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Visibility and votes: A spatial analysis of anti-immigrant voting in Sweden

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Abstract

The mechanisms by which negative attitudes toward immigrants become votes for anti-immigrant parties are not fully understood. Yet, voting for political parties with anti-immigrant platforms is arguably the most common expression of these sentiments in Europe. I use anti-immigrant attitudes as a starting point and hypothesize that superficial intergroup contact, or immigrant 'visibility', brings these attitudes to the fore as politically salient. A spatial analysis of electoral data from each polling station in Sweden for the 2010 parliamentary election (n= 5,688) provides support for the hypothesis. Much of the variance in district-level voting can be accounted for by the percent of non-western residents in adjacent neighborhoods. The findings suggest that the probability of anti-immigrant attitudes translating into votes increases in neighborhoods where residents are likely to have fleeting contact with immigrants and I test this further with a city-level case study. I collected observational data on the visibility of non-westerners in a mid-size Swedish city and find that votes for the Sweden Democrats are above the national average where immigrants are most visible. Furthermore, the effect of non-western residents on anti-immigrant voting is most pronounced in regions without histories of significant non-western immigration, suggesting that the negative effects of superficial contact diminish over time.

Keywords: immigration, voting, contact, attitudes

1. Introduction

At first glance, an article about voting might seem a bit out of place in a special issue on attitudes toward immigration. But voting for political parties with explicitly anti-immigrant platforms is arguably the most common, visible expression of anti-immigrant attitudes in Europe today and its prevalence is increasing in many countries. Marine Le Pen, leader of France's National Front, received 17.9 percent of votes in the first round of the 2012 presidential election—a record number for the party. In the 2011 national election,

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the Swiss People's Party surpassed all other parties in Switzerland, with over 25 percent of the vote. Anti-immigrant parties are growing even in some countries where they have not been popular before. The British National Party received nearly 50,000 votes in the 2010 Westminster election, despite its first-past-the-post rules, and in the same year the Sweden Democrats won parliamentary representation for the first time. Group threat is commonly used to explain both negative attitudes toward immigrants and anti-immigrant party success. Europeans may feel that non-western immigrants threaten their economic well-being or national culture. It is not surprising, then, that anti-immigrant parties have become successful as migration from developing countries has increased and, more recently, as the global recession has spread.

While group threat undoubtedly plays a role in the formation of anti-immigrant attitudes, and attitudes are a necessary precursor to anti-immigrant voting, the relationship between attitudes and votes is not straightforward. Negative attitudes are strikingly high and consistent across Europe (Ceobanu and Escandell 2010), while party success is variable across countries. For instance, the western European countries with the lowest levels of opposition to immigration—the Nordic countries, Finland, Switzerland, and Luxembourg—all have nationally successful anti-immigrant parties, while several countries with less favorable attitudes do not—Portugal, Germany, and Spain, for example (Sides and Citrin 2007). And while Lubbers et al. (2002) find that national-level variation in anti-immigrant voting is impacted by public opinion toward immigration, characteristics of the parties themselves have an even greater effect. It is not surprising that attitudes are not perfect predictors of behavior, as this is a common finding in the social sciences, but it does highlight the need to further investigate the conditions under which negative attitudes toward immigrants manifest as votes.

One possible mechanism by which anti-immigrant attitudes turn to votes is through the increased salience of immigration as political issue. Even if political preferences remain stable, their reordering can lead to a change in voting behavior if a new dimension not represented by one's current party becomes relevant. Immigration may increase in salience via superficial, but routine, interpersonal contact between ethnic majority group members and immigrant group members which results in immigrants becoming more 'visible' in their communities. Dating back to Allport (1954), it has been hypothesized that fleeting intergroup contact may heighten negative sentiments toward out-group members (though meaningful intergroup contact diminishes them). But contact has also been shown to influence political behavior. In Dutch cities, segregation increased anti-immigrant party votes and the effect was greatest in more tolerant cities (van der Waal et al. 2013). Since segregation decreases the overall likelihood of meaningful intergroup contact, this is consistent with expectations of the contact hypothesis. Similar results were found in Britain. The probability of anti-immigrant party membership increased in ethnically heterogeneous cities only if those cities were also segregated. In Sweden, living next to, but not within, an ethnically heterogeneous neighborhood increases anti-immigrant voting. Drawing upon distinctions between meaningful and superficial contact, Rydgren and Ruth attribute these findings 'to the discrepancy between living close to the "imagined other" but not the "experienced other"' (2013: 13). Furthermore, in line with expectations regarding the positive effects of meaningful contact, party membership in Britain was negatively correlated with heterogeneity within a neighborhood, where sustained meaningful contact is

likely to develop (Biggs and Knauss 2012). *Ceteris paribus*, routine yet superficial contact with members of an immigrant out-group should increase the probability of casting a vote for an anti-immigrant party among members of the ethnic majority group with pre-existing negative attitudes.

Unlike other articles in this issue, I do not attempt to explain the emergence of anti-immigrant attitudes, nor do I use them as an explanatory variable. I begin with the assumption that they are pre-existing in the population and are a necessary but insufficient cause for anti-immigrant voting, then examine one condition under which they may become politically salient—through superficial contact with ethnic 'others'. This article builds upon existing literature and tests the relationship between neighborhood ethnic heterogeneity and anti-immigrant vote in the 2010 parliamentary election in Sweden. It adds to Rydgren and Ruth's (2013) findings by testing the effect of a broader set of neighborhoods using spatial analysis rather than OLS. This method allows me to examine the effects of more distant neighborhoods, rather than only including those that share a border, and it also enables me to detect regional variation in the effects of ethnic heterogeneity on voting.

I find that most variation in anti-immigrant party voting can be accounted for by the ethnic heterogeneity of the five to ten nearest neighborhoods and that the effect is weakest in regions with the longest histories of immigration. This suggests that the negative impacts of contact diminish over time, perhaps as meaningful intergroup relationships develop over a broader set of the population. Additionally, I find that neighborhood-level heterogeneity is a better predictor of anti-immigrant vote than municipal-level measures of heterogeneity or group threat, which suggests that contact with one's neighbors is more relevant than the overall proportion of immigrants in a city when explaining anti-immigrant political behavior. I couple these quantitative analyses with observational fieldwork in a mid-sized Swedish city, thereby examining the effect of residential segregation on intergroup contact in shared public spaces.

2. Literature review

Prejudice toward immigrants is widespread across Europe (Zick et al. 2008) and is commonly attributed to perceived threats. The group threat hypothesis posits that a minority group poses a threat to the majority's social position as they grow in number (Williams 1964) or begin to compete for resources (Blalock 1957). Ethnic majorities may fear that immigrants will compete for low-skill jobs, undermine local wage structures, or require government-provided social assistance. Non-western immigrants in particular may have foreign customs, religions, and languages that threaten dominant national cultures. Therefore, negative sentiments toward immigrants will form when members of the ethnic majority group feel economically or culturally threatened. In response, anti-immigrant parties arise and promote policies that have been described as xenophobic and racist—often seeking to reduce immigration rates, cut social benefits to newcomers, promote assimilation, or increase aid to developing countries so as to reduce the push factors of immigration.

Economic threat models work well at the individual level, though the evidence is mixed for larger units of analysis. At the individual level, education is negatively correlated with

anti-immigrant attitudes across national contexts (see for example, Coenders and Scheepers 2003). Negative sentiment toward immigrants is also correlated with low labor force status (Scheepers et al. 2002; Gorodzeisky and Semyonov 2009) and unemployment (Semyonov et al. 2008). The unemployed (Lubbers et al. 2002), males (Givens 2005), and the working and middle classes (Ivarsflaten 2005; Norris 2005) are overrepresented among far right voters. Economic threats are less effective at explaining national trends and cross-national variation. There is mixed evidence on whether unemployment rates or economic growth rates affect country-level anti-immigrant attitudes (Quillian 1995; Arzheimer and Carter 2006). And research does not consistently find the expected correlations between unemployment rates and anti-immigrant votes at the municipal, regional, or national level (Givens 2005; Lubbers and Scheepers 2001; Arzheimer and Carter 2006; Knigge 1998).

There is much less evidence on the ways that cultural threats affect anti-immigrant attitudes and voting behavior (perhaps because cultural variables are more difficult to measure). However, there is evidence that they may be more important than economic threats in predicting anti-immigrant attitudes (Sides and Citrin 2007). Schneider (2008) finds that the percent of non-western immigrants in a population affects anti-immigrant attitudes more than the percent of low-educated immigrants. This suggests that Europeans are more threatened by newcomers who are culturally distant than by those who may require welfare benefits or compete for low-skill jobs.

