

ELECCIONES Y SEGREGACIÓN DE POBLACIÓN EXTRANJERA EN ANDALUCÍA. INDICADORES ANTE UN NUEVO PANORAMA POLÍTICO

ELECTIONS AND SEGREGATION OF THE FOREIGN POPULATION IN ANDALUSIA INDICATORS IN THE FACE OF A NEW POLITICAL PANORAMA

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Abstract: *The reality of migration is a global challenge to today's societies, posing social, economic and political challenges. In recent years, a politicisation of these issues is being observed, leading to "anti-immigrant" political discourses and the defence of ethnocentric and assimilationist values. This has led to an increase in support for populist radical right political formations, which was reflected in Spain in the last elections with the irruption of VOX in April 2019, increasing their support in November 2019. Faced with this situation, the media, networks and social researchers have linked the presence of the foreign population with this fact, studying the population dynamics and segregation in their influence on the vote for right-wing parties. This paper aims to understand this type of relationship in the Autonomous Community of Andalusia, doing so from a municipal territorial approach and broken down by census tracts.*

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Key words: *elections; foreign population; populist radical right; segregation; VOX.*

Resumen: *La realidad migratoria supone un desafío global a las sociedades actuales, planteando retos sociales, económicos y políticos. En los últimos años se está observando una politización de estos asuntos, derivando en discursos políticos “anti-inmigrantes” y la defensa de valores etnocéntricos y asimilacionistas. Esto ha conllevado un aumento del respaldo a formaciones políticas de derecha radical populista, que se ha reflejado en España en las últimas elecciones con la irrupción de VOX en abril de 2019, incrementando sus apoyos en noviembre de 2019. Ante esta situación, medios de comunicación, redes e investigadores sociales han puesto en relación la presencia de población extranjera con este hecho, estudiando las dinámicas poblacionales y de segregación en su influencia en el voto a partidos de derecha. Este artículo pretende conocer este tipo de relaciones en la Comunidad Autónoma de Andalucía, haciéndolo desde una aproximación territorial municipal y desagregada por sección censal.*

Palabras Clave: *elecciones; población extranjera; derecha radical populista; segregación; VOX.*

INTRODUCTION

The socio-economic and political dynamics of the last years of this second decade of the 21st century are generating multiple challenges at different scales, including challenges associated with demographic changes such as migration. Spain is a receiving country of migrants and in recent times there have been perceived patterns of politicization of the migration phenomenon. In this context, different political forces are emerging, with “anti-immigrant” political discourses and the defense of ethnocentric and assimilationist values.

Today there is much debate about the causes and consequences of these political discourses and the increase in support received. This support has arrived in the last elections in areas and territories where the presence of foreign and migrant population is high, echoing in many media and social networks. Hence the intention of this paper to allow a more rigorous understanding of this phenomenon, investigating the fundamental elements of the presence of the migrant population, its distribution, and the possible relationships with the political support of parties that defend these types of ideas.

In this sense, we talk about the evaluation of the levels of demographic and residential segregation of groups with different cultures as a factor of sociological and urban interest. Residential segregation is understood as the degree to which, within a given geographical area, individuals belonging to different social groups live in neighborhoods characterized by different social compositions (Palacios García and Vidal Domínguez, 2014, p.100; Reardon and Firebaugh, 2002). There are numerous studies that show a direct relationship between residential segregation and voting, especially relevant in the scientific production is the case of the United States the polarization of the racial vote linked to residential segregation of African American and Latino immigrants in the United States (Johnston, Manley and Jones, 2016; Pearson-Merkowitz, 2012; Weaver and Bagchi-Sen, 2015), although it is also present in other contexts such as Europe, is the case of Holland where Van der Waal et al. (2013) carried out a study in 50 Dutch cities, verifying the relationship between ethnic segregation and voting for the extreme right. In a main way, Zingher and Thomas (2012) also recognize residential segregation as a determining factor in the political behavior of the population.

This study proposes three general objectives: to know the existence of patterns of intra-urban location (at the level of census tracts) of the foreign immigrant population in Andalusia through the proportion of foreign population and segregation; to represent the socio-spatial distribution through Geographic Information Systems of this population; and finally, to relate the socio-spatial elements and presence of foreign population with the voting tendency in the congressional elections at the national level in 2019.

The calculation of segregation for each municipality in Andalusia as a whole is innovative. This index has been worked on to a greater extent by considering overall municipal values, but not in census tracts, in order to understand the dynamics of votes and put it in relation to the proportion of the foreign population.

1. THE IRRUPTION OF THE RADICAL POPULIST RIGHT IN A EUROPE IN CRISIS

Since the dawn of the 21st century, the political parties of the “extreme right” or the radical populist right (RPR), as Mudde (n.d.)

categorizes in his detailed study of these political forces, trying to refine their conceptualization on the basis of the characteristics they share, have been gaining prominence in the European political sphere. The crisis situation in the Eurozone during the first decade of this century has spurred the presence of these parties in practically all of these countries, reaching sufficient representation to achieve single or shared government in countries such as France, Denmark, Austria, Sweden or the United Kingdom, and more recently in Spain (Antón Mellón and Hernández-Carr, 2016).

This progression has had a very relevant echo in European society and has influenced not only their political programs, but also the programs of other formations that have polarized their political initiatives in order to mitigate the flight of votes towards these emerging parties (Down and Han, 2019; Tejada et al., 2013, p. 42).

