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Geography of contestation: A study on the Yellow Vest movement and the rise of populism in France

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Abstract

The rise of a geography of discontent highlighted in recent studies points to a strong association between voting for populist parties and territories with socioeconomic difficulties. While discontent has primarily been addressed through the analysis of populist votes, we provide additional elements of analysis by comparing these populist votes to the Yellow Vest movement, and we distinguish the populist votes coming from the far-left party from those coming from the far-right party. Our results show that the Yellow Vest movement cannot be confused with French populist supporters and that their sensitivity to territorial dimensions also differs from that of the latter, especially in terms of access to public services. Their behavior highlights that the geography of protest takes multiple shapes and cannot be reduced to a simple opposition between urban and mostly rural or peripheral areas. This raises serious concerns about the dynamics of territories and the deleterious effects of metropolization and the closure of public services in peri-urban and rural territories that are not specific to France.

KEYWORDS
contestation, discontent, electoral geography, left-behind places, vote, Yellow Vests

1 | INTRODUCTION

There is a new research trend of analyzing the extent to which the places and types of territories where people live influence their electoral behavior. In particular, researchers have been interested in the geography of discontent (Dijkstra et al., 2020; McCann, 2016, 2020) and the voting behaviors of populations located in places that "do not

matter" (Rodríguez-Pose, 2018). The study of recent events such as Brexit (Abreu & Öner, 2020; Los et al., 2017), the American elections (Rodríguez-Pose et al., 2020), and the European elections (Di Matteo & Mariotti, 2020) highlights a rise in extreme voting in places that "do not matter," such as rural territories, peripheral areas, and urban districts in difficulty.

Therefore, it is hypothesized that the characteristics of marginalized territories affect the behaviors and attitudes of the people living there. Simultaneously, the reasons linked to their economic decline are far from explaining why they are observed to manifest populist electoral behaviors. Gordon (2018) added that populist support across European regions is influenced by the interactions of economic and demographic changes with varying cosmopolitan/localist influences. In political science, it is highlighted that anti-establishment votes are a form of contestation of the political power that has been in place for several years, alternating between the traditional left and right parties. Such political power has given rise to a form of disenchantment with the "system" and with globalization (Kenny & Luca, 2021; Rodrik, 2018), as confirmed by the high number of protest votes cast in the elections.

In France, the rise of populism and the failure of the traditional parties in the 2017 presidential elections call into question the relevance of the vote's traditional determinants. The progressive polarization toward extreme voting is a striking feature of the political dynamics that have been at work since the early 2000s, accompanied by the steadily decreasing influence of the traditional moderate right (Republicans) and left (Socialists) parties. At the same time, social media's influence is also becoming increasingly preponderant in the orientation of voters' political choices and mobilization (Jost et al., 2018). The so-called Yellow Vest social movement, for instance, was born on Facebook.

In 2018, French society was shaken by the Yellow Vest movement, a large-scale protest movement. At first, the movement brought together angry motorists protesting against the rising fuel prices and the government's decision to reduce the authorized speed limits on secondary roads. However, it soon turned into a general protest against the government's policies. As early as the first Saturday of the demonstration, its participants were asked to block traffic as close as possible to their homes with new roadblocks, especially at roundabouts, and to participate in massive protests in the major French cities. Although the movement was triggered primarily by the increase in the tax on petroleum products, this does not seem to be the only explanation for the magnitude of the movement. Several protests took place at the beginning of Emmanuel Macron's 5-year term as president, although they did not succeed in becoming more unified. In addition to the political choices that the government has made, fundamental questions have been raised about public policies for several decades in the context of falling public spending and growing inequality with significant territorial repercussions. Thus, as in many other countries, mobilization occurred as people came to seriously question liberalism and social democracy (Pappas, 2019). However, Grossman (2019) pointed out that most of the studies that have been conducted on the Yellow Vest movement were qualitative and did not provide any synoptic view of the Yellow Vests' real identities and the places where they live.

By analyzing the Yellow Vest movement and comparing it to the characteristics of the French populist votes, our article contributes to the literature on the geography of discontent, disenchantment, resentment, and contestation. This movement can be seen as an offshoot of disenchantment; people no longer bother to vote because they no longer trust politicians (Kostelka, 2017). Voting for the extreme-right party, a widespread practice in France, can also be considered an expression of discontent (Davezies et al., 2013; Guilluy, 2019; Rodríguez-Pose, 2018). However, in the present study, we examined another way of expressing discontent: by staging massive public protests. Although both votes and protests can be resorted to as an expression of discontent, we wonder if these different types of behavior are carried out by the same types of people with the same types of opinion (hypothesis 1), and if the same socioeconomic and territorial factors (mainly decline and stagnation) underlie both of them (hypothesis 2). Several commentators have accused the Yellow Vests of adhering to the principles espoused by the populist parties, particularly the extreme-right ones.

This article is structured as follows. First, we review the literature on populism and the Yellow Vest movement. Then, we provide details about the research methods that we used, including the data collection method. We then

present the study results. Finally, we offer suggestions based on our findings and the movement's consequences in terms of the geography of contestation and discontent.

2 | POPULISM AND THE YELLOW VESTS' REVOLT

Detailed exploitation of data has revived several scientific debates related to populism and voting, such as on the decline of urbanity and political behaviors, behaviors considered acts of protest in peri-urban areas, abstention from voting, and urban districts in difficulty. Let us first analyze the literature on opposition and protest behaviors, particularly their two recent modes of expression in the French context: the populist vote and the demonstrations provoked by the Yellow Vests' revolt.

2.1 | Populism

The rise of populism is now a political reality in many Western democracies. The electoral victory of populist parties has undoubtedly been one of the most striking political developments in the last two decades (Stockemer, 2019). Many movements of this kind are now central to contemporary Western democracies, such as France, other European countries, and the United States (Müller, 2017).

In Western Europe, populism is mainly represented by radical right-wing parties, such as Marine Le Pen's *Rassemblement National* in France, Matteo Salvini's *Ligue* in Italy, and Geert Wilders' Freedom Party in the Netherlands. The Brexit referendum in June 2016 attested to the mobilizing force of the UK Independence Party's neo-conservative national populism, and to a certain extent also the Tories' This radical right-wing populism is defined above all as exclusive nationalism politicizing new cultural issues related to immigration or Islam, and as the main force of contestation in the European integration process (Stavrakakis et al., 2017). In the United States, Donald Trump's victory in the November 2016 presidential elections was a testament to the right-wing success of liberal, protectionist, and isolationist populism ("America First") mixed with social rhetoric, xenophobia, misogyny, and conspiracy theories (Gusterson, 2017). These ingredients were also present in the 2020 presidential election, coupled with major protests in the Capitol at the time of the proclamation of the results.

According to several authors, populism can also be found on the left of the political spectrum, in new radical left-wing parties such as Jean-Luc Mélenchon's *La France Insoumise* in France, Pablo Iglesias Turrión's *Podemos* in Spain[1], and Aléxis Tsípras's *Syriza* in Greece (Mudde & Rovira Kaltwasser, 2013). This antiliberal left-wing populism already has a long history in Latin America against a backdrop of economic recession and political corruption (Handlin, 2018). In Europe, the success of these parties has mainly been based on their critique of the austerity and neoliberal policies imposed by financial institutions or the European Union (Custodi, 2020).

