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Urban ecology and the underclass in New York City

Huang, Qi, Ph.D.

City University of New York, 1994

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A

**URBAN ECOLOGY AND THE UNDERCLASS
IN NEW YORK CITY**

by

Qi Huang

**A dissertation submitted to the Graduate Faculty in Sociology in partial
fulfillment of the requirements for the degree of Doctor of Philosophy,
The City University of New York**

1994

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QI HUANG

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This manuscript has been read and accepted for the Graduate Faculty in Sociology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

1/25/94
Date

William Tomblin
Chair of Examining Committee

1/25/94
Date

Paul Attewell
Executive Office
Paul Attewell

John Mollokopf

Supervisory Committee

THE CITY UNIVERSITY OF NEW YORK

ABSTRACT

URBAN ECOLOGY AND THE UNDERCLASS IN NEW YORK CITY

QI HUANG

Adviser: Professor William Kornblum

Ricketts and Sawhill's (1988) definition of underclass areas is used to develop a social class ecology map of the underclass in New York City. To estimate whether the underclass has grown in the 1970-1990 period, Ricketts and Mincy's (1980) cutoffs were used. The major findings are: (1) During the 1970s and 1980s, New York City experienced a substantial increase in social problems mainly due to the increase of welfare households, female-headed families, and unemployment. (2) The number of underclass tracts increased substantially for the period from 1970 to 1980, but decreased for the period from 1980 to 1990; from 1970 to 1980, the population in underclass tracts more than quadrupled but decreased by 23 percent between 1980 to 1990. (3) There were similar patterns in the number of concentrated poverty areas (poverty rate more than 40 percent) and population. These processes were associated with a substantial increase in poverty concentration in the 1970s and a decline in the 1980s. (4) Poverty and the urban underclass are ultimately shaped by the economy and population of the state and the city. Business cycles and the

change in polarization of income are major factors in explaining the growth and shrinkage of the underclass and poverty for this period. (5) Ecological analysis using cross-sectional (proportions as independent variables) and longitudinal (change in proportions) regression models shows that poverty rate is the major predictor for the presence of underclass behaviors in a census tract; the proportion of middle class, percentage of blacks and Hispanics, percentage of foreign-born population (1980 and 1990), and distance from established underclass tracts are also important explanatory variables. (6) Spatial analysis using computer mapping techniques shows that highly concentrated underclass areas are located within highly segregated black and Hispanic neighborhoods. Hispanics had the highest poverty rates in the city for the last few decades, but in the "persistent slums" the percentage of non-Hispanic blacks was much higher than that of Hispanics. This supports Massey's argument that segregation is a structural factor in forcing African-Americans into becoming an urban underclass. (7) The maps show that underclass areas expanded in the 1970s, and shrank in the 1980s. Some underclass tracts revived strongly during the 1980s. The tracts that received the greatest influx of immigrants are located along subway lines. My research reveals that, once again, the phenomenon of ethnic succession via new immigration has changed city neighborhoods during the last two decades, a pattern that has typified the American city for over a century.

ACKNOWLEDGMENTS

Findings from this dissertation research have been presented at different academic conferences at national and international level. One paper received an award for outstanding paper at the 1993 Social Research Conference in New York City. One of the papers has been selected for inclusion in the volume of conference proceedings. I wish to express my appreciation to my dissertation committee: Professors William Kornblum, Paul Attewell, and John Mollokopf.

My thanks to Professor Kornblum for his invaluable guidance throughout all stages of the urban underclass research, and for financial support from the Center for Social Research.

I am especially grateful to Professor Paul Attewell for frequent advice, intellectual stimulation, development of collaborate research for this topic, and his friendship.

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Chapter I

INTRODUCTION

American cities historically have attracted immigrants from abroad and from rural areas in this country who are seeking economic opportunity and social progress. However, since as early as the 1920s, people and jobs have been migrating to the suburbs so that inner cities have declined in population, employment, and income relative to fast-growing suburbs (Hawley 1956, Long 1981). Older cities have suffered especially from declines in manufacturing as growth in the production of goods has been replaced by an increase in the production of information and other services (Garnick 1988).

In recent decades, middle-income blacks and other minorities have joined better-off whites in moving to the suburbs. Exodus from the central cities has been partially offset by in-migration, and most of the immigrants have been minority people with low incomes.

As a result, increases in the poverty rate have been associated with an increasing concentration of poverty in the central cities. At the same time, the social structure of the city has also changed: there are fewer employed men and more families headed by women, especially among blacks and Hispanics.

The spatial concentration of urban poverty and the social and cultural tendencies presumed to accompany it have been paid wide attention by the mass media and social scientists.

In the 1980s, urban analysts began to pay increased attention to the large population of low-income families and individuals whose behavior contrasted sharply with that of the mainstream population. During the 1970s, the rate of inner-city joblessness, poverty, teenage pregnancy, out-of-wedlock births, female-headed families, welfare dependency, and serious crime in ghetto neighborhoods rose significantly above 1960s levels. The sub-population experiencing these conditions was viewed as cut off from society, because its members lacked the education, skills, and other traits needed to function as effective members of a modern economy.

These people have been called the "dependent poor," the "active poor," the "ghetto poor", the "dangerous class," the "disadvantaged," and the "underclass." The term *underclass* is the most flexible. The term originated in academic studies (Myrdal 1962), eventually making its way into the popular press. The emergence of an underclass has become a general phenomenon in American society since the 1970s. It has been said that the underclass is "like a fire siren in the night." "It is both America's peril and shame" (Auletta 1982). The underclass has become a hot topic in academic studies and in the popular media. This is reflected in the extensive literature on American urban studies, such as The Truly Disadvan-

taged-The Inner City, the Underclass, and Public Policy, by William J. Wilson (1982), a study of the underclass that focuses on Chicago. In American Apartheid-Segregation and the Making of the Underclass, Douglas Masset and Nancy Denton point out the contribution of segregation to the composition of urban poverty and to the development of an underclass.

In late April 1992, when a suburban all-white jury exonerated the police who beat Rodney King, civil disturbances erupted immediately in South Central Los Angeles. Over the next few days, Los Angeles' expanding "riot of color" spread south to Long Beach, north to Pasadena, and northwest to Sepulveda. It should be noted that during six days of rioting the active participants in the riots were mostly adolescent and young adult males. More important, according to the arrest records, most of these young men, 55 percent black and 45 percent Hispanics were neither in school nor employed (Morrison and Lowry 1993). The ghetto population was the source of rioters. The "riot of color" in South Central Los Angeles provided evidence that the underclass was "like a fire siren in the night" in American cities.

1. Significance of this Research

New York City is the nation's largest and most important city. Since the 1970s it has been experiencing a post-industrial transformation, and facing the same underclass social issues as the nation as a whole. The decade from 1970 to 1980 saw an upsurge in poverty in the city, and areas of concentrated poverty spread rapidly into neighboring districts. In the decade 1970 to 1980, because of rapid increases in the proportion of female headed households, welfare households, men not in the labor force, New York City became known among demographers as the capital of the underclass.

Despite the considerable attention given to the underclass and the growing amount of research done on it nationwide, relatively little is known in detail about the underclass situation in New York City.

This research will systematically document changes in the underclass and in poverty in New York City for the period 1970-1990. The research will provide an ecological picture of the underclass at different points in time and changing patterns in the underclass over a 20-year period. The study should be of considerable help in updating information about the underclass in the five boroughs of New York city. The findings should be of great value in the development of social policy and planning. If we know what has happened, we know what to do.

The research will consider a number of themes relating to the underclass of New York City:

(1) definition of the underclass—what it is, the concept, measurement of the underclass, and a description of the underclass in New York City;

(2) the incidence of social ills, social problems in the inner city (high school dropouts, joblessness, teenage pregnancy, out-of-wedlock births, female-headed families, welfare dependency, and serious crime)—extensiveness of these problems;

(3) size of the underclass—growth rate, characteristics of the underclass ghetto;

(4) ecological location of the underclass in the city—observable patterns, if any;

(5) causes of the underclass—predictors of underclass presence and growth;

(6) geographic mobility of the underclass;

(7) consequences of the underclass in the city—changes that have taken place in underclass neighborhoods, effects of the underclass on neighborhood evolution.

The research is based on U.S. census data from 1970 to 1990, and documents the changes in patterns of the economy and demography of New York City during this period. According to a report by Department of City Planning of New York City (1992), due to the economic downturn, in 1990-1991 New York City suffered its largest one-year employment loss (181,000)

since local data was first tabulated in 1958 (see Figure 1.1). The unemployment rate in New York City was 13.4 percent in January, 1992—a city record.¹ The economic decline was steep and there was a commensurate increase in poverty. Evidence indicates that poverty has increased substantially since 1989. The demand for public assistance has risen rapidly over the last several years. The number of people living on welfare was the highest ever in the City of New York (see Figure 1.2). The 1990 census did not include this information, and the effect of economic recession on the city after 1990 will not be included in this research.

2. Data and Methodology

The study of the underclass involves two levels of analysis, the ecological and the individual. This research will focus on ecological analysis by using aggregated census data. The process of ecological differentiation within the city results in the development of smaller ecological communities. The geographical boundaries of these communities are neighborhoods, which are relatively socially homogeneous. For our ecological level analysis, we use census tracts as statistical neighborhoods. According to the Census Bureau's own description, tracts are:

Kevin Sack. "New York Unemployment Fund About to Run Out." New York Times, February 24, 1992. A1.

Small, relatively permanent areas into which metropolitan and certain other areas are divided for the purpose of providing statistics for small areas. When census tracts are established, they are designed to be homogeneous with respect to population characteristics, economic status, and living conditions. Tracts generally have between 2,500 and 8,000 residents.

We do not aim to make inferences from the census data about individuals, but rather to learn about the characteristics of the communities comprising them. Virtually all of the tabulations available for states and the nation are derived from census tracts. We have all the socio-economic information gathered by the Census Bureau for every one of our census tracts. For ecological analysis, we are more interested in the spatial variation of basic characteristics than in specific detail. These data are available in Summary Tape File (STF3, STF4) of the 1980 and the 1990 Census, and File of 1970 Fourth Count Summary Tape (FCST). The tapes have been used to do ecological analysis and have generated most of the tables in this research.

There are separate files by race and ethnicity (whites, blacks and Hispanics) in both the 1970 FCST file and the 1990 STF4 file. Tabulations of socio-economic characteristics in this research have been divided by race and ethnicity. Whites and blacks are exclusive groups, while the Hispanic group include all races. Because the definitions of and questionnaires for race were different for the 1970 and the 1980 Census, the inter-Census comparability of the four racial/ethnic groups (white, black, Hispanic, and Asian) was

problematic. I opted to use the definition and procedure employed by Massey and Denton (1987) in their work on residential segregation. Thus, we have exclusive and comparable groups of non-Hispanic whites, non-Hispanic blacks, Hispanics and non-Hispanic Asians and others.

The following major methods are used in this research:

(1) Tabular analysis to provide a context for information on the city's economy and demography;

(2) Measurement of the underclass developed by Erol Ricketts and Isabel Sawhill, treating the four underclass indicators as major dependent variables (for purposes of comparison, measures of population in concentrated poverty areas—those with a poverty rate greater than 40 percent—are also analyzed);

(3) Table of transition probabilities of underclass indicators designed by myself;

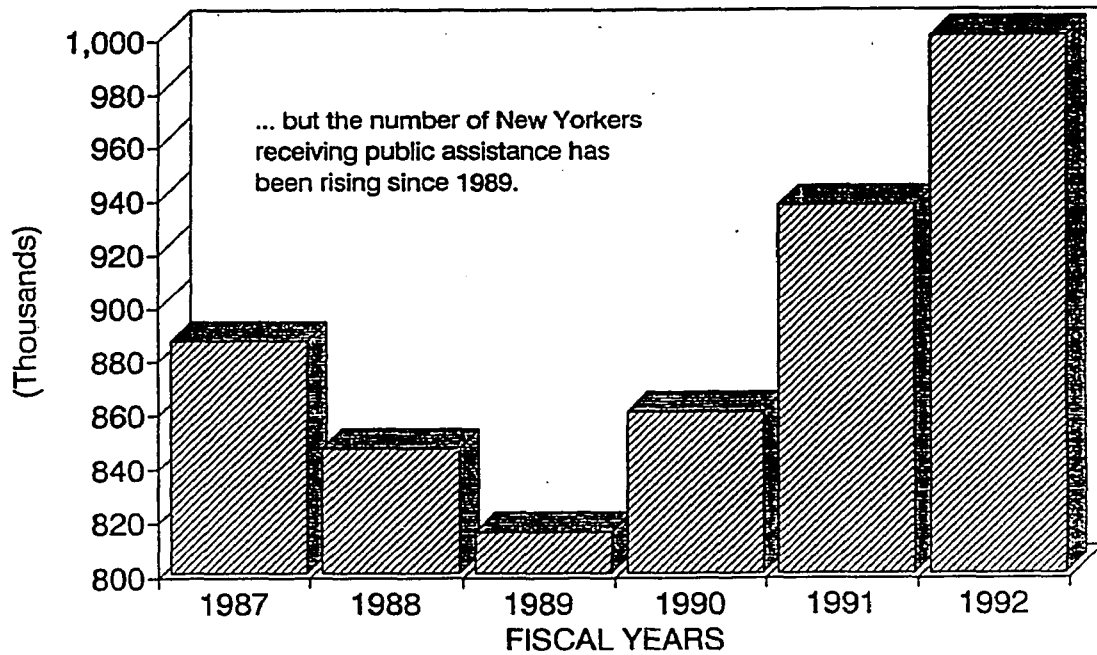
(4) Social class ecology map developed by William Kornblum, Jim Beshers and myself;

(6) OLS regression analysis to develop cross-sectional and longitudinal models;

The strategies of analysis and the specific application of these methods will be presented in each chapter.

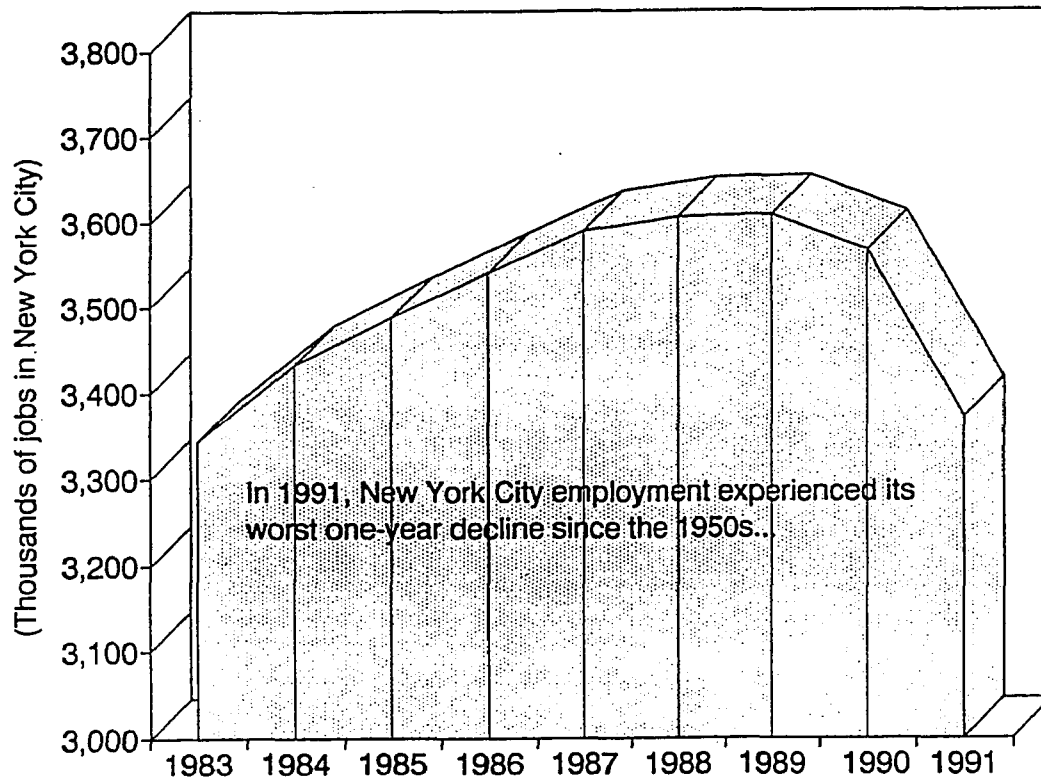
Figure 1.1

PUBLIC ASSISTANCE TOTAL NUMBER OF PERSONS



Source: Department of City Planning, Annual Report on Social Indicators, 1992

Figure 1.2

TOTAL EMPLOYMENT

Source: Department of City Planning, Annual Report on Social Indicators, 1992

Chapter II

A BRIEF LITERATURE REVIEW OF UNDERCLASS RESEARCH

To provide a context for my research data, I have reviewed the literature on poverty and the underclass over the last few decades. Section I examines changes in the perception of poverty over the last three decades. Section II outlines the concepts and definitions of the underclass as used by influential researchers. Section III outlines the major hypotheses which explain the emergence of the underclass.

