Spatial dimensions of Arab American voter mobilization after September 11

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Abstract

We examine the sources of variability in Arab American voter registration in the months following September 11, 2001. Several comparisons suggest that the policy aftermath of 9/11 has acted as an accelerant to Arab American political incorporation. Specifically, we evaluate raised incidences of Arab American voter registration across locations relative to two populations: the Arab American population that registered to vote prior to 9/11, and the non-Arab American population that registered after 9/11. New Arab American voters, while dispersed, are not randomly distributed across space. The period between September 11, 2001, and the 2004 presidential election witnessed considerable change in the geographic distribution of the Arab American electorate, as well as its partisan and demographic composition. © 2006 Elsevier Ltd. All rights reserved.

Keywords: Arab Americans; Political participation; Mobilization; Ripley's K Function; September 11; USA Patriot Act

Significant political events, especially those perceived to involve threats of some kind, often serve as a catalyst for political mobilization (Hershey & Hill, 1975; Sears & Valentino, 1997; Sigel, 1989; Valentino & Sears, 1998). The events of September 11, 2001, certainly fall into this

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category, greatly alarming the American public at large, and causing great consternation among Arab Americans (Cainkar, 2002; Cho, Gimpel, & Wu 2006; Feldman, 2002). Among other events, 9/11 instigated the wars in Afghanistan and Iraq, the passage of new laws concerning domestic civil liberties and police surveillance power, the arrest and detention of large numbers of Arab American and other U.S. citizens, and a reconsideration of the legal standing of previously questioned interrogation methods, including specific forms of torture. Concomitantly, these measures quickened the political incorporation of Arab Americans, mobilizing them in previously dormant locales and strengthening their presence in areas where they were more concentrated. We seek to understand this phenomenon by scrutinizing mobilization patterns across the nation, pre- and post-9/11. Who were these new Arab American registrants? What characteristics distinguish them from those who registered pre-9/11 and from non-Arab registrants who registered afterward?

We are particularly intrigued by the act of voter registration because it is such a weighty sign of a citizen's level of political interest (Cain, Kiewiet, & Uhlaner, 1991; Highton, 1997: 566; Timpone, 1998: 150). A consistent series of findings shows that once the act of registration is accomplished, many traditional predictors of turnout diminish in importance (Erikson, 1981; Highton, 1997; Squire, Wolfinger, & Glass, 1987), since non-voting is most heavily concentrated among those who are not registered (Highton, 1997: 566).

We proceed as follows. First, we discuss a set of inertial forces that have inhibited the civic engagement of Arab Americans. We also present some hypotheses anchored in theories of political participation about why and where we might nonetheless expect mobilization to have occurred. This is followed by empirical evidence of registration gains after 9/11 that facilitates our understanding of the nature of the Arab American movement into the electorate. Finally, we conclude with a discussion about possible linkages between geographic settlement patterns and the spatial and aspatial aspects of political mobilization we observe.

Arab Americans in the contemporary era

Just who is and is not ''Arab'' is a matter of some contention, both in the Middle East itself and in the United States. Our study includes the population of Arab American *heritage* that traces its ancestry to 22 Arabic speaking countries (including Palestine) in the Middle East and North Africa (Al-Qazzaz, 1996: 258), whether born in the United States or abroad. By this standard definition, widely accepted within the United States (Nigem, 1986), the 2000 U.S. Census indicates that there are approximately 1.2 million people who reported Arab ancestry (foreign and native born). Leading Arab American advocacy groups suggest that the figure is closer to 3.5 million (Arab American Institute, 2004). About one-third of the total resides in California, New York and Michigan. They are a predominantly metropolitan population, with 94% residing in major urban areas. According to the Arab American Institute, the likely Arab American voting population was estimated at about two million just prior to the 2004 election, with significant concentrations in the electoral battleground states of Michigan, Florida, Ohio, and Pennsylvania.

Forces impeding Arab American mobilization

That Arab Americans might have taken a greater interest in American politics after 9/11 is not obvious for a number of reasons. First, they are a small population from an electoral standpoint. Numerically they are only slightly larger than Native Americans. Compared with other

groups, such as Latinos and Asian Americans, they are less concentrated and often less conspicuous. Lacking a critical mass, the concrete benefits of electoral participation may be questioned, leading minority group members to calculate that conventional political participation is not the best recourse for achieving group ends (Browning, Marshall, & Tabb, 1984).

Second, Arabs are diverse religiously and by nationality, and this may conspire against the formation of a cohesive Arab American political identity. Not all Arabs are Muslims, and not all Muslims are Arabs (Mehdi, 1996; Naber, 2000). A majority of established Arab Americans are Christians. The oldest wave of Arab immigration to the United States, occurring between 1880 and 1945, was of Christians from what is now Lebanon and Syria, but was then part of the greater Ottoman Empire (Khalaf, 1987; Naff, 1985; Samhan, 1987; Suleiman & Abu-Laban, 1989). The Christian sects were divided approximately equally between Maronite Christians and Greek Orthodox, with a smaller number adhering to Greek Catholicism.

Third, homeland attachments are strong among a significant component of this population. Between World War II and the 1960s, the immigration stream was small, but the arrivals wound up expressing greater nationalism and interest in the politics of the Middle East than those from the earliest wave (Abraham, 1983; Aswad, 1974; Orfalea, 1988). Modern transport and communications links have made it possible to stay in more regular contact with the home country. Homeland attachment, in turn, can dampen interest in political engagement with the immigrant's host country (Castles & Davidson, 2000; cf. Nagel & Staeheli, 2004).

Fourth, Arab immigrants, like other immigrant groups, are not always politically socialized to understand or appreciate democratic political norms and practices. They are commonly averse to politics, and their countries of origin often have authoritarian traditions with no sense of civic responsibility (Al-Qazzaz, 1996; Lin & Jamal, 1998). This antipathy to things political has been captured well in the Dearborn area fieldwork of Lin and Jamal (1998, 1999). Among their interviews with Arab American citizens, they find considerable ambivalence about participation in American political life. Immigrants in these communities can rarely name any Arab American advocacy organizations, and they often express strong political opinions, but these opinions are not translated into political action, even action as seemingly effortless as voting (Lin & Jamal, 1999: 36). In related work on Arab American organizations in U.S. cities, Nagel and Staeheli (2004) found evidence of a rather ''passive politics'' (p. 13), less than half of the organizations' websites were used for political mobilization even after 9/11. In addition, patriarchal cultural traditions among Arab immigrants may delay political engagement—at least among women (Marshall & Read, 2003). It is not clear from the current body of research that religion, per se, is the source of such customs, but it is certainly plausible that the patriarchy present among some ''conservative'' or observant Muslim families impedes the mobilization of a large segment of the American Muslim community; that proportion comprised of women. To be sure, this may not be a function of Islam itself, since there are Muslim women who are politically active. But perhaps there are particular strains of Islamic religious thought and practice that sustain patriarchy and thereby impede female political involvement.

Fifth, political parties and candidates in the United States have not been receptive to the inclusion of this group's voice and interests. Political parties and candidates rarely target Muslim religious congregations for visits. Often an emphasis on ethnicity is considered a liability by Arab American activists (Suleiman, 1994: 51–52). Candidates have been known to return the contributions of Arab American and Muslim organizations upon being questioned by their opponents. There are few congressional candidates or officeholders of Arab American ancestry, and those who are elected cannot attain office primarily on the basis of Arab American support. As recently as 2004, John F. Kerry's campaign reportedly asked Arab American supporters to

keep a low profile at the Democratic National Convention so as to not draw widespread public attention to a group whose support might embarrass the Democratic ticket.

Finally, Arab American diversity has hindered coalition building because these communities do have differing ideologies and policy emphases, producing a multiplicity of small groups with separate agendas, but no singularly dominant voice (Barghouthi, 1989; Haddad & Smith, 1994; Lin & Jamal, 1997; Nyang, 1999: chap. 2; Sandoval & Fendrysik, 1993; Shain, 1996). As more Muslim Arabs have entered the country, secular Arab American organizations have found themselves competing for membership with Muslim organizations (Lin & Jamal, 1997). Most observers indicate that these groups have not learned to work in coalition, either with each other or with outside groups. Success in developing a unified political front out of this diversity has been mixed, at best.

From demobilization to mobilization

Our abridged synopsis of the state of the Arab American diaspora, anchored in the scholarly research of others, raises some doubt about whether political mobilization would be uniform, or even especially impressive, across this population. Nonetheless, despite significant barriers to mobilization, there are also some good reasons to believe that 9/11 and its aftermath might have had a stirring impact in many locations.

