ABSTRACT: The most prominent change in the population of the United States since 1970 has been the explosion of diversity among the American people. Using data from the 1990 U.S. Census and the entropy index of population, I have calculated a value between 0 and 1 for each of the zip code zones in New York City. These zones approximate New York's concept of neighborhoods. The resulting data give a profile of the level of diversity from neighborhood to neighborhood.

One of the chief attributes of the population of the United States has always been our diversity. We think of ourselves as a nation of immigrants. Prior to 1965, most immigration originated in Europe, with the exception of Native Americans and of Blacks, whose ancestors were involuntary immigrants who were brought to this country as slaves. The Immigration Act of 1965 eliminated quotas of national origin which had been designed to maintain the status quo of ethnic composition in the U.S. New quotas with a limit of 20,000 immigrants per country of origin replaced the old restrictions. This allowed more immigration from Asia and Western Hemisphere countries. This change, combined with the improvement of transportation links and the internationalization of the economy, quickly resulted in a much greater diversification of the population of the United States (Roseman et al., 1996).

New York City has always been viewed by the rest of the United States as an international city, not quite American. It was founded as a port city and even when it was the Dutch possession of New Amsterdam, it had a diversity of people that was unique in the world. New England Yankees and Quakers from England mixed with German Anabaptists and Walloons, Black slaves and freemen, Jews fleeing persecution, French traders and West Indian rum runners. Immigration continued to be important to the growth of the city throughout the colonial and revolutionary periods.

The years 1789-1880 were a time when German and Irish immigrants flooded the city; this was followed by Italians, Scandinavians and Eastern Europeans in the classic age of immigration to America from 1880 to 1920. In 1930, six years after the enactment of immigration restrictions in 1924, 34% of the city was foreign born. By 1970, the percentage of foreign born in New York City had dwindled to 18% (Allen and Turner, 1989).

The impact of the Immigration Act of 1966 did not really begin to be felt until after 1970. A comparison of Census data from 1970 and 1990. New York in 1970 was 77.2% White, 21% Black and only 1.8% were classified as Other. In the 1990 Census, categories of race were expanded to five: 43.4% White, 25.6% Black, 23.7% Hispanic, 6.8% Asian and 0.5% Other.

Immigration from Latin America and Asia was the driving force in this change in racial composition of the city. There was also an increase in immigration from Eastern Europe. The Immigration Act of 1986 further increased the flow of immigrants to New York, bringing it to an estimate of over 100,000 a year. In addition to legal immigrants, the NYC Department of City Planning estimated there were over 400,000 undocumented immigrants in the city, bringing the legal percentage of immigrants in the population (28%) to almost one in three New Yorkers by the mid 1990s (NYC Department of Planning, 1992).
The pattern of change in the neighborhoods of New York City was initiated by the "White flight" of middle-class New Yorkers which began in the mid 1960s. In the sixties, the racial dynamics of New York City was a matter of Black and White. White New Yorkers were the clear majority of residents, and even without the consideration of institutional racism and discrimination, they dominated the economic and political life of the city by sheer numbers. Black political officials were few and far between on the city-wide level, despite the fact that they made up over one-fifth of the population. It was only in 1989 that a Black man, David Dinkins, was elected mayor, although many other major American cities including Los Angeles and Chicago had Black mayors long before then.

The last twenty-five years have seen the Hispanic community become a third force in the ethnic politics of the city, and Asians have only recently started to flex their political muscle, first wielding influence in local community politics in neighborhoods such as Flushing. These developments are the direct result of the numerical growth of these ethnic communities.

The rise of the Hispanic influence in the city is perceived by many to be at the expense of the influence of Blacks. Although White influence in politics in New York has decreased, it is still the dominant force in the civic arena, although minority participation in city government is much improved in the last quarter-century. Much of this is due to lower rates of minority participation in voting, and Black and Hispanic influence will increase as their absolute population numbers and rate of voter participation increases.

These political changes and the changes in the economic and cultural landscape of New York City are seen in the changes that have occurred on the neighborhood level. A good deal of these changes have happened in the outer boroughs. A map of the Diversity Profile of New York City (see Figure 1) shows that the greatest areas of diversity are in the boroughs of Queens, Brooklyn and the Bronx. Although it was once known as a bastion of White middle-class life ala "All in the Family", Queens County is now recognized as the most ethnically diverse county in the United States. The large swath of high diversity that stretches across Queens in Figure 1 parallels the route of the #7 elevated train line. This line has become known as the "immigrant express" because it runs through many different neighborhoods where recent immigrants have chosen to settle. From Manhattan, it runs through Long Island City (various groups), Sunnyside and Woodside (Irish and Hispanic), Jackson Heights (Indi, Chinese, Korean and Central and South American), Corona (again Central and South American) and Flushing (Chinese and Korean).

As all-White neighborhoods have declined, they have developed into White/Hispanic or White/Hispanic/Asian neighborhoods. The neighborhoods that were predominantly Black in 1970 have not seen the diversification other areas have experienced. Neighborhoods of high diversity in the city are those that were mostly White or White/Hispanic in the 1960s and early 1970s, such as Long Island City, Astoria and Flushing in Queens; Fordham in the Bronx and Park Slope in Brooklyn. In their article "Neighborhood Change under Conditions of Mass Immigration: The New York City Region 1970-1990", authors Alba, Denton, Leung and Logan of SUNY Albany indicate that areas that were all-Black or Black/Hispanic have tended to gain territory over the years and to experience an increase in poverty as other New York neighborhoods increased in wealth and diversity (Alba et al., 1993).