The foregoing has given rise to the idea that populism is multiform and that it is necessary to provide a clear definition of it and to limit both the question and the field of study. Over the last 15 years, a relative academic consensus has been reached about the theoretical framework proposed by Dutch political scientist Cas Mudde (2004), which focuses on two key ideas. The first is that populism is based on a specific construction of the political space that differentiates it from simple electoral demagogy or specific criticism of the system. Populism is defined above all as a systematic appeal to the people to oppose the "elites." "People" are described as a single body dispossessed of its sovereignty by an oligarchic and distant political elite. Populist tribunals inevitably claim a monopoly on the representation of "authentic" people, making themselves spokespersons of the "forgotten" ones

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[1]Pablo Iglesias Turrión is no longer the leader of *Podemos*, a party with strong personalist roots, although he holds the distinction of being its founder.

or the "silent majority" against the alleged abuses of the "system" or "establishment." The second central idea of populism is that it refers to a plurality of underlying ideologies ranging from national populism to social populism.

2.2 | The Yellow Vests' revolt

The Yellow Vest movement is part of France's long history of social movements (Alvarez et al., 2018; Duyvendak, 2019). However, it differs from traditional protests in several ways. First, the movement is characterized by numerous decentralized gathering points, often around roundabouts, which are symbols of both French-style motoring and peri-urban areas. On the first Saturday of the contestation (November 17, 2018), there were already 800 roadblocks. Second, the demonstration was organized without the parties' and unions' intervention. The latter were late in joining the protest movement (Shultziner & Kornblit, 2020). Finally, social media seems to have played a decisive role in the organization and mediatization of the movement (Clifton & de la Broise, 2020). Although massive demonstrations had already been launched and catalyzed by social networks worldwide, mobilization on this scale was the first in France.

According to the results of opinion polls, a large majority of the French people seem to support the Yellow Vest movement, even though the number of people taking part in the Saturday rallies and roadblocks had radically decreased by the end of 2018. Sebbah et al. (2018) analyzed the Yellow Vest movement through the prism of traditional media (newspapers) and social media using text analysis techniques (Facebook, Twitter, and petitions on Change.org). The study underscored the importance of themes such as mobility and taxation as well as the demonstrators' dissatisfaction with the national government.

Both academics and the media are interested in the composition of this movement and have tried to determine whether the Yellow Vests are different from or look like populist parties (especially Marine Le Pen's *Rassemblement National* and Jean-Luc Mélenchon's *La France Insoumise*). The answers are far from obvious, and even pollsters have suggested that the movement does not clearly belong to any political camp. In contrast, others have argued that they could be linked to extremist parties' movements from the left or the right of the political spectrum.

Based on the foregoing, we assume in hypothesis 1 that the people who comprise the Yellow Vest movement are not different from the people who vote for populist parties, given the similarities in their characteristics found in the literature. Their common base is dissatisfaction with the traditional ruling parties, who have succeeded one another and, according to the protesters, have failed to improve their living conditions.

3 | GEOGRAPHICAL ROOTS OF POPULISM AND PROTESTS

One of the most interesting features of the rise of populism in all its forms lies in its spatial or territorial dimension. Indeed, while the classic distinction between right and left has long been drawn from class interests, this basis of distinction seems to be fading or becoming blurred with the rise of opinions linked, above all, to the place or territory in which the opponents or supporters of the decisions made by the governments live.

3.1 | The drivers of the contestation: Political marginalization and territories on the margins

For almost 70 years, electoral sociology studies maintained that a marked political divide characterized class voting, with the working classes choosing a left-wing candidate and the privileged classes opting for a right-wing one. In 1944, American sociologist Paul Lazarsfeld wrote that social characteristics determine political characteristics (Lazarsfeld, 1944). Today, class voting has not entirely disappeared, but it has been profoundly transformed

(Stavrakakis et al., 2017). There has been a growth in populist votes, which can be explained by the fact that some citizens feel that they are not understood by the elected politicians or even feel marginalized in society (Van Hauwaert & Van Kessel, 2018). In addition, many studies have suggested that most of the people who vote for populist (especially extreme right-wing) parties live in areas where the number of immigrants is higher than in other cities (Halla et al., 2017; Ivaldi, 2019). Obviously, beyond the "classic" explanations suggested by researchers in sociology and political science, other determinants, often spatial ones, have been put forward, notably by geographers, through what is known as ecological analyses (Forest, 2018).

Electoral geography approaches have made it possible to expand the traditional electoral sociology approaches (preponderance of the social classes' role in explaining electoral behaviors) and economic and psychological approaches. That is, electoral geography approaches consider the possibility that people's votes depend on their characteristics and on certain factors at the level of the territories in which they live (Johnston et al., 2014; Köppen et al., 2020). In particular, recent studies have shown that neglected areas have been fertile grounds for the rise of populism (Dijkstra et al., 2020; McCann, 2016, 2020; Rodríguez-Pose, 2018). These studies highlighted the difficult local situations in some places that fueled people's dissatisfaction with the socioeconomic environment in which they lived. In the American context, Rodríguez-Pose et al. (2020) and Beecham et al. (2020) showed that local socioeconomic characteristics, particularly those characterizing areas in decline, may partly explain the votes for Trump.

The analysis of the election results in many countries has brought an essential spatial component to the debate about the opposition between the "globalized elites of the large metropolises" and the "real people of the forgotten places" (Ferrante & Pontarollo, 2020). As recent studies have shown, the geography of electoral behavior can be drawn according to territorial characteristics (Rodríguez-Pose, 2018). These studies mainly identified (i) productive and dynamic territories with concentrated economic activity, (ii) nonproductive but dynamic territories that benefit from the wealth produced by the productive territories, and (iii) former industrial regions that are now in decline. Regarding this last class of territories, the studies distinguished between those whose market sector is still working and those that essentially depend on social income, the latter territories being the most fragile in the face of reduced public spending. The withdrawal of public services (e.g., closure of railway stations and post offices) and the reduction of public investments have also intensified rural populations' feelings of abandonment and marginalization (Broz et al., 2019).

Given the foregoing, we formulated hypothesis 2 that the characteristics of territorial decline or stagnation influence the votes for populist parties and the Yellows Vests' mobilization.

3.2 | Recent changes in French electoral behaviors and their spatial dimensions

As in many Western democracies, the rise of anti-system forces in France is intimately linked to the deterioration of the living conditions of the middle and working classes. The 2008 financial crisis accentuated the effects of this deterioration on these classes (Cox, 2017). In France, the fact that the Communist Party was partly supplanted by *Rassemblement National* in the working-class electorate is symptomatic: the political force that industrial society conferred on the working classes has disappeared (Ivaldi, 2019).

Emmanuel Macron's victory in the 2017 presidential elections shook up a multitude of benchmarks in electoral analysis. It seems that gone are the days when, after a presidential election, the presentation of a map showing the electoral results was sometimes enough to identify the most significant political cleavages. The electoral votes of the traditional left and right parties collapsed in favor of the centrist votes embodied by Emmanuel Macron on the one hand and extreme votes on the other. The electoral landscape of France that took shape on April 23, 2017, was clearly more complex than that in the past and confirmed the emergence of new cleavages. In particular, the logic of class voting has been profoundly transformed. The geographical fractures of socioeconomic poverty are widening, and the optimism–pessimism divide is emerging as a new reading grid (Bourdin & Tai, 2021; Evans, 2018). Clearly,

the results of the last presidential elections and the legislative elections that followed further accentuated this trend. Today, there are three major forces in France: Emmanuel Macron's centrist party (around 28% of the votes cast in the last election), Marine Le Pen's *Rassemblement National* (around 22% of the votes cast), and Jean-Luc Mélenchon's *La France Insoumise* (around 23% of the votes cast).[2]

The Yellow Vest movement emerged amid the aforementioned general evolution. It has highlighted a part of the population that no longer identifies with the traditional political parties and no longer approves of the policies that have been put in place by successive governments over the last few decades (Clifton & de la Broise, 2020). Moreover, Grossman (2019) wonders whether this protest movement will ultimately become the voice of the "silent majority."