Numerous publications attempt to explain the causes of the emergence of these parties in Europe, thus Rydgren (2007, p. 241) divides between demand-side explanations, such as changing voter preferences, beliefs and attitudes, and supply-side explanations, such as political opportunity structures and party organizational factors. Falkenbach and Greer (2018) explain, in particular for the case of Western Europe, that this boom is due to the population's reaction to the failure of traditional parties to respond to what the electorate expects of them on issues related to mass migration and financial insecurity. Muis and Immerzeel (2017, p. 913) focus on causes such as the political void left by traditional parties with a similar discourse that tend to more moderate positions as a side effect of globalization (Putin 2019, p. 254), or the media hype that these parties have enjoyed due to the political controversy generated by their measures, which have allowed them to gain enormous publicity despite their reduced resources.

Spain, in comparison with most European countries, has been one of the countries where the radical populist right has remained more discreet until recently. This delay in the emergence of an ultra-right-wing political movement parallel to the emergence of these forces in European countries has been explained by Ferreira (2019, p. 74), based on the contributions of Alonso and Rovira (2015) differentiating three variables such as, the conflict in the political positioning of the Spanish political parties, which tried to adjust to the reality after the economic crisis through the polarization of the discourses, which made the parties that traditionally wanted to monopolize a position of the center reposition themselves.

2. VOX'S ADVANCE AS A REPRESENTATIVE OF THE RADICAL POPULIST RIGHT IN SPAIN

However, despite this delay, the irruption of the VOX political party, with ideals similar to this political current, has emerged strongly, rising in just 6 years of existence among the 4 most voted parties according to the results of the elections held in November 2019. Among the factors in which this rapid rise can be explained, it is worth mentioning the party's efforts, at first, to avoid placing itself on the ultra-right through the publication of more moderate objectives that are acceptable to the traditionally right-wing population (Ferreira, 2019) and the use of the media and social networks (Carrasco, Sánchez de la Nieta and Trelles, 2020; Pérez-Curiel, 2020). VOX's ideology, like that of other European PRR parties, is nationalism, authoritarianism, nativism and the defense of traditional values (Aknur and Saylan, 2019; Mudde, n. d.; Otjes et al., 2018, p. 270). This nativism evokes a national sentiment to which the radical right is appealing, playing an important role in the populist mobilization by establishing differences between social groups and giving them the opportunity to lead the defense of collective identity (Betz, 2017, p. 335). This, through a populist and xenophobic discourse. Populist, understanding populism as a form of political communication that uses situations of crisis, economic or political, to delegitimize the government or political elites through social and political mobilization in the form of conflict between the population, those at the bottom, on which appeals are made to the feeling of popular and national unity in the face of other risks, such as political corruption (Antón Mellón and Hernández-Carr, 2016). And xenophobic in that one of the risks identified is the migrant population, about which they shed serious accusations, blaming it for social phenomena of much more complex origin such as unemployment or the economic crisis (Ferreira, 2019, p. 73; Tejada et al., 2013, p. 12). Thus, in accordance with its political program, it proposes measures such as the deportation of illegal or legal migrants who have committed crimes, the lifelong incapacitation of migrants who have entered Spain illegally, the elimination of the "arraigo" formula as a means of regulation, the tightening of the conditions for acquiring nationality, which may also be revoked, making development aid conditional on the acceptance of the repatriation of migrants, and making immigration contingent on the needs of the country's economy (Casals, 2019; VOX, 2019).

These measures are in line with Rydgren's thesis (2008, p. 737) who shows in his study that frameworks linking immigration to crime and social unrest are particularly effective in mobilizing voter support for the radical right, with skepticism about immigration and the desire to reduce it being one of the main factors in predicting who will vote for a radical right-wing party. In spite of the above reality, there is an empirical debate that questions whether the segregation and concentration of immigrant and/or ethnic minority populations affects the voting intentions of radical right-wing populist parties (Janssen et al., 2019, p. 553), either because the studies use data at the aggregate level or because they draw conclusions from data at the individual level, which could adulterate the results. This theory could be based, over the last decades, on the prominence of the Hispanic vote in George W. Bush's re-election in USA in 2004 (Kim, 2014) or his support for Trump's candidacy in 2016 (Galbraith and Callister, 2020, p. 77) or the importance of resettled migrants from the Soviet Union (Aussiedler) in the progression of the far-right AfD party (Goerres, Mayer and Spies, 2020).

In the case of Spain, this debate is not developed at the empirical level. However, after analyzing the results of the November 10, 2019 congressional elections, several media outlets published different reports that alerted public opinion to the greater prevalence of immigrant voting in VOX through the study of voting by municipality and the presence of foreigners in these municipalities.

The detailed analysis of the data shows different causes of these events of various kinds such as economic and labor competition between the native population in areas with a low level of qualification and the foreign population with the same or higher level of competence (Bolet, 2020), the partiality of some media with partisan interests (Luis Gonzalez-Esteban and Maria Lopez-Rico, 2017, p. 1497), or due to the scarce inter-group coexistence that instigates fear of the other as defended by the theories of group threat and inter-group contact, or the thesis of Appadurai (2006) on the "fear of small numbers" (Charitopoulou and Garcia-Manglano, 2018).

In this line, the possibility of contact with the foreign population that allows the organization of the urban space, is shown as a fundamental element for the reduction (or not) of the inter-group conflict and the appearance of xenophobic arguments, and with this a possible incidence in the election and voting behavior.

3. MYXOPHOBIA AND RESIDENTIAL SEGREGATION AS AN INCENTIVE FOR THE RADICAL RIGHT-WING VOTE

According to Bauman (2006) the social homogeneity of space, enabled through segregation, reduces the population's capacity for tolerance of other cultures and other realities, increasing myxophobia and conflict in urban life.

