

IDENTIFICATION AND ANALYSIS OF ORTHODOX JEWISH ENCLAVES IN BROOKLYN, NEW YORK: A GIS BASED APPROACH

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ABSTRACT: *Given that religious faith is constitutionally precluded as a census question, it can be challenging to document the geography of religion at the micro level. This paper explores the geography of adherence to Orthodox Judaism in Brooklyn, New York through a variety of signature locational phenomena associated with the faith, including synagogues, yeshivas and kosher food retailers. The address, function, and sect affiliation of each location were obtained from the Yellow Pages and subsequently uploaded into a GIS. Using an address geocoding tool, these phenomena were plotted on a map based on their exact spatial location. Two criteria were used to help locate and define Orthodox Jewish enclaves and separate them from their non-Orthodox counterparts. The first was a high organizational density, marked by a dense concentration of Jewish establishments. Characteristic of Orthodox Jewish enclaves, high organizational density implies that there is religious homogeneity within that neighborhood. The rate of transition from high to low organizational density is also an indicator of Orthodox enclaves since it denotes isolation from the outside community. Finally, this study examined the racial composition of neighborhoods within and outside the enclaves. It was established that Orthodox Jews tend to conglomerate near particular racial groups, and that certain Orthodox sects isolate themselves from other sects. The Orthodox Jewish community continues to be mobile and their settlement spaces constantly expand and contract based on population pressures from other neighborhoods.*

INTRODUCTION

The neighborhood is a key component of American urban life. Neighborhoods are especially important to immigrant communities, who use their neighborhoods as a means to adjust to their new home. Neighborhoods that are made up of people from similar ethnic backgrounds, often facing marginalization and segregation, are known as ethnic enclaves (Gottdiener and Hutchinson 2006). According to the model of spatial assimilation, segregation is common for immigrant groups (Logan et al. 2002). In this model, urban ethnic neighborhoods begin to decay as successive generations overcome segregation and assimilate into American life. As a result, neighborhoods constantly undergo change through immigration, assimilation, and succession. For example, Manhattan's Lower East Side neighborhoods have seen a succession of Germans, Jews, Puerto Ricans, and most recently Dominicans (Logan et al. 2002).

Some neighborhoods, however, have withstood the test of time and have been able to retain a distinctive cultural heritage for decades. Among the best known and persistent of these ethnic enclaves are the Orthodox Jewish enclaves of Brooklyn, New York. Unlike their immigrant counterparts, the Jewish enclaves of Brooklyn are bound together not only by culture and ethnicity, but also religion. Their fundamentalist beliefs and strong community identities have allowed them to retain their distinct characteristics. Their settlement spaces are reflected by strong community identities which tend to cluster around Jewish organizations including yeshivas, synagogues, and kosher food retailers.

A common misperception is that all Orthodox Jewish communities are the same. However, a great deal of heterogeneity exists within the Orthodox Jewish population. The term "Orthodox Judaism" is a blanket term used to characterize all sects adhering to a strict interpretation and adaptation of Jewish laws and ethics. In Brooklyn, various Orthodox sects, including Satmar Hasidism, Sephardic, Messianic, and Young Israel, reside within larger ethnic enclaves. This study focuses on identifying major areas of Orthodox Jewish settlements by sect in Brooklyn, New York. Also investigated are characteristics that can help distinguish these ethnic enclaves from the non-Orthodox Jewish community.

BACKGROUND

Although Orthodox Jewish enclaves can be classified as ethnic enclaves, they exhibit major differences from their immigrant counterparts. The term "ghetto" was used to characterize a Jewish enclave in 14th century Venice (Haynes and Hutchinson 2008). An area of forced settlement, the Venetian ghetto eventually became an area of self-segregation that maintained a distinct Jewish culture (Haynes and Hutchinson 2008). Current Jewish enclaves maintain

many traditions of their Renaissance counterparts, albeit in a modern context. In order to understand the settlement patterns of Brooklyn's Orthodox Jewish enclaves, it is important to understand a few fundamentals of the Orthodox way of life. As a fundamentalist religion, Orthodox Judaism demands that its adherents focus on their religious lives. Orthodox Jews are governed by a strict interpretation and adaptation of Jewish laws and ethics as stated in the Torah and other Jewish texts (Berman 2009). Ritual is an essential feature of Orthodox life. Jewish law demands that men pray three times per day in a group of at least ten men. The Sabbath is also demanding. Hours of communal prayer and socializing occur around the Sabbath dinner table (Berman 2009). Such rituals are conducted in the Yiddish language. To Orthodox Jews, Yiddish is more than a language. It also takes on performative, ceremonial and communitive roles (Berman 2009).