Much like economic threat, there is mixed evidence regarding the aggregate effects of cultural threat. The number of immigrants in a country is correlated with perceived threat at the national level (Lubbers and Scheepers 2001), but effects on voting are less clear. Some studies find a correlation between overall levels of immigration and far right voting (Swank and Betz 2003; Van der Brug et al. 2005), while others do not (Norris 2005). These discrepancies may arise because a greater number of immigrants may cause majority group members to feel higher levels of intergroup threat, but a greater number of immigrants also creates more opportunities for intergroup friendships to develop, which should reduce feelings of cultural threat. Schneider (2008) finds a curvilinear relationship between the percent of non-western immigrants and perceived threat among Europeans.

Group threat, either economic or cultural, is certainly integral to the formation of anti-immigrant attitudes, but does not consistently explain voting behavior. Anti-immigrant attitudes, therefore, are a necessary but not sufficient condition for anti-immigrant voting. The same attitudes simply have different effects in different contexts and the conditions under which anti-immigrant attitudes become politically salient are discussed in the following sections.

2.1 Contact

One reason that attitudes are not reliable predictors of voting behavior is because the salience of beliefs are more important than their content; after all, an individual is acting on only a small subset of his beliefs during any one election. Even if an individual has a negative view of immigrants, he is unlikely to choose a party based on that attitude unless it is more important to him than other political issues such as the economy, the environment, or social welfare spending, for example. Intergroup contact can serve to heighten the

salience of anti-immigrant attitudes because, just as meaningful contact with immigrants can reduce anti-immigrant attitudes, superficial contact exacerbates them and likely brings them to the fore as politically relevant.

The contact hypothesis in its classic form predicts that if members of groups interact in situations where they have equal status, intergroup prejudice will be reduced, and the effect will be enhanced if the institutional environment fosters the perception of common interests (Allport 1954; Williams 1964; for reviews, see Brewer and Miller 1996; Durrheim and Dixon 2005). In order for this type of contact to reduce intergroup conflict, these interactions must transcend the individuals involved so that the new positive attitude will be generalized toward all members of the out-group (Hewstone and Brown 1986). In other words, a prejudiced individual must perceive the out-group member as an average representative of her group, rather than as an exception, although the same positive effects can be achieved if enough intimacy develops that individual traits become more salient than group identities (Miller and Brewer 1984). Alternatively, meaningful contact is successful in reducing intergroup conflict if it promotes a larger, common group identity which both groups share (Gaertner and Dovidio 2000; Gaertner et al. 1993, 1996).

Recent meta-studies show that most research conducted over the past few decades confirm the expectations of the classic contact hypothesis (Brown and Hewstone 2005; Pettigrew et al. 2011); however, recent advances have also been made. For instance, Allport originally hypothesized that contact reduced prejudice by increasing knowledge of the out-group, but more recent work suggests that the effects are more physiological than cognitive. Contact appears to reduce anxiety and fear of interactions with the out-group (Page-Gould et al. 2008). And once prejudice toward an out-group has been reduced through contact, it may generalize to other out-groups with whom there was no contact (Pettigrew 2009, Schmid et al. 2012). Meaningful contact combined with living in an ethnically integrated community also has positive effects on trust and altruism (Uslaner 2012). Furthermore, extended contact—having in-group friends who have out-group friends—can also reduce negative sentiments (Christ et al. 2010; Dovidio et al. 2011; Pettigrew and Tropp 2008). Therefore, one need not have direct contact with an out-group member so long as one is closely connected to someone who does. The effects of contact, then, diffuse through direct links in social networks, though these effects are not as strong as those produced through direct contact (Turner et al. 2007)

Despite the potential for friendships to reduce negative attitudes toward out-groups, most daily interaction between members of different social groups is fleeting or superficial; therefore, the majority of contact does not reduce prejudice. In fact, intergroup contact has been shown to lead to resegregation and avoidance (Alexander and Tredoux 2010; Taylor and Moghaddam 1994) or anxiety (Islam and Hewstone 1993; Stephan and Stephan 1985) that decreases tolerance (Greenland and Brown 1999; Stephan and Stephan 2000). Most intergroup contact is structured by some degree of informal segregation on a micro level that shapes everyday interactions (Durrheim and Dixon 2005; Duncan and Duncan 1955; Goldberg 1998; Massey and Denton 1988; Schnell and Yoav 2001). For this reason, one would expect that typical, day-to-day interactions between group members are not sufficient to alter attitudes. In fact, it is more likely that ordinary contact will serve to reinforce, or even amplify, pre-existing prejudices because group members are likely to meet under suboptimal conditions.

These patterns of daily interaction can have meaningful effects on people's attitudes toward out-group members. Rote activities such as buying groceries, walking down the sidewalk, or sitting at a cafe can become the basis upon which out-group prejudices become politically salient. Therefore, when assessing the impact of contact on anti-immigrant attitudes and voting behavior, it is important to distinguish meaningful from superficial contact. Meaningful contact from the perspective of the contact hypothesis is the type that allows individuals to look past group differences and overcome prejudice. There is evidence in the European context that friendships between ethnic minority and majority group members meet this criterion (Schneider 2008; McLaren 2003). Superficial contact, on the other hand, is the type that sustains or exacerbates prejudice. So, increased visibility of immigrants should serve to maintain anti-immigrant attitudes among the proportion of the population holding them, and research on social segregation suggests that this fleeting, routine contact between individuals comprises the bulk of intergroup contact in most public settings.

2.2 Salience

I hypothesize that superficial contact not only sustains or aggravates anti-immigrant attitudes; it also brings them to the fore as a politically salient issue. This can help explain the disjoint between attitudes and voting behavior because one will only vote according to a belief if it is a politically salient one. Unlike attitudes, which are not easily changed, salience changes relatively frequently and unpredictably (Ivarsflaten 2005). Eatwell (1994) claims that simply attributing the rise of anti-immigrant parties in Europe to attitudinal changes among voters oversimplifies the complex relationship between belief and action, and changes in ranking of political preferences is a plausible alternative. Even if attitudes and beliefs are constant, voting behavior will change if saliency shifts. List and Dietrich (2011) show that partisan change can be derived entirely from a shift in motivationally salient dimensions, even if the individual has no change in belief and receives no new information. This is consistent with explanations of the partisan shift that occurred in the United States when the Civil Rights and Voting Acts made race a politically salient issue (Miller and Schofield 2003).

Immigration can come to the fore as a politically salient issue through contact with ethnic minorities. If an individual commonly encounters immigrants in daily life, immigration may come to mind in the polling booth because he considers it relevant at the moment. The accessibility of an issue in one's memory serves as an important heuristic in a field of complex political information (Huckfeldt et al. 1999) and there is evidence from survey data that issue proximity trumps self-interest in explaining political preferences (Sears and Lau 1983). Accessibility models have been applied in political science to explain policy preferences and presidential choice in the United States (Aldrich et al. 1989; Jacobs and Shapiro 1994; Krosnick 1988) and Canada (Johnston et al. 1992), as well as beliefs on rights and liberties (Chong 1993). This 'top of head' effect determines salience because 'the more recently a consideration has been called to mind or thought about, the less time it takes to retrieve that consideration or related considerations from memory and bring them to the top of the head for use' (Zaller 1992). These findings indicate that political preferences remain fairly stable while their order of importance is transient.

The visibility of immigrants should especially bring immigration to the fore as a political issue when newcomers are members of an ethnic group distinct from the ethnic majority. Wimmer (2008) posits that the visibility of ethnic markers makes ethnic boundaries politically salient, and salience is increased when boundaries are resistant to change or there is inequality between groups. Furthermore, negative contact with a member of an ethnic outgroup has been shown to increase the salience of ethnicity more than positive contact does (Paolini et al. 2010). So while fleeting, everyday contact with ethnic minority group members is unlikely to change one's attitude toward immigrants, it is likely to make one's preexisting attitudes politically salient.[1] Of course, daily interactions in one's neighborhood are not the only way that immigration can become a salient political issue, but it is certainly one worth investigating. For the proportion of the population holding negative attitudes toward immigrants, superficial contact should increase the likelihood that they will vote for a party with an anti-immigrant platform.

3. Variables

I use data from the 2010 parliamentary election in Sweden because this was the first election in which the anti-immigrant Sweden Democrats gained national representation, which helps me control for many explanatory variables. For instance, in a breakthrough election, a party does not have a long-standing mobilizable base larger than the electoral threshold, a roll-call record, or a history of compromise with other parties that can explain their success. Furthermore, a single country study allows me to control for national-level variables that may contribute to party success—immigration rates, unemployment rates, economic growth, electoral rules, and political landscape, for example.