The Chicago School was the promoter of the study of the phenomenon of residential segregation from a global perspective (Checa and Arjona, 2006b, p. 87; Dangschat, 2016, p. 81) analyzing concepts based on inter-group tensions such as competition, domination, investment or succession and focusing on the price of land as the central axis. Subsequently, they continue with the line of study of residential segregation based on economic factors, either determined by wage differences or by access to the housing market (Checa and Arjona, 2006a; Pareja-Eastaway, 2009).

However, the processes of residential segregation are multi-causal, and although the difficulties of access to the housing market due to economic factors may have a greater incidence (Pareja-Eastaway, 2009), Massey and Denton (1988) argue 4 explanatory dimensions of the phenomenon to which a fifth dimension exposed by White (1983) is added: 1) Uniformity, in terms of the representation of a social group in a territory, so that the greater the inequality, the greater the segregation; 2) Exposure, related to the degree of interaction between social groups, the greater the isolation and the lesser the interaction, the greater the segregation; 3) Concentration, referring to the space the group occupies in the municipality, the smaller, the more concentrated and, therefore, the greater the segregation; 4) centralization, where the location of the social group is measured with respect to the center of the municipality, where centralization is often associated with the presence of vulnerable groups and minorities; and 5) grouping, based on the proximity between the different areas occupied by a social group, which may be very close forming enclaves of the same social group or dispersed if the distance between the nuclei is distant (Domínguez-Aguilar, 2017).

In Spain, it is from the year 2000 with the rise of the immigration movement when the upward evolution of the residential segregation of the foreign population begins (Achebak, Bayonne and Domingo, 2017), especially in Andalusia where agriculture,

in a main way, has attracted an important part of the resident migrant population.

The arrival of the migrant population and the lack of inter-group contact due, in part, as we have seen, to residential segregation has fueled the feeling of insecurity and the establishment of myths, reinforced by anti-immigrant discourses, that relate immigration to crime or unemployment (Castro and Mo-Groba, 2020, p. 44; Gómez-Fraguela et al., 2009).

Therefore, it is necessary to study the dynamics of the processes of segregation in democratic societies and the polarization of the right-wing vote that reflect the split between social groups and that favor the vulnerability of migrant groups.

Based on the objectives set forth in the introduction and starting from the theoretical framework cited on the empirical relationship between segregation and voting, the following hypotheses are worked on: 1) At the municipal level, municipalities with a high percentage of foreign population correlate with higher vote levels for VOX party; 2) the municipalities with the highest level of foreign population segregation present a higher level of votes for VOX; and 3) at levels of greater territorial disaggregation such as census tracts, those with a higher proportion of foreign population than the rest of the tracts of the municipality will not correlate with a higher proportion of votes for VOX, but rather this correlation will occur in those tracts attached to the former.

4. METHOD

4.1. Analyzed spatial units and data sources

We have worked with the minimum territorial unit which are the census tracts, and with the municipal level, using municipal references for the calculation of the indexes.

The sources of information used were: a) Cartographic sources from the National Statistics Institute (INE) referring to the 2019 census tracts; b) The use of the Continuous Register of Inhabitants for 2019; and c) data on votes by census tracts, available at the Ministry of the Interior, both from the elections to the Spanish Congress held in April 2019 and those in November of that year.

4.2. Indicators and computer programs

As for the indicators, they have been used:

- Proportion of foreign population over total population at municipal level and section tracts.
- The Segregation index (SI) that allows to know the distribution of one or several groups in the studied spatial area, (Duncan and Duncan, 1955). It measures the distribution of a certain population group in the urban space. It is calculated:

$$SI = \frac{1}{2} \sum_{i=1}^n \left| \frac{x_i}{X} - \frac{t_i - x_i}{T - X} \right|$$

Where x_i is the population of the group in census tract i ; X is the total population of the group; t_i is the total population of section, and T is the total population of the municipality.

The SI ranges from 0 to 1, so 0 expresses no residential segregation at all and 1 reflects maximum segregation possible (compared to the rest of the population). If the distribution of the minority group (foreigners) is the same as that of the majority group, the result of the index must be 0 and, at the opposite extreme, it would take a value of 1

The literature on this subject (Massey, 1985) speaks of a strong situation of segregation in the equality indexes, when the values are above 60% (0.6). This data is shown at the municipal level since the index considers the census tracts that make up the index to assess this distribution.

- The location coefficient, which expresses the relationship between the proportions of foreign people in each census tract with respect to the whole municipality (Isard, 1960, cit. in Palacios-García & Vidal-Domínguez, 2014). It detects whether or not there is a relative concentration of foreign persons in the sections. Compares the number of residents of a given origin (foreigners) in a census tract with respect to the average distribution in the whole municipality. It is obtained as follows:

$$CL_i = \frac{X_i/T_i}{X_f/T_f}$$

Where X_i is the population of group X in census tracts i ; T_i the total population of census tracts i ; X_f the population of group X in the municipality, and T_f the total population in the municipality.

The value of the quotient expresses the degree of concentration in relation to the reference territory (municipality); a higher value a 1 means a concentration in the largest census tract than the average for the municipality.

It has worked with the April and November 2019 vote figures, calculating the ratio and distribution of votes, allowing for longitudinal analysis.

Microsoft Excel 2017 software, the statistical program SPSS and the program QGSI 3.10.1 have been used for the representation and analysis of the maps of the values obtained.

The data obtained from the census tracts for the segregation index, Proportion of foreign population and the VOX vote have been submitted to the geographic information system in order to know the territorial distribution of the vote, correlating it with the demographic representation of foreign people and the level of segregation. In order to carry out this analysis, different vectorial layers have been established, according to the different variables of the study, Classified according to intervals and the application of the geoprocess of intersection between these different layers has been carried out.