1. From the War on Poverty to the Urban Underclass Debate

The problems of urban poverty did not begin with the twentieth century, but not until the 1960s did the United States government decide to take an active role in combating poverty and its effects on the nation's population and on society at large. At the same time the amount of literature discussing urban poverty increased, thus creating more awareness about poverty and its effect on society.

Most of the theories of underclass that exist today were formulated in the 1960s and early 1970s by some of the nation's leading scholars in the field of anthropology,

sociology, journalism, and politics. By arguing about the causes and effects of poverty, and why poverty was prolonged for lengthy periods in many cases, these scholars turned the topic of poverty into a national debate. They also argued about how to best solve the problems of poverty (Mincy 1992).

While intellectual debates on urban poverty raged in the 1960s, the Johnson Administration decided to implement various programs aimed at combating poverty. The most popular of these programs was the "War on Poverty," designed to fight poverty on the basis of income. The War on Poverty's major success was the achievement of better living standards for the nation's elderly, who saw their retirement incomes and living standards rise mainly because of higher Social Security payments. However, the programs had little or no effect on aiding the nation's younger population, whose poverty level continued to rise as did teenage pregnancies, out-of-wedlock births, and crime (Sawhill 1988). It was the increase in the latter that created the adverse side: the growing concern of most conservatives that the "War on Poverty" programs would turn the United States into a welfare nation. Programs such as Aid to Families with Dependent Children (AFDC) were accused of undermining family values and causing promiscuity, drug abuse, and other antisocial behaviors.

Many agreed that the programs had failed because they were unrealistic and often overlooked a pivotal reason for underclass behavior—individual choice. What was needed then

was a thoughtful and thorough study of the problem of long-term poverty. This study came about through Moynihan's successful analysis of African-Americans. The result of his endeavor was The Negro Family: The Case for National Action, released in 1964, and better known as The Moynihan Report. The report was an analysis of the social plight of African-Americans and their economic situation. One of the main culprits cited was racism, because it, along with other biases, promoted job discrimination against African-Americans—a main cause for their lower incomes and stronger underclass behavior and poverty level. The report also delved into the profound effect discrimination had on African-Americans' decisions as to where to work, how to behave, what to buy, and when to have children. Slavery also received a share of the blame, for its destruction of the family, which, the report claimed, rendered it incapable of maintaining a two-parent family (Moynihan 1965).

Many prominent Civil Rights activists of the time endorsed the argument that racism and unemployment were the real problems, but others, especially the media, concentrated on the more culturally biased aspects of the report. This created a considerable amount of controversy, which only served to undermine any further studies on poverty and the underclass. It wasn't until the early 1970s that renewed interest surfaced and the study of urban poverty was once again aggressively undertaken.

2. Conception and Definition of the Underclass

To arrive at a better understanding of my hypotheses and a clearer picture of who are considered "underclass", I have included definitions of the underclass by several researchers and related hypotheses. What is striking is that they substantially overlap and differ only slightly in their definition of "underclass." Gunnar Myrdal, for example, was one of the first to discuss the emergence of an underclass "as people who were perpetually unemployed, unemployable, and underemployed." He believed that they were "not an integrated part of the nation at all but a useless and miserable substratum..." (Myrdal 1962 p.44). He also believed that underclass children become, or tend to become, as poorly endowed as their parents. This view is very close to more recent underclass concepts used by other scholars.

For example, Clement Cottingham (1982) argued that the underclass, disproportionately comprising blacks and Hispanics, encompasses those at the very bottom of the urban stratification system. Specifically: (1) the underclass experiences severe income deprivation, unstable employment, low functional skills, and limited access to educational or other social services. (2) Many poverty-ridden households have existed for many generations, associated, at least in part, with defective familial or individual socialization processes. (3) Individuals within the underclass exhibit a high degree of disconnectedness, reflecting their unstable

linkage to family, education, economic institutions, and are enmeshed in intergenerational poverty.

Ken Auletta, a journalist, describes these individuals as being (1982):

grouped into four distinct categories: (a) the passive poor, usually long-term welfare recipients; (b) the hostile street criminals who terrorize most cities, and who are of the school dropouts and drug addict group; (c) the hustlers, who like street criminals, may not be poor and who earn their livelihood in the underground economy, but rarely commit violent crimes; (d) the traumatized drunks, drifters, homeless shopping-bag ladies and released mental patients who frequently roam or collapse on city streets.

Others, like William J. Wilson, viewed them as being (1985):

Individuals who lack training and skills and either experience long-term unemployment or are not a part of the labor force, individuals who engage in street criminal activity and other aberrant behavior, and families who experience long-term spells of poverty and/or welfare dependency.

Glasgow (1980) describes the underclass as being comprised of (1) many of the long-term working poor who had parents were also poor; (2) those who prefer to remain unemployed rather than accept jobs providing minimal financial rewards; and (3) those who seek but cannot find meaningful employment and end up accepting low-level short term jobs.

According to Ricketts and Sawhill (1988) the underclass comprises people who are able bodied but whose behavior departs from mainstream society, such as dropping out of school, becoming a teenage parent, not having a steady job, not obeying the law, and engaging in other anti-social

behavior. Ricketts and Sawhill emphasize that this does not include all women with small children or the disabled. Ricketts further defines the underclass as a non-racial category, although recognizing that American blacks and other minorities are significantly over-represented in this group.

Clark and Nathan (1982) have suggested that the underclass contains mainly people who lack education, experience in the job market, social mobility, and stable family environment as well as income; and that they are concentrated in large cities, especially the Northeast and North Central cities, and are mostly minorities, e.g. blacks and Hispanics. However, Murray (1990) described them as a subset of the poor who live on welfare or crime, are irresponsible fathers and indifferent mothers.

Jencks (1991) divided the underclass into three components: first, the "economic underclass," which consists of people who cannot get or hold a steady job; second the "moral underclass," those who treat as impractical or irrelevant such middle-class virtues as obeying the law, getting married before having children, and going to work every day; and third the "educational underclass," those lacking the information and skills needed for even the lowest-level jobs.

Given these mostly negative and unpromising views, we can still derive a definition of the underclass as being comprised of a subset of the poverty population (income dimension), whose members tend to be in poverty for relatively long

periods of time (time dimension); this poverty is both geographically concentrated (spatial dimension) and associated with dysfunctional behavior (attitudes and behavior dimension); and minorities (in particular, blacks and Hispanics) are greatly over-represented in this population (racial dimension).

These are the definitions, widely used as empirical measurements in studies of the underclass by social scientists, that will be the basis of my research.

3. Theoretical Hypotheses about the Urban Underclass

Considering the overwhelming growth of social welfare programs developed to aid the poor, the major successes of the Civil Rights Movement, and the growth of black middle class families, it is surprising that the ghetto poverty rate did not improve much since the 1960s. The debate on the causes and consequences of the underclass proceeded along much the same lines as those on poverty in the 1960s: Is the problem one of economic structure, or is it behavioral pathology?

Charles Murray (1984) argues that the implemented social programs were simply ineffective because they were mostly cosmetic in nature—a coverup for the real problem, and not a cure that would have been more practical and ultimately longer lasting. For example, one particularly troubling problem has been the high rate of black male unemployment. Some (e.g., Lewis 1966; Liebow 1967) have argued that black males are

unemployed because they are unwilling to work for low wages, even though these jobs could prove a stepping-stone for better paying ones. They believed that if these men were to change their attitudes, they could escape poverty.

This point of view has been challenged on many fronts by other researchers. William Wilson developed the most comprehensive set of hypotheses of poverty and social problems in black ghettos that became generally accepted.

Wilson's theory is based on careful analysis of changes in employment opportunities, the decline in the black marriage rate, the selective out-migration from ghettos by role models, and their effect on the neighborhood. I will summarize his points as well as related arguments by other scholars.

Changes in Employment Opportunities

As the United States evolved from a manufacturing-producing economy into a service-producing economy, and manufacturing jobs left urban centers for the suburbs, the South, and overseas, the demand for low-skilled urban workers declined. Blacks, who made up much of the low-skilled work force, suffered the most from these changes. The new environment now demanded skilled white collar workers and a clerical staff, which required higher education and at least some specialized training, requirements badly lacking in black urban workers.

These changes help to explain the increase in black male unemployment and the decline in the earning potential of blacks compared to that of whites. Other researchers (Bound and Holzer 1991) found that thirty percent of black male unemployment was a direct result of the loss of manufacturing jobs. Manufacturing jobs declined faster for blacks than manufacturing employment as a whole because they were more likely to be laid off than were whites. As a result blacks were quicker in moving into service sector than were whites, but they were placed at the lower end of service jobs.

Some researchers have argued that black males were at a disadvantage because of a skill or education mismatch, a contention that was disputed when later studies found that the educational differences between urban blacks and whites was declining as the high school dropout rate for blacks decreased. They also found that college-educated blacks were receiving lower wages than whites and less-educated men in general (Fainstein 1986, Bound and Freeman 1990).

However, researchers still believed that the skills mismatch theory had some validity when applied to performance test scores, which showed racial differences in the measurement of skills needed for employment. This at least offered a partial explanation for employment inequities that was better than the usual use of years of education favored by most other researchers when determining skills (e.g. O'Neill 1990, Fernandez 1992, Ferguson 1992).

Spatial Mismatch: The Suburbanization of Jobs

Low-skilled blacks became the most vulnerable as low-skilled manufacturing jobs moved out of the inner cities in the 1970s, and slow economic growth prevailed (Wilson 1987, Kasarda 1989). The spatial mismatch between jobs and potential black workers leads to the question of whether blacks who reside in racially mixed areas have better employment opportunities than do urban black residents; or whether urban blacks who commuted to the suburbs to work earned more than other blacks who remained in the inner cities.

There have been many interesting findings in these patterns. One finding, for example, states that during the sixties, urban black residents fared no better than suburban black residents, although urban blacks working in the suburbs did earn more than their counterparts in the inner cities. By the 1970s, the pattern had changed: suburban blacks fared better in the job market and in earned wages than urban blacks, and black commuters to the suburbs were no better off than black working in the cities. Other researchers argued that urban blacks are located farther away from jobs, and therefore, had less access to jobs. These findings, however, still do not confirm the disparities in employment and earnings, according to Lynn and McGeary for the National Research Council's Committee on National Urban Policy (1990, p.255):

Although it seems plausible that the growing spatial separation between the inner-city location of

... minority workers ... and the suburban location of entry-level jobs would cause higher unemployment in central cities, previous research has not confirmed a causal connection.... This is because, holding individual characteristics constant, blacks are equally unlikely to be employed no matter where they live in the metropolitan area.

Other demographic changes included the increasing number of women in the work force, cited by Wilson as being a contributing factor, because it created a saturated job market that offered employers a more varied labor pool from which to select. Once again, black males were at a disadvantage, given their socially stereotyped image and low skills.

Decline in Black Marriage Rates

Wilson explains that the rise in welfare dependent female-headed households is a result of a changing job environment in inner cities that adversely affected black males. Black men who could no longer support a family resorted to behavior such as crime, hustling, and drug trafficking as an adjustment to their new economic environment of joblessness. This resulted in a decreased marriage rate because these men could no longer support a family; this, in turn, led to increased out-of-wedlock births and welfare dependency. However, this is disputed by Murray (1984) who argues that the government's liberal social programs such as Aid to Families with Dependent Children (AFDC) is the real problem. He argues that these programs make it easier for black men to abandon their family responsibilities.

To counter this argument, Wilson constructed an index that linked the declining black male employment rate to increases in unwed motherhood, and decreases in the number of stable marriages in poverty areas. This "male marriageable pool index" measured the ratio of employed black men to single black women of the same age. Wilson found that the index had fallen since the sixties.

The underlying assumption of the "male marriageable pool index" was that the man is supposed to support his family. Thus, prolonged unemployment among black men would render them incapable of supporting their families, causing them to postpone marriage even when their girlfriends became pregnant, and may even have been a cause for higher divorce rates. This led Wilson to claim that changing marriageability was the "single most important factor" in black underclass behavior.

Although other researchers have supported this theory, they have also argued that the black male unemployment rate is not large enough to fully explain the increases in out-of-wedlock births and the high black divorce rate (Mare and Windship 1991). Even among employed black males the rates of unwed-parenthood and divorce had increased substantially. Some researchers have suggested that the changes could be a result of more black males enrolling in school, of males not feeling responsible for unplanned pregnancies, and the availability of abortion and birth control pills. Nonetheless, 20 percent of the decrease in the marriage rate has been

correlated with a decrease in employment opportunities (Mare and Windship 1991, Jencks 1991).

Social Isolation via Selective Out-Migration

Wilson claims that the social isolation of the underclass is, by far, the most damaging aspect within the black community. From the sixties to the eighties, middle and working class black families left ghettos in significant numbers, leaving behind the most disadvantaged blacks in the community. The implication of this out-migration is the removal of both an important social buffer and mainstream role models.

Until the 1960s blacks all lived in the same ghettoized neighborhoods, whose internal hierarchical structure reflected variations of wealth and status. After the Civil Rights Movement of the sixties this situation changed dramatically. Wilson credits the out-migration of the more affluent segments of the community to some of the Civil Rights Movement's major victories: Equal Employment Opportunity (EEO), which opened up better paying jobs to blacks; affirmative action, which provided them with more job security; and Fair Housing laws, which allowed them to move into neighborhoods once off limits to them. These new laws created greater incomes and access to better housing, which was located mainly in the suburbs. Thus, the exodus of middle-class blacks from the ghettos in the 1970s.

The resulting effect of this out-migration is a ghetto environment made up of the most disadvantaged, socially isolated and seldom interacting on a sustained basis with people who are employed or with families that have a steady breadwinner.

Lack of different class segments in the black community and even of contact with mainstream society, Wilson asserts, has resulted in an increased poverty rate and other social problems.

Massey and Eggers (1991) have challenged Wilson's isolation theory on the grounds that even in some of the worst poverty stricken areas there are still many working families and non-poor residents in significant numbers. Although the black middle class left the ghettos, their numbers were not large enough to create a concentration of black poverty during that period. Additionally, the measure of isolation, i.e., the degree of class segregation within the black community, did not increase from 1970 to 1980. Other researchers have agreed with Wilson's theory, but there still is no clear explanation for the varied findings on black middle class out-migration from ghetto areas, or its effect on underclass behaviors in the ghetto.

Neighborhood Effects

Given Wilson's findings, the isolation of ghetto residents meant the removal of important influences, role models, and networks that could help them move into the mainstream. The low-skilled blacks who remained in the ghetto had poverty-level incomes and related social problems. In time, the younger generation, surrounded by this isolation and lacking mainstream institutions, made choices that further isolated them and kept them socially disadvantaged. This naturally increased the growth of poverty and social problems in the ghettos.

Various theories exist to explain neighborhood cause and effects. The structural theory of the underclass states that structural changes like deindustrialization result in joblessness, which in turn affects individual behaviors like not marrying. The cultural transmission theory argues that people are likely to mirror behaviors of those affected by macro-social causes even when they themselves are not directly affected by these causes. This is called peer pressure. For example, a teenage girl from a non-poor two-parent family living in a poverty area may have out-of-wedlock babies, reflecting profound peer-pressure from the surrounding underclass values.