The Swedish case is appropriate for studying the effects of contact because Sweden is marked by significant residential segregation; hence, there is much variation in expected levels of intergroup contact. There are large differences between cities, with 12 municipalities having foreign-born residents that comprise approximately 20 percent to 40 percent of the total population, while 88 municipalities have fewer than 6.5 percent, and eighteen have fewer than 4.1 percent (Statistics Sweden 2006). But there is also significant variation to be found within cities, with neighborhoods ranging from zero to over 90 percent first- and second-generation non-western immigrants (Statistics Sweden 2010). These segregation patterns are partially attributable to the state's liberal refugee resettlement polices (refugees are not 'assigned' to municipalities) and stock of large, isolated housing projects commonly referred to as 'immigrant ghettos' among Swedes.

I measure variables at three levels in order to test for the effects of threat and contact on anti-immigrant voting. The smallest units are neighborhoods (n= 5,688), which are nested in municipalities (n=290). Municipalities, in turn, are nested within labor markets (n=68).

3.1 Neighborhood level

To test the proposed relationship between contact and voting, I analyze vote results from the 2010 parliamentary election in Sweden. The dependent variable of interest is *vote for an anti-immigrant party*. In Sweden, the only current national party whose primary platform

centers on restricting immigration is the Sweden Democrats (*Sverigedemokraterna*), a party formed in 1988 that won parliamentary seats for the first time in 2010 when they garnered 5.7 percent of the vote. I measure votes cast for the Sweden Democrats as a proportion of total eligible votes[2] (n= 4,665,460) at each polling station in the country.

The primary causal variable of interest, *non-western residents*, is the proportion of the population not born in Nordic or EU-27 countries[3] (Statistics Sweden 2010). In Sweden, this group is comprised mainly of refugees and asylum seekers who arrived in Sweden beginning in the early 1980s, guest workers from the 1960s and 1970s, family members who arrived under family reunification laws, and their children born in Sweden. I include the estimate of immigrants' children born in Sweden, defined as individuals born in Sweden to two parents born outside of Sweden,[4] because according to the tenets of the contact hypothesis, contact with any person perceived to be a member of an out-group should have an effect, regardless of their country of birth.

I measure both of these variables—vote and the proportion of non-western residents—at the electoral district level. Each electoral district (n= 5,688) contains one polling station, such as a school or community center, and the median population is 1,659 with values ranging from 122 to 4,512 inhabitants. This unit of analysis is better than city or regional level measures to test the contact hypothesis since electoral districts approximate neighborhoods, which are an important source of daily, routine intergroup contact for most individuals. Official district names correspond to neighborhood names in many instances, which suggests they coincide with geographic borders that residents consider meaningful.

3.2 Municipal and labor market level

I include several variables necessary to test for the effects of economic threat at the municipal level (n=290). *Education* is the percent of the population with three or more years of post-secondary education.[5] *Income* is the median disposable income of the working age population in the year preceding the election, measured in deciles. Using a measure of disposable income rather than salary allows me to account for differences in tax rates, home ownership, and capital gains income across municipalities. *Unemployment* is the percent of the working age population who registered as unemployed at any time during the year prior to the election.[6] This is a more inclusive measure than employment because employment data were collected at only one point during the year, but unemployment includes anyone who experienced a period of joblessness during the previous year. *Non-western income* and *non-western unemployment* are income and unemployment measures of the refugee population reported as ratios to the municipal average.[7] This is the only employment data available that allows me to distinguish immigrants from the general population, but it should be noted that it is a conservative estimate of 'immigrant' since it only includes refugees—it excludes their children born in Sweden, non-western labor migrants who arrived in Sweden mainly during the 1970s and 1980s, and immigrants who arrive for reasons of family reunification.

To test the effects of economic threat on those who compete most directly with immigrants for jobs or wages, I include percent *blue collar* workers, defined as the percent working age population employed in agriculture, forestry, fishing, manufacturing, mining, energy, environmental activities, or construction, as identified by the Swedish

Standard Industrial Classification (SNI 2007) scheme in accordance with its EU counterpart (EU NACE). I also included a measure of *public sector* employees because this group is more protected than private sector employees in the labor market and, therefore, faces less competition from immigrants. This is measured as the percent of the working age population employed in government administration, state enterprise, primary municipal administration, state-owned enterprises and organizations, municipally owned enterprises and organizations, or other public institutions.

The best available proxy for cultural threat at the municipal level is the proportion of *non-western residents* in the city because non-westerners are more culturally distant than their Nordic or EU counterparts in Sweden. I also include several municipal-level variables that should impact patterns of intergroup contact. I include *population density*—the number of residents per square kilometer in the municipality—which should affect the probability of intergroup contact. It does not allow me, however, to distinguish between meaningful and superficial contact. I also include a measure of the publicly owned[8] housing stock in each municipality built between 1966 and 1975 because this was the era of the *Million Programme* in Sweden. This government program added over one million new housing units in response to housing shortages during post World War II urbanization. The housing projects were built on the outskirts of cities and contained necessary neighborhood amenities such as shopping centers, restaurants, schools, libraries, and social service offices. Furthermore, because they were often constructed according to cutting-edge urban planning ideas of the time, a circular road with just one or two entrances often surrounds them. This increases the pedestrian-friendliness inside their boundaries, but also serves to create a sense of geographic isolation from areas beyond the perimeter. Today, many of these communities have a large proportion of non-western residents and are referred to colloquially as 'immigrant ghettos'.[9] This variable, *MP-era housing*, offers a proxy of the degree to which the non-western resident population is segregated, both residentially and socially during patterns of everyday movement, since these housing units were designed to be self-contained communities on the outskirts of cities.

In addition to municipal-level measures, I also include economic threat variables—*income, education, unemployment, blue collar, public sector, non-western income,* and *non-western unemployment*— measured at the level of labor market (n=68). The labor market is a geographic unit larger than a municipality identified by Statistics Sweden as a closed unit in terms of labor supply and demand, based on characteristics such as commuting patterns. This unit of analysis should provide a more accurate measure of economic competition than municipalities.

4. Methods and results

I test for economic threat and intergroup contact at the municipal and labor market levels, then focus on the neighborhood level to test for the effects of contact on a smaller scale. Because my variables are nested, in my first analysis I use a mixed model to estimate the effects of electoral district, municipal, and labor market variables on anti-immigrant party vote. I use the xtmixed command in Stata because it allows me to estimate a fixed effects

model (Snijders and Bosker 1999). This is preferable to a random effects model because my data are a census rather than a sample.[10]

Next, I focus on neighborhood-level contact by testing for spatial autocorrelation and spatial heterogeneity in the data. Spatial autocorrelation is a test of whether a variable is correlated with itself across space, which would violate the assumption of independence necessary for OLS regression. In this analysis, it indicates the extent to which neighborhoods of high (or low) anti-immigrant vote are clustered. Because I find significant spatial autocorrelation, I run geographically weighted regression models that identify spatial heterogeneity in the data. Spatial heterogeneity exists when the effect of a variable changes by location: in essence, an independent variable works differently in different places. In this case, geographically weighted regressions are particularly useful as an exploratory tool because they identify where the presence of immigrants has a greater or lesser effect on voting.

Lastly, I draw upon observational fieldwork conducted in Sweden during 2008 and 2009 to provide insight into the ways that residential segregation impacts intergroup contact in public spaces. I measure the visibility of immigrants in a mid-sized Swedish city with a *Million Programme* housing project. I compare the visibility of ethnic minorities in various parts of the city with voting results at corresponding polling stations.

4.1 Multi-level models

I begin with estimates of the effect of municipal characteristics (level 2) on electoral district votes (level 1). Model 1 is empty and indicates that with no explanatory variables included, approximately 62 percent of the variance in anti-immigrant party vote can be explained at the municipal level (Table 1). Model 2 assesses the effects of classic economic threat variables. *Non-western income* has the largest effect on vote and is positively correlated with support for the Sweden Democrats. This may indicate that Swedes feel they compete with immigrants for jobs, but do not feel the threat that immigrants will undermine local wage structures. Furthermore, the finding that *non-western unemployment* is negatively correlated with party support indicates that Swedes are not politically motivated by the economic threat of providing social benefits to immigrants. *Education* and *public sector employment* decrease anti-immigrant vote consistent with threat models, and *unemployment* is positively correlated with vote as expected. However, inconsistent with economic threat models, neither *income* nor *blue collar* employment is statistically significant.[11]

In Model 3 I add measures that impact intergroup contact—*population density* and *non-western residents* at both the municipal and neighborhood levels. *Non-western residents* at the district level have a small but significant effect on anti-immigrant party vote, but there is no effect at the municipal level. This indicates that voters are sensitive to ethnic heterogeneity at the neighborhood level and that, in terms of the presence of non-western residents, neighborhood characteristics are more relevant than municipal ones in determining voting behavior. *Population density* of the municipality has no effect on vote, which indicates that if contact impacts voting behavior, then intergroup contact is determined by factors other than simply the compactness of the city; perhaps segregation patterns or features of the urban landscape such as transportation networks matter.