4.3. Results

Below are the results of this study, which initially presents the overall results of the April and November 2019 national elections. Next, the results are shown in relation to the population reality, contemplating the percentage of foreign population, and the results in relation to the segregation index and the location coefficients. Finally, all the elements that allow to respond to the hypotheses and objectives used are put in relation in a statistical and cartographic way.

The overall election data includes a total of 4,545,189 votes in the April 2019 elections and 4,221,012 votes in the November 2019 elections. Table 1 shows the distribution of the main political forces voted in each of the elections. As can be seen, the formations considered to be right-wing increased their representation, the PP by almost 3 percentage points, and the case of VOX by 7 points. The Ciudadanos party experienced a drop of 10 points. The decline of the rest of the parties is minimal.

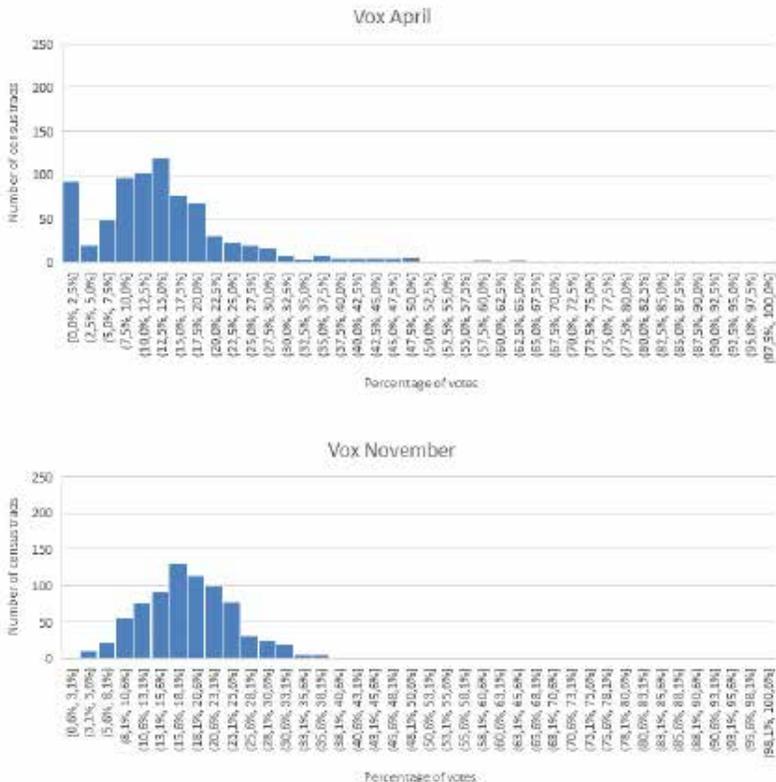
TABLE 1
DISTRIBUTION OF VOTES IN THE 2019 ELECTIONS

POLITICAL PARTY	APRIL	NOVEMBER
CIUDADANOS	18	8,20
UNIDAS PODEMOS	14,47	13,26
PP	17,34	20,78
PSOE	34,45	33,76
VOX	13,51	20,61
BLANK	0,03	0,03
OTHER GROUPS WITH MINORITY SUPPORT	2,00	3,36
	100%	100%

In order to know more rigorously the weight of the votes for the VOX party, the percentage of VOX votes to the total votes of each census tracts, as well as at the municipal level, has been calculated. At the municipal level, the percentages of votes to VOX votes has been increased from the April to November elections, specifically from an average of 14.5% of the votes in April to 18.4% in November. The reality is that in April there was a greater standard deviation than in November, with a large difference, showing extreme values but concentrated in values lower than 35% (95th percentile).

If the distribution according to the census tractscensus tracts is analyzed, the following histograms (Figure 1) show the distribution according to the calculated percentage of votes received by VOX, for April and for November 2019. It is possible to see how in the month of April the bulk of the sections come together in values less than 0.15, while in the November elections there is a shift and greater concentration of sections in values between 0.14 and 0.3. These data reaffirm this increase in support for VOX in many census tractscensus tracts in Andalusia.

FIGURE 1
 PERCENTAGE OF VOTES TO VOX IN CENSUS TRACTS
 ANDALUSIA-2019



Source: own elaboration.

Subsequently, analyses have been carried out at two territorial levels, the first at the municipal level, focusing on the first and second objective and research hypotheses; and then going deeper into the behavior of the data and the study at the level of census tracts.

The total population of Andalusia in 2019 is 8,414,240 inhabitants, of which 7.57% is foreign population. This percentage is below the national figure of 11.4% for foreigners. The smallest

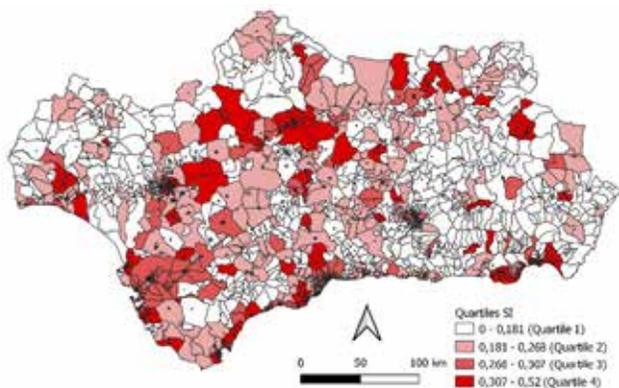
territorial unit worked on in this study corresponds to census tracts, with a total of 5,673 with valid population data, grouped together in 771 municipalities that have data for all the variables analyzed.