Two questions these findings raise is where is the point where underclass behaviors begin to affect the non-poor residents in the same neighborhood, and whether the integra-

tion of non-poor residents with others holding opposing values and cultures in poverty areas might reduce the underclass behavioral effects of unemployment and poverty. Neighborhood effects are now considered an important research priority, but some researchers believe there is too much emphasis placed on it (e.g. Lynne and McGeary 1990; Ellwood 1992). Some behaviors that are family or individually induced may be wrongly attributed to neighborhood effects because relevant family-level characteristics were not controlled in the statistical models (Jencks and Mayer 1990).

The Culture of Poverty

The culture of poverty argument suggests that the underclass is beset by distinct values and aspirations that weaken the motivation and that those values are transmitted intergenerationally (Ricketts 1992). Lewis (1966) viewed the culture of poverty as an approximate adaptation or reaction to the social structure, but the current culture of poverty advocates credit the culture of poverty to more distant events such as slavery or sharecropping in the South.

Lemann (1986) viewed the culture of poverty as a direct result of historical events, such as slavery and sharecropping, that forced a certain kind of adaptation and/or reaction to the social structure. Thus, welfare dependency is argued to be a result of the dependency on white authority figures during and immediately after slavery. This dependency created

family instability, out-of-wedlock births, and a low value placed on education. Ex-sharecroppers carried this dependency with them to Northern cities and passed it on to their descendants. However, others have attributed the breakdown of African-American families to their urbanization since the late 1950s.

In the 1930s, E. Franklin Frazier conducted a study of African-Americans who had migrated from the south and compared them to their northern-born counterparts; he argued that southerners had higher rates of out-of-wedlock births and social disorganization in general. Recently, this thesis was used by Nicholas Lehman to analyze the ghetto situation. He found underclass behaviors in the ghettos to be a direct result of roots in the South—not the South of slavery but the South of a generation ago, especially the sharecropper South. It is important to note that Lehman makes a distinction between "blacks who came directly from rural sharecropping, versus those who came from towns in the South." It is these descendants who make up today's underclass, and those who arrived in the late sixties and early seventies were most likely to develop underclass behaviors.

This theory, however, has been challenged by L. H. Long's findings that southern African-Americans who migrated to northern city ghettos had higher earnings, lower poverty rates, and lower rates of welfare dependency than their northern-born counterparts. Whether southern sharecropper

culture is indeed a force in the urban underclass is yet to be settled.

Concentration of Poverty

Wilson holds that the link between poverty concentration and underclass behavior is a result of racial segregation, economic downturn for African-Americans in the seventies, social isolation, growth in the number of poor people, and the flight of the African-American middle and working classes. Other researchers (Massey and Eggers 1991, Farley 1991) suggest that the growth in poverty concentration in the ghetto need not imply the flight of the black middle and working classes. Rather, they assert that the increasing concentration of poverty in the ghetto stems from continued racial segregation associated with a downturn in black economic fortunes in the 1970s.

However, Massey and Eggers state that "poverty became more spatially concentrated in American cities during the 1970s, with pernicious social effects," implying that these social effects are not simply due to an increase in poverty, but to geographical concentration. These claims indicate that it is a matter of geographical concentration; putting many poor people in the same vicinity only heighten underclass behavior more than if they were spread evenly across different neighborhoods.

In their work, Massey and Denton further describe their points (1993, P.12) that:

... Neighborhood stability is characterized by a series of thresholds, beyond which various self-perpetuating processes of decay take hold. Above these thresholds, each actor who makes a decision that undermines neighborhood well-being makes it increasingly likely that other actors will do the same.

In the literature, the widespread assumption is that in neighborhoods with a poverty rate of more than 40 percent there are more social problems than in neighborhoods with lower poverty rates. These arguments suggest a "tipping point" or "threshold" of poverty rate—the point at which underclass behavior takes off, i.e., that there is an upward curving relationship between poverty rate and underclass behavior in census tracts. But this argument has not been subjected to empirical testing.

The Timing of Mass Migration to Major Urban Cities

Some researchers maintain that because of the industrial transition, low-skilled immigrant groups may be at greater risk of becoming underclass (Liberson 1980; Kasarda 1983). After World War II, large numbers of low-skilled black and Hispanic (particularly Puerto Rican) migrant workers moved into major urban cities during a changing manufacturing environment. This only helped to further unsettle the already delicate economic structure: these new migrants were now more likely to be part of the underclass because of the lack of

jobs. Increased high school dropout rate, female-headed households, and AFDC households are especially prevalent among Puerto Ricans.

Today the increasing arrival of Asians and Latin Americans creates a much different picture. These new groups are known, in many cases, to revitalize depressed neighborhoods. The demographic principle that states that the greater the migration distance the greater the migrants' skill level is used to explain this phenomenon. Asians immigrants, such as those from Hong Kong and Taiwan, are known not only for bringing marketable skills but also their own financial capital to invest in restaurants, grocery stores, and laundry shops etc., which in turn creates niches for their low-skilled workers.

Poverty and Economic Performance

One important factor that may explain the emergence of the underclass is the performance of the economy over the last two decades. From the end of World War II through the 1960s, the national productivity rate was high and economic growth increasing rapidly, and the poverty rate was cut almost in half (Gottschalk and Danziger 1984). Since the early 1970s, economic productivity and growth rates have slowed down, and the hourly earnings of employees have actually declined. Affected by the ups and downs of the business cycle, the rate

of fluctuation of the poverty rate has not changed significantly since the early 1970s.

As the group at the lowest end of the ethnic employment hierarchy, African-Americans tend to do best when ethnic labor is scarce. During World War II, when immigration was restricted, they enjoyed much better labor opportunities. In the 1960s, many able-bodied African-Americans made great economic strides into the mainstream, but in the following decade (1970s) the national economy started to slow down and American blacks started to lose their newfound economic gains.

From 1973 to the early 1980s, the unstable business environment, new immigration laws that brought in more migrant workers, more women entering the job market, and increasing numbers of postwar baby boomers graduating from college dealt African-Americans an even greater blow: increased competition for which they were unprepared.

Chapter III

DEMOGRAPHIC AND SOCIO-ECONOMIC CHANGES IN NEW YORK CITY FOR THE PERIOD 1970-1990

To understand the emergence, growth and shrinkage of the underclass and poverty population for the period of 1970 to 1990 in New York City, we need to consider changing trends in the economy and population of the city. In this chapter, I will briefly present changes in New York City's economy, and then changes in the demographic profile of the city in the last few decades.

Over the past few decades many world cities have been experiencing important and profound changes, called the "post-industrial transformation." As John Mollenkopf and Manuel Castells state:

The enormity and richness of the postindustrial transformation can be compared only to the nineteenth century industrial revolution. Basic changes in global capitalism drove both. Global economic competition, a major technological revolution, the formation of a new international division of labor, the growing power of finance relative to production, the spatial concentration of global financial markets, the growth of global telecommunications networks, and migration from Third World industrializing nations to the core cities of the first world are among the forces at work. New York is central to these processes, whether one looks at international trade, financial markets, shifting patterns of global investment in manufacturing, or telecommunications technologies (1991, pg.6)

For the quarter century following World War II, the size of New York City's economy and population remained essentially stable, but radical transformations were occurring in the composition of the city's jobs and people. Although New York City's economy has always contained an important service component, activities such as law, finance, advertising, accounting, and communications rose to even greater prominence in the post-war years, and once-flourishing manufacturing declined. At the same time, the suburbs attracted increasing numbers of white, middle-class families who, in turn, were replaced by aspiring immigrants, first blacks from the south and Hispanics from Puerto Rican, and then all the countries of the world.

A historic turning point for New York City was reached in the 1970s. It was then that, for the first time, the city suffered a significant decline in both population and its economy as more than 600,000 jobs were lost and the population decreased by more than 10 percent, nearly one million people. (This was equivalent to the complete disappearance of one of the nation's ten largest cities.) Economic losses were greatest during the period 1969-1977, brought about by a combination of recession and acceleration in the loss of manufacturing activity (Brecher and Horton 1989, p.4).

As the major commercial and financial center of the world's largest national economy, New York City is well positioned to benefit from the increased global interdepen-

dence of the world economy. Technological progress has diminished New York City's manufacturing and goods distribution base, but paradoxically the same technological forces fueled the strong rise of the corporate service firms that have led the city's economic recovery since 1977. After a ten-year boom in New York City's economy, the palmy days ended with the stock market crash of 1987. After that the city economy went down in parallel with the associated slowdown in national economic growth.

As a consequence of postindustrial transformation, New York City may be described as a "dual city," one rich and one poor. The rich half is resplendent in luxury consumption and high society, it has been called the "empire city." The poor half symbolizes urban decay, the surge in crime, crack, AIDS, homelessness and a new underclass (Mollenkopf and Castells 1991, p.3).

1. The Decline and Rise of the Economy of New York City

In this section I will discuss changes in the economy in detail. First, I present a picture of family income distribution over the last two decades, then an analysis of the changes in the structure of occupation and education in the city. I will discuss a major development in the labor force—increasing participation of females and minorities—and then conclude with a discussion of poverty trends as related to race and ethnicity.

The Change in Trends in Income distribution in New York City for the Period 1970-1990

Table 3.1.1 shows the distribution of family income (in 1990 dollars) for different income categories over three census decades in New York City.¹ From 1969 to 1977, New York's economy decline. From 1977 to 1987 the economy made a dynamic comeback, resulting in substantial gains in real income. This created wealth for some city residents and poverty for others. Table 3.1.1 shows that from 1970 to 1980 income polarization increased as families with the lowest incomes (less than \$17,100 annually) increased by 22 percent. The proportion of poor families increased from 21 percent in 1970 to almost one-third of all families (29 percent) in 1980, while all other income groups shrank.

However, during the decade of 1980-1990, income polarization decreased. Both the absolute numbers and proportion of families in the two lower income groups (income under \$17.1k and income of \$17.1k-\$34.2K per annum) decreased while the absolute numbers and proportion of the two higher income groups (\$34.2K-\$51.3K and more than \$51.3K annually), comprising the middle and upper classes, increased. The number of families with the highest incomes (incomes of more than \$51.3 thousand) experienced a dramatic increase over 1980 (the

Adjusted for inflation: All dollar figures in this research are adjusted for inflation based on the Consumer Price Index, as reported by the United States Department of Labor, Bureau of Labor Statistics. The adjustments were made by myself.

absolute number increased by 38 percent, with a proportionate increase to 29 percent in 1990 from 21 percent in 1980).

Comparing incomes of 1990 to those of 1970, I found that the proportion of the city's family in the bottom income group increased from 21 percent in 1970 to 25 percent in 1990, while the proportion in the top income group went up from 24 percent in 1970 to 29 percent in 1990. The size of the two groups in the middle shrank from 56 percent in 1970 to 46 percent in 1990. This indicates that the income gap between the lowest and the highest groups has increased: after twenty years of growth in the city economy, the inequality between poor and rich has become greater than before.

According to another source, total wages and salaries in the city were 13 percent higher in 1988 than in 1969 (see Figure 3.1.1). Figure 3.1.1 also gives us a clear picture of the trends in all employment sectors (private, government and self-employment) in the city over the last twenty years.

These pictures of income distribution and employment changes raise the following questions: What changes in the city affected income distribution? How did it happen? What groups benefitted from the changes? What groups suffered from the changes?

The answer to these questions is found in the changes in the economic structure of the American city, the postindustrial transformation described briefly at the beginning of

this chapter. Now let us examine the changes in occupation, education and employment of the city population, all brought about by industrial transition in the city.

Occupation, Education and Employment

Changes in the economy affect the labor force. The occupational data in the census give us information about the demand side in the labor force. Educational level is a strong predictor of employment, occupation and income. The educational data in the census gives us information of the quality of the labor force and the supply side in the labor market. Table 3.1.2 and Figures 3.1.2 and 3.1.3 present a picture of employed people 16 years and over in New York City from 1970-1980-1990.

One of the most important changes of New York City's postindustrial transformation during the past two decades has been the massive shift of employment away from manufacturing toward corporate, public, and nonprofit services. Following these sectoral changes, occupations have shifted from manual work to managerial, professional and service work.

Table 3.1.2 shows that in 1970 New York City's total employment of 16-64 year-old was 3.20 million. By 1980, it had gone down to 2.92 million, a 9 percent decrease. The subsequent recovery brought employment back to 3.26 million in 1990. These changes reflect the changes in the economy -- contraction in the 1970s and boom in the 1980s.

The same table also indicates that despite the decline in total employment between 1970 and 1980, some occupations did expand. The number of people working as managers and administrators was up by 33.2 percent, and sales workers gained an additional 12.4 percent. The share of managers and administrators grew to 11.4 percent in 1980 from 7.8 percent in 1970; the share of professionals and technicians went up to 16.9 percent in 1980 from 15.7 percent in 1970. All blue collar occupations (craft, operative, labor, and service) shrank. The biggest decrease (32 percent) was machine operator jobs in manufacturing.

Employment increased by 11.6 percent from 1980 to 1990, reflecting a substantial increase in jobs for managers and administrators, professionals, technicians, sales workers, plus one blue collar occupation—service workers. Operatives continued to decline by 14 percent during the 1980s.

The share of white collar workers (the sum of all categories of managers, administrators, professional, technicians, sales, and clerical workers) increased from 57.9 percent in 1970, 62.2 percent in 1980, to 64.5 percent in 1990, while the share of blue collar workers (the sum of all categories of craft, operatives, laborers and service workers) shrank from 47 percent in 1970, to 37.4 in 1980 to 35.2 in 1990. Among the blue collar workers the biggest drop was for operatives: this dropped from 15 percent in 1970 to 11.1 percent in 1980 to 8.6 percent in 1990. However the share of service workers

increased from 13.5 percent in 1970 and 14.6 percent in 1980 to 16 percent in 1990, and the actual number of the service workers increased by 22 percent in the 1980s.

In summary, Table 3.1.2 illustrates the transformation of the city toward a service, professional and managerial oriented economy. The overall trend has been toward occupational upgrading, as indicated by increases in the share of managers, administrators, professionals and technician (23 percent in 1970, 28 percent in 1980, and 34 percent in 1990). These groups of New Yorkers were greatly benefitted by the growth of the city's economy. At the same time, other groups of New Yorkers suffered from the decline in the manufacturing industry at the expense of low-income service jobs.

The new informational economy provides greatest occupational opportunity to those with high educational levels. On the other hand and the other end of the educational spectrum, it provides no ladder of upward mobility to those working in lower income industries. Education largely determines the ability of labor to enter the dynamic positions of the new occupational structure. The levels and quality of schooling of the people provide information on the supply side of the labor market.

Table 3.1.3 and Figure 3.1.4 present people at age 25 and over and their educational attainment. The table indicates that the number of those with college and graduate degrees

increased by 53 percent in the 1970s and by an additional 45 percent in the 1980s. As a result of the increase among the higher educated, the share of people with college and graduate degree increased from 10.6 percent in 1970, to 17.3 percent in 1980, to 23 percent in 1990.

Conversely, the proportion of the population with less than a high school diploma decreased notably, from 53 percent in 1970, 40 percent in 1980, and down to 32 percent in 1990. This group comprises a large number of people at the bottom of the occupational structure and those out of the labor force.

Table 3.1.4 and 3.1.5 present educational data for people at age 25 and over in New York City in 1980 and 1990 by race and ethnicity.² All groups in New York City show a decrease in the percentage of adults who have less than high school education, and a substantial gain in the relative number and percent of people who completed their college education in the same period.

Nonetheless, among adult New Yorkers there are dramatic differences in educational levels by race and ethnicity. By 1990, the percentage of New Yorkers who had not completed high school was 31.7 percent, down from 39.8 percent in 1980.

All data by race and ethnicity in all the tables in this chapter came from the tract level aggregated data. Hispanics can be either white or black. Whites include Hispanic white and blacks include Hispanic blacks.

Among whites the rate was 25.8 percent in 1990 (6 percent points lower than the city average), compared with 1980 when the rate was 34.4 for the same group. Among blacks the rate was 35.9 in 1990 (4 percentage points higher than the city average), compared with 42.2 percent in 1980. Among Hispanics, the rate was 52.1 percent (20 percentage points higher than the city average), compared with 60.5 percent in 1980. These figures support other evidence of extremely high Hispanic high school dropout rates (Rodriguez, Terry Rosenberg 1991, p.24).

