	0	26	132	42,191
R1 percentages	Le Pen	34,124	26.418	9.059	0.000	20.000	32.479	83.721
	Macron	34,124	20.412	5.852	0.000	16.574	24.088	61.538
	Fillon	34,124	19.871	7.519	0.000	14.843	23.729	80.000
R2 commune votes	R2 votes expressed	34,124	824.810	2,991.797	4	115	603	161,548
	R2 Le Pen votes	34,124	289.547	833.816	0	49	246	55,418
	R2 Macron votes	34,124	535.263	2,256.113	0	63	354	134,049
R2 percentages	Le Pen	34,124	42.181	11.930	0.000	33.766	50.521	100.000
	Macron	34,124	57.819	11.930	0.000	49.479	66.234	100.000
Commune-level controls	Total population (per 100,000)	34,124	0.018	0.078	0.00004	0.002	0.012	4.796
	Immigration (%)	34,124	4.211	4.321	0.000	1.591	5.332	70.527
	Nationality (%)	34,124	2.941	3.757	0.000	0.785	3.637	57.912
	Rootedness (%)	34,124	53.160	6.460	14.444	49.528	56.631	96.296
Employment (%)	Agriculture	34,124	6.405	10.448	0.000	0.000	8.333	100.000

(Continued)

Table 1. (Continued.)

Variable category	Variable	i	Mean	St. Dev.	Min	Pctl (25)	Pctl (75)	Max
	Artisan	34,124	7.956	7.474	0.000	3.509	10.680	100.000
	High skill	34,124	10.993	9.446	0.000	4.762	15.303	100.000
	Intermediate skill	34,124	26.082	11.811	0.000	19.540	32.692	100.000
	White collar	34,124	30.550	12.061	0.000	24.038	36.842	100.000
	Manual labor	34,124	29.436	14.529	0.000	20.000	37.500	100.000
	Unemployment	34,124	8.123	3.432	0.000	5.882	9.950	41.667
Education (%)	High education	34,124	41.676	9.619	7.143	34.951	47.727	86.750
	Low education	34,124	22.750	7.347	0.000	17.453	27.331	62.579

Table 2. OLS regression results on the relationship between election outcomes and presence of religious buildings for Wave 1 (preliminary) of the 2017 French Presidential election, adjusted for commune-level controls

	Le Pen Wave 1	Macron Wave 1	Fillon Wave 1
(Intercept)	56.470***	13.903***	3.115***
	(0.833)	(0.576)	(0.752)
Commune Catholic buildings	-0.330***	0.122***	0.089**
	(0.040)	(0.028)	(0.036)
Commune mosques	0.395***	-0.729***	-0.574***
	(0.129)	(0.089)	(0.116)
Population (per 100,000)	-8.082***	9.149***	5.606***
	(1.045)	(0.723)	(0.943)
Immigration (%)	-0.299***	0.073***	-0.087***
	(0.011)	(0.007)	(0.010)
Unemployment (%)	0.120***	-0.166***	-0.331***
	(0.016)	(0.011)	(0.014)
Low education (%)	-0.075***	0.016**	0.205***
	(0.010)	(0.007)	(0.009)
High education (%)	-0.393***	0.148***	0.161***
	(0.009)	(0.006)	(0.008)
Agriculture employment (%)	-0.120***	-0.015***	0.081***
	(0.006)	(0.004)	(0.006)
Artisanal employment (%)	-0.122***	0.020***	0.016**
	(0.007)	(0.005)	(0.007)
High-skill employment (%)	-0.059***	0.051***	0.065***
	(0.007)	(0.005)	(0.006)
Intermediate-skill employment (%)	-0.009	0.005	-0.029***
	(0.006)	(0.004)	(0.005)
White collar employment (%)	-0.031***	0.011***	-0.038***
	(0.005)	(0.004)	(0.005)
Manual employment (%)	0.025***	-0.024***	0.007
	(0.005)	(0.004)	(0.005)
Rootedness (%)	-0.163***	0.009*	0.164***
	(0.008)	(0.006)	(0.007)
Num.Obs.	34,124	34,124	34,124
R ²	0.257	0.147	0.122

(Continued)

Table 2. (Continued.)