For instance, as the intensity of the threat to Arab American interests increased after 9/11, we might expect greater political activation in locations where the Arab American population is especially well-educated, or is at least situated among well-educated populations (Naber, 2000: 978) because heightened political participation generally follows from higher levels of education. This is one of the most consistent findings in the study of political behavior over the last 40 years (Campbell, Converse, Miller, & Stokes, 1960; Rosenstone & Hansen, 1993). According to 2000 census figures, about 40% of Arab Americans have a 4-year college degree, compared to 24% of all other Americans. Seventeen percent have a post-graduate degree, compared with the U.S. average of 9%. They also occupy relatively high rungs on the economic ladder and exhibit high naturalization rates relative to other immigrant groups. These characteristics predict that even in the absence of threat, Arab Americans are likely to register and vote because they are able to access informational resources that communicate facts about American political life.

In addition, political mobilization in response to threat is facilitated in locations where there are extensive social networks, through which politically relevant information is communicated (Phillips, 1979; Weatherford, 1982). The local geographic extent of these networks has been addressed by Baybeck and Huckfeldt (2002) and Johnston et al. (2005). Influential discussion partners are those with whom individuals are in regular contact. And the regularity of contact is still influenced by proximity, even in the Internet age. If local networks are productive of higher levels of political participation, spatial data analysis of new Arab American registration should reveal distinct geographic pockets of new registrants rather than randomly dispersed, spatially independent patterns.

Previous research suggests that such networks are active in the locations where Arab immigrants have settled in the past (e.g., Aswad, 1974; Haddad & Smith, 1994). Studies of Arab immigrants in Europe have found that voter turnout there is directly related to the political mobilization that occurs through ethnic networks (Togeby, 1999, 2004). Internal to the Dearborn, Michigan, Arab American community, Lin (2004) found that those with extensive network ties had more knowledge about how to take political action to resolve community

problems than those who had narrower networks. This body of work guides us to the expectation that the presence of network ties within Arab American communities is participation-enabling, helping to account for elevated levels of political participation among Arab Americans even in the pre-9/11 period.

One of the traditional ethnic loci of social and political organization has been the place of worship, and this generalization would appear to hold for recent Muslim immigrants in particular. One recent study shows that since 2001, Muslim advocacy groups have turned increasingly to mosques as centers for voter registration activity and political outreach (Jamal, 2005). In turn, higher levels of mosque participation are associated with higher levels of political activity. Those who regularly attend Muslim religious services are also more likely to be sensitive to how Islam has been demonized, fostering a stronger sense of collective identity (Jamal, 2005; Kahn, 1998: 117), which is itself an important precursor for group mobilization.

Spatial evidence for increased mobilization

Although there are reasons to expect that Arab American political involvement and mobilization prior to 9/11 was nothing extraordinary, and that the same complacency might have continued afterward, we have also set forth a compelling rationale for believing that 9/11 would have been a turning point, certainly in some locations. Since the spatial distribution of participation-enabling traits is far from even, we would not expect this movement into the electorate to be geographically uniform. Instead, following Johnston's study of striking mineworkers in Britain (Johnston, 1991), we expect that the level of activism is likely to reflect underlying local attributes of the community. Accordingly, we may see spatial surges of registration activity in areas with the constellation of characteristics that political participation theories suggest will influence activism: locations with more affluent and better educated citizenry, with larger foreign born populations, with larger Arab American concentrations, and with nearby mosques.

Evidence of these spatial surges is likely to be conditioned by the numerical size of the Arab American population. That is, given their small numbers in most locations, clusters of new Arab American registrants may be most prominent at granular scales such as neighborhoods or city blocks. Certainly, it would be much more difficult to imagine that these effects could register at larger units of aggregation, such as counties or states. The scale of the spatial surges should reflect the scale at which this ethnic population can be found to be clustered in the locations we examine.

Data preparation and analysis

Our data analysis is based on the entire population of registered voters in 15 large counties in six states: Oregon (Washington, Clackamas, and Multnomah), California (Santa Clara, Los Angeles, and San Diego), Florida (Broward, Pinellas, and Orange), North Carolina (Wake, Mecklenburg, and Forsyth), Pennsylvania (Philadelphia County), and New York (Nassau and Queens). These locations were chosen for three principal reasons. First, these locations present broad diversity along a number of important dimensions, including total population size, ethnic diversity, and total size of the Arab American population (see Table 1)—all of which may condition the extent of mobilization within the community. After all, Arab Americans are not simply found in one kind of neighborhood or cultural context, but reside in a variety of settings—a function of their episodic history of migration to the United States (Naber, 2000).

Table 1

Census characteristics of study locations with estimated number and percentage of Arab American pre- and post-9/11 registrants

Census data	Broward, FL	Orange, FL	Pinellas, FL	Clackamas, OR	Multnomah, OR	Washington, OR
Total population	1,623,018	896,344	921,482	338,391	660,486	445,342
% Foreign born	25.3	14.4	9.5	7.1	12.7	14.2
% Naturalized	11.3	6.0	4.4	2.7	4.4	4.6
% Entered 1990−2000[a]	40.9	45.8	37.5	43.3	55.1	53.1
Arab ancestry[b] 2000	10,747	6,234	5,137	1,545	2,824	2,152
Arab ancestry[b] 1990	6,319	3,110	2,838	894	2,206	1,019
% Change 1990−2000	70.1	100.5	81.0	72.8	28.0	111.2
Voter file data						
Pre-9/11 Arab	6,782 (81.0%)	3,021 (72.2%)	1,369 (76.5%)	304 (80.6%)	507 (63.3%)	393 (65.4%)
Post-9/11 Arab	1,593 (19.0%)	1,162 (27.8%)	420 (23.5%)	73 (19.4%)	294 (36.7%)	208 (35.6%)
Total Arab registration	**8,375**	**4,183**	**1,789**	**377**	**801**	**601**

Census data	Philadelphia, PA	Nassau, NY	Queens, NY	Los Angeles, CA	San Diego, CA	Santa Clara, CA
Total population	1,517,550	1,334,544	2,229,379	9,519,338	2,813,833	1,682,585
% Foreign born	9.0	17.9	46.1	36.2	21.5	34.1
% Naturalized	4.3	9.9	20.9	13.8	8.9	14.0
% Entered 1990−2000[a]	46.4	27.7	41.7	34.8	35.5	46.3
Arab ancestry[b] 2000	5,271	6,397	16,165	65,836	18,747	9,063
Arab ancestry[b] 1990	3,490	5,193	9,938	56,345	13,055	7,085
% Change 1990−2000	51.0	23.2	62.7	16.8	43.6	27.9
Voter File Data						
Pre-9/11 Arab	6,782 (81.0%)	2,731 (84.5%)	5,725 (8.3%)	20,348 (75.2%)	3,339 (56.1%)	2,740 (70.5%)
Post-9/11 Arab	1,593 (19.0%)	501 (15.5%)	1,582 (21.7%)	6,711 (24.8%)	2,610 (43.9%)	1,149 (29.5%)
Total Arab registration	**8,375**	**3,232**	**7,307**	**27,059**	**5,949**	**3,889**

Table 1 (*continued*)

Census data	Forsyth, NC	Mecklenburg, NC	Wake, NC	Total (All)
Total population	306,067	695,454	627,846	–
% Naturalized	6.5	9.8	9.7	–
% Foreign born	1.3	2.8	2.6	–
% Entered 1990−2000[a]	65.7	62.1	64.3	–
Arab ancestry[b] 2000	721	3,930	4,569	–
Arab ancestry[b] 1990	518	1,881	2,312	–
% Change 1990−2000	39.2	108.9	97.6	–
Voter file data				
Pre-9/11 Arab	232 (78.1%)	959 (78.7%)	1,108 (68.3%)	55,452 (73.3%)
Post-9/11 Arab	65 (21.9%)	259 (21.3%)	515 (31.7%)	19,871 (26.7%)
Total Arab registration	**297**	**1,218**	**1,623**	**74,323**

Source: U.S. Census, 2000 and County Voter Files from Each Location as of 12/31/03.

Figures in boldface indicate estimate of total Arab American registered voter population.

[a] % of all foreign born residents who entered between 1990 and 2000.

[b] Ancestry count for each county is based on Census 2000 Summary File 3 (SF 3) Sample Data, or Census 1990 Summary File 3 (SF 3) Sample Data.

Second, they are all in states that register voters by political party, so it is possible to examine whether those newly registered were inclined to prefer one party or another. Third, these are all locations that keep up-to-date and well-managed voter files available for research and analysis. Our effort required up-to-date files that contained detailed information on registration dates and birth dates. Not every county government manages voter files with the same level of competency and diligence.