As Evans (2018) explains, in France, as in many other democracies, there has been a breakdown of the republican model of the integration of populations and territories. As Bourdin and Torre (2020) pointed out, successive territorial French reforms have led to a movement of metropolization ("big is beautiful"), to the detriment of some territories (mainly the peri-urban and rural ones) that have been left behind in terms of public policy. At the same time, the successive political choices that were made to reduce public expenditures and rationalize public infrastructures have affected the national policy on regional planning and equipment and contractual policies between the state and local authorities. As a result, feelings of resentment grew among several segments of the French population, who thought that they were "paying for others" or "abandoned." The Yellow Vest crisis can be considered an offshoot of this growing anger (Shultziner & Kornblit, 2020).

Mapping the populist parties that ran in the 2017 presidential elections (Figures 1 and 2) and the territories that saw the rise of the Yellow Vest movement (Figure 3) allowed us to highlight the very differentiated geographies of the three forms of the behavior despite the fact that all of them fall under what is commonly called protest behavior. This justifies questioning the motives of the populist vote and public protests, such as the Yellow Vest movement.

4 | METHODOLOGY

The objective of the method used in this study is twofold: (i) to determine whether the factors driving the populist votes are present in the gathering areas of the Yellow Vests; and (ii) to determine the extent to which territorial characteristics influence the geography of contestation. Given the spatial autocorrelation of the data, we used a spatial econometric model for the data analysis.

4.1 | Data

Our geographical area of analysis was the employment zone (*zone d'emploi*). The *Institut national de la statistique et des études économiques* (National Institute of Statistics and Economic Studies) defines it as a geographical area based on an analysis of commuting areas: most of the individuals grouped in the same employment zone work and live within this geographical area. Thus, it seemed appropriate to use this scale because it provides a satisfactory representation of living areas.

4.1.1 | Political dependent variables: Votes and meetings

The present study focused on three dependent variables: (i) the number of local Yellow Vest meetings per 100,000 inhabitants (*YELVEST*); (ii) the share of votes cast for Marine Le Pen (far-right populist party) in the
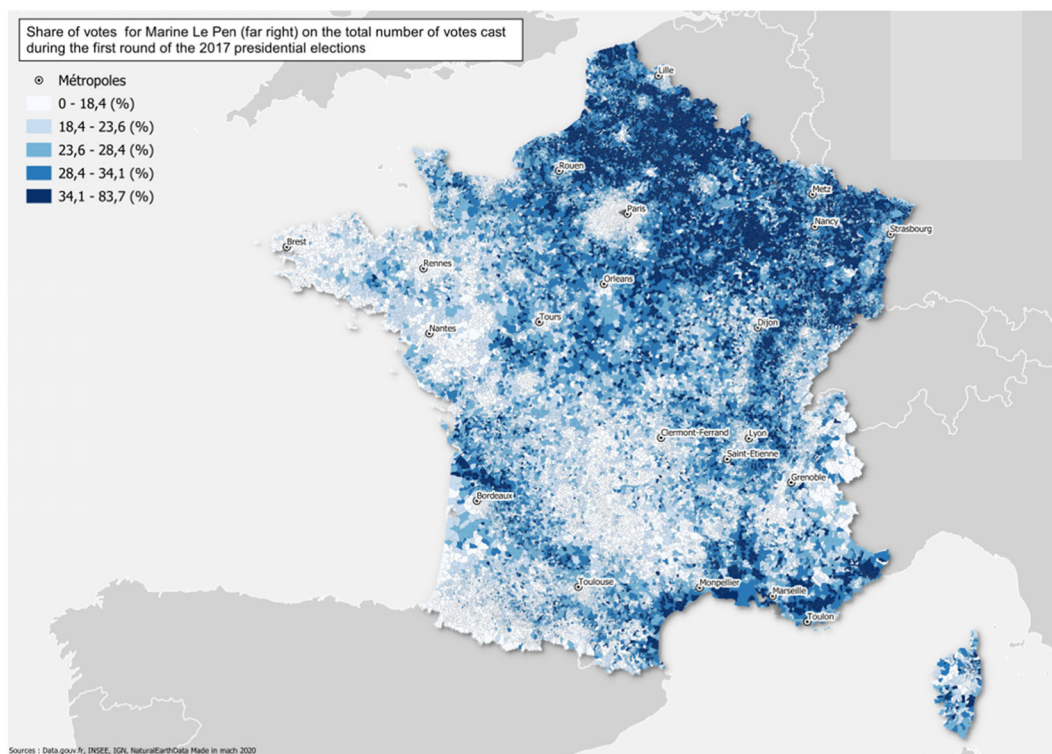

FIGURE 1   Number of Yellow Vests local meetings/100,000 inhab [Color figure can be viewed at wileyonlinelibrary.com]

total number of votes cast in the employment zone in the first round of the 2017 presidential elections (*EXTR-Right*); and (iii) the share of votes cast for Jean-Luc Mélenchon (far-left populist party) in the total number of votes cast in the employment zone in the first round of the 2017 presidential elections (*EXTR-Left*). Data for the first variable were collected from the official website of the Grand National from November 17, 2018, to March 21, 2019 (see Appendix 1). Data for the last two variables were collected from the official website of the Ministry of the Interior. For the first variable, we used the number of local meetings rather than the number of events because many Yellow Vest supporters gathered mostly in places at the hearts of medium-sized towns and metropolises to increase their visibility (mass effect). Taking these data into account would have increased the risk of an urban bias of geographical concentration. In other words, the advantage of using data on the number of local meetings is that these meetings are highly decentralized and are held in places as close as possible to the citizens; thus, they appear more representative of the dynamics of engagement on a local scale.