	Le Pen Wave 1	Macron Wave 1	Fillon Wave 1
R^2 Adj.	0.256	0.147	0.121
AIC	237,149.5	212,011.6	230,132.3
BIC	237,284.5	212,146.6	230,267.3
Log.Lik.	-118,558.760	-105,989.788	-115,050.145
F	841.465	421.178	337.172

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Pen vote share. This observation is reversed for Macron, wherein each additional Catholic building in a commune was associated with a 0.12% (SE: 0.03) increase in his Wave 1 vote share. Comparatively, these associations change direction when considering the relationship between mosques and election results. Each additional mosque in a commune was associated with an increase in Le Pen vote share by 0.39% (SE: 0.13) and a decrease in Macron vote share by -0.73% (SE: 0.09). The associations observed for Fillon largely reflect Macron, although to a lesser magnitude. We observe a slight positive association with Catholic buildings for Fillon (coefficient 0.09, SE: 0.04) and a moderate negative association with mosques (coefficient -0.57, SE: 0.12).

We can make several observations on the association of control variables with each candidate. There was a strong negative association with commune vote share for Le Pen and areas with higher levels of immigration, high education, and areas with higher rootedness scores, but areas with higher levels of unemployment demonstrated a strong positive association. Comparatively, there were moderate to strong positive associations with commune vote share for Macron and areas with areas with higher population and education levels, although a strong negative association for areas with higher levels of unemployment. Model fit was strongest for Le Pen with an adjusted R^2 of 0.256, whereas model fit for Macron and Fillon were lower at 0.147 and 0.121, respectively.

Because Wave 2 of the presidential election contains only the leading candidates of Le Pen and Macron, a commune's expressed vote share will always be the remainder of the other candidate. For example, if a given commune had 60% of the votes go to Macron, the remaining 40% must go to Le Pen. Thus, the regression point estimates for one candidate will be equal and reverse to the other. We present the regression estimates for both candidates for clarity in Table 3. These models use the same specification described previously. We observe similar associations in magnitude and direction for Wave 2 as observed in Wave 1. Catholic buildings are negatively associated with Le Pen vote share (coefficient -0.41%, SE: 0.05) while mosques are positively associated with Le Pen vote share (coefficient 0.48%, SE: 0.17). Wave 2 model fit has an adjusted R^2 of 0.252, similar to the Wave 1 models. We present a visual representation of the coefficient estimates and 95% confidence intervals in Figure 2.

Of the coefficient estimates, the direction and strength of the number of mosques with candidate vote share appeared counter-intuitive because Macron's electoral success in metropolitan areas. In France, cities and metropolitan areas contain higher

Table 3. OLS regression results on the relationship between election outcomes and presence of religious buildings for Wave 2 (final) of the 2017 French Presidential election, adjusted for commune-level controls

	Le Pen Wave 2	Macron Wave 2
(Intercept)	77.736***	22.264***
	(1.100)	(1.100)
Commune Catholic buildings	-0.405***	0.405***
	(0.053)	(0.053)
Commune mosques	0.477***	-0.477***
	(0.170)	(0.170)
Total population (per 100,000)	-13.386***	13.386***
	(1.380)	(1.380)
Immigration (%)	-0.385***	0.385***
	(0.014)	(0.014)
Unemployment (%)	0.237***	-0.237***
	(0.021)	(0.021)
Low education (%)	-0.117***	0.117***
	(0.013)	(0.013)
High education (%)	-0.517***	0.517***
	(0.011)	(0.011)
Agriculture employment (%)	-0.117***	0.117***
	(0.009)	(0.009)
Artisanal employment (%)	-0.144***	0.144***
	(0.010)	(0.010)
High-skill employment (%)	-0.094***	0.094***
	(0.009)	(0.009)
Intermediate-skill employment (%)	-0.016**	0.016**
	(0.007)	(0.007)
White collar employment (%)	-0.043***	0.043***
	(0.007)	(0.007)
Manual employment (%)	0.029***	-0.029***
	(0.007)	(0.007)
Rootedness (%)	-0.142***	0.142***
	(0.011)	(0.011)
Num. obs.	34,124	34,124
R ²	0.252	0.252
R ² Adj.	0.252	0.252

(Continued)

Table 3. (Continued.)