Background on the study locations

To be sure, this set of locations is neither random nor representative of all locations where Arab Americans have settled in the United States. But our effort is still an unprecedented examination of places where Arab Americans are known to have a considerable presence combined with locations where they are less prominent and remain unstudied. Typical treatments of ethnic populations commonly gravitate toward the larger ethnic enclaves, often ignoring those locations where the ethnic population is less visible, or well-integrated with the general population. The emerging literature on Arab immigrants often highlights their invisibility in locations where they are not concentrated or especially large in number (Naber, 2000; Nagel, 2005). By examining Arab Americans in seemingly out-of-the-way areas such as North Carolina and Oregon, we include the visible and invisible, or *less* visible, residents.

Table 1 provides relevant census information about the change in the population of Arab ancestry from 1990 to 2000, along with associated facts on the foreign born and naturalized in each county. Some of our study locations, such as Orange, FL (Orlando), Washington, OR (suburban Portland), Mecklenburg, NC (Charlotte), and Wake, NC (Raleigh), saw their Arab American populations double across the intercensal period. The largest study areas on the East Coast, Philadelphia, PA, and Queens, NY, also witnessed notable increases, 51% and 63%, respectively. The flow into Los Angeles was slower percentage-wise, but there was a 43.6% jump in San Diego. Among this set of counties, we capture significant variation in population size and recent immigrant flow.

The locations also present helpful variation in terms of the presence of Arab American ethnic organizations and the size of the Arab Muslim population. Queens and Los Angeles not only have large Arab American populations, but numerous ethnic organizations that serve as the basis for network exchange. Organizations link Arab American professionals, business leaders, and activists concerned with advancing Arab American political causes. The Muslim presence is also substantial, at the time our research was conducted; there were 49 mosques in Los Angeles County, with 15 in Los Angeles city proper, and 35 in Queens. These communities are large enough to sponsor their own Islamic schools.

At the other end of the continuum, our North Carolina counties exhibit far less of an *organized* Arab American presence. These Arab Americans live in a rather different milieu, one that may stimulate political participation, but less out of a strong sense of group consciousness and more as a result of interaction with non-Arab populations. Most Arab Americans in North Carolina are not Muslim, although there are mosques in Winston-Salem (3), Charlotte (7) and Raleigh (2). Current evidence suggests that they are small, and only one in Charlotte is sizable enough to sponsor its own religious school.

In 2002, Charlotte did make headlines due to the local conviction of two Lebanese American businessmen who were charged with supporting Hezbollah and related terrorist efforts through the operation of a cigarette smuggling ring. Throughout the investigation, the local Arab American Anti-Discrimination Committee (ADC) complained that the tone of media coverage

created a highly anti-Arab atmosphere in Charlotte, with aspersions cast against the entire community.

As Table 1 indicates, Arab Americans are a middling presence in the other two California locations, the Florida locations, Philadelphia, and Nassau, NY. Florida ranked third to New York and California in the number of anti-Arab bias complaints to the U.S. Commission on Civil Rights in the year following 9/11, rising to second the following year. The Florida communities included here are large enough to have a significant Arab and Muslim presence, and to have sponsored cultural sensitivity training sessions in local police departments, but not the broad array of secular and religious organizations that New York City and Los Angeles are able to command. Anti-Arab bias attacks after 9/11 were reported on Long Island and Philadelphia. San Diego's Arab Muslims were shocked to learn that three of the 9/11 hijackers had lived and prayed among them. Suspecting there might be more terrorists in the community, the FBI maintained a constant presence in San Diego mosques for months after the attacks.

The Portland metro area has a small Arab American population, scattered throughout Portland and affluent suburban Washington County (Beaverton, Tualatin). In spite of a seemingly diminutive presence, however, this area became a veritable hotbed for FBI terrorist investigations of Arab Americans in the months following 9/11. In response, a Portland mosque was the first to join a lawsuit challenging the provisions of the USA Patriot Act. In mid-2003, imam from a Portland mosque was arrested in an embarrassing spectacle that closed an entire concourse at Portland International Airport, but eventually resulted in only trivial fraud charges. The area's Arab American population was rocked by the arrest and eventual conviction of seven Muslims accused of plotting with Al-Qaeda and the Taliban in 2001. Five of the seven received lengthy prison terms. These investigations triggered an intense climate of fear among Arab Americans throughout Oregon and the Pacific Northwest. The Portland experience suggests that threatening government policies, alone, can trigger greater political awareness, and that members of threatened groups need not be concentrated in a large or extensively-organized community to respond.

In short, each of our study locations presents its own unique story with regard to the Arab American experience after 9/11. Although Arab Americans are not considered numerically large in several of the places we examine, their presence is noticeable and has been noticed.

Voter registration lists

The data on voter registration are considered public information, and the files were acquired in the fall of 2004 from local boards of elections or county offices (usually the county clerk) that manage local voter registration. Each file contains registration history through the early months of 2004. Our cut-off date for analysis is December 31, 2003. Post-9/11 registrants are considered those who registered after September 11, 2001, but before January 1, 2004. Pre-9/11 registrants registered to vote prior to September 11, 2001. These lists include the entire registered voter population. No sampling is involved.

These lists contain two important components. First, because they contain residential addresses, we are able to spatially locate all registered voters in their neighborhoods. We can, in turn, then assess the geographic distribution and density of all registered voters.[1]

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[1] Surveys, on the other hand, are severely limited in the sense that they rarely sample enough people at given locations for us to determine whether there is spatial variability in the concentration and mobilization of voters.

Second, we have the registrants' names. The names (first and last) help us identify which registrants are Arab Americans. Lauderdale (2006) describes in considerable detail the process of building our Arab American surname dictionary, so we will not reiterate the full procedure here. Briefly, the name dictionary was compiled from applications for Social Security cards, a registry of persons living in the United States since 1936 when the social security program began. These applications collect information on the names of parents and their nation of birth. Names are then categorized accordingly to how likely they are to be attached to Arab ancestry. Some names are virtually always associated with Arab ancestry while others are associated but perhaps less commonly. The final list we used contains over 29,000 names (over 22,000 surnames and over 8,000 first names). Such name coding procedures do have limitations. For instance, if one is examining names only, intermarriage and adoptions certainly can "mask" ethnic identity, as can the propensity to anglicize names. Despite obvious limitations, this is clearly a well-documented and effective method. It is also a method that is familiar to and widely used among others who study Arab Americans, employed by specialists such as Jen'anan Ghazal Read (2004: 1044) and the survey research of Arab American pollster John Zogby.

Tests of this method have indicated that surname lists do identify, with high accuracy, a majority of persons who self-identify as Arab American (Lauderdale & Kestenbaum, 2000: 294). Efforts to validate this list, and similar name dictionaries, have been encouraging (Abrahamse, Morrison, & Bolton, 1994; Lauderdale & Kestenbaum, 2000; Morrison, Kestenbaum, Lauderdale, Abrahamse, & Samia El-Badry, 2003), accounting for the widespread use of surname identification procedures in fields such as public health (Lauderdale, 2006; Morgan, Wei, & Virnig, 2004; Quan et al., 2006); and political microtargeting (Lee & Sutton, 2002).

Although our data are rich and unique, they do lack detailed individual level information often used in political behavior research. All of the lists we are working with contain some information on voter history, age, sex, and party registration, but other variables such as income, education level, and political interest are lacking. Certainly, no data source is perfect, but the voter files are the best source for studying geographic patterns of registration and mobilization and the associated names give us an indication of ethnicity.

Ripley's *K* and Besag's *L*

To determine whether spatial surges in registration occurred at all, we must begin by obtaining some measure of the density of the population in a community. We would like to know, for instance, whether there is a more spatially distinct community of Arab American registered voters at a location after 9/11 compared to the density in that same area prior to 9/11. Our measure of spatial concentration is Besag's *L*. Intuitively, suppose one can overlay a grid with equal-sized cells over a county. If the number of Arab Americans residing in each cell of the grid is the same, then the "concentration" or "density" is low because it would appear that the residences of Arab Americans are independently distributed across space. On the other hand, if most Arabs are located in just one cell with most of the remaining cells largely empty, then the concentration or density is high.

If the aftermath of 9/11 is productive of distinctive spatial patterns or surges in mobilization attributable to neighborhood related outreach within non-participatory groups, we should see *new* Arab American registrants clustering in greater numbers than if they were simply registering randomly and independently of any kind of spatially distinct stimulus. To establish that the concentration of new registrants is independent of other factors, we might also note whether

and how the spatial distribution of Arab Americans who registered after 9/11 differs from that of the non-Arab American population registering after 9/11.