4.1.2 | Sociodemographic explanatory variables

Regarding the explanatory variables, we used different types of indicators often mentioned in the literature to capture the variables traditionally used to explain votes and more specific variables linked to the characteristics of territories. First, we found sociodemographic variables: (i) the share of people aged 65 and over (*65yo+*) in the total number of votes cast, which is often put forward as an explanatory factor for the high number of populist votes,
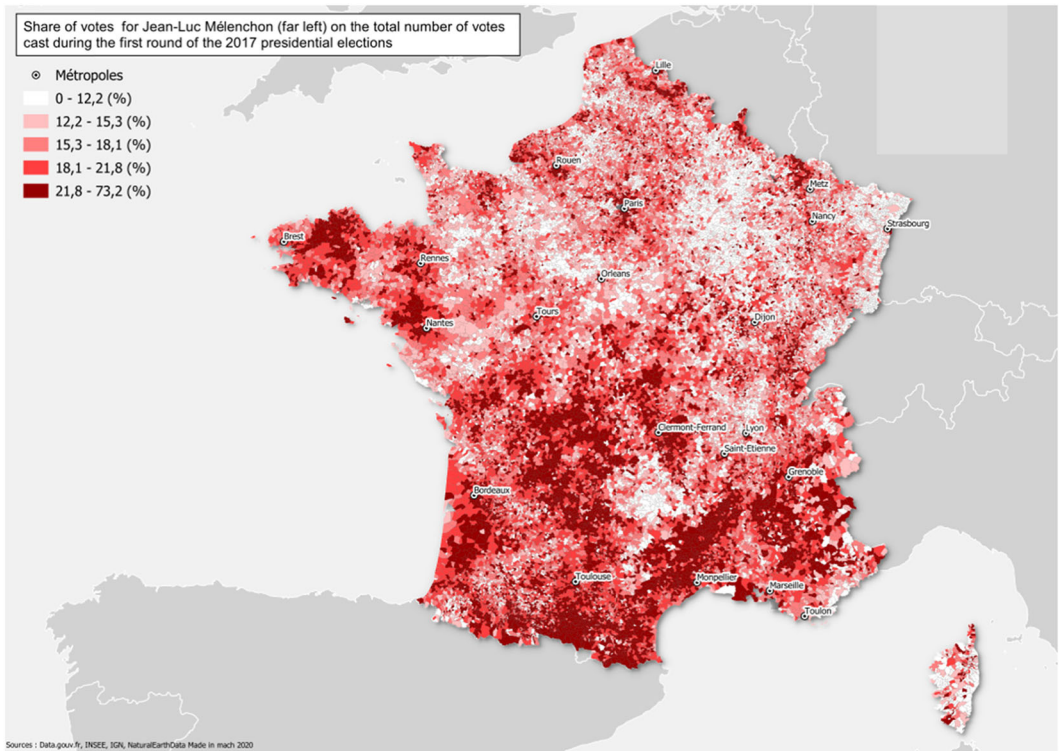
FIGURE 2 Share of votes for Marine Le Pen (far right) on the total number of votes cast during the first round of the 2017 presidential elections [Color figure can be viewed at wileyonlinelibrary.com]
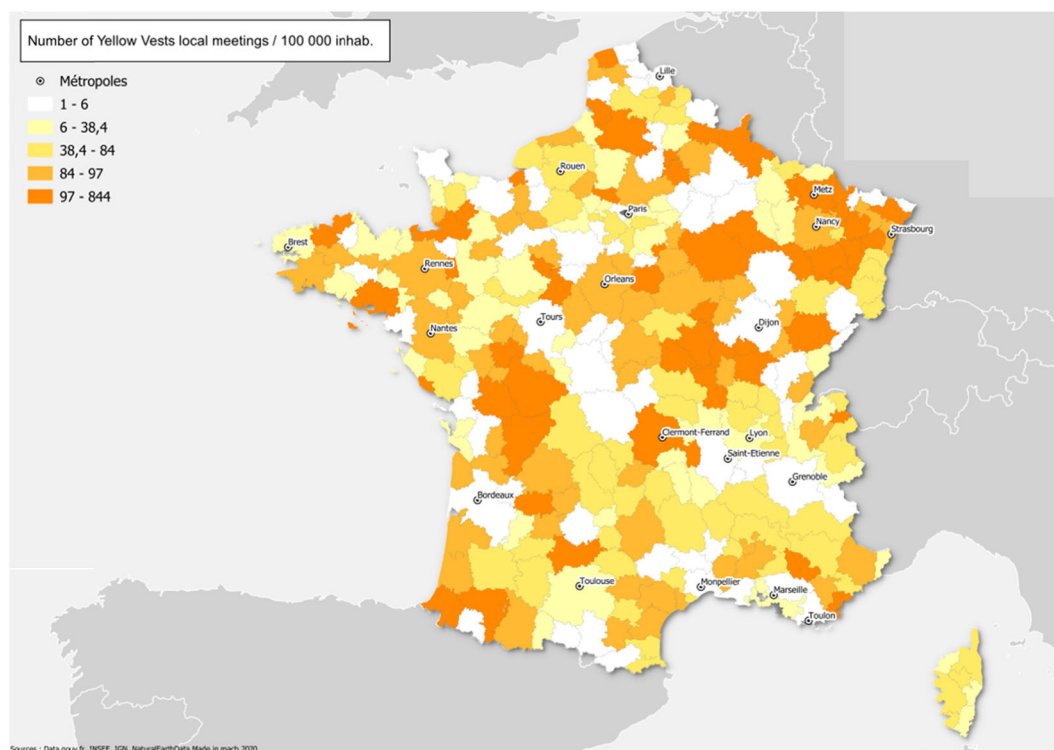
particularly for the extreme right-wing party (Müller, 2017); (ii) the share of the 20- to 39-year-olds (*20–39yo*); and (3) the share of the 40- to 64-year-olds (*40–64yo*). To avoid multicollinearity, we carried out regressions by including only one age group at a time. This was also used as a robustness check. As previous studies have shown that the rate of populist voting is lower among highly educated people (Hawkins et al., 2020), we also included the share of higher-education graduates among the 25- to 64-year-olds (*HighEduc*).

Immigration has traditionally been used to explain anti-establishment voting. Specifically, studies have shown that the issue of immigration has historically been put forward by extreme right-wing parties to stir their voters' sense of national identity (Halla et al., 2017; Stavrakakis et al., 2017). In the French case, Ivaldi (2019) explains that while *Rassemblement National* fuels voters' growing fears about immigration, *La France Insoumise* advocates the defense of immigrants' and minorities' rights in French society. For this reason, we added a variable regarding the share of immigrants in the French population in 2017 (*Immigr*).

4.1.3 | Economic explanatory variables

We included variables related to income and employment inequality, which are believed to play a crucial role in fomenting resentment toward incumbent politicians (Pappas, 2019). Specifically, we added the change in median living standards within the period from 1999 to 2018 (*EvoIncome*) and the interdecile ratio of disposable income in 2018 (*InegIncome*). The latter is an indicator of the differences in living standards between the wealthiest 10% and the poorest 10%. We also added the median disposable income per consumption unit (*Income*). Another

Number of Yellow Vests local meetings / 100 000 inhab.

⊙ Métropoles
1 - 6
6 - 38,4
38,4 - 84
84 - 97
97 - 844

Sources : Data.gouv.fr, INSEE, IGN, NaturalEarthData Made in mach 2020

FIGURE 3   Share of votes for Jean-Luc Mélenchon (far left) on the total number of votes cast during the first round of the 2017 presidential elections [Color figure can be viewed at wileyonlinelibrary.com]

marker of socioeconomic inequality is whether one is a homeowner or a tenant. We, therefore, added the share of owner-occupied main residences (*Owner*).

We also included the unemployment evolution within the period from 1999 to 2018 (*EvoUnemploy*) and the long-term unemployment rate in 2018 (*LTUnemploy*). When it is high, it can generate strong psychological and material tension in both the unemployed and their families. It is also a source of concern for policymakers because high long-term unemployment rates are a sign of a poorly working labor market (Nichols et al., 2013). These arguments are often put forward by populist parties to denounce the fact that specific populations are victims of neoliberal globalization (Essletzbichler et al., 2018). Starting with the 2017 presidential elections, Algan et al. (2018) explained that these inequalities in income and access to employment have played important roles in the collapse of the left–right paradigm and the rise of populism.

4.1.4 | Territorial characteristic variables

Several territorial characteristics were added to the model, such as population density (*Density*). McKay (2019) explains that people living in less populated areas tend to be more dissatisfied as these areas are often rural territories left behind by public policies. Bourdin and Torre (2020) also argued that some territories' remoteness from metropolitan areas reinforced their residents' feelings of abandonment by public policies. Thus, a variable was added relating to the centroid's average distance from the employment area to the metropolises (*DistMetropo*) (see Figures 1–3).