	Le Pen Wave 2	Macron Wave 2
AIC	256,133.5	256,133.5
BIC	256,268.6	256,268.6
Log. lik.	-128,050.774	-128,050.774
F	822.453	822.453

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

numbers of mosques, as seen in Figure 1. To provide further insight into the association between religious buildings on vote share, we examined how the estimated Le Pen vote share varies for communes with differing numbers of mosques. Figure 3 shows the average fitted value, 5th percentile of the fitted value and 95th percentile of the fitted value for Le Pen vote share for communes with different numbers of mosques. Other explanatory variables were held at their observed values in the data. Communes with zero or very few mosques tend to have the largest estimated Le Pen vote share. However, this vote share slowly decreases toward zero as the number of mosques in commune increases, with the estimated vote share plateauing for communes with eight or more mosques. The coefficient estimate, which is the average effect holding all else equal, obfuscates this nuance. We contextualize this finding in

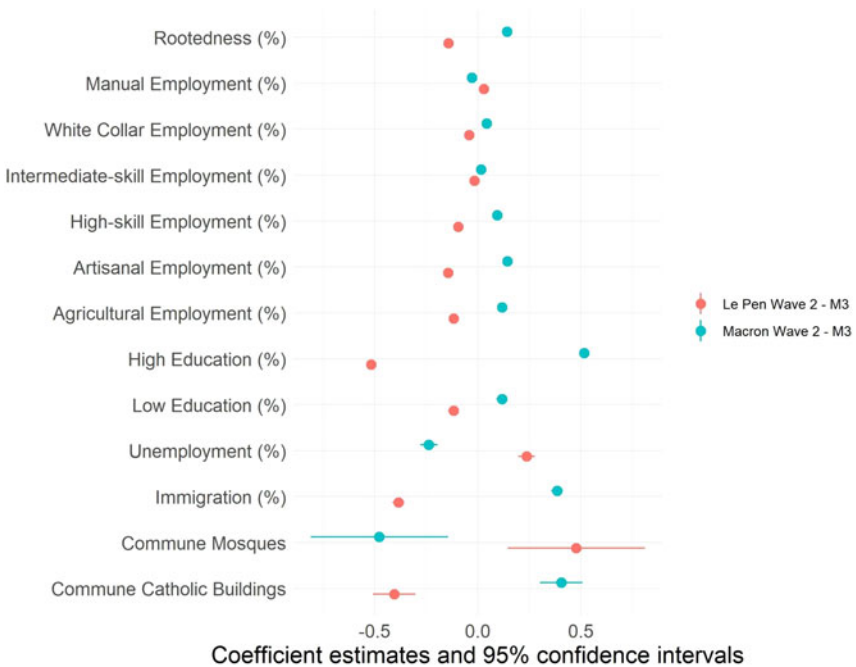


Figure 2. Coefficient plot for Wave 2 OLS models estimating candidate vote share. The Intercept and Total Population (per 100,000) coefficients were omitted from the plot as their large values obscured variation between the remaining coefficients

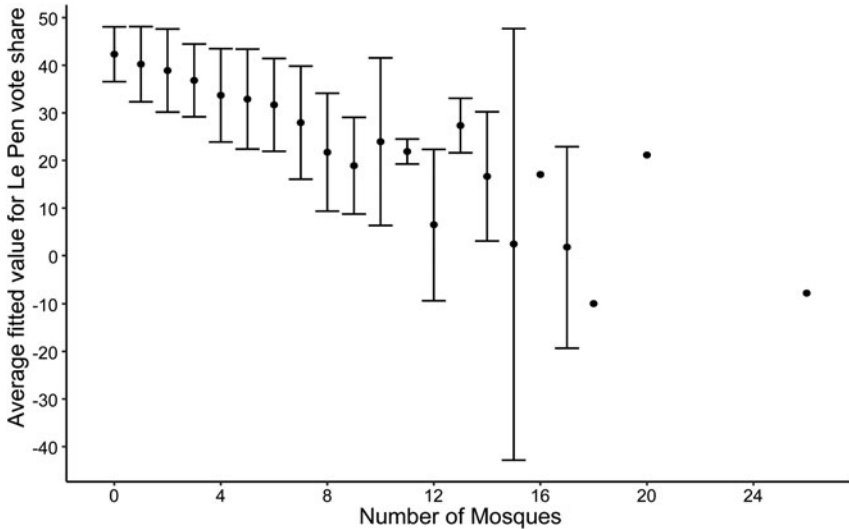


Figure 3. Average fitted value for commune-level Le Pen vote share in Wave 2 of the 2017 French presidential election, by the number of mosques in a commune. Fitted values were gathered from fully adjusted regression models, holding other explanatory variables at their observed values.