The disparity in college completion rates between whites and other racial/ethnic groups is also notable. As of 1990, 23 percent of people in the city who were 25 years old and over had completed college. By comparison, 29.2 percent of whites, 12.4 percent of blacks, 8.2 percent of Hispanics and 24.1 percent of Asians completed college in 1990. There was a similar pattern in 1980: 21 percent of whites, but only 8.4 percent of blacks and 5.9 percent of Hispanics were college graduates.

For the blacks, Table 3.1.6 presents school years completed over time for the period of 1970 to 1990. This table indicates that over the past two decades, the percentage of blacks with less than high school completion has shrunk markedly, from 59 percent in 1970 to 42 percent in 1980 and 36 percent in 1990. Conversely, the number of college completions grew by 135 percent in the 1970s, and 93 percent in the

1980s. By 1990, more than three times as many blacks were college graduates than in 1970. As a result, the share increased to 12 percent in 1990 from 4 percent in 1970 and 8 percent in 1980.

All these tables show that Hispanics lag behind all other groups in high school and college completion. This indicates that Hispanics are the most disadvantaged group in the labor force market in the city.

A later table shows that labor force participation rates in the city were 57 percent in 1970, 54 percent in 1980 and 62 percent in 1990. This indicates that a large number of people were out of the labor force. Most of the city's truly disadvantaged people who are young minority members with less than a high school education are from this group.

Industrial Transformation and Women Workers

One of the major developments in the demographic profile of employment in the city is the increasing participation of women in the New York economy. This is reflected in the change in family income distribution, presented at the beginning of this section. The increasing participation of women in the labor force means that with both husbands and wives employed there is a proliferation of dual-income families. Over the past few decades, this in turn has caused an increasing proportion of families to be in the two highest income groups (\$34.2k-\$51.3k, and over than \$51.3k, see Table 3.1.1).

Today white collar work comprises more than 50 percent of the American economy, with the largest occupational group being clerical workers. Because of economic growth, clerical jobs have provided employment for millions of women in New York City since the 1950s. New York's rebound since 1977 has centered on information processing, the coordination of large organizations and the management of financial markets. Affirmative action opened recruitment to women and members of minority groups. Many black women found their way both into the clerical positions white women left behind and into the new positions created by the thriving economy (Cynthia and Duncombe 1991). Later tables show that the rates of labor force participation by women increased continuously for all racial groups over the last two decades.

The massive job cutbacks of the 1970s affected men far more than women, because men had had a greater representation in many blue collar industries, particularly those hard hit during the years of economic crisis. Table 3.1.7 shows the number of employed people by sex 16 years and over in the city in 1970 and 1980. Between 1970 and 1980, the number of employed adult males in the city fell by 16 percent, while the number of employed adult females increased by 3 percent. In the 1970s, male workers decreased for most categories (except farm and managerial), while females increased for most of the categories, save for operative and clerical. Furthermore, men's employment growth in the 1980's substantially lagged behind that of women. Between 1979 and 1991, the percentage increase for men was only half that of the 14 percent rise among women (Ehrenhalt 1993).

More important, Table 3.1.7 shows that the movement of working women, age 16 and over, was into New York's major growth fields—professional, managerial, technical and sales. These white collar jobs are more demanding, and on the whole, better paying than other occupations. Between 1970 and 1980 the number of women in these occupations increased by 135,000, a 41 percent rise, compared with only a 9 percent increase in male managerial workers. The number of male professional, technical, and sales workers decreased (Table 3.1.7).

Now let us compare two racial groups, whites and blacks. Table 3.1.8 shows the number of employed whites, 16 years and over, in New York City in 1970 and 1980. Among employed whites, male employment decreased by 32 percent, while female employment decreased by 19 percent. All of the categories shrank for males, while many categories increased for females. The number of managerial workers increased substantially by 43,000, a 100 percent rise for women. Among employed blacks (Table 3.1.9), the disparity between men and women was even greater. The number of employed black men decreased by 4.6 percent, while among black women there was an increase of 24.3 percent between 1970 and 1980. The number of white collar workers (managerial, professional, technical, sales and clerical workers) increased for both men and women, 16 percent for men and 45 percent for women.

I will now turn to a detailed discussion of the minority population in the work force.

Industrial Transformation and the Minority Population

The impact of the postindustrial transformation on the nation's cities and their minority populations is a central issue in urban research. The general consensus holds that these changes have a disproportionate effect on urban minorities because the loss of manufacturing jobs has been greatest within large cities, and most of the new, high-technology

service industries are locating in smaller cities or on the fringes of the metropolitan area. Because the work sites are difficult to reach and the educational requirements for them are high, urban minorities do not have ready access to the new jobs. As a result, the percentage of urban, working-age minority men employed in stable, reasonably well paid jobs has fallen dramatically. This view contends that the root problem is a skills mismatch (William Wilson 1989).

An alternative view emphasizes, instead, the polarization of the urban economy. The advocates of the polarization viewpoint contend that the shift away from manufacturing produces disproportionate displacement of minorities and thereby widens the split between minorities and whites.

Bailey and Waldinger (1991), using Public Use Samples data from 1970 and 1980 census and data from the New York State Department of Labor's Covered Employment series, demonstrate the weaknesses of both the mismatch and the polarization theories in explaining the changes different groups have undergone in New York City.

Their major points are as follows:

1. Change in the relative labor supply of the various ethnic groups, in particular the dramatic drop in the population of native whites after 1970: because whites tend to have the best jobs, their departure expands job opportunities for all other groups and often allows nonwhites to move up in the occupational hierarchy;

2. The tendency for minority groups to be concentrated in particular occupations or industries: The most striking aspect of black industrial distribution in 1970—high concentration in public sector employment—proved to be a source of shelter against the ravages of the decade, insofar as government employment grew while private employment declined. Immigrants have made considerable economic progress through the mobility associated with entrepreneurship as well as through movement into growth sectors.

3. The interaction between economic change and group characteristics, which has allowed minority groups to become less dependent on a limited number of industries and to shift to an employment pattern similar to that of labor force as a whole.

The following tables generated from 1970 and 1980 aggregated census data provide support for Waldinger's argument.

Table 3.1.10 presents the New York City occupational distribution by race and ethnicity in 1980. The disparity among whites, blacks and Hispanics is clear. Whites are concentrated in the managerial, professional and technical category (33.3 percent) compared to 18.6 percent for blacks and 13.6 percent for Hispanics. Blacks were more likely (23.7 percent) to be service workers, compared to 19.4 percent for Hispanics and 10.9 percent for whites. Hispanics were concentrated in the manufacturing industry, with 22.9 percent operative workers among Hispanics, compared to 12.1 percent among

blacks and 8.9 percent among whites. Blacks were most likely (28.7 percent) to be found in clerical jobs; the corresponding percentages for whites and Hispanics were 24.6 percent and 20.7 percent respectively. The greater probability of blacks than whites to be found in clerical positions may be due to the concentration of blacks in low-level white collar jobs in the government sector.

Table 3.1.11, which presents black occupational data from 1970-1980, illustrates the impact on blacks of their dependence on various low-skill, blue collar jobs (craft, operative, labor and service), 56.7 percent in 1970, and 47 percent in 1980. Moreover, they were most concentrated in the category of the white collar clerical worker, 27 percent in 1970 and 29 percent in 1980, and also service worker among blue collar, 24 percent in 1970 and 1980. In addition, in both 1970 and 1980 there was a concentration of 24 percent in the blue-collar service worker category. In the 1970s, while low end jobs were being lost in all other blue collar sectors, service jobs increased by 8 percent. Blacks scored sizeable gains in white collar employment (53 percent in 1980, an increase from 43 percent in 1970), including significant numbers of professional and managerial workers, with the share increase going from 12 percent in 1970 to 19 percent in 1980. Comparing black employment with total employment in the city, the number of black workers in the managerial, professional and technical

sector increased by 56 percent in the 1970s, whereas total employment in the same categories only gained 10 percent in that period (Table 3.1.2). These facts indicate that whereas blacks gained in share of professional, managerial, sales, and clerical jobs, losses in all the blue collar categories did not exceed the downward impact of economic decline and occupational contraction. Thus, the overall pattern is one of leaving low-end occupations and gaining in white collar jobs. According to Table 3.1.8, white employment in most categories decreased, except for managerial jobs (increase by 13.5 percent). The total number of employed whites decreased by 27 percent in the 1970s.

Another fact I want to present is the change in the number of male operative workers, i.e., males working in manufacturing. The number of male workers in operative jobs decreased 33 percent between 1970 and 1980 in the city (Table 3.1.7), but the number of black male operative workers decreased by 28 percent, less than the city average. According to my calculations (from Tables 3.1.7, 3.1.9 and 3.1.8), in 1970 black workers were 25 percent of the total work force of male machine operative workers, and by 1980 were 27 percent of total workers, a proportion increase of 2 percentage points. By way of contrast, in that same period, while males accounted for 73 percent of total male operative workers in 1970 and only 54 percent in 1980, a decrease of 19 percent. These figures reveal that the proportion white male machine opera-

tors were of total males in the manufacturing sector shrank, while the proportion of black males expanded, in a direction opposite to the general shrinkage of manufacturing in the city.

The 1970s saw severe declines in the numbers of non-Hispanic whites living in New York. Two million fewer whites lived in New York in 1980 than in the decade before. White losses in the labor market were also disproportionate, with the most severe declines occurring in sectors like manufacturing and retailing, which contained sizeable concentrations of older white workers. These figures indicate that white manufacturing workers fled the city and left room for blacks and other racial groups, and that blacks did not suffer more than any other racial group from "manufacturer flight."

According to Waldinger, although there has been a rise in the demand for educated employees due to the city's increased need for professional and technical workers and the decline of manufacturing jobs, there is still a great demand for lower skill workers. During the last two decades, rapid economic changes have provided many opportunities to new immigrants, who in turn contributed to the expansion of the city's economy. Many arrived with relatively little education and in large numbers, providing not only a younger, less expensive, and low-skilled labor force to expand the service industry, but also helping to abate a potential labor shortage

due to the aging population, the decrease of young entry-level workers, and low labor force participation.

At the same time, recent selected immigration procedures encouraged new immigrants who came not only with their strong cultural values but with valuable financial capital as well. These new immigrants tended to be highly educated, more skill orientated, and having a profession needed in the city economy.

Many new immigrants were very entrepreneurial and eager to start their own businesses. They started businesses and marketed goods and services both to their own communities and to the broader population. According to the 1987 Survey of Minority-Owned Businesses, since 1982 the city has experienced a 46 percent increase in businesses owned by blacks, and virtually a doubling of businesses owned by Hispanics and Asians. A substantial portion of this growth has been due to businesses owned by recent immigrants (Department of City Planning 1992). These diversified businesses have become an important part of New York's economy, as the increasing diversity of the city's immigrant population has accounted for an overwhelming share of the net increase in New York's labor force.

As the financial center of the world, New York City attracts capital investments from all over the world. Over the past three decades, businessmen in many Asian countries (especially Hong Kong and Taiwan) that experienced rapid

economic growth and are now experiencing political uncertainty are now looking to the U.S. to shelter their fortunes. America's Chinese communities have become the ideal place for investment. New York's Chinatown is a prime example: It experienced a drastic increase in investments, the extent of which is seen by the many new banks that have opened. By 1986, there were 27 banks, one-third of which were branches of American banks and the rest Chinese-owned (Peter Kwong 1987).

In the 1980s, despite progress in educational attainment and occupational status, the minorities still lag in obtaining better and higher level jobs. It is estimated that, in 1990, 44 percent of employed non-Hispanic whites were in managerial, professional, and technical jobs, compared to 22 percent of non-Hispanic blacks and only 17 percent of Hispanic workers (Ehrenhalt 1993)

An up-to-date detailed analysis by race of the above question needs to bring new 1990 STF4 data (not available as yet). Here the argument is that the replacement of manufacturing by services has increased the number of low-level jobs in which minority workers are employed while also generating jobs at the top. From this perspective, the problem is that job loss is concentrated in the middle tier of the job hierarchy, leaving low-paid jobs at the bottom and fewer opportunities for occupational advancement. However, the key issue is the large numbers of minority people who are not in the labor

force and make up the most disadvantaged group, which is the topic in next section.

Labor Force Implications

Trends in labor force participation and unemployment in New York city from 1970 through 1990 can be seen in Tables 3.1.12 and 3.1.13. For all racial groups, labor force participation rates increased from 1970 through 1990. At the same time, unemployment rates increased from 1970 to 1990, showing a diverse pattern of unemployment rates across racial and ethnic lines. For all groups, the labor force participation rates of men have been higher than those of women. The pattern of unemployment rates for men and women within each racial and ethnic group changed from year to year. Throughout the period analyzed, white men and Hispanic men had the highest labor force participation rates in New York City. Notably, the black male labor force participation rate declined substantially, from 71.7 in 1970 to 64.8 in 1980, rising only to 67.5 in 1990.

The labor force participation rate serves as a useful index of the degree to which groups have simply dropped out of the labor force. These so called "discouraged workers" are officially outside the labor force, and therefore do not appear in unemployment statistics.

The pattern of labor force participation among women of different racial and ethnic groups is also revealing. In the

period studied, black women had the highest female labor force participation rate of all New York City women. White women had an intermediate rate, followed by Hispanic women. In 1980, black women had a labor force participation rate of 58.8 percent, white women a rate of 51.9 percent, and Hispanic women a rate of only 47.8 percent.

The labor force participation rate differential between men and women was smallest for blacks (only 8.7 percent in 1980). For whites it was 19.8 percent, and for Hispanics 24.5 percent. Black women have typically joined the labor force, and Hispanic women, on the contrary, have remained behind other women in their tendency to join the labor force.

Although the adverse economic trends of the 1970s have caused out-migration and population loss, it was not great enough to prevent growing unemployment among city residents. There were continued moderate increases in the unemployment rates in the 1980s, although the economic trend was up. Among males, black males showed the highest unemployment rate from 1970 to 1990. Among females, Hispanic women showed the highest unemployment rate.

In most years considered, whites had a lower unemployment rate than did other groups in New York City. The unemployment rate of white men in the city was approximately half the rate for black men. In 1980, the difference in unemployment rates between men and women was the greatest for blacks 3.6 percent. The rate differential between men and women for

Hispanics was 1.7 percent and for whites it was only 0.2 percent.

Labor force participation rates and unemployment rates help us to understand some of the underlying reasons for lower income levels among New York City's minorities. These facts show that the most troublesome signs among blacks and Hispanics are not to be found among the employed; rather it is the rising number of these minorities who are excluded from the labor force. The fortunes of these people, it may be argued, increasingly diverge from those of people who are employed. From this standpoint, polarization may be an apt characterization of the changing situation of New York's minority population. Polarization now refers to the growing internal stratification between the employed and the unemployed in the minority population.

After reviewing the picture of employment, education and occupation in the city, I turn to focus on the topic of the poor and poverty in New York City.

Poverty Trends and Differentials by Race and Ethnicity

The poor constitute of a major part of the urban underclass population. In this section I will describe the trends and differentials by race and ethnicity, which provide backdrop information for the underclass. In a later chapter I will give a more detailed discussion of the concentration of

poverty and the underclass, involving a ecological analysis.

Numerous national studies have documented the increase in poverty and inequality between those at the bottom and the top of the income distribution in the last few decades. According to a report by the Census Bureau, the number of people living below the poverty line in the United States has increased by 4.3 million from 26 million (12.4 percent) in 1980 to more than 31 million (13.1 percent) in 1990.

Table 3.1.14 present the population below the poverty line by race in New York City. The table shows that the proportion of the city's population living below the poverty line went up from 14.8 percent in 1970 to 19.7 percent in 1980 and then declined to 18.9 percent in 1990.⁴ There was a substantial increase in the poor in the 1970s (16 percent) in the city. The increase in black poor (including Hispanic blacks) was 28 percent in this period. Decreasing minority poverty rates contributed to the declining poverty rates in the city in the 1980s. Among Hispanics, the poverty rate went down to 32 percent in 1990 from 35 percent in 1980; among blacks, the poverty rate dropped to 25 percent in 1990 from 29 percent in 1980.