We also included the population evolution within the period from 1999 to 2018 (*EvoPop*). This variable is an indicator of the level of attractiveness of a territory. According to Grossman (2019), there was a feeling of

resentment among the Yellow Vests as they had difficulties accessing employment. Specifically, this feeling came from the fact that they had to travel farther to find a job and to spend more on fuel and car repair due to depreciation. Therefore, we added the variable of the share of employed people living 30 min or less away from their workplaces (*Work30min*).

We also added other determinants that illustrate the territories' decline and oblivion. Among these were the evolution of the number of schools (*EvoSchool*) and the evolution of the living services offered to the population (*EvoServPop*) within the period from 1999 to 2018. Finally, in view of several recent studies (Cox, 2017; Dijkstra et al., 2020; Rodríguez-Pose, 2018; Rodríguez-Pose et al., 2020), we included a variable to show industrial decline as this may be a factor favoring voting for anti-establishment parties. This variable was the change in the share of employment in the industry within the period from 1999 to 2018 (*EvoIndus*).

4.2 | Modeling strategy

In our empirical analysis, we first tested which socioeconomic and territorial determinants explain voting for extreme parties and the spatial distribution of the Yellow Vest movement. Second, we assessed the extent to which the phenomena studied could be confounded or whether populist behavior could take more or less complex forms. Third, we assessed the extent to which populist behavior is affected by the behaviors of people in neighboring cities and regions. To do this, we ran an ordinary least-squares (OLS) regression model.

$$Y_{i,t} = \delta + \beta X_i + \varepsilon_i,$$

where $Y_{i,t}$ is one of the three dependent variables, X_i is the set of explanatory variables of employment areas i, δ is the constant, β is the vector of the estimated coefficient, and ε_i is the vector of the residuals.

Then, given that the literature has highlighted the spatial dependence (relative location) of populist vote variations as a determinant of the number of votes that extreme parties obtained in the previous elections (e.g., Artelaris & Tsirbas, 2018; Burnett & Lacombe, 2012), we used a spatial econometric model. Several studies have shown that people's behaviors are affected by those of people in neighboring cities and regions. Based on the results of their recent study, Essletzbichler et al. (2021) concluded that one's electoral behavior is the result of one's interactions with other individuals. However, as these social networks tend to be spatially circumscribed, one can expect to observe that electoral choices are influenced by the conditions in the surrounding cities and regions. Moreover, it has already been shown that geographical location (absolute location) and local spatial characteristics help explain the geography of populism (Calvo & Escolar, 2003; Ron & Nadesan, 2020).

To consider the spatial dependence in the specification model, we first tested whether the data had spatial autocorrelation (LeSage & Pace, 2010). Our test revealed that this was indeed the case (I Moran *EXTR-Left* = 0.29**; *EXTR-Right* = 0.38***; *YELVEST* = 0.27**). Following Anselin and Florax (2012), we performed a Lagrange multiplier test (lag and error) and its robust versions to determine whether the spatial autocorrelation was in the dependent variables (spatial autoregressive model [SAR]) or in the error terms (spatial error model [SEM]). Considering the test results (see Table 1), we could reject the null hypothesis (absence of spatial autocorrelation in the error term) regardless of the spatial weighting matrix that was chosen.

To detect spatial interactions ($\rho \neq 0$), we used the approach proposed by Elhorst (2010), which involved studying whether the use of the spatial Durbin model (SDM) was appropriate as it contains both SEM and the SAR model. Thus, we performed an additional test to define the most appropriate estimation strategy. The results (see Table 2) show that hypothesis $\theta = 0$ is systematically rejected, which means that SDM is more relevant than the other estimation strategies.

In SDM, spatial dependence is included in both the endogenous $Y_{i,t}$ and exogenous $X_{i,t}$ variables.

TABLE 1 Lagrange multiplier tests

Spatial weight matrix	LM tests		Robust LM tests	
	Spatial lag	Spatial error	Spatial lag	Spatial error
1st order contiguity	71.54***	32.89***	58.13***	1.74
2nd order contiguity	109.75***	74.33***	71.42***	2.27
3rd order contiguity	81.47***	42.14***	37.28***	0.36
5 nearest neighbors	128.44***	71.65***	65.73***	0.30
10 nearest neighbors	98.36***	32.98***	90.14***	0.03
15 nearest neighbors	152.98***	62.31***	101.26***	0.37

Abbreviation: LM, lagrange multiplier.

TABLE 2 Comparison of the SAR/SDM model and choice of the weighting matrix

Spatial weight matrix	LIK	LR test: $\theta = 0$
1st order contiguity	38.57	39.48***
2nd order contiguity	46.42	37.91***
3rd order contiguity	31.28	22.29**
5 nearest neighbors	40.32	40.63***
10 nearest neighbors	44.97	33.58**
15 nearest neighbors	35.25	28.62***

Abbreviations: LIK, Likelihood; LR, lagrange robust; SAR, spatial autoregressive model; SDM, spatial Durbin model.
**$p < 0.01$; ***$p < 0.001$.

$$Y_{i,t} = \delta + \sum_{j=1}^{n} W_{ij} Y_i + X_i \beta + \sum_{j=1}^{n} W_{ij} X_i \gamma + \varepsilon_i,$$

where $Y_{i,t}$ is one of the three dependent variables, $\sum_{j=1}^{n} W_{ij} Y_i$ is the dependent variable in the neighboring employment areas (spatially lagged endogenous variable), $X_{i,t}$ is the set of explanatory variables of employment areas i, $\sum_{j=1}^{n} W_{ij} X_i$ is the set of explanatory variables of neighboring employment areas i (spatially lagged exogenous variables), δ is the constant, β and γ are the vectors of the estimated coefficients, and ε_i is the vector of the residuals. The model parameters that were used were estimated using the maximum likelihood method.

Regarding the choice of spatial weighting matrix, following Stakhovych and Bijmolt (2009), we used the most common: the log-likelihood function value (LIK). The results showed that the most appropriate spatial weighting matrix was the 2nd-order contiguity (highest LIK), but we could have chosen the 10 nearest neighbors because the LIK is very similar.

5 | RESULTS

To interpret the results of our SDM, we focused on the total effects because they take into account both the direct and indirect (spatial dependence) effects in all the observations through the spatial multiplier (LeSage & Pace, 2010). A first general analysis of the results showed that we were dealing with a geography of

anti-establishment behavior that was polymorphic. If the common feature of the voters for *Rassemblement National* and *La France Insoumise* and of the Yellow Vests is contestation, the factors explaining their spatial distribution are different (Table 3).

One of the significant results of the 2017 elections was the unprecedented rise of populism in the sense defined earlier. In one way or another, the candidates who referred to it (in different political directions and with our previous definition) received 46% of the votes cast in the first round of the presidential elections (Marine Le Pen, Jean-Luc Mélenchon, and Nicolas Dupont-Aignan). This result was confirmed by the 2022 French presidential elections. This populist wave is based on common fundamentals: reaffirmation of national sovereignty, criticism of Europe and its capitalist drift, and rejection of the political elites in place in the hope that direct democracy will compete with representative democracy or will amend it (Stavrakakis et al., 2017). However, beyond this common base, the two major components of populist demand, the *France Insoumise* and *Rassemblement National*, are radically separated on the terrain of immigration and the economy. Moreover, a first look at the results highlighted that populist votes differ from the Yellow Vest movement. Indeed, the traditional variables used in electoral sociology