In the first place, we have worked with the characterization of the foreign population in its distribution and municipal location. To this end, three basic indicators have been used: the percentage of the foreign population, categorizing it in order to identify those sections with a higher percentage than the rest (given that the hypotheses are related to the greater or lesser presence of the foreign population in the territory with the VOX vote); the Segregation Index (SI) and the Location Coefficient (LC).

There is great variability in the data, since the average is 6.7% of foreigners, but the median is 3.4% with a high standard deviation (0.902), and the maximum is 69%. These data, together with the quartiles, show an agglutination of the sections in not very high values of percentage of foreign population, being the 75th percentile the one that is situated in the value 7,1%. The upper end, located at the 95th percentile, acquires values of 26% or more of foreign people over the total inhabitants of the municipality.

A classification has been established considering the categorization of this variable into four groups according to the quartiles. Next, the data of municipalities for the Segregation Index (SI) has been calculated and analyzed. This index measures the distribution of the foreign population in the total space of the municipality, which is calculated from the difference between the proportion of foreign people and the proportion of the Spanish population in each territory. The overall data for Andalusia places the SI at an average of 0.24 with a standard deviation of 0.93. Considering the bibliographical references on this index, we would be talking about a small level of overall segregation in this region of Spain, given that it is considered high when it reaches 0.6 or more. There is also a great variability in the distribution of the SI, given that the average is 0.11, the mode is 0.32, occupying 0.20 is the 75th percentile of the set of municipalities. The SI variable has been categorized according to quartiles. Figure 2 shows the territorial distribution at the level of municipalities of the behavior of the SI.

FIGURE 2
TERRITORIAL DISTRIBUTION ACCORDING TO SI (2019)



Source: own elaboration.

The existence of correlations between the variables under study has been analyzed. They have been significant for the VOX votes in November. All the analyses shown in this article correspond to the November 2019 elections, since the results for April have not been significant in the basic analyses and therefore the November 2019 elections have been deepened.

A significant correlation has been found between the percentage of votes to VOX -November 2019 and the percentage of foreign people in the municipality (Pearson=0.400; $p=.000$), as well as of VOX votes with the SI (Pearson=0.08; $p=.021$), although the variability explained by the latter is minimal. The analysis of the correlations of the percentage of foreign population by continent of origin in the municipality has also shown significant correlations only with the vote for VOX in November (not April). These statistically significant correlations occur with positive orientation for populations from Africa (Pearson=0.33; $p=.000$); America (Pearson=0.21; $p=.000$); Asia (Pearson=0.14; $p=.000$) and Europe (Pearson=0.28; $p=.000$). The correlations of votes for VOX in November 2019 with the percentage of the foreign population and their different origins at the census tract level have also been positive and significant in this same direction.

The support for the dependent variable by VOX in November of the variable percentage of foreign population in the municipality, together with the average income per person and the SI, has been

analysed by means of multiple linear regression. Income did not show significant correlations with the VOX vote. The results have been statistically significant for the other variables, but with a value of R2 corrected to a fairly low 10%. The standardised regression coefficients show that the percentage of the foreign population is more relevant than the SI variable (Beta of 0.321 and 0.050 respectively). The descriptive analyses show the following averages in VOX votes for each variable, with an increase observed in municipalities with more foreign people and more segregation.

TABLE 2
DESCRIPTIVE STATISTICS PERCENTAGE OF VOTES TO VOX
(NOV-19) FOR EACH VARIABLE

		<i>N</i>	<i>Average</i>	<i>Standard deviation</i>	<i>Standard error</i>	<i>Minimum</i>	<i>Maximum</i>
PROPORTION OF TOTAL FOREIGNERS	Quartile 1	192	15,6	5,31	,38	3,00	30
	Quartile 2	193	16,6	5,49	,40	0,62	32,7
	Quartile 3	194	19,3	6,16	,44	3,62	33,2
	Quartile 4	192	22,1	6,81	,49	4,83	43,9
	Total	771	18,4	6,45	,23	0,62	43,9
SI	To Quartile 2	385	17,93	6,55	,00334	1	37
	Quartile 3	193	18,28	6,01	,00433	4	35
	Quartile 4	192	19,51	6,38	,00461	5	39
	Total	770	18,41	6,41	,00231	1	39

Considering the percentage of the foreign population, the ANOVA carried out shows that the greater the presence of foreigners, the greater the percentage of votes for VOX ($F=39.41$; $p=0.000$). There are significant differences between all quartiles, except between quartile 1 and 2.

To check this together, a univariate general linear model has been made with the variables and their intersection, including also the level of income per person in the municipality in the model. The results revealed the non-significance of the income variable in the model. This has been confirmed by repeating the ANOVA analysis for income distributed in quartiles, which is not significant. Therefore, the analysis was repeated excluding this income and carrying out

the analysis with the SI variables and the percentage of foreign population in the municipality. The averages of the percentage of votes to VOX considering all variables together (SI and percentage of foreigners) are shown in the following table.

TABLE 3
DESCRIPTIVE STATISTICS OF PERCENTAJE OF VOTES
TO VOX IN NOVEMBER 2019, PERCENTAJE OF FOREIGNERS
AND SI VARIABLES.