Table 1. Multilevel models[a] of anti-immigrant party vote in Sweden

	(1)	(2)	(3)	(4)	(5)
Municipal-level variables					
Income		0.05	0.07	0.07	0.07
		(.13)	(.13)	(.13)	(.13)
Education		−0.12*	−0.13*	−0.16**	−0.16**
		(.05)	(.05)	(.05)	(.05)
Unemployment		0.22†	0.18	0.15	0.15
		(.12)	(.12)	(.12)	(.12)
Blue collar		0.01	0.02	0	0
		(.04)	(.04)	(.04)	(.04)
Public sector		−0.18***	−0.17***	−0.18***	−0.12***
		(.04)	(.04)	(.04)	(.04)
Non-western income		2.91†	2.34	1.83	1.83
		(1.53)	(1.57)	(1.56)	(1.55)
Non-western unemployment		−0.44*	−0.40†	−0.15†	−0.35†
		(.21)	(.21)	(.12)	(.21)
Non-western residents			0.06	0.12**	0.12**
			(.04)	(.04)	(.04)
Population density			0.00	0.00	0.00
			(0)	(0)	(0)
MP-era housing				−.10**	
				(.04)	
Non-western × MP					−.10**
					(.04)
District-level variables					
Non-western residents			0.01***	0.01***	0.01***
			(0)	(0)	(0)
Intercept	6.40	7.61	7.56	9.30	9.30
	(.15)	(2.44)	(2.45)	(2.49)	(2.49)
Proportion of variance					
Municipality	6.13	5.09	5.08	4.92	4.92
	(.54)	(.48)	(.48)	(.47)	(.47)
Electoral district	3.73	3.75	3.73	3.73	3.73
	(.07)	(.07)	(.07)	(.07)	(.07)

†p < .10; *p < .05; **p < .01; ***p < .001.
[a]Group variable is municipal code.

Therefore, in Model 4 I add a measure of the proportion of public housing built in the municipality during the *Million Programme* era. The effect of this variable is significant and negative, which is consistent with my hypothesis that segregation reduces visibility and, hence, anti-immigrant voting. The addition of this variable also makes *non-western*

residents at the municipal level significant so I include an interaction between *non-western residents* and *Million Programme* housing in Model 5. I find that, as expected, the interaction effect is significant and negatively correlated with votes for the Sweden Democrats. Together, Models 3 and 4 signify that it is not merely the proportion of immigrants in a city which impacts voting but, rather, how they are arranged residentially.

Because I find no significance of *income* or *blue collar* across the models, which is inconsistent with much of the literature, I suspect that municipalities were the incorrect unit of analysis for testing economic threat and I use labor market at level two. In this model, income becomes significant and positively correlated with anti-immigrant vote, but blue collar employment remains insignificant (Table 2). As in municipal-level models, the income level of non-western immigrants is the strongest predictor of vote, but changes direction. This indicates that perhaps voters in Sweden do indeed feel wage competition with immigrants. The significance and direction of all other variables remain the same and are consistent with threat models. However, this model has reduced explanatory power regarding voting behavior at the neighborhood level because only 32 percent of the variance in the model is explained at the labor market level.

Across the models, several variables work in the direction consistent with group threat: a city's average level of *education* and protected *public sector* employment are inversely correlated with anti-immigrant voting. But some key variables are not significant or work in the opposite direction predicted by group threat. Perhaps most surprising is the finding that *income* and *employment* are not significant. It is important to point out that this is not evidence against group threat. A more reasonable interpretation is that the variables in the model are predictive of anti-immigrant attitude, as much research has shown, but not vote.

4.2 Spatial analysis

Even though multi-level models account for grouping of level one observations, they do not account for proximity within or between the groups under study, so the models presented in Table 1 estimate the effects of non-western immigrants in one district, but do not account for immigrants in the surrounding neighborhoods. Since individuals are unlikely to be confined to the neighborhood in which they reside, the proportion of immigrants in neighboring areas should impact voting behavior if intergroup contact matters. We would expect different levels of intergroup contact, and therefore anti-immigrant votes, when comparing two districts with low levels of non-western residents if one borders a neighborhood with similarly low numbers of non-westerners but the other abuts a neighborhood with a high proportion of non-westerners. To test the spatial relation between non-western residents and vote, I rely on tests of spatial autocorrelation and spatial heterogeneity using neighborhood measures.

4.2.1 *Spatial autocorrelation.* To test for autocorrelation, I calculated Moran's I—a global correlation coefficient similar to Pearson's r produced in standard regression models, but constrained by space. Its values range from −1, meaning that values are

Table 2. Economic threat variables at the labor market level

	(1)
Income	0.24 (.08)**
Education	−0.19 (.01)***
Unemployment	0.13 (.03)***
Blue collar	0.00 (.01)
Public sector	−0.04 (.01)***
Non−western income	−1.78 (.55)**
Non−western unemployment	−0.27 (.08)***
Intercept	7.12 (.89)
Proportion of variance	
Labor market	3.75 (.70)
Electoral district	4.39 (.08)

†p < .10; *p < .05; **p < .01; ***p < .001.

perfectly dispersed in space, to +1, indicating that values are perfectly correlated across the geographic area under analysis.

I calculated Moran's I using both inverse distance and polygon contiguity (first order) commands in ArcGIS.[12] Inverse distance weights voting results in every district against every other in the dataset, assuming that the impact of districts upon each other decreases with distance.[13] Polygon contiguity calculates neighbor effects, so rather than taking into account every district it only includes those with a shared border. Moran's I is large and statistically significant using both weight matrices. In general, values greater than 0.2 indicate spatial autocorrelation, and both methods of calculation result in robust and significant coefficients (Table 3).

Interestingly, Moran's I is much larger when calculated using polygon contiguity. This indicates that neighbor effects are strong and votes in a district are highly correlated with those in adjacent districts. This is consistent with three clustering patterns which can be derived from the contact hypothesis: 1) anti-immigrant voting will occur around neighborhoods with large non-western populations, where ethnic majority residents are likely to have regular, superficial contact with ethnic minority group members during daily activities; 2) anti-immigrant votes are less frequent in neighborhoods near areas with small immigrant populations, where the ethnic majority has little routine contact with the ethnic minority; and 3) anti-immigrant voting is less frequent in neighborhoods that have surpassed a certain threshold of non-western residents, where ethnic majority group members are likely to have meaningful contact in the form of friendships with ethnic minority group members.

Of course, it should be noted that this correlation can also be due to patterns inconsistent with the contact hypothesis—for instance, anti-immigrant vote increasing in the absence of non-westerners. The analysis cannot give us insight to the direction of correlation; it only demonstrates a strong spatial correlation in voting. Therefore, I cannot determine whether

Table 3. Spatial autocorrelation between districts

	Moran's I
Inverse distance	0.49***
Polygon contiguity (first order)	0.72***

$^{\dagger}p < .10$; $^{*}p < .05$; $^{**}p < .01$; $^{***}p < .001$.

neighbor effects are due to the presence of immigrants or some other unobserved characteristic of neighborhoods, so I introduce measures of non-western residents in my next analysis. I use geographically weighted regression (GWR) because the robust and significant spatial autocorrelation in voting violates the basic assumptions of independence in ordinary least squares regression models.

4.2.2 *Spatial heterogeneity.* I estimate several GWR models with set bandwidth parameters ranging from five to 1,000. The first two models incorporate the nearest five and ten electoral districts because I have a theoretical reason to suspect that patterns of daily interaction are shaped mainly by the ethnic composition of the nearest neighborhoods. I find that more than 90 percent of variance in anti-immigrant voting behavior can be explained by the proportion of non-western immigrants the nearest five or ten electoral districts (Table 4), which is consistent with my expectation that patterns of inter-group contact impact the salience of immigration as a political issue. It should be noted that small bandwidths reduce degrees of freedom so the adjusted R-squared values are lower, around .80. I found no autocorrelation in the residuals, so the model accounts for all significant spatial processes in the data.

As the number of neighbors increase, R-squared values decrease, but reveal observable patterns of interest at the regional level. Model 5, which includes 1,000 districts as neighbors, has the lowest R-squared value (though at 0.43 it is still notable in the social sciences) and a map of regression coefficients reveals interesting regional patterns of spatial heterogeneity (Fig. 1). The neutral, gray shaded areas on the map indicate areas where the effect of non-western residents in the nearest 1,000 electoral districts has almost no effect on voting. The red areas indicate where the effect is positive, with GWR coefficient values ranging from .02 to .10. Blue indicates a negative correlation with values ranging from −.10 to zero.