TABLE 3 List of variables

	Min	Max	Mean	Standard deviation
EXTR-Left	1.05	5.8	3.07	0.82
EXTR-Right	6.73	22.24	13.3	3.23
YELVEST	0.00	195.04	42.44	23.47
Socio-demographic variables				
20–39yo	10.3	31.00	15.56	2.56
40–64yo	30.4	43.9	38.14	1.84
65yo+	2.6	36.7	22.1	4.79
HighEduc	23.3	52.4	34.8	5.77
Immigr	1.00	32.1	6.82	4.74
Economic variables				
EvoIncome	1.77	11.79	5.66	1.31
InegIncome	2.3	5.5	3.11	0.33
Income	12826	28732	19880	1915
Owner	43.9	78.4	63.77	6.13
LTUnemploy	5.6	34.1	24.92	3.79
EvoUnemploy	−16.09	16.28	1.81	5.07
Spatial variables				
Density	12.50	2005	130.49	196.10
DistMetropo	0.00	264.5	60.8	42.93
EvoPop	−11.28	42.74	8.11	9.69
Work30min	49.00	93.4	80.71	7.55
EvoSchool	−3.00	16.00	0.61	1.66
EvoServPop	−18.00	93.00	5.87	12.21
EvoIndus	−21.68	137.95	37.92	24.02

were found to be correlated with the populist votes, but spatial variables also played a role in the votes for *La France Insoumise* and *Rassemblement National*. In fact, they seem to play a greater, albeit different, role in explaining the Yellow Vest movement.

5.1 | Sociodemographic variables

The analysis of the Melenchonist electorate showed that the leader of *La France Insoumise* was able to seduce a public that was quite different from the voters of Marine Le Pen. The determinants differed in terms of education level; the voters for *La France Insoumise* were, on average, much more educated. The people who voted for Jean-Luc Mélenchon were educationally qualified to obtain jobs, but they often felt downgraded, considering themselves victims of diplomas' devaluation (Duyvendak, 2019). The negative and significant effect of the income evolution hid a downgrading mechanism that appeared in the differential between the income level and the diploma level. Regarding the Yellow Vests, they seemed less educated than the average population. According to them, their jobs were low paying and kept them from earning more money than if they benefited from social assistance. This argument has often been echoed in public debate, confirming that the Yellow Vests are often impoverished workers (Clifton & de la Broise, 2020).

On the immigration topic, our results showed that immigration had a weakly negative effect on the votes for the extreme right-wing party, which could have been both ideological and spatial and related to their negative expectations. Marine Le Pen's discourse consisted of explaining to the inhabitants of peripheral and rural areas that immigrants threatened their jobs. It included a criticism of the traditional parties but also of immigration. From an ideological point of view, the analysis of *Rassemblement National*'s electorate highlighted the classic motives of the national-populist right party (Ivaldi, 2019). We observed a positive and significant effect on the votes for *La France Insoumise*, which appeared to be mainly urban, involving people who were used to living with immigrants or their descendants on a daily basis. Jean-Luc Mélenchon's candidacy obtained votes beyond the ranks of the communist sympathizers traditionally located in the bastions with an over-representation of workers and involved more educated urban dwellers.

As far as the Yellow Vests are concerned, it was observed that the influence of the 40–64 and 65+ age groups on the movement was significant and positive. This is in line with Sebbah et al. 's (2018) finding that young people are less involved in the movement overall and that the Yellow Vests are, above all, people with a stable job or who are retired and are thus benefitting from a regular income, but one that is considered insufficient due to their current economic constraints. The effect of the immigration variable was found not to be significant for the Yellow Vests variable. This confirms Algan et al. 's (2019) conclusion that the migration issue is not a central concern for the members of this movement. This distinguishes them from the voters of the extreme right, for whom the migration issue is important.

5.2 | Economic variables

The unemployment evolution had a highly positive effect on the extreme right-wing voters, indicating that they tended to live in declining, marginalized areas. They were also very sensitive to the income inequalities between the richest and the poorest. The votes for Mélenchon were not sociologically characterized (null and a significant sign of average income). Moreover, Mélenchon obtained almost the same number of votes among the popular categories (24% on average among employees and workers) as among the middle classes (26%), rendering him neck and neck with Emmanuel Macron.

Like the voters for the extreme right-wing parties, the Yellow Vests are very sensitive to economic inequalities between the wealthiest categories and those at risk of falling into poverty and exclusion, as shown

by the variable's significant positive effect on income inequalities. This is in line with the discourse of the Yellow Vests on social media, which expresses a desire to benefit more fairly and equitably from the distribution of wealth (Sebbah et al., 2018). It is not surprising that these subjects were widely found in the minutes of the Great National Debate, where people complained about their economic situation and the expenses required to keep their jobs (Table 4).

5.3 | Territorial characteristic variables

Over the last 30 years, France's social geography has been profoundly modified by urban sprawl and peri-urbanization. Whole sections of the working and middle classes have gradually left the large conurbations to settle in the suburban areas due to the relegation phenomenon (the increase in real estate prices in the metropolises, leading them to settle or buy properties in areas with more affordable real estate, albeit farther away from the city centers) or by choice (fleeing big cities or their suburbs and the supposed nuisances therein, in search for gardens and for proximity to natural areas). These elements can explain why the coefficient related to distance from the metropolis was significant and positive for the extreme right-wing party. Voting for *Rassemblement National*, which is often associated with peri-urban territories, took on a new dimension in 2012 in rural areas, which was confirmed by the subsequent elections. This explains the significant and negative sign of the density variable (see Figure 1). In contrast, *La France Insoumise* was able to find support in most of the large conurbations. Jean-Luc Mélenchon obtained a significant number of votes from these central cities and their immediate peripheries, showing that density had a positive and significant effect on voting for *La France Insoumise* (see Figure 2).

We find many references to the industrial decline in certain French territories in the speeches of *Rassemblement National*. Its leaders often invoke the impotence of governments to maintain productive activities in these territories. This may also explain why the long-term unemployment rate had a significant positive influence on the votes for *Rassemblement National*. All in all, during the presidential campaign, Marine Le Pen addressed the much-talked-about "invisible" people by clearly calibrating her remarks based on this electorate's expectations and daily difficulties (Algan et al., 2018).

The positive and significant effect of population density on the volume of the Yellow Vests' mobilization highlights that this movement cannot be simplistically reduced to an opposition between rich cities and the marginalized rural world. It is the typical French peri-urban areas with inequalities that are reflected in this mobilization. The proportion of precarious inhabitants is higher in large agglomerations, especially at their margins, and strong disparities in income and living conditions are observed in these urban spaces. These inequalities can lead to protestation behavior, as Bourdin and Tai (2021) demonstrated. This is also highlighted by the significant negative effect of the distance to the metropolises, which applies to people living in rural areas but most of all to workers who are forced to commute from the remote suburbs to distant places of work located in the city centers or in other peri-urban areas. Positive coefficients associated with home–work distances confirmed the importance of the mobility issue in the Yellow Vests' mobilization. In fact, as mentioned earlier, this issue was one of the initial reasons for the birth of this movement, particularly the rise in the petrol price and the fact that the authorized speed limits on departmental and national roads are now 80 km/h from 90 km/h in the past. This is another illustration of the major role played by spatial factors in the Yellow Vest movement.