In the 1980s, despite the number of poor people and the poverty rate decline in the city, the absolute number of black

I use the ratio of population living below the poverty line to the total population as a poverty rate.

and Hispanic poor continued to grow, 2 percent for blacks and 14 percent for Hispanics. Hispanic poor accounted for 36 percent of the total poor in 1980 and 41 percent in 1990, while black poor accounted for 37 percent in 1980 and 38 percent in 1990. Therefore, throughout these census decades, the poverty population of New York City has been predominantly a minority population.

The trend in poverty indicates that although the 1980s were a period of prosperity in the city, black and Hispanics did not benefit much from the economic growth, and Hispanics remained the most disadvantaged group in the economic terms due to fact that they have the highest poverty rate of any group.

2. Change in Demographic Profile

Even more dramatic than the changes in the city's economic environment are the changes in its demographics. My data indicate that the city's population declined precipitously from 7,894,862 in 1970 to 7,071,639 in 1980, and then rose to 7,322,564 in 1990 (Table 3.2.1), somewhat below the population at the end of World War II (Figure 3.2.1). But the characteristics of the city's current residents differ significantly from those of their predecessors. The driving force in this post-war demographic transformation has been migration.

During the 1970s the city's population declined by 10.4 percent. Much of the loss was due to a large out-migration,

often called "white and middle class flight," in response to the ailing economy and deindustrialization of the city. New York City had a net loss of over one million native-born people, 19 percent of the native-born population in 1970 (Table 3.2.3). During the same period, a large number of newly arrived immigrants, about 78,000 each year, entered the city (Department of City Planning 1992). As a result, the city's foreign-born population increased from 15.4 percent in 1970 to 23.6 percent in 1980 (Figure 3.2.2 and Table 3.2.7); the arrival of these new immigrants helped to offset the city's declining population.

In the 1980s, as the number of native born New Yorkers declined continuously (a 3 percent decrease from 1980 to 1990, see Table 3.2.3), the arrival of new immigrants—about 85.6 thousand each year in this period (Department of City Planning 1992)—increased the percentage of foreign-born residents from 23.6 percent in 1980 to 28.4 percent, with a total number of more than 2 million in 1990 (Table 3.2.7). This combined moving out and moving in cycle increased the city's population 3.5 percent in this period.

Although the city's overall population was shrinking in the 1970s and growing in the 1980s, the minority population increased to become the majority. There were 61 percent non-Hispanic whites in 1970, 52 percent in 1980 and 43 percent in 1990. Non-Hispanic Blacks comprised the single largest minority group in New York. Their numbers grew modestly during the

1970s (11.5 percent increase) and the 1980s (9 percent increase). The share of non-Hispanic blacks increased only one percent in the 1980s, from 24 percent in 1980 to 25 percent in 1990. Since 1970, the surge in the minority population is due mainly to large increases among Hispanics, and secondarily among Asians. During the 1970s and 1980s, the Hispanic population increased by 10 and 27 percent respectively, accounting for 20 percent of the total population in 1980, and increasing to 24 percent in 1990. The fastest growing racial/ethnic population are Asians.⁵ In the 1980s, the number of Asians doubled (a 98 percent increase) from 3.8 percent of the total population in 1980 to 7.2 percent in 1990 (Tables 9 and 10).

The distribution and growth of New York City's population is presented in Table 3.2.1. and Figure 3.2.1. The distribution of population between the five boroughs remained relatively stable during the 1980s. Disproportionate population losses in Brooklyn and the Bronx between 1970 and 1980 diminished their share of the total population of the five boroughs from 51.6 percent in 1970 to 48 percent in 1980. Brooklyn, the borough with the largest population, accounted for 33 percent of the city's population in 1970, 31.5 percent in 1980, and 31.4 percent in 1990, reflecting a 14.3 percent loss of population in 1970-1980 and an increase of 3.1 percent in 1980-90. Queens, the borough with the second largest popula-

Note: the group of Asians have been categorize as Asians and Others in census. Asians account for 94.5 percent in 1980 and 96.4 percent in 1990 of this group in New York City.

tion, accounted for 25.2 percent of the city's population in 1970, 26.7 percent in 1980, and remained the same in 1990; it had a 4.8 percent loss of population in 1970-1980 and a 3.2 percentage increase between 1980 and 1990. Manhattan, the third most populated borough, held 19.5 percent of the city's population in 1970, 20.2 percent in 1980, and 20.3 percent in 1990. It lost 7.2 percent of its population between 1970 and 1980, and then had the second largest increase in the city, 4.1 percent from 1980-1990. The Bronx, the borough with the second lowest population, accounted for 18.6 percent of the city's population in 1970, 16.5 percent in 1980, and 16.4 percent in 1990. It had the highest population decrease in the city between 1970 and 1980—20.6 percent (twice the city average of 10 percent), and the lowest increase in population, 3.0 percent, between 1980 and 1990, lower than the city average of 3.5 percent. Staten Island, the borough with the lowest population count is the only one with a continuous increase of population; it accounted for 3.7 percent of the city's population in 1970, 5.0 percent in 1980, and 5.2 percent in 1990. It was the only borough to experience a dramatic population growth (19.2 percent) between 1970 and 1980, but from 1980 to 1990 the growth slowed to 7.6 percent.

Roger Waldinger's (1991) summary of these changes demonstrates three levels of migration that radically changed the city's population.

First, millions of economically mobile whites moved out of the city to the suburbs and, particularly in the 1970s, to other regions. This outflow abated in the 1980s. Second, large numbers of blacks from the south and Puerto Ricans moved into the city in search of economic opportunities. This inflow was greatest in the 1960s and early 1970s, but over the last 15 years it has added little to the city's population. Third, there has been a considerable increase in new immigrants from all over the world arriving in the city, making it far more heterogeneous than other cities.

I present data from the 1970, 1980, and 1990 U.S. census, which are then compared to Waldinger's analysis. This is followed with full demographic profiles of the city's residents and a detailed analysis of the various patterns in its five boroughs.

New York lost 26 percent of its non-Hispanic whites in the 1970s and 15 percent in the 1980s (Table 3.2.2). The biggest loss happened in the Bronx; with a 45 percent decline in number of whites in the 1970s, and 32 percent in the 1980s, since 1970 the Bronx has had a 63 percent outflow of non-Hispanic whites. Brooklyn lost almost one-third (31 percent) of its white population in the 1970s, and 15 percent in the 1980s; since 1970, 42 percent of its non-Hispanic whites have fled. Queens, which has similar numbers as Brooklyn, lost 40 percent of its white population since 1970. Manhattan lost 14 percent of its non-Hispanic white population in the 1970s, but

gained 0.7 percent in the 1980s. There was a continued increase of non-Hispanic whites in Staten Island in the 1970s and 1980s, a total of 14 percent increase since 1970.

Non-Hispanic blacks increased by 11.5 percent in 1970s and 9 percent in the 1980s (Table 3.2.3). As shown, non-Hispanic blacks increased in all boroughs except in Manhattan, where they declined by 14.4 percent in the 1970s and 10.1 percent in the 1980s. However, there was a continuous increase of 60 percent of non-Hispanic blacks in Queens and 32 percent in Brooklyn from 1970 to 1990.

Non-Hispanic blacks comprise two different groups: African-Americans who are mostly native born, and foreign-born blacks who are mainly immigrants from the West Indies and Central American countries. Table 3.2.8 shows American-born and foreign-born blacks in 1970 and 1980 (1990 data is missing because STF4 tapes are not yet available). The table shows there were 1,572,000 American-born blacks (94.6 percent of blacks in 1970), which declined to 1,440,000 (80.5 percent) in 1980. Total American-born blacks in the city decreased by 8 percent during the 1970s, but not in all of the boroughs: the number of American-born blacks decreased 23 percent in Manhattan, 13 percent in Brooklyn, and 6 percent in the Bronx, but increased 19 percent in Queens and 61 percent in Staten Island. This could reflect a population movement whereby

blacks tried to get out of ghettos and seek better neighborhoods in the city.

The Hispanic population increased by 10 percent in the 1970s and by 26.8 percent in the 1980s (Table 3.2.5). In 1970 there were 32 percent Hispanics in the Bronx, 31 percent in Brooklyn, 25 percent in Manhattan, 12 percent in Queens, and only 1 percent in Staten Island. Queens had the largest Hispanic increase: by 72 percent in the 1970s, 45 percent in the 1980s, a total of 148 percent increase since 1970. The percentage of Hispanic has increased by 24 percent in Manhattan since 1970. In the Bronx there was an increase by 3 percent in the 1970s and 32 percent in the 1980s.

Table 3.2.6 presents Hispanics in the city by origin and location. It shows that in 1970, 63.5 percent of Hispanics were Puerto Ricans, making them the most dominant Hispanic group. Puerto Ricans increased by 5 percent in the 1970s but only 1 percent in the 1980s, which supports Waldinger's analysis that migration from Puerto Rico has almost stopped in the last two decades. In Manhattan Puerto Ricans decreased by 10 percent in the both 1970s and 1980s (most Puerto Ricans live in East Harlem). The most interesting finding for Puerto Ricans in the city is that while their numbers remained stable over the last twenty years, they tended to move around in the five boroughs. In the 1970s, they increased 1.5 percent in

Brooklyn, 0.5 percent in the Bronx, 16.7 percent in Queens, and 137.7 percent in Staten Island. In the 1980s they decreased 4.5 percent in Brooklyn, but increased 5.7 percent in the Bronx, 16.7 percent in Queens, and 51.9 percent in Staten Island. The reason for Puerto Rican movement among the different boroughs may be similar to that of blacks: they fled from the deteriorated ghettos, and moved to more suburbanized boroughs to seek better neighborhoods.

Next I examine the third force driving the population change in the city: new immigrants. Since the passage of the Hart-Cellar Act in 1965, foreign migration has been a major source of population growth in New York City. One consequence of the act was a dramatic increase in immigration from Asia, which coincided with increased immigration from the Caribbean and Latin America. In 1986, the Immigration Reform and Control Act provided an amnesty for undocumented immigrants who had resided continuously in the United States since January 1, 1982. These two acts together created a tremendous impact on the city's population not only in past and the present, but also for the future.

According to U.S. Immigration and Naturalization Services data, immigration admission to the United States and New York City substantially increased after 1965. During the 1960s there were 3,214,000 new immigrants to the United States, of whom 576,000 arrived in New York City (17.9 percent of total immigrants). In the 1970s 4,336,000 arrived in the U.S., of

whom 783,000 landed in New York City (18.1 percent of total immigration). From 1982 to 1989 there were 4,726,000 newly arrived immigrants to the U.S., 591,000 of whom arrived in New York City (14.5 percent of total immigration). As a result, the foreign-born population increased by 37.3 percent in the 1970s, and by 24.7 percent in the 1980s from the 1970 base of the number of 1,217,000 (Table 3.2.6). This increase in the foreign-born population has been substantial. Both the number and the percentage of foreign-born residents in the city are at their highest levels since before World War II (Figure 3.2.2).

Another important change in the city's population is the immigrants' racial composition. Since the 1960s, the makeup has shifted from being mainly European to mostly Caribbean, South Americans, and Asians. The vast bulk of immigrants came from the Caribbean, Latin America, and Asia. Between 1982 and 1987 the City Planning Department conducted a survey of people who told federal immigration services they intended to live in New York once they are finally issued their green cards. The numbers were: 40 percent from Caribbean countries, 26 from Asia, 17 percent from South America, and only 9 percent from Europe. All told, the immigrants came from 146 countries. Dominicans topped the list followed by Jamaicans, Chinese, Guyanese, Haitians, Colombians, Asian Indians, Koreans, Ecuad-

orans, and Filipinos. These nationalities accounted for 66 percent of the flow.⁶

United States Immigration and Naturalization Services data state that from 1982 to 1989 in New York City the top five immigrant countries were the Dominican Republic (16.9 %), Jamaica (10.6 %), China (10.5%), Guyana (7.8 %), and Haiti (6.0). The new flood of immigrants has resulted in perhaps the highest level of racial diversity the city has ever known.

Since 1970 there has been a 71 percent increase in the foreign-born population of the city. This increase in the number and percent of foreign-born people occurred in all boroughs. Prior to 1980, immigrants were more likely to settle in Brooklyn, Queens or Manhattan than in the Bronx. The borough of Queens experienced the largest increase in foreign-born residents—52 percent in 1970, and 31 percent in 1980. In 1990, they represented 36 percent of Queens' population, up from just 18 percent in 1970, 29 percent in 1980 to 36 percent in 1990; they now total 707,000. Brooklyn and the Bronx experienced similar rates of growth in the number of foreign-born residents in the 1980s. However, Brooklyn experienced a continuous increase from 1970, with a 36 percent in the 1970s and 27 percent increase in the 1980s. Brooklyn had more than twice as many foreign-born people as the Bronx in 1990. In the Bronx, there was only a 3 percent increase of

Note: Special Reprint "New York's New World" Daily News. May, 1992. .

the foreign-born population in the 1970s and 28 percent in the 1980s. In Manhattan the increase was 50 percent in 1970 and only 10 percent in 1980: This sharp slowdown was due to the rise in real estate values, which keeps out many foreign-born residents from Manhattan.

Table 3.2.4 presents black New Yorkers by origin and by location for 1970 and 1980 (1990 data are not yet available). This table shows that foreign-born blacks increased almost threefold (a 294 percent increase) in the 1970s. Their numbers went from 5 percent in 1970 to 19 percent in 1980, and continued to grow in the 1980s due to increasing immigration. Historically, black New Yorkers generally have been American-born individuals of African descent; now they are increasingly of Caribbean descent such as American-Jamaican, -Guyanese, -Haitian, -Trinidadian, -Barbadian, or -Grenadan. The other groups came mainly from Central American countries such as American-Panamanian, or -Honduran; there is even a growing percentage of Africans mainly from Senegal, Nigeria, or Ghana. Of all the black immigrant groups that settled in New York, two of the largest groups are from the Caribbean: Jamaicans the second largest and Guyanese the fourth largest. Table 3.2.4 shows that a large number of foreign-born blacks live in Brooklyn and Queens; this is because most Caribbean immigrants tended to settle in central Brooklyn neighborhoods like Flatb-

ush, East Flatbush, and Crown Heights, and Queens neighborhoods like Queens Village and Jamaica.

As for Hispanics, previously they primarily came from Puerto Rico. Now they also come from the Dominican Republic, Ecuador, Colombia, Cuba, Mexico, Peru, and other Latin American countries. Table 3.2.7 shows the population by Hispanic origin and location for 1970 to 1990. Forty-eight percent of Hispanics come from Puerto Rico, 19 percent from the Dominican Republic, 3 percent from Mexico and Cuba, and 26 percent from other Latin American countries. Dominicans are now the largest group of new immigrants. They are mostly concentrated in Washington Heights and the Lower East Side of Manhattan, the west Bronx and Williamsburg in Brooklyn. The other two large groups are Colombians and Ecuadorans, who mostly settled in Queens neighborhoods like Astoria, Jackson Heights, and Corona.

The other large immigrant group is comprised of Asians. Asian New Yorkers are mainly from China, Korea, Thailand, Cambodia, Vietnam, the Philippines, India, Pakistan, and Sri Lanka. Over the last decade, the majority of this group has come from China. The 1990 census showed approximately 529,000 Asians in New York City (Table 3.2.8). From 1970 to 1980 the number of Asians increased 98 percent, of whom 239,000 or about 45 percent were Chinese. Chinatown, located on the Lower East Side of Manhattan, has remained the hub for Chinese

immigrants, but high Manhattan rents have driven many of them to Brooklyn's Sunset Park and Eighth Avenue areas. Many new Chinese immigrants have now settled in the borough of Queens along the Number Seven subway line, in Elmhurst and Jackson Heights, and in Flushing where they are now creating a new Chinatown. Table 3.2.8 shows where the largest number of this group are located. They are mostly concentrated in Manhattan (49 percent) in 1970, and then in Queens in 1980 (39 percent) and 1990 (46 percent). Both Queens and Brooklyn have absorbed a large number of Asians in last two decades, where 68 percent of Asians lived in 1990.