As a result of shared customs, limited social interaction and strict adherence to tradition, Orthodox enclaves have a tendency to self-segregate. An introverted community, Orthodox Jewish enclaves have relatively little contact with "gentiles," or members of the outside community. Orthodox Jews tend to conglomerate in self-imposed enclaves and avoid as much as possible, contact with the outside world. Ultra-Orthodox sects such as the Satmar Hasidics are more conservative than their Orthodox counterparts. They live in greater isolation and avoid contact with people outside of their religious sect (Berman 2009). Demographically, the Orthodox Jewish communities of Brooklyn tend to be homogeneously white. In addition, Orthodox communities are characterized by higher than average birthrates. For one sect, the Satmar Hasidics, the total population doubles every twenty years (Hoover 2006). Orthodox Judaism is a minority denomination within the Jewish faith. A 2006 study concluded that only 37 percent of Brooklyn's Jews consider themselves Orthodox. Therefore it is important to distinguish between areas of Orthodox Judaism and other areas of Jewish settlement.

DATA

Most studies of ethnic neighborhoods utilize fieldwork, and interpretation of census data. This study took a different approach. It focused on locating and plotting the locations of religious, social, and commercial Jewish establishments throughout the Borough of Brooklyn. The Yellow Pages (www.yellowpages.com) were used in order to obtain the addresses of these establishments. Addresses were obtained online from the Brooklyn Yellow Pages and then integrated into GIS. Spatial analysis functions were performed on this data using GIS. Three categories of Jewish organizations were used due to their ease of identification and their proclivity to be found in Orthodox Jewish communities: synagogues, yeshivas (religious schools) and kosher food outlets. In all 53 kosher food outlets, 154 yeshivas, and 268 synagogues were identified and mapped in Brooklyn, New York. It is possible that not all Jewish organizations list themselves in the Yellow Pages. In a more extensive study, the Yellow Pages should be supplemented with online searches and searches in paper directories to account for unlisted Jewish organizations.

Census data was also used. However, it was not used as the main source of geographic data. The most readily available large-scale census data for GIS purposes was zip code data. Zip code census data was used to identify the racial composition of each zip code to determine the racial majority. This was used for a demographic analysis of the enclave zip codes and surrounding zip codes. Although census block or block group data would have yielded more accurate results than zip code data, it was not available in a GIS compatible form. Since zip codes contain relatively few divisions compared to census tracts or census blocks, they proved to be inaccurate for locating specific locations of ethnic enclaves. Brooklyn is divided up into only 38 different zip codes, many of which contain a wide array of racial characteristics. Another limitation of census data is that it is divided up into arbitrary geographic units, and therefore is not particularly useful for performing neighborhood analysis (Sampson et al. 2002). Because of these constraints, the focus of this analysis was address geocoding of various Jewish organizations.

METHODS

This study integrated various spatial analysis functions of GIS. The single most important method used was the address geocoding of Jewish establishments. The search for Jewish organizations and establishments in the Brooklyn Yellow Pages generated 475 results. For each result, the address, name, sect affiliation and type of organization was recorded into a spreadsheet. Once all of the data was compiled it was then uploaded into GIS ArcMap Version 9.3. Using a street based address geocoding tool, the addresses were point plotted on the map. The kernel density tool was used in order to create rasters which showed densities of synagogues, yeshivas and kosher food retailers in the study area. Kernel density measures the magnitude of point features per areal unit by creating a continuous smoothly tapered surface. Kernel densities studies have successfully been used to analyze cross-sectional point datasets in the social sciences (Schonfelder and Axhausen 2003; McLafferty and Grady 2004). Total organizational density was calculated

using a summation of the three kernel density rasters. This was done using the raster overlay feature. Spatial means for synagogues, yeshivas and kosher food retailers were also calculated in order to examine the spatial distribution of each within Brooklyn. Census data by zip code was also incorporated into the GIS. The racial composition was recorded for each zip code. The zip code data was used to perform a demographic analysis of the areas bordering the Orthodox Jewish enclaves. Finally, synagogue sect affiliation was recorded where possible. This was incorporated into the point data and used in a spatial analysis of Orthodox Jewish sects. However, most synagogues did not give their affiliation in the yellow pages. Future studies could make use of additional resources such as city directories, personal interviews, and field work in order to determine the sect affiliation of the remaining synagogues.