The evolution of the services offered to the population had a negative and significant effect on the Yellow Vests. The abandonment of public infrastructures in peripheral areas has been one of the major issues raised by this movement. The variables of the evolution of life services and the number of schools also had a significant negative effect on the Yellow Vests. The changes that affected the public services, such as by reducing the number of agents in some sectors and the services provided to the users (e.g., post offices, schools, transport, hospitals), were interpreted as effects of liberal policies (Sebbah et al., 2018). However, public services have a

TABLE 4   OLS and SDM models

Estimation methods	OLS	SDM EXTR-Left		OLS	SDM EXTR-Right			OLS	SDM YELVEST		
20–39yo	0.011*	0.022**		0.018	0.02			0.005*	0.005*		
40–64yo	0.115	0.104		0.009**		0.011**		0.06**		0.062**	
65yo+	0.060***		0.045***	-0.003			-0.003	0.24**			0.225**
HighEduc	0.01**	0.015**	0.037**	-0.38***	-0.3***	-0.41***	-0.355***	-0.189***	-0.190***	-0.225***	-0.194***
Immigr	0.009**	0.007**	0.009**	-0.001***	-0.002***	-0.002***	-0.001***	0.001	0.002	0.001	0.004
EvoIncome	-0.12***	-0.142***	-0.158***	0.275**	0.254**	0.217***	0.28**	0.55	0.56	0.5	0.55
InegIncome	-0.002	0.000	-0.002	2.124**	2.163**	2.15**	2.294**	1.55***	1.59***	1.48***	1.55***
Income	0.000***	0.000***	0.000***	0.052	0.05	0.049	0.048	0.002	0.003	0.002	0.002
Owner	0.002*	0.001*	0.001*	-0.09**	-0.114**	-0.121**	-0.956**	0.243***	0.245***	0.247***	0.201***
LTUnemploy	0.07***	0.076***	0.107***	0.241***	0.269***	0.24***	0.255***	0.494	0.455	0.447	0.452
EvoUnemploy	-1.29***	-1.245***	-1.134***	2.003**	-2.105**	-2.058**	-2.014**	-0.037	-0.029	-0.030	-0.025
Density	0.02**	0.021**	0.025**	-0.255**	-0.263**	-0.254***	-0.259**	0.005**	0.003**	0.005**	0.005**
DistMetropo	-0.001	-0.012	-0.009	0.002**	0.022**	0.023**	0.022**	-0.002***	-0.001***	-0.002***	-0.001***
EvoPop	-0.01	-0.014	-0.011	-0.02	-0.025	-0.031	-0.022	-0.226	-0.23	-0.225	-0.225
Work30min	-0.01	-0.012	-0.016	-0.04	-0.044	-0.032	-0.041	0.572***	0.57***	0.569***	0.571***
EvoSchool	0.002*	0.001*	0.002*	0.01	0.009	0.009	0.011	-0.03***	-0.028***	-0.03***	-0.03***
EvoServPop	0.194***	0.158***	0.208***	-0.003**	-0.002***	-0.003***	-0.002**	-0.175***	-0.2***	-0.190***	-0.185***
EvoIndus	0.005	0.007	0.019	0.012**	0.010**	0.012**	0.013**	0.002	0.003	0.002	0.002
Pseudo R^2	0.33	0.39	0.40	0.57	0.61	0.6	0.59	0.35	0.38	0.37	0.37
Multicollinearity	5.89			4.58				5.70			

(Continues)

TABLE 4 (Continued)

Estimation methods	OLS	SDM EXTR-Left	OLS	SDM EXTR-Right	OLS	SDM YELVEST
Jarque–Bera test	5.25*		5.77**		5.49*	
Breush-Pagan test	21.49**		25.12**		22.15**	

Abbreviations: OLS, ordinary least-squares; SDM, spatial Durbin model.

*p < 0.05; **p < 0.01; ***p < 0.001.

collective history: the progressive institutionalization of the welfare state, which protects the weakest and reduces inequalities (Bourdin & Torre, 2020). The reduction of these services generates a feeling of abandonment of entire territories and thus worsens the rupture between civil society and the political elites. It is also interesting that this argument did not at all concern Jean Luc Mélenchon's voters, with whom the evolution of public services was found to be positively correlated. We can see this as an illustration of the very urban characteristic of the votes for *La France Insoumise*; in fact, much of the public infrastructure had been cut in more peripheral areas and rarely in the hearts of cities.

6 | DISCUSSION

This article highlights the significant originality of the Yellow Vests' behaviors compared to the behaviors of the populist parties, whether from the left or the right, but it also reveals a complex geography of contestation.

To summarize, *Rassemblement National*'s discourse and votes relate to a number of difficulties existing in peripheral territories. The first is the fragility of the local economic fabric due to the concentration of employment in a limited number of companies (which will have a significant impact in the event of site closure as the employees will find it more difficult to get a job than in large conurbations) and due to the French economy's rapid deindustrialization process: the number of industrial jobs dropped from 5.4 million in 1974 to less than 2.5 million at present, only 10.3% of the total jobs in France (France Stratégie, 2020). The second is the constant disappearance of some public services, such as hospitals, schools, and public transport. In addition, there are the consequences of the relegation suffered or chosen (imposed or voluntary decision to distance oneself from the big city) and the fear of "being caught up in the suburbs." In addition, extreme-right-wing supporters often suffer from being far from the big cities (e.g., lack or lower quality of public services, often giving the feeling of being second-class citizens); at the same time, they fear that "urban nuisances" in terms of the delinquency of "problem populations" (immigrants or welfare recipients) or the difficulty of cohabiting with these people will gradually spread and reach them. In addition, the votes for *Rassemblement National* were more concentrated in areas experiencing industrial decline, as revealed by their strong concentration in the north and southeast of the country. To this must be added the influence, in the south of France, of the *pied-noir* immigrants from North Africa following the declarations of independence of Algeria, Morocco, and Tunisia in the 1960s (Hubbell, 2015; Hunt, 1992), and their descendants. Their presence is very important in the zones of success of *Rassemblement National* in the south of France, and they often embrace values extremely to the right and strongly oppose Muslims. They are mainly located in urban environments, which corresponds to the success of *Rassemblement National* in several large municipalities in these regions (e.g., Perpignan, Fréjus, and Orange). However, this point must be put into perspective because the strong presence of the *pied-noir* immigrants from North Africa and their descendants in Paris does not seem to produce comparable effects.

The Yellow Vests' mobilization mainly highlights the social and economic divide between part of the civil society and the elites. This divide takes the shape of a sharp criticism of the national leaders in a way rather different from the criticism associated with populist votes and has a more complex geographical pattern. Unlike the results of some studies (Guilluy, 2016), our study's results do not support the idea that the Yellow Vests are the spokespersons of "peripheral France" or of the rural territories forgotten by politicians, or even of extreme-right followers. Contrary to what inspired the *Rassemblement National* votes, the opposition is not only about the French big cities (with economic opportunities and political decision-making) versus the French countryside and invisible populations on the fringes of progress and globalization. The Yellow Vests are rural and peri-urban residents or users of the services offered by medium-sized cities and former inhabitants of or current consumers in metropolises. Supporters of this movement have also called for greater social and fiscal justice. They feel that they are "paying for others" and that they are left out of public policies. This result is consistent with that of a study by Algan et al. (2019) based on the *Centre de Recherches Politiques de*

Sciences Po (French Center for Political Science) Barometer of Confidence survey, which investigated the sociodemographic characteristics of the Yellow Vests' supporters: that the voters were extreme-right partisans, extreme-left partisans, or abstainers. It should be noted that the survey focused on the political positions of those supporting the Yellow Vest movement and did not directly deal with the demonstrators themselves.