<i>Percentage of foreigners</i>	<i>SI</i>	<i>Average</i>	<i>Standard deviation</i>	<i>N</i>
Quartile 1	To 2nd quartile	15,77	5,499	89
	3rd quartile	15,17	5,184	52
	4th quartile	15,7	5,212	50
	Total	15,61	5,319	191
Quartile 2	To 2nd quartile	16,19	6,001	80
	3rd quartile	17,15	5,330	65
	4th quartile	16,58	4,828	48
	Total	16,61	5,492	193
Quartile 3	To 2nd quartile	17,99	6,629	105
	3rd quartile	20,87	5,073	44
	4th quartile	20,94	4,732	45
	Total	19,33	6,052	194
Quartile 4	To 2nd quartile	20,84	6,628	111
	3rd quartile	22,04	6,547	32
	4th quartile	24,81	6,069	49
	Total	22,07	6,663	192
Total	To 2nd quartile	17,93	6,557	385
	3rd quartile	18,28	6,019	193
	4th quartile	19,51	6,384	192
	Total	18,41	6,408	770

The model tests are significant for the corrected model ($F(11,770) = 15.70$; $p = .000$), as well as for the main effects of percentage of foreigners ($F(3,770) = 48.9$; $p = .000$), of SI ($F(2,770) = 6.84$; $p = .001$) and the effect of the intersection of both variables ($F(6,770) =$

2.48; $p = .024$), explaining according to the determination coefficient 17.4% of the variability of the votes to VOX. The eta values for knowing the size of the effect are large in all cases. In addition, the observed power reaches the maximum level 1 in all cases, except in the interaction of the factors, which is 0.92.

The post-hoc comparisons of the analysis of variance for each main effect indicate that significant differences in the percentage of vote to VOX derived from the variable percentage of foreigners are produced at all levels, except between the two lower ones (quartile 1 and 2, that is, municipalities with a lower proportion).

Similarly, in the SI factor categorized into quartiles, the statistically significant differences are located between the extreme groups only (between those municipalities with the least and those with the greatest segregation).

Knowing the behavior of the variables that reflect the population reality of presence and segregation of foreign people at the municipal level in relation to the VOX votes, the next step to be able to respond to the global objectives and hypotheses proposed, is to carry out analyses with a greater level of territorial disaggregation, focused on the census tracts. In this sense, and following the same logic as in the previous analysis, we have worked on the reality of the population, which reflects a behavior analogous to the municipal one in general terms. Specifically, work has been added with the Location Coefficient (LC) and its relations with the percentage of vote to VOX.

The data on the foreign population is distributed very unevenly among the census tracts (the average is 6.5% of foreigners (6.5%), but the median is 3.6% with a high standard deviation (0.832), and the maximum value is 69%. These data, together with the quartiles, show an agglutination of the sections in not very high values of proportion of foreign population, since the 75th percentile is situated in the value 7.6%.

Next, the location coefficient per section (LC) was calculated, which establishes a ratio between the proportion of foreign people in the section with the proportion that exists in the municipality, thus showing whether or not there is a relative concentration of foreign people in these units of analysis. The interpretation of the results is simple: when the value is greater than 0 and less than 1 there is a relative deficit in the census tracts; if it is 1, the section has the same proportion of foreigners as the city as a whole; and finally,

when the value is greater than 1 it is said that there is a relative surplus in the census tracts.

The descriptive statistics of the LC indicate an average of 1.018 with a standard deviation of 0.634, but with a maximum value of 7.64, which again shows the tonic of great variability and distribution of the data. In order to establish subsequent analyses incorporating the geostatistical and geographical representation component, this variable has also been categorized considering the mean and standard deviations (two standard deviations). Thus, from the minimum value to the mean is considered low LC, from the mean to two standard deviations above a medium LC, and above two standard deviations from the mean a high LC. Knowing that most sections have a low LC (given the mean, deviation and maximum values mentioned), an uneven distribution is obtained, but it is interesting to be able to locate and consider those more extreme sections that present the highest concentration of foreign people compared to the distributions of their own municipalities.

The distribution of the set of census tracts categorized in levels is distributed in (excluding 2.1 considered lost): 60% for the low LC, 34% for the medium LC and 3.8% for the high LC.

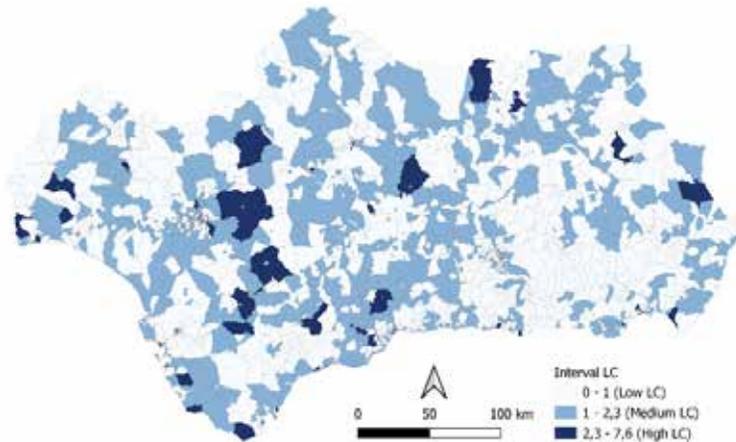
If the results of the percentage of votes to VOX for the sections are taken, the average is 20%, with a maximum value of 46%, but where the value of the 75th percentile is 24%. Table 4 shows the descriptive statistics of vote to VOX by groups, observing that the behavior is that the sections with medium or low LC behave in a similar way, while the high LC tracts have lower average vote to VOX.

TABLE 4
DESCRIPTIVE VOX NOV-19 STATISTICS BY LC GROUP

<i>CL_INTERVALOS_SD</i>		<i>N</i>	<i>Min</i>	<i>Max</i>	<i>Average</i>	<i>Std. Dev.</i>
Low LC	VOX_nov19	3478	,06	48,3	20,05	6,33
	N	3478				
Medium LC	VOX_nov19	1972	,01	48,7	20,24	6,33
	N	1972				
High LC	VOX_nov19	222	,04	34,4	19,76	6,02
	N	222				

The distribution of LC is shown geographically in Figure 3, considering the different levels from the mean and two standard deviations to group the variable into three categories.