RESULTS

This study focused on both examining and analyzing Orthodox Jewish enclaves within Brooklyn, New York. By plotting locations with Orthodox Jewish affiliation, the locations of the enclaves were able to be determined. Figure 1 shows the point locations of synagogues, yeshivas and kosher food retailers throughout Brooklyn. The major clusters of points indicate the locations of the enclaves. The point data was also used to determine any linear orientation of these establishments. Yeshivas, businesses and synagogues were found to be clustered along Ocean Parkway, a major north-south thoroughfare in Brooklyn. In addition, the New York City F subway line runs parallel to Ocean Parkway, giving a further transportation connection to the enclaves. Because of their dense, urban, mixed use nature, synagogues, businesses and yeshivas all displayed similar distribution throughout the enclaves. The business spatial mean and the yeshiva spatial mean were located in almost the exact same area. The synagogue spatial mean was located less than a half mile south of the other two. This suggests that there is a great deal of uniformity within Jewish settlements and that the Orthodox enclaves have similar densities of synagogues, yeshivas and kosher food outlets. Ethnic enclaves are known for their mixed use nature (Gottdiener and Hutchinson 2006) and contain various ethnic run businesses. Figure 1 suggests that the same is true for Orthodox enclaves as commercial and religious structures are located in relative proximity to one another.

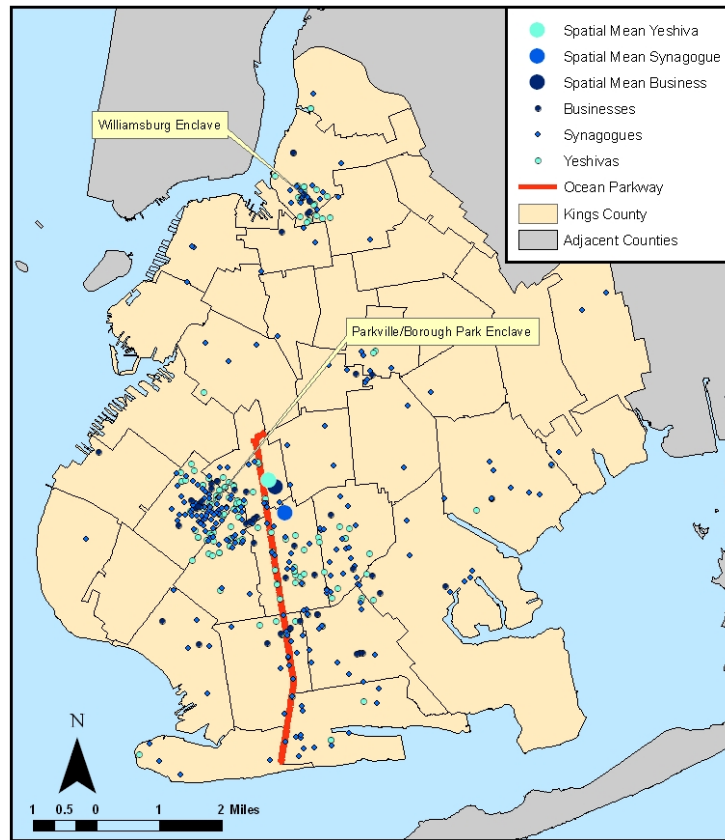


Figure 1. Point locations of Jewish organizations in Brooklyn.