I would now like to discuss my analysis of the occurrence of diversity throughout the neighborhoods of New York City. I have chosen to use the level of zip code areas because it is the level of U.S. Census data that most closely approximates the entity I think most New Yorkers think of when they use the term "neighborhood". This term has a special meaning to New Yorkers that may not be the same as it is used in some other places. When one New Yorker asks another where he or she lives, the response is likely to be Flatbush or Jamaica, not Brooklyn or Queens. The neighborhood is the primary arena for the personal life of the New Yorker, where she or he lives, goes to church, shops for everyday items or passes the time with friends. The neighborhood where one works also has a special place in the New Yorkers life.

It is on this neighborhood level that the change in diversity has often been first encountered. One day it is noticed that the Italian fruit stand is
Figure 1 Diversity profile of New York City (1990).
Diversity Profile of New York City - 1990

Table 1 Diversity Profile of New York City by Borough, 1990

<table>
<thead>
<tr>
<th></th>
<th>NYC</th>
<th>Manhattan</th>
<th>Brooklyn</th>
<th>Queens</th>
<th>Bronx</th>
<th>S. I.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>43.41%</td>
<td>48.98%</td>
<td>40.35%</td>
<td>48.26%</td>
<td>22.95%</td>
<td>80.16%</td>
</tr>
<tr>
<td>Black</td>
<td>25.60%</td>
<td>17.80%</td>
<td>35.07%</td>
<td>20.20%</td>
<td>31.62%</td>
<td>7.51%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>23.73%</td>
<td>25.59%</td>
<td>19.46%</td>
<td>19.03%</td>
<td>42.27%</td>
<td>7.77%</td>
</tr>
<tr>
<td>Asian</td>
<td>6.78%</td>
<td>7.21%</td>
<td>4.71%</td>
<td>11.95%</td>
<td>2.57%</td>
<td>4.32%</td>
</tr>
<tr>
<td>Other</td>
<td>0.47%</td>
<td>0.43%</td>
<td>0.41%</td>
<td>0.56%</td>
<td>0.59%</td>
<td>0.24%</td>
</tr>
<tr>
<td>Diversity Index</td>
<td>0.772</td>
<td>0.747</td>
<td>0.748</td>
<td>0.778</td>
<td>0.725</td>
<td>0.441</td>
</tr>
</tbody>
</table>

* Staten Island

now run by Koreans, or the Irish pub has become a Ecuadorian restaurant. The local parochial school that was steadily losing enrollment now has a problem with overcrowding and the church has added a Spanish mass at 11 a.m. on Sunday. The neighborhood suddenly has its first ever mosque. You develop a liking for curry at the local Indian restaurant. Your children now have friends who are from countries they never even knew existed.

It is from these beginnings that the human face and cultural landscape of New York City has been transformed since 1970. Every New Yorker has been affected by these changes. Many changes have enriched the life of everyone in the city, and some have created new problems, but it remains a fact that we all have had to learn how to exist in this new environment. Understanding the process of diversification can help us to be better prepared to cope with the changes it has brought about.

In my analysis of the distribution of diversity in New York City I have used the entropy index of population as cited in The Geographical Analysis of Population by Plane and Rogerson (1994). I entered the data for each zip code from the six primary categories of race used in the 1990 U.S. Census (1990). These categories are White; Black; Asian or Pacific Islander; Hispanic; American Indian, Eskimo or Aleut; and Other. Because there are few people in the American Indian, Eskimo or Aleut category in New York City I combined it with Other and used five categories to calculate the entropy index, which is also known as the diversity index. This index, which in this study has been normalized to give a range of values from 0 to 1, is used as a statistical measure of the distribution of two or more groups. A value of 0.125, for example, would indicate the overwhelming numerical predominance of one group; a value of 0.722 (which is actually the diversity index value for New York City as a whole) would indicated a high degree of distribution among all groups in the analysis. Table 1 reports the diversity index and percentage for New York City in aggregation. New York City and four of the five boroughs, excluding Staten Island, show a relatively high value of diversity. Allen and Turner (1989) have also posited New York City as a place of relatively high diversity in their article "The Most Ethnically Diverse Urban Places in the United States," although they used a non-normalized entropy index and substituted the American Indian group for the Other group in their five categories (Binder and Reimers, 1995).

Staten Island is an anomaly among the boroughs with a diversity index of 0.441. It is physically distant from the rest of the city and has always had more of a suburban character than the other boroughs. However, even Staten Island has experienced an increase in diversity in the last few years. The relatively small Black and Hispanic population is concentrated in the northern part of the borough and has increased their percentage of total population since 1970. Saint George (zip code 11303), at the Staten Island end of the ferry to Manhattan has a diverse population with a diversity index of 0.703.
The diversity index can be used to analyze the relationship between a diverse population and other demographic attributes. For example, Figure 2 is a cross-tabulation of the diversity index with per capita income by zip code in New York City. This scatter graph shows a moderate increase in per capita income is associated with a decrease in the diversity index. This correlates with the intuitive assumption that people of higher income cohorts would seek residence in a more exclusive neighborhood.

The future seems to indicate that the growth of diversity will continue to advance in New York City. This is a time of the largest level of international immigration in history, and, as always, many of the people seeking refuge and a better life will make their way to New York City. There are many working class neighborhoods in Brooklyn, Queens, and other parts of the city that have not yet seen a high level of diversification and they may well be the next "new neighborhood" for the increasing numbers of people from Eastern Europe and perhaps Africa that will join those from Latin America and Asia in becoming the New Yorkers of the 21st Century.

REFERENCES