The Yellow Vests are predominantly mature and active or retired people with a lower standard of living than the average, a feeling of downgrading, and very low confidence in politicians. Most of them live in rural communities and in the suburbs of the metropolises, but some of them live in towns with fewer than 100,000 inhabitants. This population is penalized by exorbitant expenses: bills, petrol costs, and other loan repayments (with a significant positive effect on the share of homeowners). Their demands are mainly fueled by the precariousness of the labor market and their feeling of fiscal injustice due to the rising taxes. They have also suffered from the closure of public services, a process that has suddenly accelerated since 2007 (The general review of public policies law) and 2014 (Law for the modernization of territorial public action and the assertion of metropolises), with the disappearance of 60% of the military sites by 2020, especially in the Grand Est region; of 30% of the magistrates' courts within the period from 2007 to 2010 in all the small towns; and of 15% of the maternity hospitals in 7 years, especially in rural areas (France Stratégie, 2020). To the perceived violence of this process is added the lack of effective public responses to deindustrialization and the Yellow Vests' feeling of losing their standard of living, a feeling shared by the *Rassemblement National* voters. It should also be noted that the disappearance of these public services increases the distances that people have to negotiate to benefit from public services elsewhere; thus, it entails a significant cost for the Yellow Vests. Due to the increasing weakness of public transport in the areas where most of the Yellow Vests live, they have to use personal cars, which explains their high sensitivity to increases in gasoline prices or to the lowering of speed limits, which lengthens their gear-switching time. They are thus highly sensitive to space, not in the generally presented sense (a localization concentrated in peripheral areas) but because they have to make many personal trips to get to work or to access services for themselves and their families.

The aforementioned sensitivity of the Yellow Vests is strongly linked with the elements brought to the fore by the Local Socio-Cultural Degradation Theory (Bolet, 2021), which highlights the loss of socio-cultural capital perceived by local populations faced with the loss of traditional social places. The Yellow Vests wanted everyone to know their demands by occupying roundabouts and then the hearts of large cities (e.g., the Champs-Elysées in Paris). These places represent two different geographical symbols: roundabouts, where people commute with their cars in a peri-urban atmosphere, and central places, which represent remote urban economic and political power.

Depending on the dependent variables observed, the effects of density and distance from the metropolis may play a positive or negative role. This is indicative of the complexity of "rural" areas, which are made up of both remote territories and small towns, for example. The Yellow Vests' sensitivities differ according to where they are located in these peripheral areas. Some have to travel to an intermediate town or even a metropolis to work, while others may live in a small town close to their work. These results call for more detailed studies, such as those based on hypotheses related to the inner areas found in certain Italian regions (Vendemmia et al., 2021).

Overall, our article demonstrates that populism takes various forms on the left and right of the political spectrum and in a variety of (spatial) contexts. Indeed, this was what led Agnew and Shin (2019) to state that populism is inherently complex and that incorporating the spatial dimension provides a better understanding of what it encompasses. This spatial and multiscalar dimension can also be found in Ron and Nadesan's (2020) book, in which they highlight that populism is both local and global. The authors believe that both politicians and citizens face issues related to the rise of nationalism, the effects of globalization and economic discontent, and immigration. By comparing the Yellow Vest movement to traditional analyses of votes for the far-left and far-right parties, we were able to highlight that populism has multifold manifestations and is not limited to nationalism or anti-system parties. From this perspective, the Yellow Vest movement is a good illustration of the complexity of populism and of "returning power to the people" (de la Torre & Srisa-Nga, 2021).

7 | CONCLUSION

The aim of our article was to enlarge the understanding of the geography of discontent, disenchantment, resentment, and contestation by using the French case, especially the protestations issued by the Yellow Vest movement. While we essentially approached discontent through an analysis of populist votes, we introduced additional elements of analysis, comparing populist votes to the Yellow Vests' protestations. We used statistical data on votes and meetings to assess the economic, sociodemographic, and spatial characteristics of the protest movements. We tested two hypotheses that the Yellow Vests are the same as those who vote for populist parties and that the characteristics of territorial decline or stagnation have a parallel influence on the Yellow Vest movement and on voting for populist parties. When we compared the characteristics of the Yellow Vests with the determinants of the populist votes, we failed to confirm our hypotheses; that is, we found that the Yellow Vests could not be confused with populist supporters and that they also differ from the latter in terms of their sensitivity to territorial dimensions. We showed that spatial variables better explain the geography of the Yellow Vests whereas the French populist votes are explained by a mix of spatial variables and variables traditionally used in electoral sociology (sociodemographic and economic).

The French geography of contestation raises serious concerns about the dynamics of the territories not specific to France (Kenny & Luca, 2021). The first concern is the driving power of the metropolises over the whole country. Like the rest of the world, France is subject to the logic of metropolization, tending to concentrate values in large urban areas. As a result, people living outside the metropolises feel that they are not benefitting from globalization or that they are even suffering from its consequences, reinforcing the idea that some places are left behind (Leyshon, 2021). With housing prices soaring in these large cities, some people have to live in peripheral or rural areas, increasing their distance from public services and their transportation costs to get to their jobs.

A large part of the contestation in France is also related to the development of new public management (Chouraqui, 2020; Hammerschmid et al., 2019), presented as a miracle recipe for the profitability of the public sector. In France and in other developed countries, the search for better public policy performance has led to a decrease in public services in the territories already in difficulty. Thus, it is not surprising to see that the people who are no longer benefitting from these services (or who are suffering from their deteriorated quality) no longer believe in the government and assert their rights by protesting. This is especially the case for the *Rassemblement National* voters, who mainly live in peripheral areas, but also for the Yellow Vests, who are suffering from the disappearance of public services, which forces them to take long and costly personal and professional trips.

The last reflection is about territorial governance. The Yellow Vests' revolt has highlighted the need for a more participative democracy; rethinking the territorial governance of economic development projects is a key issue. As Torre and Traversac (2011) pointed out, the main resource of a territory is the intensity of the links between all the stakeholders, both public and private, including those beyond their immediate environment. Consequently, the question of territorial governance is becoming increasingly central. To be effective, it must include all the stakeholders in the territory, such as the citizens, who are too often forgotten and left behind (Stead, 2014). It is also this feeling of being ignored and the lack of consideration for the citizens' expectations that generate resentment and encourage people to set up a revolt, such as the Yellow Vest movement.

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APPENDIX 1: THE GREAT NATIONAL DEBATE (LE GRAND DÉBAT NATIONAL)

The Great National Debate is a French public debate launched on January 15, 2019 by the president of the French republic, Emmanuel Macron, in the context of the Yellow Vest Movement. The government held a major debate on four themes that covered the nation's major issues: taxation and public spending, the organization of the state of public services, ecological transition, and democracy and citizenship. Everyone could also organize a debate at various levels: in their neighborhood, village, region, etc. To collect the best citizen voices in the field, organization kits and presentations of topics for the holding of debates were proposed to the organizers. In parallel, all the citizens could contribute online on a dedicated digital platform.

The consultation took place in the following phases:

(1) Reporting of complaints and exchanges between citizens and mayors (from mid-December 2018 to mid-January 2019);
(2) Holding of local debates organized by mayors, associations, individuals, etc. on issues related to the four themes chosen by the government (mid-January to mid-March 2019);
(3) Giving of opinions and proposals by all citizens on a dedicated website (as of January 21, 2019);
(4) Holding of national thematic conferences with various associations and unions (March 11–14, 2019); and
(5) Holding of citizen-led regional conferences (March 15–16 and 23–24, 2019).

The government estimated that the cost of the organization of such a debate was 12 million euros. In total, more than 10,000 local meetings were held during this period, and nearly two million contributions were collected on the dedicated website. On April 25, 2019, Emmanuel Macron concluded the debate with a press conference, during which he notably announced a reduction in income tax and the reindexation of small pensions on inflation.