The organizational density maps painted a more accurate picture of the locations of enclaves. Several areas of high organizational density showed up throughout Brooklyn. In addition to the total organizational density, the rate of transition from low to high organizational density was vital to enclave identification. A high rate of transition suggests a high level of isolation from the outside community. A concentration of high organizational density surrounded by a large area of low organizational density suggests that there is a zone of transition. This zone of transition suggests that there is some contact with the outside community. Figure 2 shows two major Orthodox Jewish enclaves: Williamsburg, and Parkville-Borough Park. Both of these neighborhoods were found to have a high organizational density and a high rate of transition from low to high organizational density. Two other areas of high density were found in the Midwood section of Brooklyn, relatively close to the Parkville-Borough Park neighborhoods. However, they were surrounded by large area of low organizational density suggesting that it interacts with the larger community and may contain more mainstream Jews as opposed to Orthodox Jews. Its proximity to the Parkville-Borough Park enclave and its north-south orientation suggest that the Midwood area is connected to the Parkville-Borough Park enclave rather than a separate entity. In essence, it is a “cultural arm” extending from the main enclave containing a wide assortment of Orthodox, and non-Orthodox Jews. This suggests that despite their increased distance from the enclave, they still maintain some connection to it. Another location of an Orthodox enclave is the cluster of organizations located in the Crown Heights section of Brooklyn. Although Crown Heights was once a Jewish stronghold in Brooklyn, it has been declining for decades (Goldschmidt 2006). In 1960 Crown Heights was 70 percent Jewish. Only 10 years later, in 1970, 70 percent of the population was African American. Although there are still some remnants of Jewish organizations, it is not enough to suggest that Crown Heights still represents a Jewish enclave (Goldschmidt 2006). Because of the inconsistencies with the other areas of high organizational density and isolation, Williamsburg and Parkville-Borough Park were identified as the only two Orthodox Jewish enclaves. Despite the high concentrations of Jewish organizations within the two identified enclaves, there are numerous others scattered at relatively low densities throughout Brooklyn. These represent either small, isolated Orthodox communities, or organizations of mainstream Jews. The latter is more likely, although there are some groups such as the Orthodox Sephardic Jews who tend to be located outside of the major enclaves.

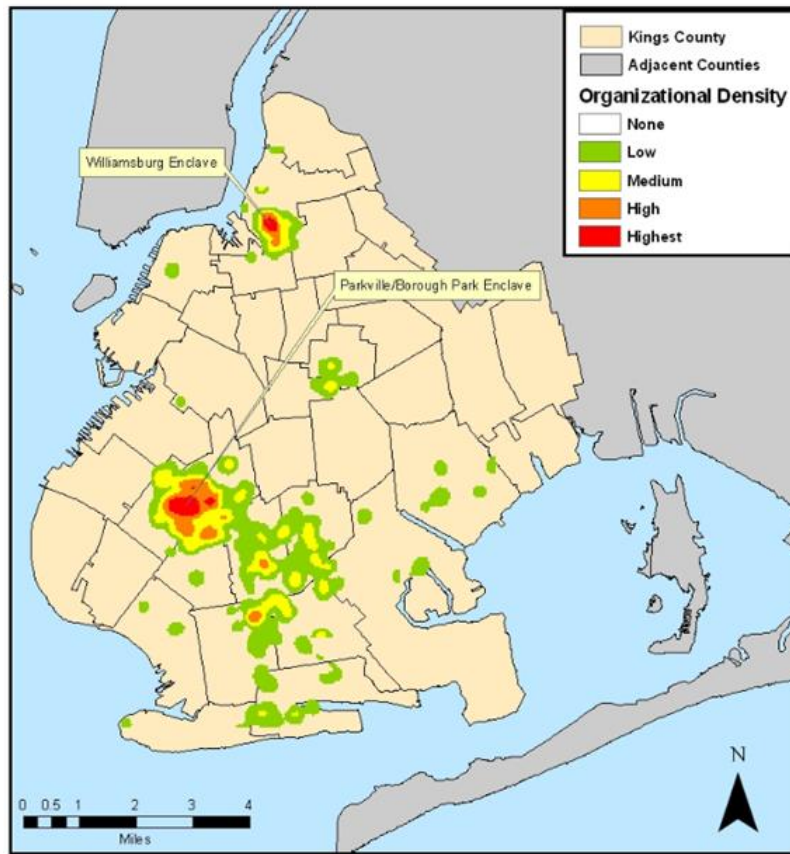


Figure 2. Organizational density in Brooklyn, New York.

This study also focused on the racial characteristics within and around Orthodox Jewish enclaves. Two major conclusions were drawn from this portion of the study. The first is that Orthodox Jewish enclaves tend to be located in areas that are overwhelmingly white. Figure 3 shows the racial majorities of Brooklyn zip codes in relation to the Orthodox Jewish enclaves. Although Orthodox Jews make up significant proportions of the white populations, zip codes bordering the enclaves also had white majorities. This suggests that they favor areas of white settlement. There were minorities present in enclave zip codes, but they were mostly Hispanics or Asians. Table 1 shows the ethnic composition of the five zip codes that fit the demographic profile of Orthodox enclaves. In the five selected zip codes, the non white population was composed of 16% Hispanic, 12% Asian, and only 5% African American. Crown Heights, an enclave in decline, is one of the few areas of Jewish settlement located in a predominantly African American area. Jews in Crown Heights have had a turbulent past with their neighbors as they steadily encroached on the former stronghold (Goldschmidt 2006). Both major enclaves are located in predominantly white areas, but have sharp drop-offs in organizational density as they approach their ethnically diverse neighbors. Areas of the “cultural arm” extend into the territory of their African American neighbors.