A quick glance at the red areas on the map shows that residents of central Sweden are more electorally sensitive to the presence of non-westerners than are Swedes in most other parts of the country. There are also smaller red patches to the east of Stockholm and on the island of Gotland, which is an interesting counter to economic threat models because the island of Gotland and the area between the capital and the coast are generally high income areas, but threat-based explanations posit that low income groups should feel most threatened by immigration. However, because they are high income areas, they are likely similar to central Sweden in that they are places relatively new to non-western immigration. The larger regression coefficient in these regions could indicate that individuals in areas new to immigration are especially sensitive to the presence of non-western newcomers.

Table 4. Geographically weighted regressions of anti-immigrant party vote

	(1)	(2)	(3)	(4)	(5)
Neighbors	29	5	10	100	1,000
R^2	0.79	0.98	0.91	0.66	0.43
Adjusted R^2	0.73	0.80	0.78	0.64	0.43
AICc	22240	52679	25265	23146	25587
Residuals					
Moran's I	−0.01***	−0.02***	−0.02***	0.04***	0.17***

$^{\dagger}p < .10$; $^{*}p < .05$; $^{**}p < .01$; $^{***}p < .001$.

The analysis also reveals that voters in southern Sweden and in Stockholm are less sensitive to the presence of non-westerners than voters in most other parts of the country. This finding is interesting because southern Sweden is the area of the country where the Sweden Democrats receive most votes. So, even though Skåne is the region where the Sweden Democrats are most popular, the political expression of anti-immigrant attitudes is relatively low, given the number of immigrants in the region. Given the long history of immigration to this region (as well as Stockholm) and its high proportion of non-western immigrants, this finding is consistent with the expectations of meaningful contact. When an immigrant population surpasses a certain threshold, there is more possibility for meaningful inter-group contact to occur. These findings indicate that this is likely happening in many neighborhoods in the region.

4.3 Observational fieldwork

To examine the ways that residential segregation translates into superficial, inter-group contact in public spaces, I conducted observational fieldwork in a mid-sized Swedish city. I chose the city of Linköping for several reasons. Firstly, it is the seventh largest municipality in Sweden, so it is large enough to be representative of the dynamics that likely occur in other Swedish cities, but it is also compact enough that I could visit most areas of the city during fieldwork. Importantly, Linköping also has a *Million Programme* housing project and, according to the GWR results presented in the previous section, it is in an area of the country where the impact of non-western residents on anti-immigrant voting is about average. Additionally, due to its relatively high levels of employment, high-skill labor force, and education, the city should be less susceptible to economic threat than many cities.

Linköping is city approximately 200 kilometers southwest of the capital of Stockholm in the county of Östergötland. Historically, it served as the religious and educational center of the region, later becoming the headquarters of the Saab aircraft industry. Today it is home to one of Sweden's largest universities and the country's second largest information technology park. The population of the city is, on average, more highly educated and employed than the national average. Of Linköping's 144,690 residents (Statistics Sweden 2010), 13.1 percent are foreign-born (Table 5). Using the same calculations described above in the

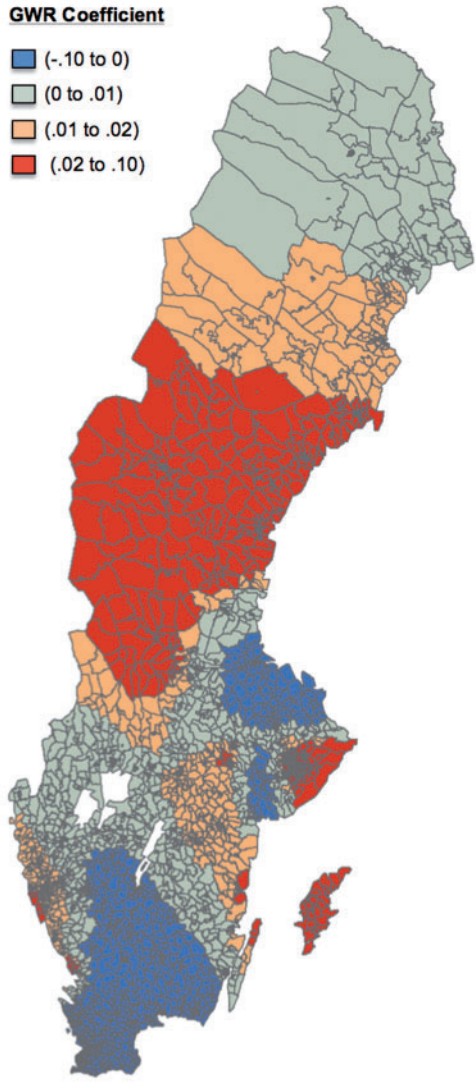

Figure 1. Map of the regional effects of non-western residents on anti-immigrant party vote. (Figure is available in colour online only).

variables section, I find that approximately 12.9 percent of the residents of Linköping have a non-western background. This makes the proportion of foreigners in Linköping slightly higher than the Swedish average and, in line with national trends, they fare less well economically than native Swedes. More than two-thirds of households receiving social assistance in Linköping have a foreign-born head of household (Statistics Sweden, 2008).

Table 5. Local and national immigrant populations

	Linköping	Sweden
Total population	144,690	9,340,689
Immigrants		
Foreign-born (%)	13.1	14.3
Non-western foreign-born (%)	10.3	8.7
Immigrants and their children born in Sweden		
Foreign background (%)	16.5	18.6
Non-western background (%)	12.9	11.3

Furthermore, Linköping has a segregation index of 39.3, nearly twice the Swedish average of 20.4 (Statistics Sweden 2009), though not unusual for a large or mid-sized Swedish city.

Like many old European cities, Linköping has a city center marked by cobblestone streets lined with cafes and shops. The center also contains grocery stores, chain clothing stores, a shopping mall, and a large, historic cathedral. Just beyond the center lie residential areas, shops, and a university. Beyond that is a major roadway, named Industrial Road (*Industrigatan*), that separates residential areas from the industrial area, a large modern shopping mall, big-box stores surrounded by parking lots, and Skäggetorp—a *Million Programme* project built for working class families in the 1960s and 1970s. This area is referred to by city residents as the 'immigrant neighborhood' (personal interviews) and contains schools, a shopping mall, restaurants, a library, and other necessary amenities. Skäggetorp's boundary is encircled by a small road, as is common among *Million Programme* projects, and is surrounded on three sides by industrial or rural areas, so it is geographically isolated from the rest of Linköping. For instance, to enter the neighborhood by foot or bike, one must pass through short, tunneled underpasses.

I visited public spaces such as plazas, cafes, and shopping centers and categorized individuals, using phenotypic cues, as either 'western' or 'non-western' in an attempt to measure the visibility of non-westerners. This method is similar to that employed by Durrheim and Dixon (2005) to measure small-scale, public segregation in desegregated South Africa. This is an imperfect measure, so I erred on the side of undercounting ethnic minorities. For instance, I almost certainly excluded immigrants from Russia or from the former Yugoslavia (which is a sizable immigrant group in Sweden). However, attitudes toward such groups may be less negative than are attitudes toward those groups that are more ethnically distant from native Swedes (Waisman 2008). I counted a total of 4,924 individuals and coded whether they were in mixed-ethnicity dyads, triads, or larger groups in order to capture meaningful versus superficial contact. I took counts in various locations at different times of day, week, and year during 2008 and 2009 in four areas of Linköping—1) the historic town *center*; 2) the 'immigrant neighborhood' on the *edge* of town; 3) the modern mall *adjacent* to the immigrant neighborhood; 4) the residential area *midway* between the center and the immigrant neighborhood, which contains a commuter bike path connecting the two (Fig. 2).