the discussion section. In general, we observe that areas with more mosques tend to have lower or negligible estimated Le Pen vote share, although there is lower precision for the few communes with more than 15 mosques.⁶

Sensitivity analysis #1: consideration of Gironde

Although Catholic buildings and mosques are distributed across all of France, Gironde has a unique set of circumstances that requires special consideration. Gironde is the seat of the Roman Catholic Archdiocese of Bordeaux and has the highest number of Catholic buildings among all departments. In addition, Gironde was a strong area of support for Jean Marie Le Pen and *FN* in the 2002 presidential election. For these reasons we follow Fitzgerald and repeat our analysis on the communes comprising Gironde.

We present the key coefficients of interest for Gironde communes compared to communes across France in Table 4. 534 communes were analyzed, which represents 98.5% of the total communes in Gironde. Comparing these Gironde-specific coefficients to those estimated for all communes of France reveals several nuances. Firstly, the negative association between Le Pen Wave 1 vote share and the number of Catholic buildings changes direction, although the standard errors are much wider and the point estimate is no longer significant. A similar association reversal is observed for Macron. The positive association between Macron Wave 1 vote share and the number of Catholic buildings changes direction, again with wider standard errors. The wider standard errors are likely due to the dramatic reduction in the number of observations considered in the Gironde models ($n = 34,124$ for all

Table 4. Sensitivity analysis of OLS regression for the association of religious buildings on election share outcomes for the French Presidential election

	Le Pen—Wave 1	Macron—Wave 1	Fillon—Wave 1	Le Pen—Wave 2	Macron—Wave 2
Coefficient estimates (standard errors) across communes of France					
Catholic	−0.330 (0.040)	0.122 (0.028)	0.089 (0.036)	−0.405 (0.053)	0.405 (0.053)
Mosques	0.395 (0.129)	−0.729 (0.089)	0.089 (0.036)	0.477 (0.170)	−0.477 (0.170)
Coefficient estimates (standard errors) for communes of Gironde					
Catholic	0.426 (0.284)	−0.301 (0.206)	0.661 (0.276)	0.751 (0.363)	−0.751 (0.363)
Mosques	0.186 (1.106)	−1.640 (0.803)	−1.556 (1.074)	0.420 (1.414)	−0.420 (1.414)

Models are compared between all communes of France and all communes of Gironde.

communes of France compared to $n = 534$ for all communes of Gironde). These reversals for Catholic buildings are more pronounced in the Wave 2 results. However, the Gironde estimates for the number of mosques in a commune have the same direction as the estimates calculated from all communes of France, although the point estimates are smaller in magnitude and have wider standard errors. Le Pen still has a positive association for vote share and the number of mosques, whereas Macron has a negative association.

Sensitivity analysis #2: consideration of sensitive urban zones (zone urbaine sensible, ZUS)

The analysis of mosque numbers to vote-share thus far has assumed that out-groups living in France would not vote for the FN. However, out-group counterintuitive votes are possible and, in the absence of individual-level voter surveys, may be discernable in local geographic units. A proxy measure for out-group presence at the commune level is immigration. A strong, positive relationship between votes for FN and immigrant composition would challenge our assumptions about voting behavior in France and suggest alternative explanations for the present results. To test the assumption that Muslims and, more broadly, immigrants living in France did not vote for the FN, we conduct an additional sensitivity analysis examining the relationship between votes expressed for Le Pen and immigrant composition. This comparison is made amongst the sensitive urban zones (*zone urbaine sensible* or ZUS) of France. These areas are a common destination for immigrants coming to France and are profiled as relating to urban terror, although this association has been critiqued (Body-Gendrot, 2008). While our general models show a negative relationship between immigrant levels and support for FN, we examine this subset of areas as a sensitivity analysis.

A complete atlas of the ZUS is provided by the *Système d'Information Géographique de la Politique de la ville*⁷. ZUS are defined at the geographic level of quartier. No comprehensive crosswalk linking quartiers to communes was identifiable from online sources. Therefore, we linked the ZUS atlas to the nationwide election dataset based on department codes and commune names. This method successfully linked $n = 480$ of the $n = 715$ mainland ZUS (67% of mainland ZUS or 64% of all ZUS) to the nationwide election dataset. Although we were not able to link all ZUS, tabulations of demographic characteristics of the linked ZUS indicate that the sample is consistent with INSEE reports⁸. For example, the communes containing ZUS in our sample have a high proportion of immigrant residents (mean 15.44%, 95% CI 14.68–16.21) and unemployment (mean 13.38%, 95% CI 13.14–13.63). These levels were much higher than the proportion of immigrant residents (mean 4.21%, 95% CI 4.16–4.26) and unemployment (mean 8.12%, 95% CI 8.09–8.16) for the rest of France.