FIGURE 3
DISTRIBUTION ACCORDING TO LC.



Source: own elaboration.

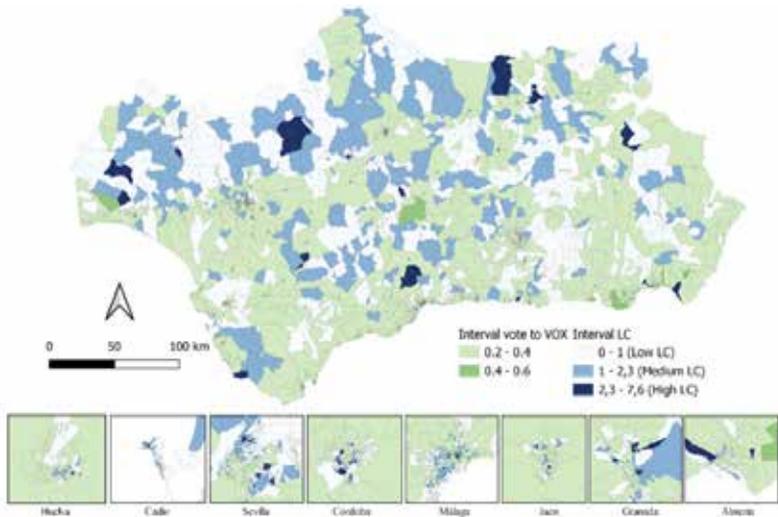
There is no significant correlation between the VOX ratio and the LC, nor is there any statistically significant difference between the LC and the VOX ratio. Even considering the VOX ratio categorized in levels, there is no association with interval LC contingency analysis.

These data are relevant in relation to the research hypotheses presented, considering, in the first place, the approach to the phenomenon at the municipal level, and in a second moment focusing on the census tracts. Therefore, it has been considered that the statistical analysis is necessary, but not sufficient to explain the voting behavior to VOX, and should be incorporated into a geospatial analysis. Both analyses make it easier to give a more accurate response to reality and with greater rigor to cover the objectives and hypotheses raised.

A geographical and spatial analysis of the location of the sections according to their LC has been carried out together with their

proportion of vote to VOX, evaluating their geographical position. Figure 4 shows that the vote for VOX is higher in those sections with medium and low LC, especially in tracts attached to those where the LC is high, and which do not have a large proportion of votes for VOX. This is also occurring mainly in urban environments, reflecting in the figure the main sections of the capitals of Andalusian provinces. This reality can be seen in these municipalities, except in the case of the municipality of Cadiz, which, although it has sections with a high LC, does not show a high proportion of votes for VOX (in fact, in this municipality the majority of the votes have been for United We Can, a political movement totally opposed to VOX).

FIGURE 4
GEOGRAPHICAL DISTRIBUTION LC AND VOTE TO VOX



Source: own elaboration.

5. DISCUSSION AND CONCLUSIONS

The irruption of VOX in the Spanish political scene, as a representative of the radical populist movement that has gained prominence in Europe in the last 20 years, has come with a delay

compared to other European countries in the trend of voting towards the political right, but has had a very rapid evolution in terms of electoral support, placing it among the most voted parties in only 6 years of history.

This evolution, in addition to the media noise caused by very controversial measures that it exposes in its political program, has put in the target the immigrant collective, one of the most attacked by this political party.

Following the results of the 2019 congressional elections, numerous media outlets warned of the association between the percentage of migrants in the municipalities and the number of voters for this party, and even inferred that the vote for VOX came from the migrant population.

In order to understand this reality in the Autonomous Community of Andalusia, the variables assumed by these publications and broadcasts have been considered. With this, the first step has been the population characterization of the municipalities and census tracts (as a minimum unit of territorial analysis). The current reality is that in Andalusia there is a 7% foreign population, but this is reflected in a disparate manner in the municipalities, since, although the average is not high, there is a not very large percentage of municipalities that have a greater proportion of foreign people among their inhabitants, specifically 15% of the municipalities are those that have shown to have more than 11% foreign people (exceeding the national average).

Secondly, work has been done on population segregation, which shows the existence of municipalities where there is a greater or lesser concentration of foreign population. It is possible that the proportion of foreigners is not matched by the behavior of the SI, and there may be municipalities with a high proportion of foreigners with a low SI, that is, foreigners are distributed equally throughout the municipality, or vice versa.

The analysis of the correlation of these variables in the municipalities in the Autonomous Community of Andalusia confirms a correlation between the VOX vote and the percentage of foreign population. In addition, the above results confirm that the inclusion of residential segregation is influencing the VOX vote. The model that has proved significant concludes that the municipalities with the highest percentage of VOX votes are those with a high percentage of foreign people and a high degree of residential segregation. However, the phenomenon is multi-causal

and complex, which would also explain the low SI values and the low determination coefficient found.

These data lead to the conclusion that residential segregation is a key element in the polarization of the right-wing vote, especially in those municipalities with a high percentage of foreign population. This correlation distorts the thesis that the vote for VOX is being exercised by the migrant population, since we are talking about municipal data where the foreign population is also more concentrated in some sections than in others.

Nevertheless, in order to be able to study this relationship in greater depth, the location coefficient of the census tracts in the Andalusian community has been calculated, from which it is possible to identify in which sections the number of foreign people is significantly greater than in the rest of the sections of the municipality to which they belong, which allows us to know which populations are more concentrated at the population-spatial level.