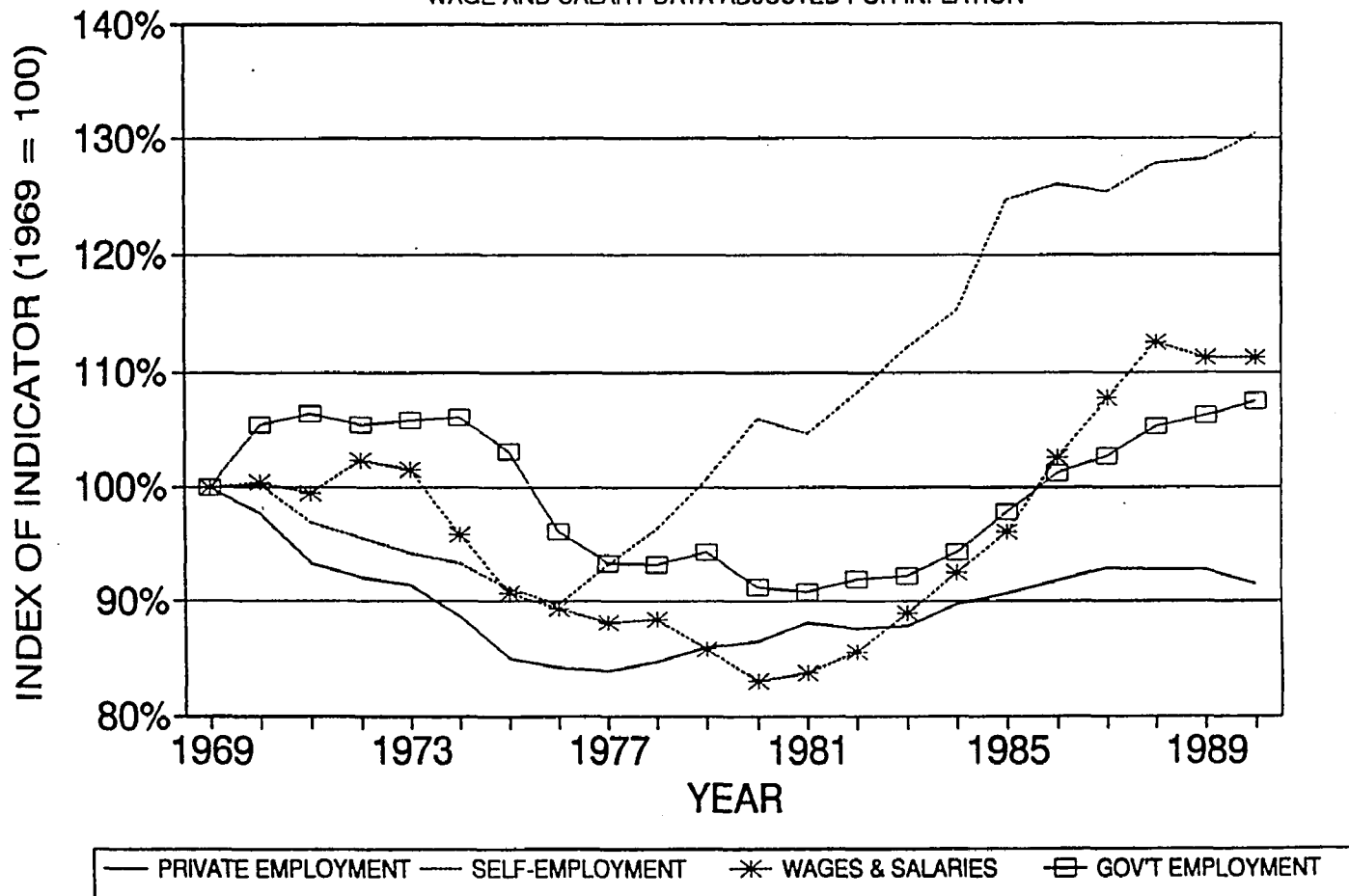
Having discussed the changes economic and demographic aspect of New York City, I will next focus on my discussion on the underclass issues in the city. I am concerned with how the changes in economy and population related to the growth and shrinkage of the underclass, and affected their ecological distribution in the city.

Figure 3.1.1

INDEX OF ECONOMIC INDICATORS

NEW YORK CITY, 1969 TO 1990

WAGE AND SALARY DATA ADJUSTED FOR INFLATION

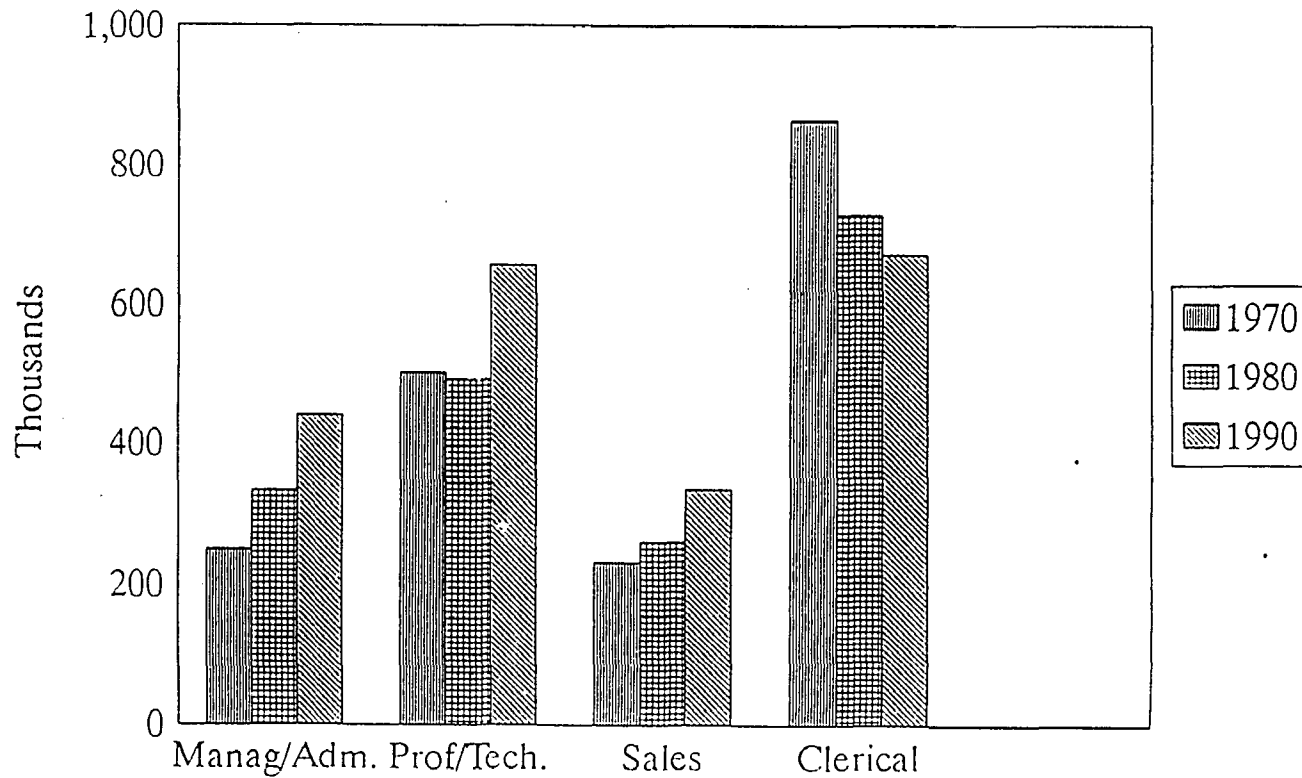


SOURCE: BEA, U.S. Dept. of Commerce

Figure 3.1.2

OCCUPATIONAL EMPLOYMENT 1970, 1980 and 1990 NYC Population 16 and Over

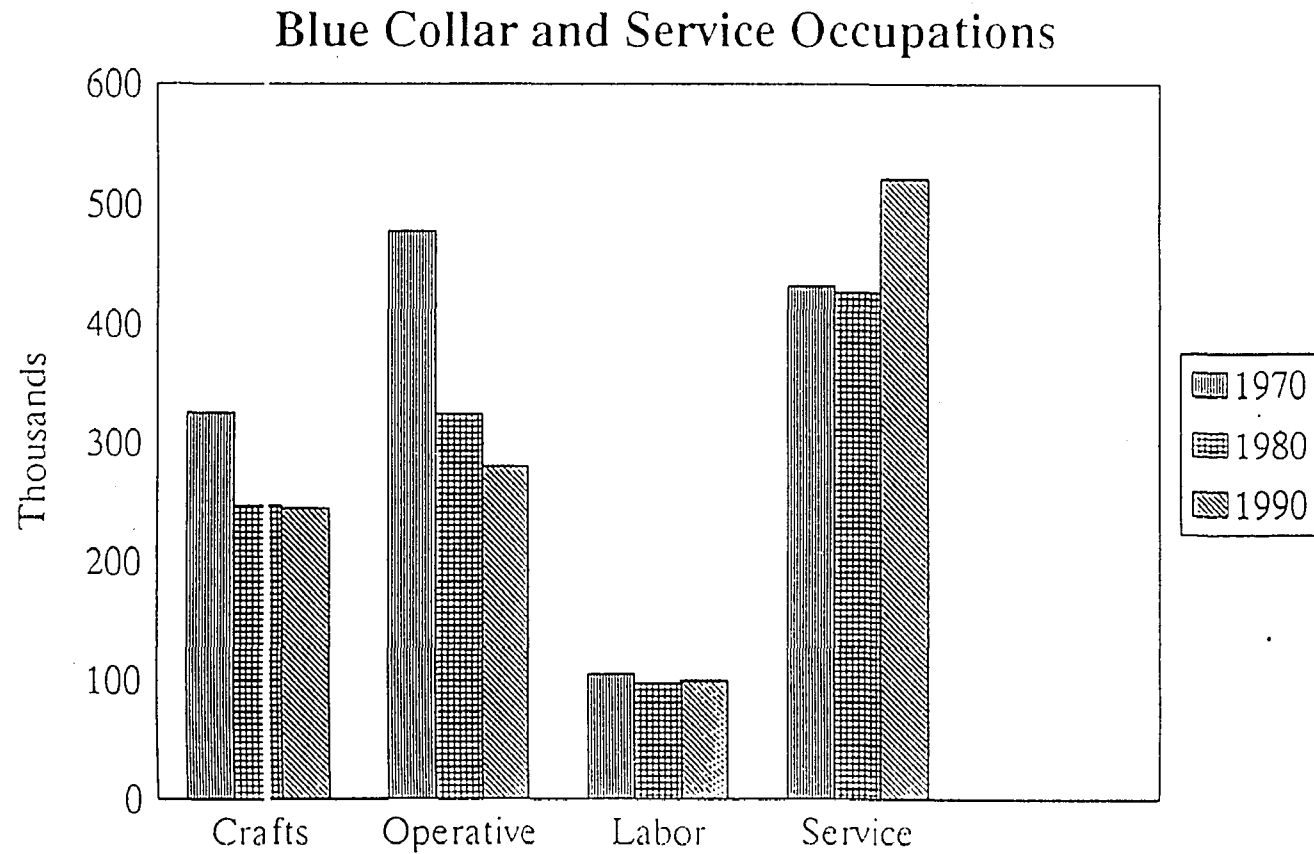
White Collar Occupations



Source: U.S. Census of Population, 1970 FCST, 1980 STF4 and 1990 STF3

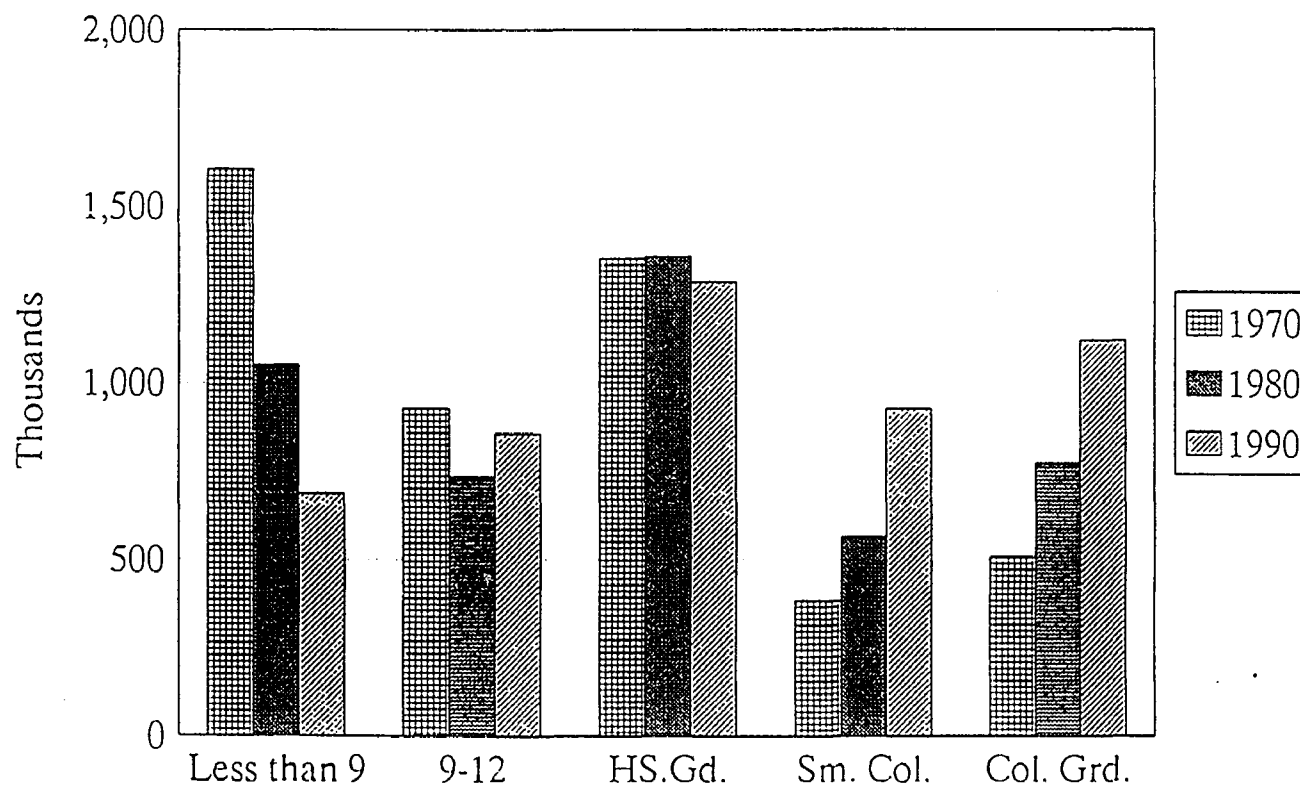
Figure 3.1.3

OCCUPATIONAL EMPLOYMENT 1970, 1980 and 1990 NYC Population 16 and Over



Source: U.S. Census of Population, 1970 FCST, 1980 STF4 and 1990 STF3

Figure 3.1.4
SCHOOL YEARS COMPLETED 1970, 1980 and 1990
NYC Population 25 and Over



Source: U.S. Census of Population, 1970 FCST, 1980 STF4 and 1990 STF3

Table 3.1.1 Family Income Distribution (in 1990 dollars) in New York City: 1970, 1980 and 1990

Family Income	1970	1970	1980	1980	1990	1990	1970-80	1970-80	1980-90	1980-90
	N Family	%	N Family	%	N Family	%	N Change	% Change	N Change	% Change
New York City:										
Less than \$17.1K	428,999	20.8	521,311	29.4	437,500	24.9	92,312	21.5	-83,811	-16.1
\$17.1K - \$34.2K	639,872	31.1	511,329	28.9	437,184	24.9	-128,543	-20.1	-74,145	-14.5
\$34.2K - \$51.3K	504,603	24.5	370,103	20.9	374,372	21.3	-134,500	-26.7	4,269	1.2
More than \$51.3K	485,415	23.6	368,223	20.8	506,663	28.9	-117,192	-24.1	138,440	37.6

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

**Table 3.1.2 Employment of New York City Residents, by Occupation: 1970, 1980 and 1990
Employed Persons 16 Years and Over**

All Employed	1970		1980		1990		1970-1980	1970-1980	1980-1990	1980-1990
	Number of Persons	Percent of Distribution	Number of Persons	Percent of Distribution	Number of Persons	Percent of Distribution	Number of Change	Percent Change	Number of Change	Percent Change
MANA	250,184	7.8	333,255	11.4	440,090	13.5	83,071	33.2	106,835	32.1
PROT	502,140	15.7	492,327	16.9	656,286	20.1	-9,813	-2.0	163,959	33.3
SALE	232,844	7.3	261,808	9.0	335,477	10.3	28,964	12.4	73,669	28.1
CLER	863,657	27.1	727,602	24.9	672,434	20.6	-136,055	-16	-55,168	-7.6
CRAF	325,983	10.2	246,350	8.4	244,817	7.5	-79,633	-24	-1,533	-0.6
OPER	477,151	15.0	324,801	11.1	279,623	8.6	-152,350	-32	-45,178	-14
LABO	105,334	3.3	97,589	3.3	99,584	3.1	-7,745	-7.4	1,995	2.0
SERV	431,419	13.5	426,350	14.6	520,974	16.0	-5,069	-1.2	94,624	22.2
FARM	2,557	0.1	8,020	0.3	8,352	0.3	5,463	214	332	4.1
OCCT	3,191,281	100	2,918,102	100	3,257,637	100	-273,179	-8.6	339,535	11.6

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

Note: MANA - Managerial and Administrative workers. PROT - Professionals and Technicians. SALE - Sales workers. CLER - Clerical workers. CRAF - Craft workers. OPER - Operative workers. LABO - Labors. SERV - Service workers. FARM - Farmers. OCCT - Total employment.