We begin the sensitivity analysis by exploring the association between immigrant composition and votes expressed for Le Pen in Wave 2 of the 2017 French presidential election amongst communes containing a ZUS (Figure 4). A negative correlation is visible wherein communes with a lower proportion of immigrant residents have a higher proportion of votes expressed for Le Pen and, conversely, areas with a higher

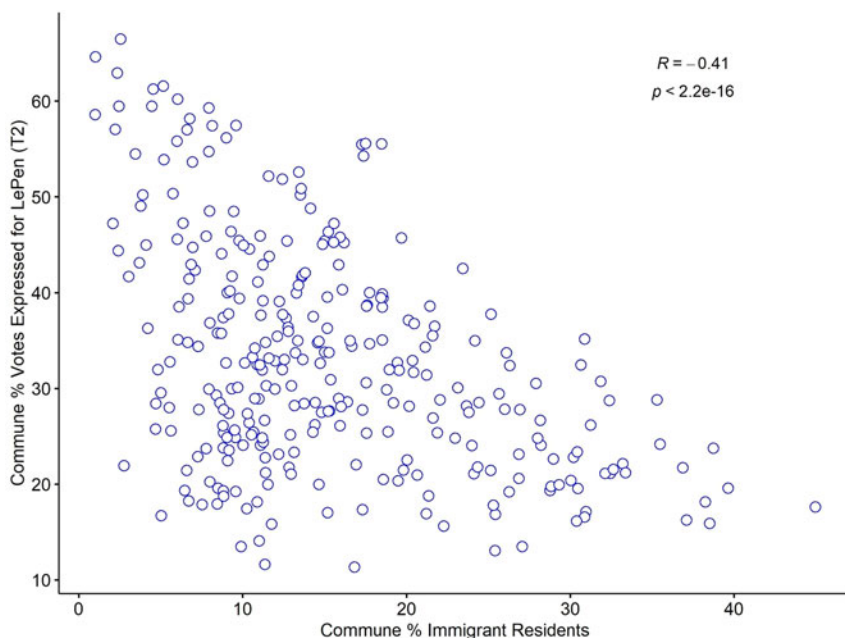


Figure 4. Scatterplot of commune-level proportion of votes expressed for Le Pen in Wave 2 of the 2017 French presidential election and commune-level proportion of immigrant residents. Each point represents one sensitive urban zones (*zone urbaine sensible*, ZUS). $n = 480$ ZUS are shown in total, representing 67% of the $n = 715$ ZUS located in mainland France. Not all ZUS could be included in the analysis due to a lack of comprehensive crosswalk available between ZUS and Communes

proportion of immigrant residents have a lower proportion of votes expressed for Le Pen (Pearson's R of -0.41).

We present the key coefficients of interest for communes containing ZUS across mainland France in [Table 5](#). The associations between the number of religious buildings and candidate vote share amongst this sub-sample of the data are consistent with the main findings. A higher number of Catholic buildings are negatively associated with Le Pen vote share, while a higher number of mosques are positively associated with Le Pen vote share. While this relationship could suggest that Muslims are counter-intuitively voting for *FN*, the correlation between immigration and *FN* support in [Figure 4](#) suggests this is not likely. Precedence for counter-intuitive voting has been observed in other contexts ([Alamillo, 2019](#)). Nevertheless, considering sub-samples of the national dataset offers a practical method to test conceptual assumptions and model consistency.