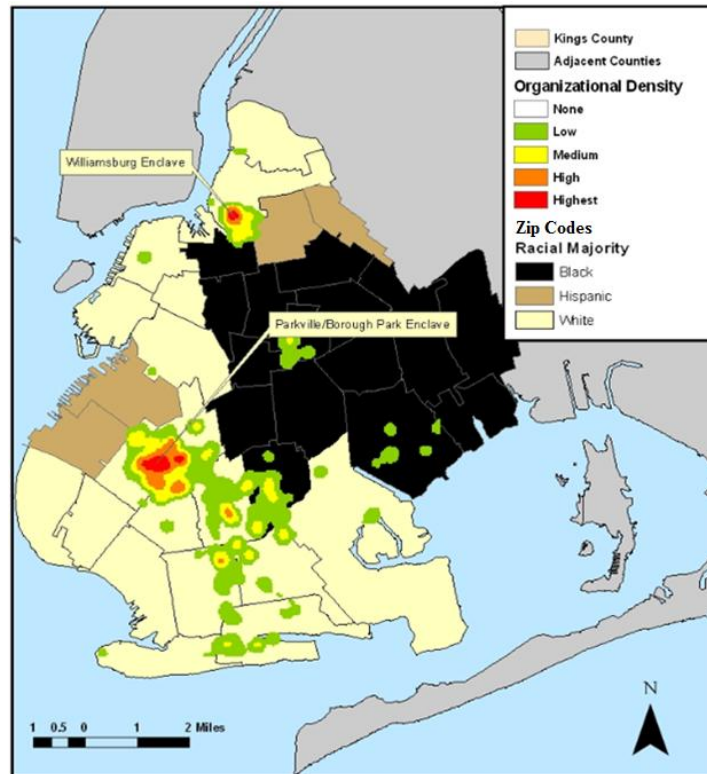


Figure 3. Space and race in Brooklyn, New York.

Table 1. Racial Composition of Zip Codes Containing Orthodox Enclaves

Zip Code	% White	% Hispanic	% Asian	% African American	% Minority
11211	63.2	36.2	2.2	4.8	43.2
11218	55.4	19.6	14.3	13.1	47
11219	71.4	11.9	16.2	1	29.1
11204	74.7	7.2	19.1	0.3	26.6
11230	73	8.2	11.1	8.3	27.6
TOTAL	67.54	16.62	12.58	5.5	34.7

There is also considerable diversity within the Orthodox Jewish community. Although most synagogues did not give their affiliation in the Yellow Pages, the ones that did were plotted and can be seen on Figure 4. This study led to two different classifications for Orthodox enclaves: multi-sect enclaves and single-sect enclaves. The Parkville-Borough Park is a multi-sect enclave and contains at least five different sects including the Messianic, Satmar Hasidic and Young Israel. The fifth sect, the Progressive Jewish sect is a non-Orthodox sect and contains mainstream members. It is somewhat surprisingly located near the center of the enclave and gives evidence that non-Orthodox Jews still retain their connections with the Orthodox enclaves. Williamsburg is the opposite of Parkville-Borough Park and is a single sect enclave. It is dominated by one sect; the Ultra-Orthodox Satmar Hasidim. As an Ultra-Orthodox sect, the Satmar-Hasidics not only isolate themselves from their non-Jewish neighbors, but also Jews who are members of different sects (Berman 2009). Figure 3 shows the Williamsburg enclave's location bordering both Hispanic and African American neighborhoods. With nowhere left to expand, the Satmar Hasidism of Williamsburg have begun to expand to New York City's northern suburbs and now have growing enclave communities in Monsey, Rockland County, and Kiryas Joel, Orange County (Berger, 1997; Santos 2006). Young Israel is an Orthodox sect that has the widest dispersion throughout Brooklyn. Although they have numerous organizations in the heart of the Parkville-Borough Park enclave, most are located in outlier areas in southern and eastern Brooklyn. With their roots in preserving Orthodox traditions and converting secular Jews, Young Israel continues to take an active role in converting new members (Quinn 2007). Recent decisions involving rabbinical appointment have caused some commotion within the sect and within the larger Orthodox community (Quinn 2007). These inter-sect rifts, and divergence from traditional Orthodox practices can help explain Young Israel's dispersion throughout Brooklyn. Sephardic Jews, who are descended from Spanish Jews also show high levels of dispersion and are located throughout southern and eastern Brooklyn.