To examine these spatial patterns, we compute Besag's *L* across our locales of interest. We first describe Ripley's *K* function since Ripley was the pioneer in this area. Besag's *L* is a straightforward normalization of Ripley's *K*, but is generally preferred because it is easier to interpret. The two functions measure identical quantities. The *K* function is simply the number of neighboring observations divided by the average density (Ripley, 1976, 1977, 1981). It quantifies concentration or dispersion by considering each point and its neighbors within a distance, *d*, of each of these points. Ripley's *K* is defined as

$$K(d) = \frac{E(d)}{\lambda},$$

where $E(d)$ is the number of points or neighbors within a distance, *d*, of an arbitrary point, and λ is the average density over the area of interest (Fotheringham, Brunsdon, & Charlton, 2000; Wiegand & Moloney, 2004). Fig. 1 demonstrates this technique with circles of radius 0.25 miles drawn around each Arab American registrant in a Florida county.[2] If there are no systematic influences on where points in space occur, then the expected number of points in a circle of radius *d* is $\lambda \pi d^2$, and so $K(d) = \pi d^2$. Accordingly, if points/registrants are concentrated at a distance *d*, then $K(d)$ will be greater than πd^2. If registrants are dispersed, then $K(d)$ will be less than πd^2. The benchmark, then, is πd^2.

Besag's (1977) *L* is a normalized form of Ripley's *K*,

$$L(d) = \sqrt{\frac{K(d)}{\pi}} - d.$$

This statistic is more easily interpretable because the normalization results in the benchmark now being 0. Accordingly, when $L(d) > 0$, the population is geographically concentrated, and negative values indicate dispersion.

Results

We begin analyzing our data by first comparing Besag's *L* at various distances for Arab American registrants after 9/11 with both non-Arab American registrants post-9/11 as well as all Arab American registrants pre-9/11. Our unit of observation is the individual. For instance, the value of Besag's *L* at the 1-mile mark gives us an indication of how much spatial clustering is evident at a radius of 1 mile from each individual registrant. Exemplary results from four counties are presented in Figs. 2–6. In examining these plots, we are not necessarily most interested in the distance at which clustering can be shown to peak, for example, the distance at which *L* reaches its highest value, but instead in differences among these groups at various distances indicative of the scale of Arab American residential concentration.

If group-oriented networks are operating to produce spatially distinctive peaks in voter registration among Arab Americans after 9/11, we might expect clustering to be high among

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[2] Edge effects can be problematic because points located near the boundary of the study area will be fewer, ceteris paribus, than those in the center of the study area since points outside the boundary are not counted, resulting in bias. We correct for this by using only the part of the circle's area that is within our study location (Besag, 1977).
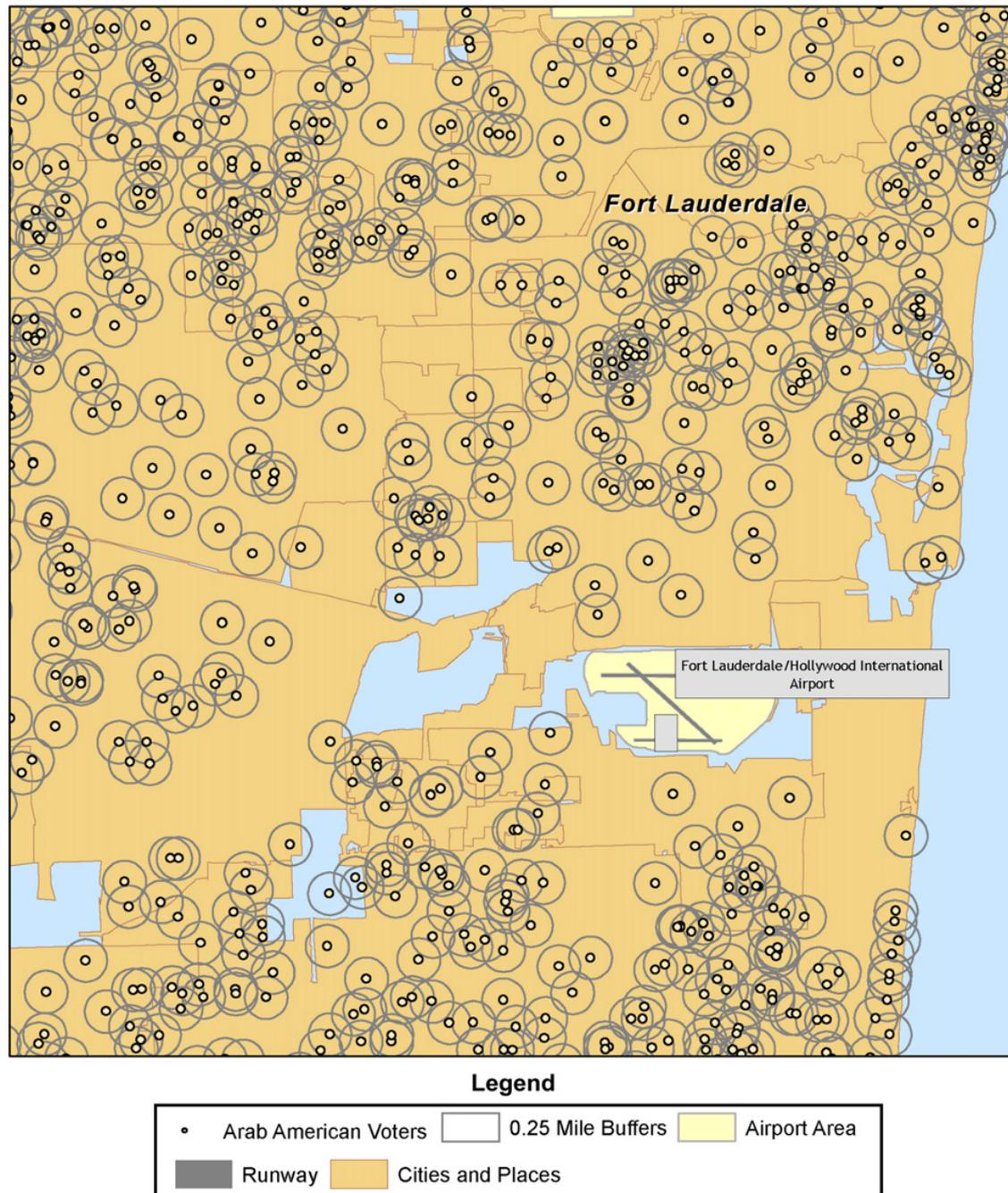
Fig. 1. At what scale does clustering occur? Spatial distribution of new Arab American registrants in Broward County, Florida, with 0.25-mile radii shown.

post-9/11 registrants at very small distances, distances that represent the typical scale of physical proximity of these new citizens to each other—city blocks and even single households. Comparisons to pre-9/11 Arab American registrants are of particular value since there is substantial intersection in settlement patterns.

Across the locations we are evaluating, we discover some variability in clustering. Several counties (Nassau, NY, Queens, NY, and Clackamas, OR) show greater geographic concentration of post-9/11 Arab American registrants than of those who registered prior to this event. In these cases, the post-9/11 pattern is unique especially for short distances, but fades as distance increases. At all three North Carolina locations we observe a modest spatial surge in
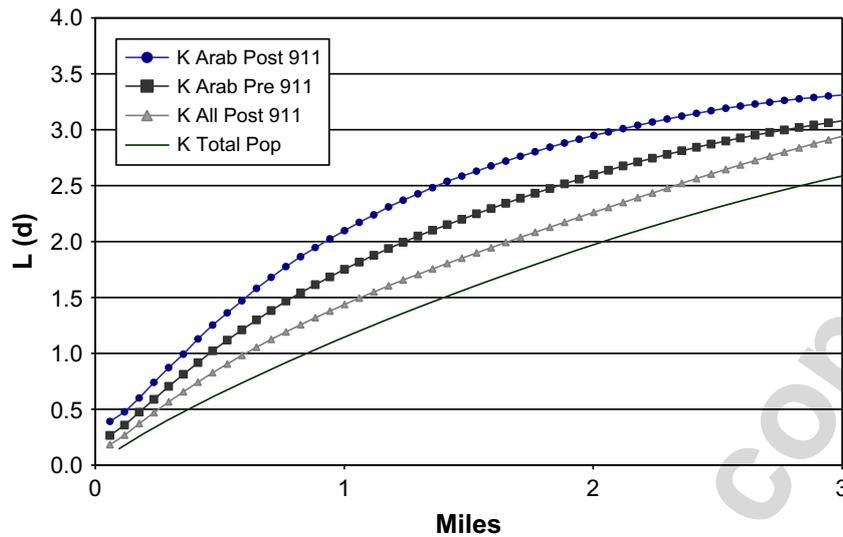
Fig. 2. Besag's *L* (Ripley's *K*) Function for Queens County, NY.

post-9/11 Arab American registration at very short distances (<2 miles) but substantial similarity to pre-9/11 Arab American registration at scales greater than 2 miles (see Mecklenburg County in Fig. 4). While the differences between the pre- and post-9/11 populations are small, this evidence is consistent with the notion that spatial surges in new registration result from information flow within neighborhoods, and among kin, about the importance of political involvement.