Discussion

The results of this analysis present two major findings that are worth further discussion. First, our tests suggest that the relationship between mosques and *FN* vote share support Hypothesis 2. Second, there is a strong, negative relationship between the number of Catholic buildings and Le Pen vote share, which is not consistent with

Table 5. Sensitivity analysis of OLS regression for the association of religious buildings on election share outcomes for the French Presidential election

	Le Pen—Wave 1	Macron—Wave 1	Fillon—Wave 1	Le Pen—Wave 2	Macron—Wave 2
Coefficient estimates (standard errors) across all communes of France					
Catholic	−0.330 (0.040)	0.122 (0.028)	0.089 (0.036)	−0.405 (0.053)	0.405 (0.053)
Mosques	0.395 (0.129)	−0.729 (0.089)	0.089 (0.036)	0.477 (0.170)	−0.477 (0.170)
Coefficient estimates (standard errors) for $n = 480$ communes containing SUZ across mainland France					
Catholic	−0.075 (0.062)	−0.011 (0.038)	−0.096 (0.047)	−0.115 (0.087)	0.115 (0.087)
Mosques	0.158 (0.086)	−0.003 (0.053)	0.070 (0.064)	0.173 (0.120)	−0.173 (0.120)

Models are compared between all communes of France and $n = 480$ sensitive urban zone (SUZ) communes across France.

Hypothesis 1. The counter-intuitive findings lead us to conclude that Islamic presence in small, rural areas leads to greater support for Le Pen.⁹ This generally supports the theory that RRP support is tied to the ongoing changes of globalization rather than the religious group around which the party draws its identity. It is also in line with recent findings by Gravelle *et al.* (2021), suggesting that this is not merely a French phenomenon but likely a pattern that exists in other political contexts.

First, we find that the increase in the number of mosques in a town has a positive relationship on the vote share for *FN* at the town level, all else equal. This finding implies that, in Wave 1, the increase of the number of mosques in a town by one was associated with an increase in the vote share for Le Pen in that town by 0.4 percentage points, all else equal. In the second round, the relationship was slightly more pronounced, leading to a 0.48 percentage point increase in Le Pen vote share. While the coefficient estimate for number of mosques suggests that the commune-level Le Pen vote share increases with the number of mosques, this association appears to be mitigated by the value of other variables. In fact, when taking the observed values of the other variables into account, the predicted commune-level Le Pen vote share appears to decrease when the number of mosques is very high (see Figure 3). We argue that this decrease is because communes with a high number of mosques are located predominantly in cities and metropolitan areas. We interpret this finding as suggesting that smaller communes that see marginal increases in the number of mosques will have higher Le Pen vote share. We suggest that the reason for this lies in our theory that support for RRP like *FN* is driven by perceived differences in economic outcomes that emerge from globalization. The results from other covariates also lend credence to this theory. For example, support for Le Pen increases as town population decreases, as well as when unemployment and manual labor (as a percentage of town workforce) increase.

In terms of our findings on Catholic buildings, the results are not in line with Hypothesis 1. The relationship between the number of Catholic buildings on *FN* vote share is negative in both Waves of the election. This relationship is striking because, prior to the testing, the theoretical evidence would have suggested a positive relationship on *FN* vote share, if the theory of majority-group religious support for RRP were true. However, when using the buildings-per-capita measure in our sensitivity analysis, the coefficient for Catholic buildings per capita on vote outcomes is zero. These findings are in line with the theory of civilization-nationalist support for RRP. As stated earlier, attendance of Catholic services in France is low. The more Catholic buildings in a town, even if they are unused and exist for historical preservation, physically dominate the public space, indicating the religious civilizational heritage of the town is still intact. But, at the same time, such visible evidence of the dominant religion may not matter much in voting outcomes. As Weitzel (2020) suggests, many French do not notice the presence of Catholic buildings as they are so common that individuals tend to ignore them. As such, we reject hypothesis 1, which we believe lends less credence to the religious support for RRP theory.

While the national-level models of vote share are consistent in the direction and magnitude of the Catholic buildings variable, our analysis of the region of Gironde suggests that the association is not consistent across regions. The Gironde results show that the Catholic building association is positive for towns with an average

Le Pen vote share, although it is not statistically significant. Comparatively, the association for the number of mosques in Gironde is still consistent with the national level models, although the coefficients are also not statistically significant. This sensitivity analysis provides further evidence for Hypothesis 2.

Limitations

Although VGI has been identified as a promising digital innovation, VGI has also been subject to several criticisms (Sui *et al.*, 2012). One primary criticism arises from the challenges of validating massive amounts of user-contributed content (Fonte *et al.*, 2015; Basiri *et al.*, 2019). A potential consequence of this limitation could be an *overestimation* of the number of religious buildings present in a commune, and subsequent point estimates for the number of Catholic buildings and mosques may be exaggerated. Relatedly, there exists the possibility of *underestimation* for religious buildings not reported in the online databases or incorrectly geocoded. Other unofficial sources claim that France has more than 70,000 religious buildings, including more than 45,000 Catholic buildings.¹⁰ If such figures are true, it is likely that our VGI collection efforts underestimated the number of religious buildings in France for both Catholicism and Islam.