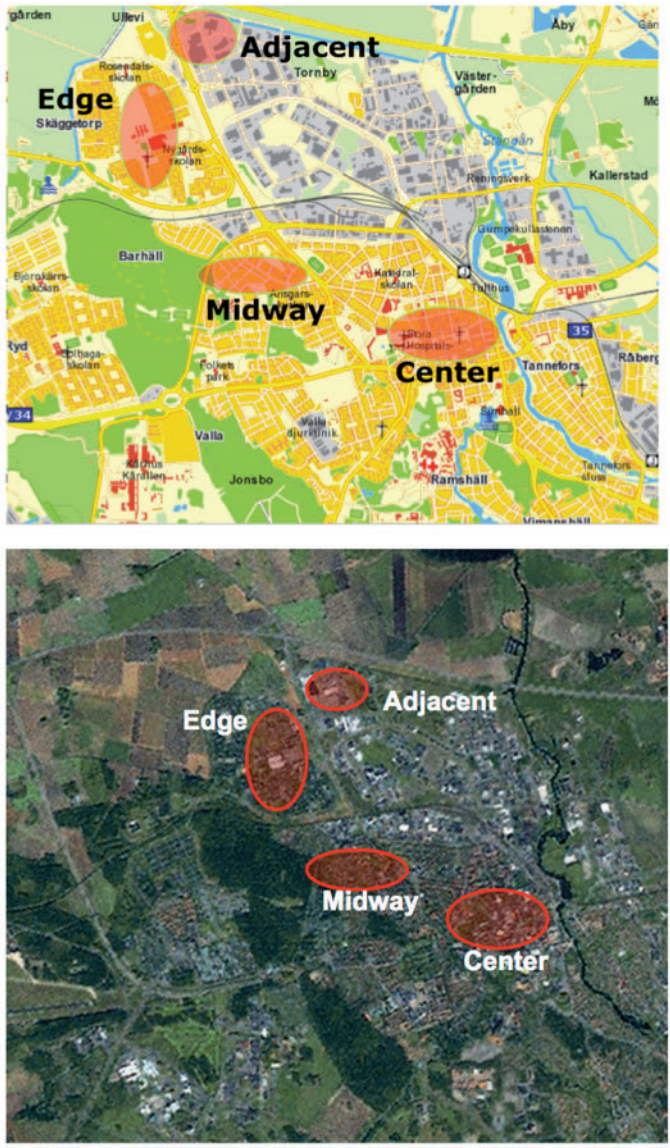

Figure 2. Road map and satellite image of Linköping, with observation areas highlighted in red. (Figure is available in colour online only).

I find that immigrants are underrepresented relative to their share of the population in the center and midway zones of the city, an overrepresented in the immigrant neighborhood. In the center they are visible at a rate roughly equivalent to three-quarters their actual makeup of the city's population. Their visibility is even lower in the residential zone outside

the center which is separated from Skäggetorp by Industrial Road, at just over one-quarter their actual presence in the city. The opposite is true in the modern shopping center adjacent to Skäggetorp, where non-westerners were visible at rates approaching twice their proportion of the population. The 'immigrant neighborhood' appeared to have roughly a 70 percent non-western population in public spaces, over five times their proportion of the population in Linköping.

Furthermore, nowhere in the city did I observe much 'meaningful' contact. I saw groups comprised of both ethnic minority and majority group members together at the highest rates in the shopping center adjacent to the immigrant neighborhood, where 4.2 percent of observed people were sitting, chatting, in mixed groups (Table 6). But I do not wish to place too much emphasis on these findings because 61 percent of observed individuals were alone. These observations, therefore, are most likely not reflective of the interactions that occur in schools, or workplaces, or voluntary associations. This could be especially problematic in the adjacent zone, for example, where I noticed zero individuals engaged in meaningful contact. However, as a residential area, most of my observations consisted of bikers on the bike path, or people walking dogs or tending their lawns.

These findings indicate that residential segregation in Linköping is transformed into social segregation in public places. This is most likely due to the concentration of immigrants in the *Million Programme* community. These projects were designed to be self-contained, thereby eliminating the need for residents to travel outside of their neighborhood for daily errands and, often, for work. Unsurprisingly, it appears that place of residence affects movement throughout the entire urban landscape. Therefore, if an individual lives, works, and shops primarily inside the 'ring road' of the city, he is more likely to perceive that non-westerners make up a smaller percentage of the city's population than they actually do. On the other hand, if one lives, works, or shops in or near the immigrant neighborhood, he is more likely to perceive non-western immigrants as constituting a much larger proportion of the city's population than they actually do. I hypothesize that individuals in this situation who already hold negative attitudes toward immigrants have an increased probability of voting for the Sweden Democrats because the salience of immigration increases under these conditions of superficial contact.

Indeed, voting patterns in the city of Linköping are consistent with this claim. In Fig. 3, the gray lines overlaid on the map of Linköping denote electoral districts, and the colors denote votes for the Sweden Democrats in standard deviations relative to the national average. Blue shades indicate 'cool spots' with lower than average support and orange indicates 'hot spots' of party voting. The only areas where voters choose the anti-immigrant party at rates of at least 1.5 standard deviations above the national average are in and around the immigrant neighborhood, while party support tends to be below average inside the ring road where non-westerners are less visible. The yellow areas indicate votes at about national average rates. It is interesting to note that the large yellow patch on the eastern edge of the map is one large electoral district because it includes a large swath of farmland. It may show more variation if it were divided into smaller districts because some residents likely live very near Skäggetorp while others are quite distant. I cannot explain the additional yellow areas to the south with the observational data I collected in the field, but they contain two additional *Million Programme* projects with much smaller immigrant populations than Skäggetorp. Personal interviews I conducted with residents

Table 6. Visibility of non-westerners in various parts of Linköping

	Non-westerners observed	As a proportion of actual non-western population
Center	9.4%	0.73
Midway	3.8%	0.29
Edge	69.5%	5.37
Adjacent	23.5%	1.82

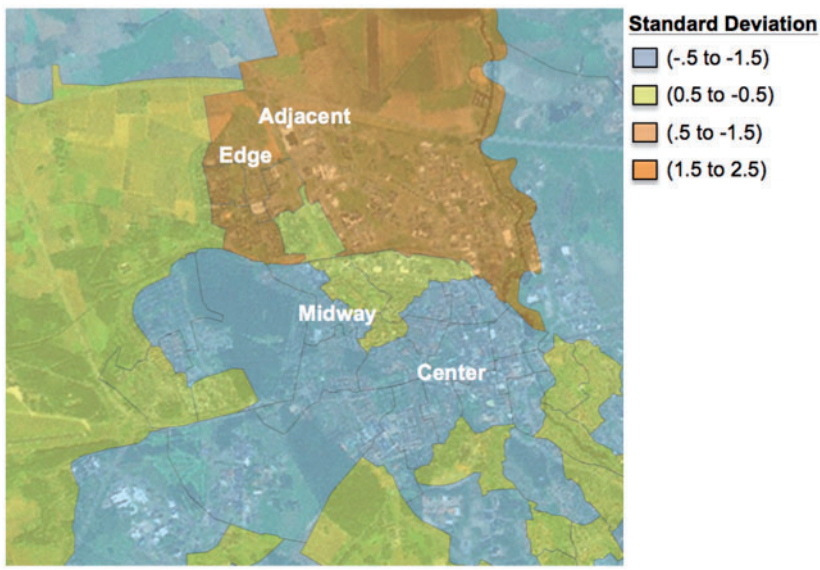

Figure 3. Satellite imagery of Linköping overlaid with votes for Sweden Democrats. (Figure is available in colour online only).

indicate that these areas are notable for being 'working class' more than 'immigrant' neighborhoods.

5. Conclusion

Taken together, these analyses indicate that neighborhood levels of inter-group contact can help explain anti-immigrant voting. The multi-level models show that levels of economic threat in a city can account for some of the variation in district voting, though not as clearly as previous literature has shown that it explains anti-immigrant attitudes. The spatial analyses show that voting for an anti-immigrant party was highly spatially dependent in the 2010 Swedish election and was robustly correlated with the percent of non-western

residents in the five nearest electoral districts. This is consistent with my hypothesis that superficial inter-group contact, or 'visibility', can increase the political salience of anti-immigrant attitudes among the ethnic majority, but these data cannot test the mechanism of contact. My observational data from Linköping does a better job of this. I find that votes for the Sweden Democrats are higher than average in areas where immigrants are visible in public spaces at rates higher than their actual proportion of the city's population.

Furthermore, the findings presented here highlight the need for more research that examines the micro-level effects of segregation and contact. There have been decades of rich research on both the positive and negative effects of inter-group contact, but we know much less about the environmental conditions that structure contact. Case studies may be especially useful for identifying the dimensions of urban landscapes that impact inter-group contact. This study suggests that urban planning projects can have significant, but unintended, social consequences in terms of segregation. The *Million Programme* was an ambitious project implemented by Social Democrats to create modern self-contained communities for workers moving to cities during post World War II urbanization. And though they were successful in creating communities for residents several decades ago, they now serve to segregate many immigrant communities. For instance, their location on the outskirts of cities, often bordered by a circular road, creates a feeling of geographical isolation and contributes to turning simple residential segregation into comprehensive social segregation.