What about the cases where we see no distinctive spatial surges present on these graphs? In these locations, mobilization may occur, but it is qualitatively different. Isolated Arab American residents sprinkled among the general population may be motivated to register to vote, perhaps out of a sense of threat, but they do not appear to be moved as part of a concerted effort occurring within a geographically concentrated community of non-voters. These individuals register singly, perhaps with a family member, but this type of mobilization appears as spatially indistinct on the graphs of Besag's *L*. Some type of network may be involved in producing such
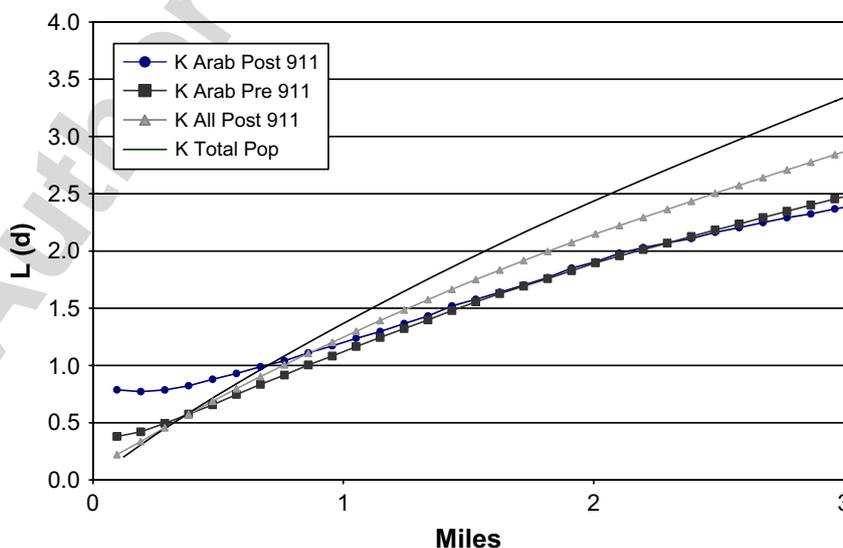

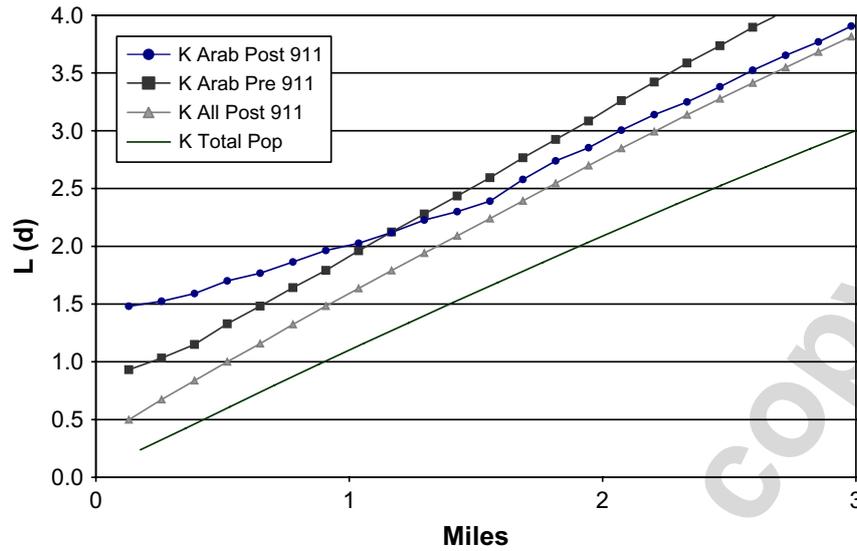Fig. 3. Besag's *L* (Ripley's *K*) for Nassau County, NY.

Fig. 4. Besag's *L* (Ripley's *K*) for Mecklenburg County, NC.

aspatial patterns, but it is doubtless of a more diffuse variety. In Portland, for example (see Fig. 6), the pattern of post-9/11 Arab American registrants is difficult to discern from the pattern of previous registrants, or even the city's general population distribution. We also found this similarity in Philadelphia (figure not shown).

Modeling the emergence of new Arab American registrants

To explain the sources of spatial variation in the incidence of Arab American registration after 9/11, we estimate two logistic regression models. In the first model, our population is all Arab American registrants, and our dependent variable indicates a post-9/11 registration. In the second model, our population is all post-9/11 registrants, and our dependent variable indicates that the registrant is Arab American. We chose our explanatory variables based on their obvious theoretical importance to explaining the spatial incidence of new Arab American
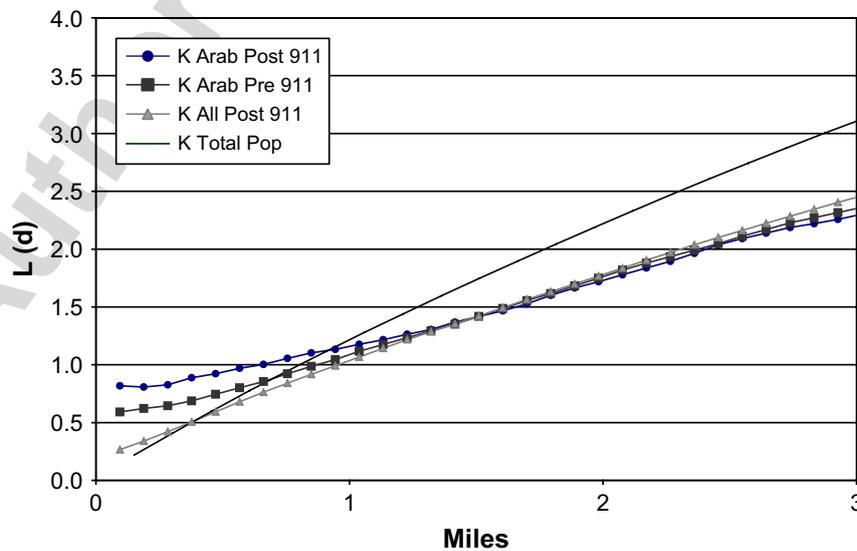

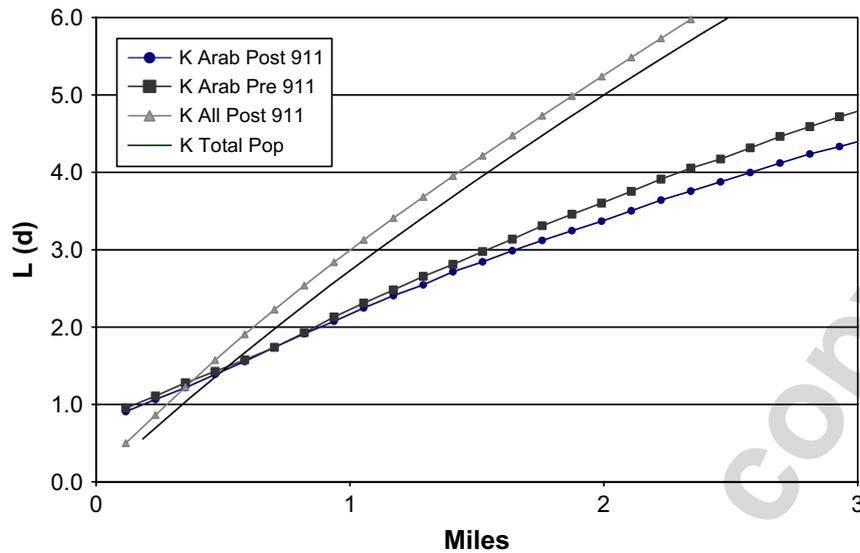Fig. 5. Besag's *L* (Ripley's *K*) for Pinellas County, FL.

Fig. 6. Besag's *L* (Ripley's *K*) for Multnomah County, OR.

registration. Specifically, at the individual level, we evaluate the effect of age, gender, and political party affiliation. We also control for the number of mosques in each study area to help evaluate whether there was a conspicuous uptick in Arab American voter registration in areas where Muslim religious institutions may have served as a hub of information exchange after 9/11 (Jamal, 2005).[3]

Since our spatial clustering analyses suggested that new registrants of Arab American ancestry emerged at a very granular scale, we include neighborhood characteristics measured at the census tract level of aggregation.[4] Inclusion of these covariates should help to account for the spatial distribution of the dependent variable both within and across the study locations. These include education, median household income, the proportion of residents in the tract that has moved from outside the state in the previous 5 years, the proportion in the tract that are foreign born, and measures related to the size of Arab and non-Arab populations.[5]

We also include the percentage of Democratic registrants to capture neighborhood targeting efforts by political parties. Considerable evidence suggests that the political parties in the 2002 mid-term elections focused on building their base of registrants and voters, gravitating to areas of pre-existing strength to register the newly naturalized, and employing sophisticated technology to target those with irregular voting histories (Gimpel, Dyck, & Shaw, 2004). We might expect, then, to observe spatial surges in registration at locations where the parties have

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[3] We normalize this measure by population on the grounds that the Muslim presence at a small location with two or three mosques may be much more pronounced than a much larger location that is home to, say, 10 mosques.