In addition, we assume that the presence of religious buildings is indicative of the importance of religion in an area. However, such a method of measuring religiosity remains an ecological proxy (Shelton *et al.*, 2012). We do not weigh the impact of each building with information on congregation size, number of tithings gathered, years of activity, or another institutional measure that might capture levels of religiosity (Zwingmann *et al.*, 2011). This additional information was not available for all buildings, would require additional validation, and is likely to vary over time. In addition, there may be substantive differences between Catholic and Islamic buildings in France. For example, mosques are likely to be built more recently compared to Catholic buildings, and, as such, counts of mosques may reflect the prominence of an immigrant community over anything else. We attempt to account for this by adjusting models for both immigration, nationality, and rootedness.

The present study was designed as a cross-sectional analysis. We cannot establish causality between the explanatory and response variables, nor can we comment as to how the association between these variables changes over time. The primary challenge in extending the current study across time is the collection of information on religious buildings across France. Gathering spatio-temporal religious information is of paramount importance to enable future research. For example, resources could be allocated for a building survey that would gather the founding date as well as the previously mentioned, non-identifiable measures of community religiosity. This data could be used in conjunction with individual-level survey data to establish a stronger causal connection while controlling for higher level factors.

Lastly, we did not consider all possible minority religions in France. Recent estimates suggest that these non-Islam minority religious groups make up the smallest proportions of the French population.¹¹ However, consideration of these other minority religious groups is important. Historically, FN candidates have drawn intense backlash over discriminatory remarks made toward Judaism, and several

scholars have argued that the emergence of Islamophobia alongside existing anti-Semitism reinforces ethnocentric fears of the “other” in Western European states (Bangstad and Bunzl, 2010; Mayer, 2012). Our results are most relevant to discussions of Catholicism and Islam in France, and the direction of the observed associations may change direction or not hold when considering other minority religions.

Conclusion

This study explores the relationship between religion and voting outcomes in the 2017 French presidential election. By comparing two theories of the use of religion by RRP, we sought to find whether evidence supported the religious or civilizational theories. We believe the findings speak to a broader research agenda related to far-right support. We find ecological evidence that Muslim presence (number of mosques in a commune) is connected to support for the far-right party leader, Marine Le Pen. Specifically, our analysis demonstrates that it is areas which are either rural or small towns that also have mosques which supported Le Pen the most in 2017. We found evidence in support of Hypothesis 2 when considering all communes across France. Additional sensitivity analyses of the observed relationship between the number of mosques in a commune and vote share suggest that the relationship is most pronounced in communes with a few mosques. Comparatively, analyses relating to Hypothesis 1 indicated more complicated results. When considering all communes across France, we found evidence of a negative relationship between the presence of Catholic buildings and Le Pen vote share. In general, we suggest that these findings lend more credence to the theory that religion is being used as a means to promote nativist policies under the guise of defending religion. Particularly in France, given the rise in discussions about *laïcité*, it seems more likely that the focus of the RRP is on highlighting out-group differences rather than winning over traditional religious voters (Roy, 2020). Future analyses should be conducted to see if this trend holds across time. We also expect that, given the rise of immigration crises across Europe, most recently highlighted by the Belorussian-Polish border crisis, that these patterns of RRP support are not unique to France.¹²

Methodologically, we contribute to the literature on religion and comparative politics by using the principle of VGI to construct a unique dataset describing the location of more than 2400 mosques and 9400 Catholic buildings across France. This novel dataset is particularly useful in constructing proxy measurements on the importance of the French religious landscape, given restrictions around the collection of individual-level religious information in France. We relate the count of religious Islamic and Catholic buildings to commune-level voting results for Wave 1 and Wave 2 of the 2017 French presidential election, building upon previous empirical specifications for radical right elections in France (Fitzgerald, 2018). The research demonstrates the potential of VGI in political science research, especially in data-constrained scenarios. Future research should focus on combining data validation techniques with VGI to create robust datasets on pertinent questions relating to contemporary religious and political identity.