This study also suggests that we need to conceive of more nuanced ways to measure contact with large-N data sets. Thresholds are sometimes employed as a proxy for meaningful contact because as the number of immigrants increases, so too does opportunity for inter-group friendships to develop. This appears to be at least partially supported by my findings that the presence of non-western immigrants in southern Sweden and Stockholm impacts voting less than in other areas of the country. This may be due to the relatively high concentrations of immigrants in these areas: meaningful contact is facilitated once immigrants make up a certain proportion of the population because there is simply more opportunity for friendship to develop. However, these findings could also be a function of time. Friendships will not immediately develop simply because newcomers move into a community, even if their numbers increase quickly beyond a meaningful threshold. In fact a quick increase may have the opposite effect. People especially notice change when confronted with large quantities of information (Kahneman and Tversky 1979) and rapid demographic change can impact local politics (Hopkins 2010). Therefore, the arrival of immigrants in regions, small towns, or labor sectors where they have not traditionally been present may lead to a temporary increase in anti-immigrant attitudes that decreases as more immigrants arrive and enough time passes that meaningful friendships become the norm rather than the exception.

This study attempts to explicitly link attitudes with voting behavior by testing the proposal that superficial contact is one mechanism through which anti-immigrant attitudes become politically salient. We have a plethora of useful research measuring the cross-national variation in attitudes toward immigration, as well as many studies examining the causes of these attitudes. This article builds upon those by using attitudes as a starting point and asking when they turn into political behavior. Understanding this process is important given the context of immigration in modern Europe. Over five million immigrants now call

Western Europe home and rates of immigration from the developing world show no signs of stopping. Understanding the ways in which interactions between ethnic groups can either undermine or facilitate prejudice is timely, especially since it has the potential to aggregate into political outcomes with broad social consequences.

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Conflict of interest statement. None declared.

Notes

1. It should be noted that ethnic heterogeneity may increase overall political engagement (Kesler and Bloemraad 2010; Putnam 2007), but for the proportion of the population that votes and holds negative attitudes toward immigrants, intergroup contact should increase the salience of immigration.
2. I removed 173,889 early votes (*Förtidsröster ej fördelade efter valdistrikt*) because they were only reported at aggregate levels by municipality. Of these, 8,143 were votes for the Sweden Democrats. This leaves me with 4,665,460 votes cast in the parliamentary election (Statistics Sweden 2010).
3. It should be noted that this measure of 'non-western immigrants' includes some persons from western countries such as North America and Oceania because they are not separated in the data. However, they are a small enough proportion of the population that they should not significantly impact my findings. In 2010, residents born in Australia, Canada, Switzerland, New Zealand, or the United States comprised 2.0 percent of the total foreign-born population of Sweden.
4. At the electoral district level, counts of children born to immigrants are not reported according to parents' country of origin so I estimate them by multiplying offspring (the number of the district's population born in Sweden to two parents not born in Sweden) by the proportion of non-western residents (foreign-born outside of Nordic or EU-27 countries). I ran models both including and excluding these estimates and found no difference in results. Therefore, I report results including these estimates because it is the measure of immigration closest to my theoretical conception of the variable.

5. This is Statistics Sweden's closest approximation to having earned a BA degree, though it will include years of education in educational tracks designed for skilled labor that would not normally lead to a university degree in the Scandinavian educational system (i.e. technical or arts training).
6. 2009 data were unavailable for three municipalities and I substituted data collected in 2007 or 2008.
7. As noted by a reviewer, the emigration of immigrants to Sweden is underreported. Therefore, these data may include individuals no longer residing in Sweden, which would lead to an underreporting of income at the municipal level.
8. Some are owned by the municipality or the state, but most are owned by privately-owned public housing companies. The figures were collected in 1990 and there have been a few municipality splits since then. In those cases, I used the 1990 value for both new municipalities (Nykvarn and Södertälje; Knivsta and Uppsala; Borås and Bollebygd; Ängelholm and Båstad).
9. Some examples are Rynkeby and Tensta in Stockholm, Rosengård in Malmö, Angered in Gothenburg, and Skäggetorp in Linköping.
10. I ran random effects models using the xtreg command with no difference in findings.
11. To test the robustness of this finding, I removed education from the model, as income and education are likely highly correlated, but this did not change the significance of income.
12. In each case I row standardized so all districts will carry equal weight in the analysis.
13. For instance, when calculating the effect of neighboring districts' votes upon voting in electoral district A, if the center of district C is twice as far away as the center of B, the votes in B are weighted twice as heavily as those of C.

References

Aldrich, J. H., Sullivan, J. L. and Borgida, E. (1989) 'Foreign Affairs and Issue Voting: Do Presidential Candidates Waltz Before a Blind Audience?' *American Political Science Review*, 83: 123–41.

Alexander, L. and Tredoux, C. (2010) 'The Spaces between Us: A Spatial Analysis of Informal Segregation at a South African University', *Journal of Social Issues*, 66: 367–86.

Allport, G. (1954) *The Nature of Prejudice*. Garden City, NY: Doubleday.

Arzheimer, K. and Carter, E. (2006) 'Political Opportunity Structures and Right-Wing Extremist Party Success', *European Journal of Political Research*, 45/3: 391–418.

Biggs, M. and Knauss, S. (2012) 'Explaining Membership in the British National Party: A Multilevel Analysis of Contact and Threat', *European Sociological Review*, 28/5: 633–46.

Blalock, H. M. Jr (1957) 'Percent Non-White and Discrimination in the South', *American Sociological Review*, 22: 677–82.

Brewer, M. and Miller, N. (1996) *Intergroup Relations*. Buckingham: Open University Press.

Brown, R. and Hewstone, M. (2005) 'An Integrative Theory of Intergroup Contact', *Advances in Experimental Social Psychology*, 37: 255–343.

Ceobanu, A. M. and Escandell, X. (2010) 'Comparative Analyses of Public Attitudes Toward Immigrants and Immigration Using Multinational Survey Data: A Review of Theories and Research', *Annual Review of Sociology*, 36: 309–28.

Chong, D. (1993) 'How People Think, Reason, and Feel about Rights and Liberties', *American Journal of Political Science*, 37: 867–99.

Christ, O., Hewstone, M., Tausch, N. et al. (2010) 'Direct Contact as a Moderator of Extended Contact Effects: Cross-Sectional and Longitudinal Impact on Outgroup Attitudes, Behavioral Intentions, and Attitude Certainty', *Personality and Social Psychology Bulletin*, 36/12: 1662–74.

Coenders, M. and Scheepers, P. (2003) 'The Effect of Education on Nationalism and Ethnic Exclusionism: An International Comparison', *Political Psychology*, 24/2: 313–43.

Dovidio, J. F., Eller, A. and Hewstone, M. (2011) 'Improving Intergroup Relations through Direct, Extended and Other Forms of Indirect Contact', *Group Processes and Intergroup Relations*, 14/2: 147–60.

Duncan, O. D. and Duncan, B. (1955) 'A Methodological Analysis of Segregation Indices', *American Sociological Review*, 20: 210–17.

Durrheim, K. and Dixon, J. (2005) *Racial Encounter: The Social Psychology of Contact and Desegregation*. New York: Routledge.

Eatwell, R. (1994) 'Why are Fascism and Racism Reviving in Western Europe?' *Politics Quarterly*, 65/3: 313–25.

Gaertner, S. L. and Dovidio, J. (2000) *Reducing Intergroup Bias: The Common Identity Model*. Hillsdale, NJ: Psychology Press.

—— & Dovidio, J. F. and Bachman, B. (1996) 'Revisiting the Contact Hypothesis: The Induction of a Common Ingroup Identity', *International Journal of Intercultural Relations*, 20: 271–90.

——, Anastasio, P. et al. (1993) 'The Common Ingroup Identity Model: Recategorization and the Reduction of Intergroup Bias', in Stroebe, W. and Hewstone, M. (eds), *European Review of Social Psychology*, pp. 1–26. London: Wiley.

Givens, T. (2005) *Voting Radical Right in Western Europe*. New York: Cambridge University Press.

Goldberg, D. T. (1998) 'The New Segregation', *Race and Society*, 1: 15–32.

Gorodzeisky, A. and Semyonov, M. (2009) 'Terms of Exclusion: Public Views Towards Admission and Allocation of Rights to Immigrants in European Countries', *Ethnic and Racial Studies*, 32/1: 401–23.

Greenland, K. and Brown, R. (1999) 'Categorization and Intergroup Anxiety', *European Journal of Social Psychology*, 29: 503–21.

Hewstone, M. and Brown, R. (1986) 'Contact is Not Enough: An Intergroup Perspective on the "Contact Hypothesis"', in Hewstone. and Brown. (eds), *Contact and Conflict in Intergroup Encounters*. Oxford: Basil Blackwell.

Hopkins, D. J. (2010) 'Politicized Places: Explaining Where and When Immigrants Provoke Local Opposition', *American Political Science Review*, 104/1: 40–60.

Huckfeldt, R., Levine, J., Morgan, W. and Sprague, J. (1999) 'Accessibility and the Political Utility of Partisan and Ideological Orientations', *American Journal of Political Science*, 43: 888–911.