[4] Sociologists have persuasively suggested that census tracts approximate neighborhoods in most U.S. metropolitan areas (Massey & Denton, 1993).

[5] One might suspect that spatial autocorrelation may pose a problem in our analysis. We are cognizant of this issue, but our analysis is limited by the binary nature of our dependent variable and the size of our data set. We did, however, compare the results from an OLS regression with a spatial lag and spatial error regression for a smaller data set (with randomly selected observations from our full data set). This analysis showed that the spatial lag, while significant, did not change the magnitude, direction, or significance of the other independent variables in the equation. Since our main concern surrounds the other independent variables, we are confident that the logistic regression coefficients remain unbiased.

lopsided majorities, and where, on average, sizable percentages of new registrants would likely vote for the ''right'' candidates on Election Day. Lastly, the total electoral size of the county is included as a control variable to account for the possibility that larger counties are more likely to be targets of organized voter enrollment activity than smaller counties.

Regression results

Our results appear in Tables 2 and 3. The last column of these tables indicates the proportion increase in post-9/11 Arab American registration associated with moving a (statistically significant) independent variable from its lowest to highest value. In Table 2, then, positive signs indicate influences that increased the likelihood of a post-9/11 Arab American registration relative to a pre-9/11 Arab American registration. We compute robust standard errors to account for the clustering of voters within census tracts.

The results in Table 2 indicate that post-9/11 Arab American registrants differ from pre-9/11 registrants in some predictable and interesting ways. First, in terms of individual level characteristics, they are younger and more likely to be men. They are less partisan than their counterparts pre-9/11. Apparently in the wake of 9/11, many new Arab American registrants were uncertain as to which political party best represented their interests. This contrasts with the pre-9/11 period, when a larger share of registrants exhibited Republican predispositions. One important effect of the registration following the 9/11 policy aftermath was the shift of Arab American partisanship at these urban locations toward the Independent and Democratic side of the ledger, a movement that contributed to the momentum that Democratic candidates built among Arab Americans as the 2004 election approached.[6]

Since there is considerable support for the notion that individuals' party identifications are quite stable (Green, Palmquist, & Schickler, 2002) we can infer that much of this transformation is due to the enrollment of new voters who fundamentally changed the partisan composition of the Arab American electorate. Moreover, this political shift in party orientation after 9/11, and prior to November 2004, is neither confined solely to Muslim adherents nor driven only by new registration at mosques. Zogby's polling data suggest that the events following 9/11 steered well-networked, and politically literate Arab Americans, regardless of national origin or religion, toward a more common, pan-ethnic, political identity.[7]

Somewhat surprisingly, our findings indicate that new registrants compared to old are *less* likely to be found at locations where there is a more visible or institutionalized Muslim presence. Table 2 suggests that cases of new Arab American registration are 4% *lower* at those locations where the number of mosques (per resident) is highest than where it is lowest. This may be due to the very real possibility that Arab Americans were already registered at these locations, and that there were fewer Arab Americans to enroll in the months following 9/11.

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[6] Another glimpse of this momentum is exhibited in the survey data of John Zogby, the nation's leading expert on Arab American political opinion and attitudes, who polled voters in the political battleground states of Florida, Ohio, Michigan, and Pennsylvania in April and October of 2004. Across this 7 month period, Democratic Party identification surged among all Arabs, irrespective of religion. But the most dramatic surge came among secular Arabs, who moved from 38.6% to 60.9% Democratic in their affiliation over a brief period of a few months.

[7] Nevertheless, some polls did indicate that President Bush's support among Muslim Arabs was much lower than it was among other religious groups. Overall, the October 2004 survey indicated that Arab Americans favored John Kerry over George W. Bush by a 54% to 31% margin, with 7% supporting Ralph Nader, and the remaining undecided. This stands in marked contrast to the 2000 election when a majority of Arab Americans supported George W. Bush. The Zogby polls indicate that between the two elections, Bush lost about one-third of his Arab American support, not including those who decided not to vote in 2004 at all.

Table 2

Logistic regression on Arab American voter registration after 9/11 relative to pre-9/11 Arab American registrants

	Coefficient	Impact
Intercept	3.7011[a] (0.1909)	
Age at registration	−0.0032[a] (0.0011)	−0.09
Female	−0.2362[a] (0.0316)	−0.04
Democrat	−0.3940[a] (0.0445)	−0.07
Republican	−0.6806[a] (0.0440)	−0.11
Mosque presence	−0.0007[a] (0.0002)	−0.04
Percent college educated (Tract)	−0.0010 (0.0010)	
Median household income (Tract)	0.0000 (0.0000)	
Percent migration (Tract)	−0.0016 (0.0015)	
Percent foreign born (Tract)	−0.0014 (0.0010)	
Percent Arab ancestry (Tract)	0.0139 (0.0084)	
Percent Pre-9/11 Arabs (Tract)	0.0178[a] (0.0018)	0.21
Percent Post-9/11 non-Arab registrants (Tract)	−0.0559[a] (0.0013)	−0.88
Competitiveness (Tract)	0.0001 (0.0014)	
Percent democratic (Tract)	−0.0012 (0.0008)	
Total electoral size (County)	−0.0012[a] (0.0001)	−0.14
N	47,128	
Log likelihood	−24,173.7	

Robust standard errors in parentheses.

Impact is measured as the change associated with moving the variable from its lowest to highest value while holding other variables constant at their sample means.

[a] $P < 0.05$.

Another possibility is that locations with a pronounced Muslim religious presence are populated with non-citizens who are ineligible to vote, or citizens who maintain intense transnational ties, complicating the process of identification with the United States (Nagel & Staeheli, 2004: 6). If this is true, then it makes sense that outlying areas where there are fewer religiously observant Arabs (and fewer mosques), exhibited higher levels of political mobilization than areas with a more pronounced Muslim presence.

Finally, in some Arab American communities, Muslim religious adherence may dampen female political engagement, particularly participation arising out of a sense of gender consciousness (Marshall & Read, 2003). While religion is a resource that can increase social capital and political engagement, it is also a source of influential ideology, including gender-family norms (Bartkowski & Read, 2003) that may distance observant Muslim women from sources of political knowledge that would catalyze the expression of political viewpoints.

Our results also suggest that the emergence of new Arab American voters relative to previous Arab American registrants is not especially sensitive to neighborhood political composition (see Table 2), although it rises modestly in areas of Arab American concentration. The income and migratory characteristics of neighborhoods are unrelated to spikes in post-9/11 registration, but a significant surge can be found in settings with a greater share of pre-9/11 registrants, suggesting that older and more established voters are involved in socializing younger and less experienced ones. In these cases, the emergent registrants are not geographically distinctive from previous ones, but live among them, in the same neighborhoods.

Finally, we find that *ceteris paribus* post-9/11 registration surges among Arab Americans in the more lightly populated counties more than it does the largest cities. This is notable because

Table 3

Logistic Regression on Arab American Voter Registration After 9/11 Relative to All Post-9/11 Non-Arab American Registrants

	Coefficient	Impact
Intercept	−2.8901[a] (0.3468)	
Age at registration	−0.0005[a] (0.0002)	−0.224
Female	−0.0840 (0.0477)	
Democrat	−0.1723[a] (0.0345)	−0.002
Republican	−0.3030[a] (0.0418)	−0.003
Mosque Presence	0.0119[a] (0.0024)	0.007
Percent college educated (Tract)	0.0090[a] (0.0019)	0.010
Median household income (Tract)	0.0000 (0.0000)	
Percent migration (Tract)	−0.0135[a] (0.0052)	−0.007
Percent foreign born (Tract)	0.0100[a] (0.0025)	0.010
Percent Arab ancestry (Tract)	0.3078[a] (0.0222)	0.321
Percent Pre-9/11 Arabs (Tract)	−0.0270[a] (0.0048)	−0.011
Percent Post-9/11 non-Arab registrants (Tract)	−0.0226[a] (0.0008)	−0.034
Percent democrat (Tract)	−0.0052 (0.0042)	
Competitiveness (Tract)	0.0041[a] (0.0020)	0.003
Total electoral size (County)	0.0000 (0.0000)	
N	1,963,414	
Log likelihood	−111,246.2	

Robust standard errors in parentheses.

Impact is measured as the change associated with moving the variable from its lowest to highest value while holding other variables constant at their sample means.

[a] $P < 0.05$.

it suggests that Arab Americans in suburban areas and smaller cities exhibit a tendency to mobilize after 9/11 even in areas where there is not a well-known and well-defined Arab American presence (see Table 1). Political mobilization is not necessarily reliant on high ethnic concentration, and frequently ethnic concentration is itself a sign of recency of immigration and non-citizen status, obvious inhibitors of registration and voting.