The statistical results do not show evidence that correlates the location and voting coefficient to VOX, so this relationship cannot be confirmed with statistical analysis. However, it is true that there is great variability in the data of this coefficient, which is mostly present at low levels. However, there is a tendency for the sections with a higher location coefficient to have a lower VOX voting behavior than the rest of the sections in the Andalusian community. Furthermore, this phenomenon seems to be more acute in urban environments than in municipalities with smaller populations.

Although the statistical results cannot corroborate this trend, a geospatial study shows that the sections with a higher concentration of foreign population present a relatively low VOX vote with respect to nearby sections.

Therefore, according to the objectives and hypotheses of research raised, in light of the results obtained from the analysis of the data, it can be deduced that, although the municipalities with a greater percentage of foreign people present a higher percentage of vote to VOX, the residential segregation of the foreign population is a factor to be taken into account in the influence of vote to this party. This conclusion allows us to confirm the first two objectives established at the municipal level that defend this relationship.

However, the trend shown by the joint data and geospatial analysis shows that this increase in the vote for VOX does not materialize in the sections with the highest concentration of foreign population

(highest LC), but rather the opposite, in the sections attached to the segregated sections, as shown by the maps represented.

These findings defend the theories that warn of the conflicts in urban life that occur in divided or segregated environments, but also that it is not directly the migrant or foreign population that is voting for right-wing formations like VOX, but rather the population that resides near the spatial and social border with this population that is doing so.

The media conclusion is that VOX wins in municipalities with migrants, and in a general way this can happen, but we must go further in the approach and understanding of the phenomenon. In these statements, various explanations have been contemplated. One of them is that it is related to the idea and functioning of populism, as well as nativism that is oriented toward national monocultural states, and as Sanjuan and Goetzenberger (n. f.) point out, it is associated in the European context with extreme right-wing formations that seek the favor of the “people” as a reflection of the true “nation,” where foreigners are excluded. A common feature of the populist extreme right consists in a repeated discourse of xenophobic slogans such as “Home come first” (FN, France), “We want to take back our country” (UKIP, UK) or “There is only one nation” (VOX, Spain).

This element, together with the thesis of the protest parties in moments of disaffection of the population towards politics, as has happened in Spain, generates a greater facility of strengthening the support to parties like VOX. Moreover, taking up again the logic of “fear”, or the sociological theory of the scapegoat, when complex crisis scenarios occur, it is easier to generate a centripetal logic, seeing the different as an external threat.

Another element to consider is that which has to do with inter-group relations, along the lines set forth many years ago by Allport (1954, cit. In Alvidrez Villegas, 2012) with his hypothesis of contact, alluding to a gradual reduction of prejudice and a change in stereotypes through direct contact between members of differentiated groups, such as the foreign and native population. Although it is true, conditions have been subsequently added to this contact to produce these effects (similarity of status, shared goals...). In part, this contact can be reflected in the results obtained, where more segregated populations, may have fewer options or trend of intercultural contact, and therefore the vote to VOX is greater than in those with less segregation and therefore greater possibility of

this contact. The same is reflected at the level of census tracts with high LC with respect to their bordering sections.

From fear, the foreign person (or collectivities) is a threat at multiple levels, economic linked to the reality of work, the use of resources, but is also a risk to cultural identity (Anón n. d.). From the approach proposed by Mellón (2009), these are political formations that are associated with the reality of migration because they are against multiculturalism and advocate an ethnocentric and nationalist ultraidentity liberalism, according to criteria of national preference and differentialist racism.

6. LIMITATIONS AND FUTURE LINES

The census tracts has been taken into account as the minimum territorial unit of analysis, but it is too broad a territorial framework to know the spatial distribution of foreign people. The census tracts have been taken into account as the minimum territorial unit of analysis for this study, but it is too broad a territorial framework to know the spatial distribution of foreign people. For this reason, analyses have been carried out on the percentage of the foreign population at the municipal level, an issue which is expected to be further developed, as well as on its breakdown by origin (at least in the large continents).

A study of the percentage of foreign population, segregation index and the location coefficient has been carried out. These measures refer to only one of the dimensions of residential segregation, which although it is the most frequent in population studies, it would be interesting to take into account other dimensions that consider the interaction between different social groups, the spatial size of areas with over-representation of the foreign population or the location and peripherality of the most segregated areas.

Despite the fact that the index of segregation is a widely used index in the international scientific context, it is an index that does not operate adequately, for the case at hand, in municipalities with one or few census tracts, since it increases its significance to the extent that the data can be compared in the different tracts. Nevertheless, the calculation of the location coefficient obtained for the census tracts contributes to strengthening the analysis, especially in cases such as those referred to.

Future work is oriented towards different complementary fronts. The first is aimed at completing the analysis with other population indicators mentioned in relation to the VOX vote like as socioeconomic status, age, origin, etc. Secondly, to carry out more detailed studies at the provincial and municipal level of those territories that can be selected as the most relevant because of their segregation and the rest of the indicators. To this must be added the distinctive feature of each territory and the multiple conditions that may affect the decision and action of voting in some political formations or others. Finally, the incorporation of other factors of social class, education and territorial differentiation that may be explaining the electoral behavior towards right-wing parties in Europe (Pardos-Prado, 2019). As well as incorporating a more disaggregated analysis by place of origin of this foreign population, as another explanatory or differential factor. Finally, it would be interesting to increase multivariate analyses given the very complexity of the phenomenon, which will undoubtedly be explained with greater determination by social, economic and spatial variables. In this sense, the difficulty and challenge lies in the availability of relevant data at levels of territorial disaggregation required to allow these complex approaches, while necessary and interesting for the transfer of scientific knowledge to social reality.

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