Islam, M. R. and Hewstone, M. (1993) 'Dimensions of Contact as Predictors of Intergroup Anxiety, Perceived Out-Group Variability and Out-Group Attitude: An Integrative Model', *Personality and Social Psychology Bulletin*, 19: 700–10.

Ivarsflaten, E. (2005) 'The Vulnerable Populist Right Parties: No Economic Realignment Fueling their Electoral Success', *European Journal of Political Research*, 44/3: 465–92.

Jacobs, L. R. and Shapiro, R. Y. (1994) 'Issues, Candidate Image, and Priming: The Use of Private Polls in Kennedy's 1960 Presidential Campaign', *American Political Science Review*, 88: 527–40.

Johnston, R., Blais, A., Brady, H. E. and Crete, J. (1992) *Letting the People Decide: Dynamics of a Canadian Election*. Stanford, CA: Stanford University Press.

Kahneman, D. and Tversky, A. (1979) 'Prospect Theory: An Analysis of Decision under Risk', *Econometrica*, 47/2: 263–92.

Kesler, C. and Bloemraad, I. (2010) 'Does Immigration Erode Social Capital? The Conditional Effects of Immigration-Generated Diversity on Trust, Membership, and Participation across 19 Countries, 1981–2000', *Canadian Journal of Political Science*, 43/2: 319–47.

Knigge, P. (1998) 'The Ecological Correlates of Right-Wing Extremism in Western Europe', *European Journal of Political Research*, 34: 249–79.

Krosnick, J. A. (1988) 'The Role of Attitude Importance in Social Evaluation: A Study of Policy Preferences, Presidential Candidate Evaluations, and Voting Behavior', *Journal of Personal Social Psychology*, 55: 196–210.

List, C. and Dietrich, F. (2011) 'A Model of Non-Informational Preference Change', *Journal of Theoretical Politics*, 23/2: 145–64.

Lubbers, M., Gijsberts, M. and Scheepers, P. (2002) 'Extreme Right-Wing Voting in Western Europe', *European Journal of Political Research*, 41: 345–78.

——. (2001) 'Explaining the Trend in Extreme Right-Wing Voting: Germany 1989–1998', *European Sociological Review*, 17: 431–49.

McLaren, L. M. (2003) 'Anti-Immigrant Prejudice in Europe: Contact, Threat Perception, and Preferences for the Exclusion of Migrants', *Social Forces*, 81/3: 909–36.

Massey, D. S. and Denton, N. A. (1988) 'The Dimensions of Residential Segregation', *Social Forces*, 67/2: 281–315.

Miller, G. and Schofield, N. (2003) 'Activists and Partisan Realignment in the United States', *American Political Science Review*, 97/2: 245–60.

Miller, N. and Brewer, M. B. (1984) 'The Social Psychology of Desegregation: An Introduction', in Miller and Brewer (eds), *Groups in Contact: The Psychology of Desegregation*, pp. 1–7. New York: Academic Press.

Norris, P. (2005) *Radical Right: Voters and Parties in the Electoral Market*. New York: Cambridge University Press.

Page-Gould, E., Mendoza-Denton, R. and Tropp, L. R. (2008) 'With a Little Help from my Cross-Group Friend: Reducing Anxiety in Intergroup Contexts through Cross-Group Friendship', *Journal of Personality and Social Psychology*, 95/5: 1080–94.

Paolini, S., Harwood, J. and Rubin, M. (2010) 'Negative Intergroup Contact Makes Group Memberships Salient: Explaining Why Intergroup Conflict Endures', *Personality and Social Psychology Bulletin*, 36/10: 1723–38.

Pettigrew, T. F. (2009) 'Contact's Secondary Transfer Effect: Do Intergroup Contact Effects Spread to Non-Participating Outgroups?' *Social Psychology*, 40/2: 55–65.

—— and Tropp, L. R. (2008) How Does Intergroup Contact Reduce Prejudice? Meta-Analytic Tests of Three Mediators, *European Journal of Social Psychology*, 38: 922–34.

—— & ——, Wagner, U. and Christ, O. (2011) 'Recent Advances in Intergroup Contact Theory', *International Journal of Intercultural Relations*, 35/3: 271–80.

Putnam, R. D. (2007) 'E Pluribus Unum: Diversity and Community in the Twenty-First Century. The 2006 Johan Skytte Prize Lecture', *Scandinavian Political Studies*, 30/2: 137–74.

Quillian, L. (1995) 'Prejudice as a Response to Perceived Threat: Population Composition and Anti-Immigrant and Racial Prejudice in Europe', *American Sociological Review*, 60/4: 586–611.

Rydgren, J. and Ruth, P. (2013) 'Contextual Explanations of Radical Right-Wing Support in Sweden: Socioeconomic Marginalization, Group Threat, and the Halo Effect', *Ethnic and Racial Studies*, 36/4: 711–28.

Scheepers, P., Gijsberts, M. and Coenders, M. (2002) 'Ethnic Exclusionism in European Countries: Public Opposition to Civil Rights for Legal Migrants as Response to Perceived Ethnic Threat', *European Sociological Review*, 18/1: 17–34.

Schmid, K., Hewstone, M., Küpper, B. et al. (2012) 'Secondary Transfer Effects of Intergroup Contact: A Cross-National Comparison in Europe', *Social Psychology Quarterly*, 75/1: 28–51.

Schneider, S. L. (2008) 'Anti-Immigrant Attitudes in Europe: Outgroup Size and Perceived Ethnic Threat', *European Sociological Review*, 24/1: 53–67.

Schnell, I. and Yoav, B. (2001) 'The Sociospatial Isolation of Agents in Everyday Life Spaces as an Aspect of Segegation', *Annals of the Association of American Geographers*, 91: 622–36.

Sears, D. O. and Lau, R. R. (1983) 'Indicating Apparently Self-Interested Political Preferences', *American Journal of Political Science*, 27: 223–52.

Semyonov, M., Raijman, R. and Gorodzeisky, A. (2008) 'Foreigners' Impact on European Societies. Public Views and Perceptions in a Cross-National Comparative Perspective', *International Journal of Comparative Sociology*, 49/1: 5–29.

Sides, J. and Citrin, J. (2007) 'European Opinion About Immigration: The Role of Identities, Interest, and Information', *British Journal of Political Science*, 37/3: 477–504.

Snijders, T. A. B. and Bosker, R. J. (1999) *Multilevel Analysis: An Introduction to Basic and Advanced Multilevel Modeling*. London: Sage Publications.

Stephan, W. G. and Stephan, C. W. (1985) 'Intergroup Anxiety', *Journal of Social Issues*, 41: 157–77.

——. (2000) 'An Integrated Threat Theory of Prejudice', in Oskamp, S. (ed.), *Reducing Prejudice and Discrimination*, pp. 23–45. Hillsdale, NJ: Lawrence Erlbaum Associates.

Swank, D. and Betz, H. G. (2003) 'Globalization, the Welfare State and Right-Wing Populism in Western Europe', *Socio-Economic Review*, 1/2: 215–45.

Taylor, D. M. and Moghaddam, F. M. (1994) *Theories of Intergroup Relations: International Social Psychology Perspectives*. London: Praeger.

Turner, R. N., Hewstone, M., Voci, A. et al. (2007) 'Reducing Prejudice via Direct and Extended Cross-Group Friendship', in Strobe, W. and Hewstone, M. (eds), *European Review of Social Psychology*, pp. 212–55. Hove: Psychology Press.

Uslaner, E. (2012) *Segregation and Mistrust: Diversity, Isolation, and Social Cohesion*. New York: Cambridge University Press.
Van der Brug, W., Fennema, M. and Tillie, J. (2005) 'Why Some Anti-Immigrant Parties Fail and Others Succeed', *Comparative Political Studies*, 38/5: 537–73.
Van der Waal, J., de Koster, W. and Achterberg, P. (2013) 'Ethnic Segregation and Radical Right-Wing Voting in Dutch Cities', *Urban Affairs Review*, 49: 748–77.
Waisman, G. (2008) *Essays on Discrimination and Corruption*. Stockholm: Stockholm University.
Williams, R. M. (1964) *Strangers Next Door*. Englewood Cliffs, NJ: Prentice Hall.
Wimmer, A. (2008) 'The Making and Unmaking of Ethnic Boundaries: A Multilevel Process Theory', *American Journal of Sociology*, 114/4: 970–1022.
Zaller, J. (1992) *The Nature and Origin of Mass Opinion*. New York: Cambridge University Press.
Zick, A., Pettigrew, T. F. and Wagner, U. (2008) 'Ethnic Prejudice and Discrimination in Europe', *Journal of Social Issues*, 64/2: 233–51.