Table 3.1.3 School Years Completed in New York City: 1970, 1980 and 1990
Person 25 and Over

School Years completed	1970		1980		1990	
	Number of Persons	Percent of Distribution	Number of Persons	Percent of Distribution	Number of Persons	Percent of Distribution
Less than 9th grade	1,603,226	33.6	1,049,796	23.4	688,490	14.1
9th to 12th grade	931,539	19.5	736,812	16.4	858,657	17.6
High school graduate	1,350,746	28.3	1,357,768	30.3	1,285,196	26.3
Some college no degree	382,750	8.0	564,839	12.6	929,603	19.0
College and graduate	506,492	10.6	776,535	17.3	1,122,328	23.0
Total	4,774,753	100.0	4,485,750	100.0	4,884,274	100.0

Table 3.1.4 School Years Completed in New York City by Race/Ethnicity in 1980
Person 25 and Over

School Years	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Less than 9th grade	1,049,796	23.4	637,270	22.0	194,215	20.3	286,521	40.2
9th to 12th grade	736,812	16.4	417,179	14.4	210,003	21.9	144,547	20.3
High school graduate	1,357,768	30.3	872,450	30.1	331,442	34.6	169,940	23.9
Some college no degree	564,839	12.6	359,203	12.4	140,877	14.7	68,946	9.7
College and graduate	776,535	17.3	612,373	21.1	80,516	8.4	41,999	5.9
Total	4,485,750	100.0	2,898,475	100.0	957,053	100.0	711,953	100.0

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

**Table 3.1.5 School Years Completed in New York City in 1990:
Person 25 and Over**

School Years completed	Number of Persons All race	Percent of Distribution	Number of Person White	Percent of Distribution	Number of Person Black	Percent of Distribution	Number of Person Hispanic	Percent of Distribution	Number of Person Asian	Percent of Distribution
Less than 9th grade	688,490	14.1	335,612	11.9	152,553	12.1	272,098	27.4	65,118	19.2
9th to 12th grade	858,657	17.6	392,918	13.9	300,279	23.8	244,817	24.7	42,539	12.6
High school graduate	1,285,196	26.3	757,784	26.9	359,491	28.5	227,294	22.9	63,506	18.8
Some college no degree	929,603	19.0	508,562	18.0	291,670	23.2	165,805	16.7	165,805	49.0
College and graduate	1,122,328	23.0	824,262	29.2	155,630	12.4	81,407	8.2	81,407	24.1
Total	4,884,274	100.0	2,819,138	100.0	1,259,623	100.0	991,421	100.0	338,368	100.0

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

**Table 3.1.6 School Years Completed in New York City in 1970, 1980 and 1990:
Blacks 25 and Over**

School Years completed	1970 Number of Persons	Percent of Distribution	1980 Number of Persons	Percent of Distribution	1990 Number of Person Black	Percent of Distribution	1970-1980 Number of Change	1970-1980 Percent of Change	-1990 Number of	1980-1990 Percent of
Less than 9th grade	278,784	33.2	194,215	20.3	152,553	12.1	-84,569	-30.3	-41,662	-21.5
9th to 12th grade	220,074	26.2	210,003	21.9	300,279	23.8	-10,071	-4.6	90,276	43.0
High school graduate	251,833	30.0	331,442	34.6	359,491	28.5	79,609	31.6	28,049	8.5
Some college no degree	55,136	6.6	140,877	14.7	291,670	23.2	85,741	155.5	150,793	107.0
College and graduate	34,252	4.1	80,516	8.4	155,630	12.4	46,264	135.1	75,114	93.3
Total	840,079	100.0	957,053	100.0	1,259,623	100.0	116,974	13.9	302,570	31.6

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

Table 3.1.7 Employment of New York City Residents, by Occupation and Sex: 1970 and 1980
Employed Person 16 Years and Over

Occupation	1970		1980				70-80 (M)		70-80 (M)		70-80 (F)	
	Number	Percent	Female	Percent	Male	Percent	Number	Percent	Number	Percent	Number	Percent
MANA	201,237	10.6	48,947	3.8	220,207	13.8	113,048	8.5	18,970	9.4	64,101	131.0
PROT	291,721	15.4	210,419	16.3	248,324	15.6	244,003	18.4	-43,397	-14.9	33,584	16.0
SALE	159,721	8.4	73,123	5.7	150,977	9.5	110,831	8.4	-8,744	-5.5	37,708	51.6
CLER	280,769	14.8	582,888	45.1	225,085	14.1	502,517	37.9	-55,684	-19.8	-80,371	-13.8
CRAF	307,436	16.2	18,547	1.4	220,793	13.9	25,557	1.9	-86,643	-28.2	7,010	37.8
OPER	307,222	16.2	169,929	13.1	204,785	12.9	120,016	9.1	-102,437	-33.3	-49,913	-29.4
LABO	99,260	5.2	6,074	0.5	79,121	5.0	18,468	1.4	-20,139	-20.3	12,394	204.1
SERV	249,324	13.1	182,095	14.1	236,798	14.9	189,552	14.3	-12,526	-5.0	7,457	4.1
FARM	1,813	0.1	744	0.1	6,957	0.4	1,063	0.1	5,144	283.7	319	42.9
OCCT	1,898,503	100.0	1,292,766	100.0	1,593,047	100.0	1,325,055	100.0	-305,456	-16.1	32,289	2.5

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

Note: MANA - Managerial and Administrative workers. PROT - Professionals and Technicians. SALE - Sales workers.
CLER - Clerical workers. CRAF - Craft workers. OPER - Operative workers. LABO - Labors.
SERV - Service workers. FARM - Farmers. OCCT - Total employment.

**Table 3.1.8 Employment of New York City Residents, by Occupation and Sex: 1970 and 1980
Employed Whites 16 Years and Over**

Occupation	1970		1970		1980		1980		70-80 (M) Number Change	70-80 (M) Percent Change	70-80 (F) Number Change	70-80 (F) Percent Change
	Number Male	Percent	Number Female	Percent	Number Male	Percent	Number Female	Percent				
MANA	183,900	11.9	43,351	4.3	171,640	16.3	86,333	10.6	-12,260	-6.7	42,982	99.1
PROT	259,067	16.8	172,350	17.3	193,735	18.5	167,196	20.6	-65,332	-25.2	-5,154	-3.0
SALE	145,625	9.4	64,529	6.5	115,093	11.0	78,504	9.7	-30,532	-21.0	13,975	21.7
CLER	222,124	14.4	473,514	47.4	137,114	13.1	321,133	39.6	-85,010	-38.3	-152,381	-32.2
CRAF	256,221	16.6	14,206	1.4	149,260	14.2	14,939	1.8	-106,961	-41.7	733	5.2
OPER	225,646	14.6	127,189	12.7	109,935	10.5	55,631	6.9	-115,711	-51.3	-71,558	-56.3
LABO	73,094	4.7	3,824	0.4	45,034	4.3	8,460	1.0	-28,060	-38.4	4,636	121.2
SERV	178,908	11.6	99,336	9.9	123,575	11.8	78,367	9.7	-55,333	-30.9	-20,969	-21.1
FARM	1,199	0.1	249	0.0	4,406	0.4	705	0.1	3,207	267.5	456	183.1
OCCT	1,545,784	100.0	998,548	100.0	1,049,792	100.0	811,268	100.0	-495,992	-32.1	-187,280	-18.8

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

**Table 3.1.9 Employment of New York City Residents, by Occupation and Sex: 1970 and 1980
Employed Blacks 16 Years and Over**

Occupation	1970		1970		1980		1980		70-80 (M) Number Change	70-80 (M) Percent Change	70-80 (F) Number Change	70-80 (F) Percent Change
	Number Male	Percent	Number Female	Percent	Number Male	Percent	Number Female	Percent				
MANA	13,513	4.3	4,867	1.8	22,060	7.3	16,907	5.0	8,547	63.3	12,040	247.4
PROT	24,924	7.9	32,680	12.1	27,949	9.3	51,949	15.5	3,025	12.1	19,269	59.0
SALE	12,141	3.8	7,793	2.9	16,140	5.4	18,495	5.5	3,999	32.9	10,702	137.3
CLER	54,494	17.2	102,112	37.9	56,191	18.6	126,634	37.8	1,697	3.1	24,522	24.0
CRAF	48,472	15.3	4,053	1.5	40,584	13.5	4,971	1.5	-7,888	-16.3	918	22.6
OPER	76,173	24.1	35,809	13.3	55,005	18.2	21,812	6.5	-21,168	-27.8	-13,997	-39.1
LABO	25,082	7.9	2,129	0.8	20,094	6.7	5,193	1.5	-4,988	-19.9	3,064	143.9
SERV	60,823	19.2	79,650	29.5	62,107	20.6	88,978	26.5	1,284	2.1	9,328	11.7
FARM	585	0.2	466	0.2	1,446	0.5	224	0.1	861	147.2	-242	-51.9
OCCT	316,207	100.0	269,559	100.0	301,576	100.0	335,163	100.0	-14,631	-4.6	65,604	24.3

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 (STF4)

Note: MANA - Managerial and Administrative workers. PROT - Professionals and Technicians. SALE - Sales workers. CLER - Clerical workers. CRAF - Craft workers. OPER - Operative workers. LABO - Labors. SERV - Service workers. FARM - Farmers. OCCT - Total employment.

**Table 3.1.10 Employment of New York City Residents, by Occupation in 1980
Employed Hispanics 16 Years and Over**

Occupation	Number	Percent	Number	Percent	Number	Percent	Number	Percent
MANA	333,255	11.4	257,973	13.9	38,967	6.1	28,753	6.2
PROT	492,327	16.9	360,931	19.4	79,898	12.5	34,120	7.4
SALE	261,808	9.0	193,597	10.4	34,635	5.4	31,914	6.9
CLER	727,602	24.9	458,247	24.6	182,825	28.7	95,415	20.7
CRAF	246,350	8.4	164,199	8.8	45,555	7.2	48,074	10.4
OPER	324,801	11.1	165,566	8.9	76,817	12.1	105,603	22.9
LABO	97,589	3.3	53,494	2.9	25,287	4.0	26,731	5.8
SERV	426,350	14.6	201,942	10.9	151,085	23.7	89,502	19.4
FARM	8,020	0.3	5,111	0.3	1,670	0.3	1,617	0.4
OCCT	2,918,102	100.0	1,861,060	100.0	636,739	100.0	461,729	100.0

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

**Table 3.1.11 Employment of New York City Blacks, by Occupation: 1970 and 1980
Employed Blacks 16 Years and Over**

All Employed	1970		1980		1970-1980	
	Number of Persons	Percent of Distribution	Number of Persons	Percent of Distribution	Number of Change	Percent Change
MANA	18,380	3.1	38,967	6.1	20,587	112
PROT	57,604	9.8	79,898	12.5	22,294	38.7
SALE	19,934	3.4	34,635	5.4	14,701	73.7
CLER	156,606	26.7	182,825	28.7	26,219	16.7
CRAF	52,525	9.0	45,555	7.2	-6,970	-13
OPER	111,982	19.1	76,817	12.1	-35,165	-31
LABO	27,211	4.6	25,287	4.0	-1,924	-7.1
SERV	140,473	24.0	151,085	23.7	10,612	7.6
FARM	1,051	0.2	1,670	0.3	619	58.9
OCCT	585,766	100	636,739	100	50,973	8.7

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3

Note: MANA - Managerial and Administrative workers. PROT - Professionals and Technicians. SALE - Sales workers.

CLER - Clerical workers. CRAF - Craft workers. OPER - Operative workers. LABO - Labors.

SERV - Service workers. FARM - Farmers. OCCT - Total employment.

Table 3.1.12 Labor Force Participation Rates by Race/Ethnicity and Sex in New York CITY: 1970, 1980 and 1990
Persons 16 Years and Over

Race/Ethnicity and Sex	1970 Number	1970 %	1980 Number	1980 %	1990 Number	1990 %	1970-80 Number Change	1980-90 Number Change	1970-80 % Change	1980-90 % Change
New York City:										
Total	3,344,311	56.7	3,167,613	57.2	3,586,428	61.7	-176,698	418,815	-5.3	13.2
Male	1,988,701	74.1	1,732,120	69.5	1,891,211	71.0	-256,581	159,091	-12.9	9.2
Female	1,355,610	42.2	1,435,493	47.1	1,695,217	53.7	79,883	259,724	5.9	18.1
Whites:										
Total	2,660,782	56.5	1,986,073	57.6	1,975,485	61.1	-674,709	-10,588	-25.4	-0.5
Male	1,614,585	74.6	1,119,575	71.0	1,077,872	71.7	-495,010	-41,703	-30.7	-3.7
Female	1,046,197	41.2	866,498	46.3	897,613	51.9	-179,699	31,115	-17.2	3.6
Blacks:										
Total	619,786	57.1	719,485	57.2	978,776	62.5	99,699	259,291	16.1	36.0
Male	335,660	71.7	347,435	64.8	455,504	67.5	11,775	108,069	3.5	31.1
Female	284,126	46.1	372,050	51.5	523,272	58.8	87,924	151,222	30.9	40.6
Hispanics:										
Total	.	.	518,996	54.0	743,164	59.1	.	224,168	.	43.2
Male	.	.	300,425	70.3	418,853	72.3	.	118,428	.	39.4
Female	.	.	218,571	41.0	324,311	47.8	.	105,740	.	48.4

Source: U.S. Census of Population, 1970 Fourth Count Summary Tapes (FCST), 1980 STF4A and 1990 STF3A

Table 3.1.13 Unemployment Rates by Race/Ethnicity and Sex in New York City: 1970, 1980 and 1990
Persons 16 Years and Over

Race/Ethnicity and Sex	1970 Number	1970 %	1980 Number	1980 %	1990 Number	1990 %	1970-80 Number Change	1980-90 Number Change	1970-80 % Change	1980-90 % Change
New York City:										
Total	139,422	4.2	243,134	7.7	322,125	9.0	103,712	78,991	74.4	32.5
Male	76,951	3.9	133,226	7.7	174,919	9.2	56,275	41,693	73.1	31.3
Female	62,471	4.6	109,908	7.7	147,206	8.7	47,437	37,298	75.9	33.9
Whites:										
Total	105,069	3.9	121,380	6.1	128,485	6.5	16,311	7,105	15.5	.9
Male	57,659	3.6	66,373	5.9	70,951	6.6	8,714	4,578	15.1	6.9
Female	47,410	4.5	55,007	6.3	57,534	6.4	7,597	2,527	16.0	4.6
Blacks:										
Total	32,091	5.2	81,048	11.3	125,972	12.9	48,957	44,924	152.6	55.4
Male	17,988	5.4	44,396	12.8	67,418	14.8	26,408	23,022	146.8	51.9
Female	14,103	5.0	36,652	9.9	58,554	11.2	22,549	21,902	159.9	59.8
Hispanics:										
Total	.	.	56,419	10.9	99,190	13.3	.	42,771	.	75.8
Male	.	.	30,600	10.2	52,865	12.6	.	22,265	.	72.8
Female	.	.	25,819	11.8	46,325	14.3	.	20,506	.	79.4