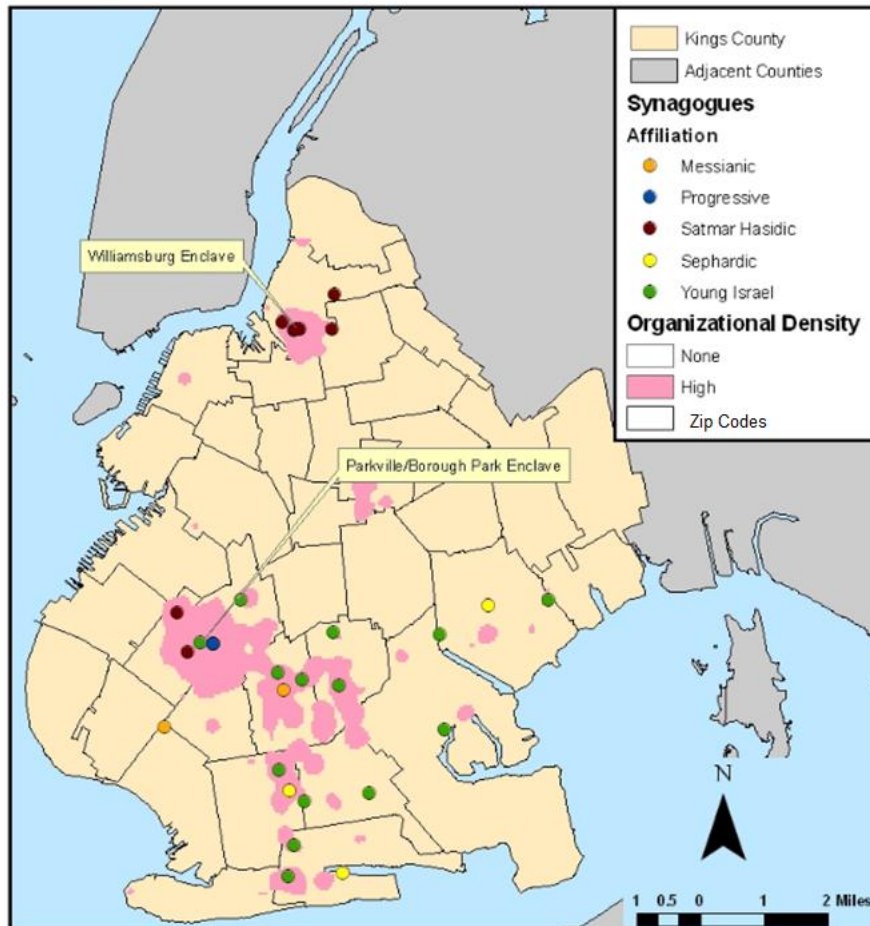


Figure 4. Sect affiliation of Orthodox Jewish enclaves.

CONCLUSION

Ethnic enclaves have been part of urban life for centuries. Ethnic enclaves are often formed by recently arriving immigrant groups who want to retain some aspects of their traditional culture. However, these enclaves rarely last more than a few generations and eventually deteriorate due to assimilation into mainstream society. There have been some exceptions to that trend. The Orthodox Jews are one exception and have been able to preserve their traditional beliefs from their ancestral homes in Europe, North Africa, and Asia. Although they have been able to preserve many of their old world traditions, they have not done so in the same space. The deterioration of Crown Heights and the emergence of the Parkville-Borough Park enclave suggest that Brooklyn's Orthodox Jews are constantly moving in response to population pressures from other groups. Orthodox enclaves are found throughout Brooklyn and contain great diversity in composition and location. The Williamsburg enclave is largely made up of Hasidic Ultra-Orthodox Jews. Its larger counterpart, the Parkville-Borough Park enclave is home to numerous orthodox sects. Both are marked by high birthrates, racial homogeneity, isolation from outside communities, and a high density of Jewish organizations such as synagogues, yeshivas, and kosher food outlets. Brooklyn's Jewish community is also home to numerous non-Orthodox Jews. This study helped detect areas with low and medium Jewish organizational density that may be affiliated with more mainstream sects. With the ever-expanding Orthodox population, it will be fascinating to see how Brooklyn's enclaves will respond to the growing population pressures.

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