Table 3, which shows the differences between cases of new Arab American registrants and new non-Arab American registrants in the months following the 9/11 attacks, presents a different and instructive contrast. These results constitute a comparison of the level of political activity across ethnic lines, Arab to non-Arab, rather than within ethnicity as in Table 2. This comparison helps us understand where Arab Americans after 9/11 became a marginally larger (or smaller) share of the *total* registered voter population. These results show that new Arab American registrants are considerably younger than other citizens who enrolled after 9/11—this is perhaps their most notable individual level characteristic. Second, the new Arab American registrants are less likely to be adherents of one of the two major parties, signifying that Arab American registrants after 9/11 increased the total number of politically unaffiliated voters on the rolls at these locations.

Arab American new registration, relative to *all other* new registration, spikes at sites where the population is better educated, and in neighborhoods where there are more foreign born and Arab American residents, and in those counties where there is a large number of mosques per resident. The political ambiance of neighborhoods also matters to the increasing proportion of Arab Americans on the voter rolls, as politically competitive locations experience a modest

jump in Arab American registration, whereas one-sided Republican or Democratic neighborhoods see no significant change.

Discussion

What we have learned is that the rise in Arab American registration after 9/11 cannot be attributed solely to 1) where Arab Americans were mobilized in the past, or 2) to where the general citizenry was mobilized afterward. There are distinctive post-9/11 patterns of Arab American activation.

Our analysis indicates that the locations where Arab Americans registered after 9/11, compared to where they had registered before, were not spatially random. To be sure, there is continuity with pre-9/11 registration patterns: local surges in registration were associated with areas where there were politically active, Arab American and Muslim populations — examples include Philadelphia and San Diego. At these locations, response to the policy aftermath of 9/11 was undoubtedly facilitated by the know-how and experience of those who had already taken these steps.

Not every addition to the voter rolls testifies to the activity of ethnic networks. Given their sparse numbers, we might expect to see Arab American registration after 9/11 surge aspatially, that is, in response to influences unrelated to organizational memberships or substantial neighborhood concentrations. And we do see this in the increased registration of Arab American men and youth after 9/11 in Oregon and North Carolina. Arab Americans did not necessarily need to reside in a densely populated Arab American enclave to feel uneasy about controversial courses of official policy. The sense of threat experienced after 9/11 may have been sufficiently ubiquitous that young Arab American men, for instance, were mobilized even in out-of-the-way locations where their isolation made them feel even more apprehensive. These findings are intriguing and could certainly serve as the starting point for more in-depth qualitative research on the large number of Arab Americans who do not live in urban neighborhoods.

We have also observed that Arab Americans became a larger share of the *total* electorate after 9/11 than before in many neighborhoods (see Table 3). While their increased registration relative to the rest of the population may still not make this group a powerhouse in statewide or national elections, the mounting numbers are still worth noting (see Table 3). Compared with the general citizen population that moved onto the rolls following 9/11, Arab American registration was younger, more male, and more likely to be unaffiliated with the two major political parties. It also rose faster than non-Arab registration in locations with better educated populations, foreign born populations, more mosques, and more residents of Arabic ancestry (see Table 3). The surge in registration among Arab Americans in New York and Philadelphia, probably best fits this generalization. Certainly their power may be muted on the national level, but 9/11 appears to have stimulated greater involvement in spite of small numbers overall.

In summary, while the comparison of pre- and post-9/11 Arab American registrants reveals that those in more peripheral rather than highly central locations registered in greater waves in the post-9/11 period, the comparison of Arab American registration to non-Arab registration after 9/11 showed that the spatial concentration of the former facilitated their greater mobilization relative to the latter. In geographic terms, what this means is that *9/11 broadened Arab American political influence beyond traditional areas of Arab American settlement, but also within them*. New Arab Americans were mobilized as part of the broader Arab American voting public in the suburban and ex-urban locations we studied, but Arab Americans gained voting power relative to the general population in the largest cities.

It is not inevitable that dramatic political events mobilize a population to action. Threats to basic rights and freedoms may not be universally or uniformly perceived (Cho et al., 2006). Other prerequisites for effective mobilization must often be met, among them, a critical mass, a racialized identity, effective mobilizing institutions, and the presence of community leadership that can unify diverse interests. To this point, none of these precursors have been in plentiful supply except perhaps in some larger cities and among Muslim Arabs.

Voter registration, because it has few of the risks or costs associated with more visible types of activism, is a political avenue of choice for group members who sense they are vulnerable. This study has suggested that mobilization occurs in response to neighborhood as well as individual characteristics that are likely to be associated with the acquisition of information relating to threatening government policy actions, coupled with information about elections and voting. It is encouraging that small and neglected minority groups do not simply give up on the electoral process as a means for expressing their views and grievances. Whether there will be a substantial payoff for this kind of activism remains to be seen, but there certainly will be no returns without it. Arab Americans appear to be following in the footsteps of previous immigrant groups that have stood up to demand recognition and respect for their values and ideals, while also learning new norms and practices. History suggests that this mutual accommodation eventually yields full incorporation, but not without conflict and adjustment for both newcomers and the well-rooted along the way. The policy aftermath of 9/11 appears to be acting as an accelerant to political activism in many Arab American communities, but clearly further research must go beyond our study to evaluate the local conditions under which we see both leaders and laggards in the incorporation process.

References

Abraham, Sameer Y. (1983). Detroit's Arab-American community: a survey of diversity and commonality. In Sameer Y. Abraham, & Nabeel Abraham (Eds.), *Arabs in the new world: Studies on Arab American communities* (pp. 84−108). Detroit, MI: Wayne State University Center for Urban Studies.

Abrahamse, A., Morrison, P. A., & Bolton, N. M. (1994). Surname analysis for estimating local concentration of Hispanics and Asians. *Population Research and Policy Review, 13*, 383−398.

Al-Qazzaz, Ayad. (1996). The Arab lobby: political identity and participation. In Wilbur C. Rich (Ed.), *The politics of minority coalitions: Race, ethnicity and shared uncertainties* (pp. 257−268). Westport, CT: Praeger Publishers.

Arab American Institute. (2004). Arab American demographics. http://www.aaiusa.org/demographics.html. Accessed January 2005.

Aswad, Barbara C. (Ed.). (1974). *Arab speaking communities in American cities*. New York, NY: Center for Migration Studies.

Barghouthi, Iyad. (1989). *Palestinian Americans: Sociopolitical attitudes of Palestinian Americans toward the Arab-Israeli conflict*. University of Durham: Center for Middle Eastern and Islamic Studies.

Bartkowski, John P., & Read, Jen'nan Ghazal. (2003). Veiled submission: gender, power and identity among evangelical and Muslim women in the United States. *Qualitative Sociology, 26*(1), 71−92.

Baybeck, Brady, & Huckfeldt, Robert. (2002). Urban contexts, spatially dispersed networks and the diffusion of political information. *Political Geography, 21*(3), 195−220.

Besag, Julian E. (1977). Comment on 'Modeling Spatial Patterns' By B.D. Ripley. *Journal of the Royal Statistical Society B, 39*, 193−195.

Browning, Rufus P., Marshall, Dale R., & Tabb, David H. (1984). *Protest is not enough: The struggle of blacks and Hispanics for equality in urban politics*. Berkeley, CA: University of California Press.

Cain, Bruce E., Kiewiet, D. Roderick, & Uhlaner, Carole J. (1991). The acquistion of partisanship among Latinos and Asian Americans. *American Journal of Political Science, 35*(2), 390−422.

Cainkar, Louise. (2002). No longer invisible: Arab and Muslim exclusion after September 11. *Middle East Report, 224*, 22−29.

Campbell, Angus, Converse, Philip E., Miller, Warren E., & Stokes, Donald E. (1960). *The American voter*. New York: John Wiley and Sons.

Castles, S., & Davidson, A. (2000). *Citizenship and migration: Globalization and the politics of belonging*. New York: Routledge.

Cho, Wendy, Gimpel, James G., & Tony, Wu. (2006). Clarifying the role of SES in political participation: policy threat and Arab American Mobilization. *Journal of Politics, 68*(4), 977−991.

Erikson, Robert S. (1981). Why do people vote? Because they are registered. *American Politics Quarterly, 9*(2), 259−276.

Feldman, Keith. (2002). American justice, Ashcroft-style. *Middle East Report, 224*, 30−31.

Fotheringham, A. Stewart, Brunsdon, Chris, & Charlton, Martin. (2000). *Quantitative geography: Perspectives on spatial data analysis*. London: Sage Publications.

Gimpel, James G., Dyck, Joshua J., & Shaw, Daron R. (2004). Registrants, voters and turnout variability across neighborhoods. *Political Behavior, 26*(4), 292−310.