Ongoing concern about increased support for RRP requires an interdisciplinary approach as it likely incorporates a complicated set of demographic, geographic, and

political variables that are often hard to capture for robust analysis. Our work provides commune level evidence in support for the religion as civilization theory but not for the theory that religious voters turn to RRP, even when those parties draw on religious imagery and symbolism. This study is ecological in nature, exploring two potential theories—however, we believe that more local and individual-level research should be done to provide more evidence for the religion as a civilization theory. We have demonstrated a method of creating a replicable dataset to study the association between religion and RRP support in a context where collecting religious data is difficult. The novelty of the data builds upon Fitzgerald’s model of support for *FN*, combining new data collection techniques with a straightforward analysis of vote share across communes. As RRP continue to gain support across Europe and North America, it is likely that such interdisciplinary work will continue to grow more important for good research in this area.

Supplementary material. The supplementary material for this article can be found at <https://doi.org/10.1017/S1755048323000184> as well as on Github at https://github.com/jeffcsauer/PR_France_Religion_Replication.

Data availability. The entirety of this analysis including data collection, processing, and statistical analysis is reproducible and the replication materials are included in the submission.

Acknowledgments. The authors would like to thank the Dr. John McCauley, Dr. Rachel Haber, and the attendants of the University of Maryland, Department of Government and Politics student workshop for their feedback on previous iterations of this paper.

Competing interests. The authors declare no competing interests.

Notes

1. Ziblatt refers to these same types of parties as “far right” parties. Other authors call the same parties “right wing.” These terms are often used interchangeably but for consistency, we refer to these as RRP throughout the paper.
2. Recent work on the relationship between religion and politics has also indicated that, in some contexts, the causal arrow of religious and political choice may be reversed. Michelle Margolis (2017, 2018) finds evidence that individuals in the United States choose religious social networks *after* developing a political/ideological identity.
3. *FN* has recently rebranded to Rassemblement National or the National Rally party. At the time of the 2017 presidential elections, the time of the case we are using for this study, the name change had not yet occurred. We choose to use the party’s original name for the sake of remaining consistent.
4. *Les Republicains* was original called *L’Union pour une mouvement populaire* or the *UMP*. Since the creation of the Fifth Republic elections for president have been won either by a member of the reigning Gaullist Republican party or by a member of *PS*. This changed in the 2017 election with the win for *En Marche!*, Macron’s movement
5. This is evidenced by the “About” pages for both websites. Catholic Directory says, “The Catholic Directory is a free website for finding, reviewing, and connecting with Catholic churches, organizations, resources, and businesses. Our mission “to provide a safe website for parishioners looking to connect with churches and find Mass, ensuring God’s grace may touch the heart of every man and of every woman and lead them to Him.” Similarly, the website trouvetmosquee.fr says states “Permettre de trouver n’importe quelle mosquée en France” (“Allow you to find any mosque in France.”)
6. All analyses were also considered using population standardized measures of religious buildings (e.g., Commune Count of Catholic buildings per 100,000 people and Commune Count of Mosques per 100,000 people). These results are available in the supplementary materials file.
7. <https://sig.ville.gouv.fr/atlas/ZFU>
8. <https://www.insee.fr/en/statistiques/1280949>

9. Anticipating that the relationship between the number of buildings and the population of a town are directly related, we conducted a sensitivity analysis by changing *buildings* variables to be *buildings per capita*. These results are much more difficult to interpret as they increase the likelihood of spurious correlations and increased bias in coefficient estimates. We present the results of this supplementary analysis in the appendix. In general we find consistent associations for the primary explanatory variables, although these associations may be slightly different, implying that the relationship between population and number of buildings is indeed related. For further explanation on issues with per capita measures, see (Uslaner, 1976).
10. An oft-quoted figure is that France has more than 45,000 Catholic buildings. The origin of this claim appears to originate, in part, from a database maintained by the *Observatoire du Patrimoine Religieux* (Religious Heritage Observatory, <https://www.patrimoine-religieux.fr/>). The data underlying this claim is not publicly available.
11. <https://europa.eu/eurobarometer/surveys/detail/2251>.
12. <https://news.un.org/en/story/2021/12/1108502>.

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Cite this article: Overos HD, Sauer J (2023). *Dieu dans la commune: religion and voting in the 2017 French election*. *Politics and Religion* 16, 605–633. <https://doi.org/10.1017/S1755048323000184>