Green, Donald, Palmquist, Bradley, & Schickler, Eric. (2002). *Partisan hearts and minds: Political parties and the social identities of voters*. New Haven, CT: Yale University Press.

Haddad, Yvonne Yazbeck, & Idleman Smith, Jane. (Eds.). (1994). *Muslim communities in North America*. Albany, NY: State University of New York Press.

Hershey, Marjorie Randon, & Hill, David B. (1975). Watergate and preadults' attitudes toward the President. *American Journal of Political Science, 19*(4), 703−726.

Highton, Benjamin. (1997). Easy registration and voter turnout. *Journal of Politics, 59*(2), 565−575.

Jamal, Amaney. (2005). The political participation and engagement of Muslim Americans: mosque involvement and group consciousness. *American Politics Research, 33*(4), 521−544.

Johnston, Ronald J. (1991). *A question of place: Exploring the practice of human geography*. Oxford, UK: Blackwell.

Johnston, Ron, Propper, Carol, Sarker, Rebecca, Jones, Kelvyn, Bolster, Anne, & Burgess, Simon. (2005). Neighbourhood social capital and neighbourhood effects. *Environment and Planning A, 37*, 1443−1459.

Kahn, Mohommed A. Muqtedar. (1998). Muslims and identity politics in America. In Yvonne Yazbeck Haddad, & John L. Esposito (Eds.), *Muslims on the Americanization Path?* (pp. 107−127). Atlanta, GA: Scholars Press.

Khalaf, Samir. (1987). The background and causes of Lebanese/Syrian immigration to the United States before World War I. In Eric Hooglund (Ed.), *Crossing the waters: Arabic-Speaking immigrants to the United States before 1940* (pp. 17−36). Washington, DC: Smithsonian Institution.

Lauderdale, Diane S. (2006). Birth outcomes for Arabic-named women in California before and after September 11. *Demography, 43*(1), 185−201.

Lauderdale, Diane S., & Kestenbaum, Bert. (2000). Asian American ethnic identification by surname. *Population Research and Policy Review, 19*, 283−300.

Lee, Roger, & Sutton, David. (2002). Better ethnic targeting: new methodology enhances voter files. *Campaigns and Elections, 23*(6), 31−34.

Lin, Ann Chih. (2004). Networks, gender and the use of state authority: evidence from a study of Arab immigrants in Detroit. In Alan S. Zuckerman (Ed.), *The social logic of politics: Personal networks as contexts for political behavior* (pp. 171−183). Philadelphia, PA: Temple.

Lin, Ann Chih & Jamal, Amaney. (1997). Navigating a new world: the Political Assimilation of Arab Immigrants. Paper prepared for presentation at the Annual Meeting of the American Political Science Association, August 28−31. Washington, DC.

Lin, Ann Chih & Jamal, Amaney. (1998). Ties of memory and experience: Arab immigrant political socialization and activity. Paper prepared for the Annual Middle East Studies Association Conference, Chicago, IL. December 5, 1998.

Lin, Ann Chih & Jamal, Amaney. (1999). Individual inclusion and group exclusion: the case of Arab-American immigrants. Prepared for presentation at the Annual Meeting of the American Political Science Association, Atlanta, GA. September 2−5.

Marshall, Susan E., & Read, Jen'nan Ghazal. (2003). Identity politics among Arab-American women. *Social Science Quarterly, 84*(4), 875−891.

Massey, Douglas S., & Denton, Nancy A. (1993). *American apartheid: Segregation and the making of the underclass*. Cambridge, MA: Harvard University Press.

Mehdi, Mohammad T. (1996). Arabs and Muslims in American society. In Wilbur C. Rich (Ed.), *The politics of minority coalitions: Race, ethnicity and shared uncertainties* (pp. 249−256). Westport, CT: Praeger Publishers.

Morgan, Robert O., Wei, Iris I., & Virnig, Veth A. (2004). Improving identification of Hispanic males in Medicare: use of surname matching. *Medical Care, 42*(8), 810−816.

Morrison, Peter, Bert Kestenbaum, Diane S. Lauderdale, Allan F. Abrahamse, & Samia El-Badry. (2003). Developing an Arab American name list: Potential demographic and health research applications. Paper presented at the southern demographic association meetings, Arlington, VA. October 23—25.

Naber, Nadine. (2000). Ambiguous insiders: an investigation of Arab American invisibility. *Ethnic and Racial Studies, 23*(1), 37—61.

Nagel, Caroline R. (2005). Skilled migration in global cities from 'other' perspectives: British Arabs, identity politics and local embededdness. *Geoforum, 36*, 197—210.

Nagel, Caroline R., & Staeheli, Lynn A. (2004). Citizenship, identity and transnational migration: Arab immigrants to the United States. *Space and Polity, 8*(1), 3—23.

Naff, Alixa. (1985). *Becoming American: The early Arab immigrant experience*. Carbondale, IL: Southern Illinois University Press.

Nigem, Elias T. (1986). Arab Americans: Migration, Socioeconomic and Demographic Characteristics. *International Migration Review, 20*(3), 629—649.

Nyang, Sulayman S. (1999). *Islam in the United States of America*. Chicago, IL: ABC International Group, Inc.

Orfalea, Gregory. (1988). *Before the flames: A quest for the history of Arab Americans*. Austin, TX: University of Texas Press.

Phillips, Deborah A. (1979). Information diffusion within an inner city neighborhood. *Geografiska Annaler, Series B, Human Geography, 61*(1), 30—42.

Quan, Hude, Wang, Fulin, Schopflocher, Donald, Norris, Colleen, Galbraith, Diane P., et al. (2006). Development and validation of a surname list to define Chinese ethnicity. *Medical Care, 44*(4), 328—333.

Read, Jen'nan Ghazal. (2004). Family, religion and work among Arab American Women. *Journal of Marriage and the Family, 66*, 1042—1050.

Ripley, B. D. (1976). The second order analysis of stationary point processes. *Journal of Applied Probability, 13*, 255—266.

Ripley, B. D. (1977). Modeling spatial patterns. *Journal of the Royal Statistical Society B, 39*, 172—212.

Ripley, B. D. (1981). *Spatial statistics*. New York: Wiley.

Rosenstone, Steven, & Hansen, John Mark. (1993). *Mobilization, participation and democracy in America*. New York: Macmillan.

Sandoval, Jose Miguel, & Fendrysik, Mark Stephen. (1993). Convergence and divergence in Arab American public opinion. *International Journal of Public Opinion Research, 5*, 4.

Samhan, Helen Hatab. (1987). Politics and exclusion: the Arab American experience. *Journal of Palestine Studies, 16*(2), 11—28.

Sears, David O., & Valentino, Nicholas A. (1997). Politics matters: political events as catalysts for preadult socialization. *American Political Science Review, 91*(1), 45—65.

Shain, Yossi. (1996). Arab Americans at a crossroads. *Journal of Palestine Studies, 25*(3), 46—59.

Sigel, Roberta. (1989). Social movements and immigration. In Roberta Sigel (Ed.), *Political socialization: A sourcebook of theory and research*. Chicago, IL: University of Chicago Press.

Squire, Peverill, Wolfinger, Raymond E., & Glass, David P. (1987). Residential mobility and voter turnout. *American Political Science Review, 81*(1), 45—65.

Suleiman, Michael W. (1994). Arab Americans and the political process. In Ernest McCarus (Ed.), *The development of Arab American identity* (pp. 37—60). Ann Arbor, MI: University of Michigan Press.

Suleiman, Michael W., & Abu-Laban, Baha. (1989). The Arab tradition in North America. In Michael W. Suleiman, & Baha Abu-Laban (Eds.), *Arab-Americans: Continuity and change. Special Edition of Arab Studies Quarterly, 11* (pp. 2—3).

Timpone, Richard J. (1998). Structure, behavior and voter turnout in the United States. *American Political Science Review, 92*(1), 145—158.

Togeby, Lise. (1999). Migrants at the polls: an analysis of immigrant and refugee participation in Danish local elections. *Journal of Ethnic and Migration Studies, 25*(4), 665—684.

Togeby, Lise. (2004). It depends: how organisational participation affects political participation and social trust among second-generation immigrants in Denmark. *Journal of Ethnic and Migration Studies, 30*(3), 509—528.

Valentino, Nicholas, & Sears, David O. (1998). Event-driven political socialization and the preadult socialization of partisanship. *Political Behavior, 20*(3), 127—154.

Weatherford, M. Stephen. (1982). Interpersonal networks and political behavior. *American Journal of Political Science, 26*(1), 117—143.

Wiegand, Thorsten, & Moloney, Kirk A. (2004). Rings, circles and null-models for point pattern analysis in ecology. *Oikos, 104*, 209—229.