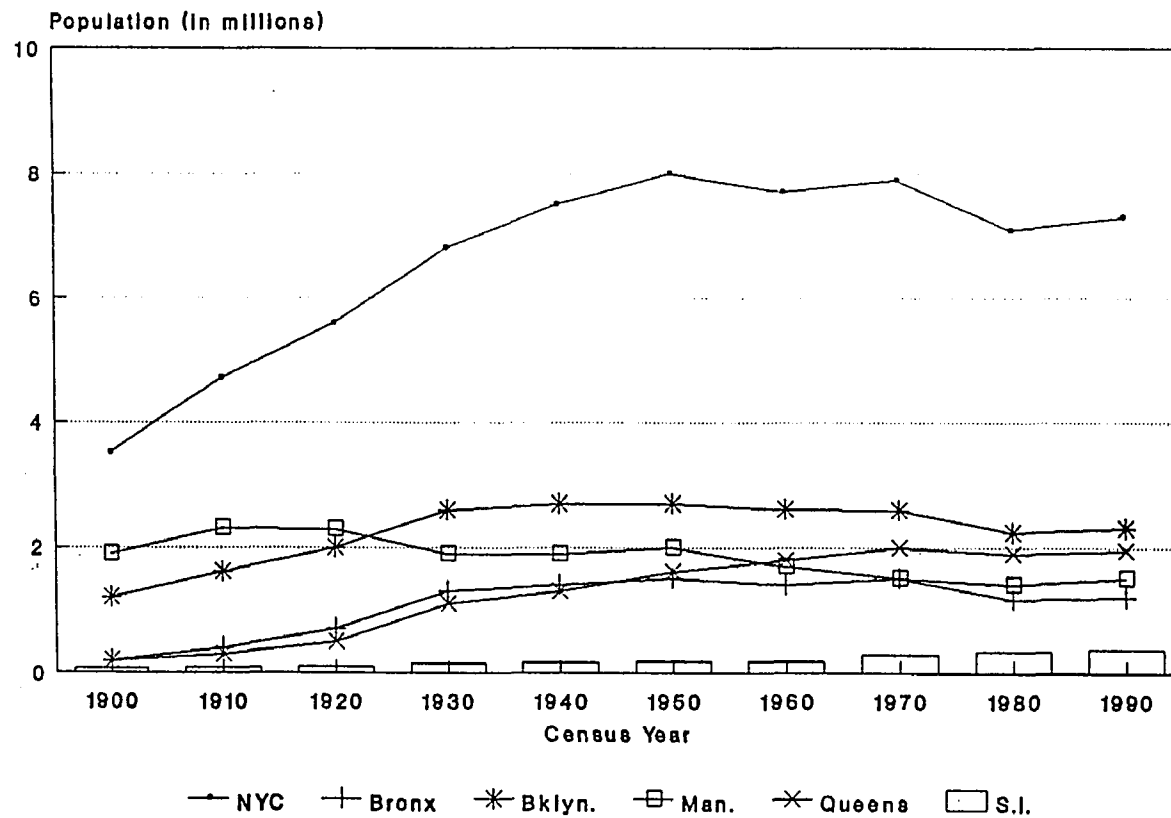
Source: U.S. Census of Population, 1970 Fourth Count Summary Tapes (FCST), 1980 STF4A and 1990 STF3A

Table 3.1.14 Population Living Below Poverty line by Race in New York City: 1970, 1980 and 1990

Year	Total Population	Total Pop Below Pvt Line	Pvt Pop % of Total Pop	Black Population	Black Pop Below Pvt Line	Black Pvt % of Black Pop	Black Pvt % of Total Pvt	Hispanic Population	Hispanic Pop Below Pvt Line	Hispanic Pvt % of Hispanic Pop	Hispanic Pvt % of Total Pvt
1990	7,322,564	1,384,994	18.9	2,107,137	521,305	24.7	37.6	1,783,511	568,533	31.9	41.0
1980	7,071,511	1,391,955	19.7	1,788,377	511,199	28.6	36.7	1,406,389	497,766	35.4	35.8
1970	7,894,689	1,164,640	14.8	1,661,806	398,287	24.0	34.2	-	-	-	-

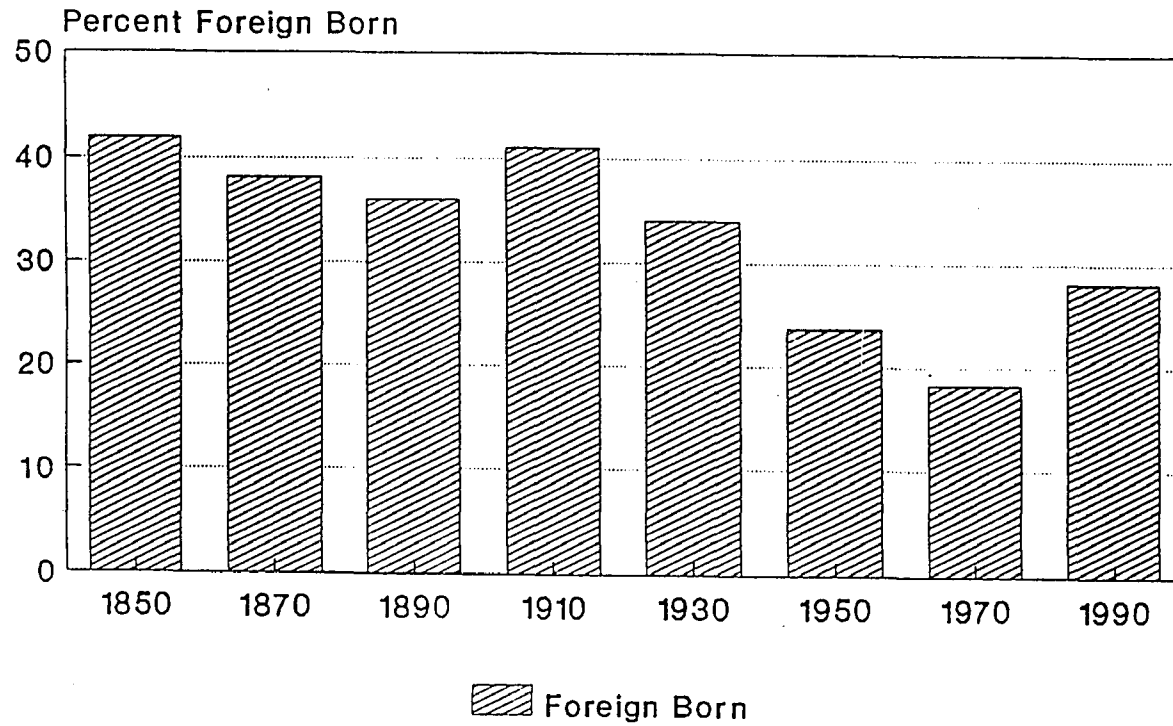
Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 (STF4)

Figure 3.2.1 NYC and Borough Population
1900 - 1990



U.S. Census, CUNY Graduate School

Figure 3.2.2 Percent Foreign Born in N.Y.C.
1850-1990



Department of City Planning, The Newest
New Yorkers, 1992

Table 3.2.1 Population in New York City by Location, 1970, 1980 and 1990

COUNTY	1970		1980		1990		70-80 Diff in %	80-90 Diff in %	70-80 N Change	70-80 % Change	80-90 N Change	80-90 % Change
	N	%	N	%	N	%						
New York City	7,894,862	100.0	7,071,639	100.0	7,322,564	100.0	0.0	0.0	-823,223	-10.4	250,925	3.5
Bronx	1,471,701	18.6	1,168,972	16.5	1,203,789	16.4	-2.1	-0.1	-302,729	-20.6	34,817	3.0
Brooklyn	2,602,012	33.0	2,230,936	31.5	2,300,664	31.4	-1.4	-0.1	-371,076	-14.3	69,728	3.1
Manhattan	1,539,233	19.5	1,428,285	20.2	1,487,536	20.3	0.7	0.1	-110,948	-7.2	59,251	4.1
Queens	1,986,473	25.2	1,891,325	26.7	1,951,598	26.7	1.6	-0.1	-95,148	-4.8	60,273	3.2
Richmond	295,443	3.7	352,121	5.0	378,977	5.2	1.2	0.2	56,678	19.2	26,856	7.6

Source: U.S. Census of Population, 1970 fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3

Table 3.2.2 Non-Hispanic Whites in New York City by Location, 1970, 1980 and 1990

COUNTY	1970		1980		1990		70-80 Diff in %	80-90 Diff in %	70-80 N Change	70-80 % Change	80-90 N Change	80-90 % Change
	N	%	N	%	N	%						
New York City	4,978,278	100.0	3,703,203	100.0	3,163,125	100.0	0.0	0.0	-1,275,075	-25.6	-540,078	-14.6
Bronx	735,054	14.8	401,856	10.9	272,503	8.6	-3.9	-2.2	-333,198	-45.3	-129,353	-32.2
Brooklyn	1,583,859	31.8	1,095,946	29.6	923,229	29.2	-2.2	-0.4	-487,913	-30.8	-172,717	-15.8
Manhattan	833,878	16.8	721,588	19.5	726,755	23.0	2.7	3.5	-112,290	-13.5	5,167	0.7
Queens	1,559,076	31.3	1,183,038	31.9	937,557	29.6	0.6	-2.3	-376,038	-24.1	-245,481	-20.8
Richmond	266,411	5.4	300,775	8.122	303,081	9.6	2.8	1.5	34,364	12.9	2,306	0.8

Source: U.S. Census of Population, 1970 fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3

Table 3.2.3 Non-Hispanic Blacks in New York City by Location, 1970, 1980 and 1990

COUNTY	1970		1980		1990		70-80	80-90	70-80	70-80	80-90	80-90
	N	%	N	%	N	%	Diff in %	Diff in %	N Change	% Change	N Change	% Change
New York City	1,520,026	100.0	1,694,505	100.0	1,847,049	100.0	0.0	0.0	174,479	11.5	152,544	9.0
Bronx	318,286	20.9	349,961	20.7	369,113	20.0	-0.3	-0.7	31,675	10.0	19,152	5.5
Brooklyn	603,016	39.7	688,405	40.6	797,802	43.2	1.0	2.6	85,389	14.2	109,397	15.9
Manhattan	339,627	22.3	290,561	17.1	261,120	14.1	-5.2	-3.0	-49,066	-14.4	-29,441	-10.1
Queens	244,554	16.1	341,261	20.1	390,842	21.2	4.1	1.0	96,707	39.5	49,581	14.5
Richmond	14,543	1.0	24,317	1.4	28,172	1.5	0.5	0.1	9,774	67.2	3,855	15.9

Source: U.S. Census of Population, 1970 fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3

Table 3.2.4 Blacks in New York by Native and Foreign Born by Location: 1970 and 1980

COUNTY	1970	1970	1970	1970	1980	1980	1980	1980	1970-1980	1970-1980
	N Native Born	Native Born % of Total	N Foreign Born	Foreign Born % of Total	N Native Born	Native Born % of Total	N Foreign Born	Foreign Born % of Total	N Change Foreign Born	PCT Change Foreign Born
New York City	1,572,411	94.6	86,590	5.2	1,439,544	80.5	341,057	19.1	254,467	293.9
Bronx	337,263	94.6	18,872	5.3	316,653	85.0	55,664	14.9	36,792	195.0
Brooklyn	617,934	94.6	34,790	5.3	536,232	74.1	185,258	25.6	150,468	432.5
Manhattan	362,159	95.4	16,754	4.4	275,366	88.4	33,228	10.7	16,474	98.3
Queens	240,566	93.7	15,268	6.0	287,896	81.1	64,967	18.3	49,699	325.5
Richmond	14,489	93.0	906	5.8	23,397	91.2	1,940	7.6	1,034	114.1

Source: U.S. Census of Population, 1970 fourth Counts Summary Tape (FCST) and 1980 STF4.

Table 3.2.5 Hispanic Population in New York City by Location, 1970, 1980 and 1990

	1970		1980		1990		70-80	80-90	70-80	70-80	80-90	80-90
	N	%	N	%	N	%	Diff in %	Diff in %	N Change	% Change	N Change	% Change
New York City	1,278,593	100.0	1,406,389	100.0	1,783,511	100.0	0.0	0.0	127,796	10.0	377,122	26.8
Bronx	407,316	31.9	395,138	28.1	523,111	29.3	-3.8	1.2	-12,178	-3.0	127,973	32.4
Brooklyn	392,570	30.7	393,103	28.0	462,411	25.9	-2.8	-2.0	533	0.1	69,308	17.6
Manhattan	312,696	24.5	335,247	23.8	386,630	21.7	-0.6	-2.2	22,551	7.2	51,383	15.3
Queens	153,691	12.0	263,548	18.7	381,120	21.4	6.7	2.6	109,857	71.5	117,572	44.6
Richmond	12,320	1.0	19,353	1.4	30,239	1.7	0.4	0.3	7,033	57.1	10,886	56.2

Source: U.S. Census of Population, 1970 fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3

Table 3.2.6 Population in New York by Native and Foreign Born by Location: 1970, 1980 and 1990

COUNTY	1970	1970	1970	1980	1980	1980	1990	1990	1990	1970-1980	1970-1980	1980-1990	1980-1990
	N of Native Born	N of Foreign Born	Foreign % of Total	N of Native Born	N of Foreign Born	Foreign % of Total	N of Native Born	N of Foreign Born	Foreign % of Total	N Change Foreign Born	PCT Change Foreign Born	N Change Foreign Born	PCT Change Foreign Born
NYC	6,677,755	1,216,755	15.4	5,401,334	1,670,177	23.6	5,239,633	2,082,931	28.4	453,422	37.3	412,754	24.7
Bronx	1,261,793	209,796	14.3	953,639	215,304	18.4	928,996	274,793	22.8	5,508	2.6	59,489	27.6
Brooklyn	2,212,639	389,284	15.0	1,699,961	530,973	23.8	1,628,095	672,569	29.2	141,689	36.4	141,596	26.7
Manhattan	1,306,559	232,598	15.1	1,079,673	348,568	24.4	1,103,670	383,866	25.8	115,970	49.9	35,298	10.1
Queens	1,630,374	356,024	17.9	1,350,468	540,818	28.6	1,244,445	707,153	36.2	184,794	51.9	166,335	30.8
Richmond	266,390	29,053	9.8	317,593	34,514	9.8	334,427	44,550	11.8	5,461	18.8	10,036	29.1

Source: U.S. Census of Population, 1970 fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3

Table 3.2.7 Population by Hispanic Origin and Location in New York City: 1970, 1980 and 1990

	1970		1980		1990		1970-80		1980-90	
	N	%	N	%	N	%	N	%	N	%
New York City:										
HISPAN	1,278,593	100.0	1,406,389	100.0	1,783,511	100.0	127,796	10.0	377,122	26.8
PTRICN	811,838	63.5	852,833	60.6	861,122	48.3	40,995	5.0	8,289	1.0
OTHHIS	466,755	36.5	553,556	39.4	922,389	51.7	86,801	18.6	368,833	66.6
MEXICA	.	.	23,761	1.7	55,698	3.1	.	.	31,937	134.4
CUBAN	.	.	63,189	4.5	57,019	3.2	.	.	-6,170	-9.8
DOMNCA	.	.	.	.	332,713	18.7	.	.	.	.
Bronx:										
HISPAN	407,316	100.0	395,138	100.0	523,111	100.0	-12,178	-3.0	127,973	32.4
PTRICN	316,772	77.8	318,365	80.6	336,367	64.3	1,593	0.5	18,002	5.7
OTHHIS	90,544	22.2	76,773	19.4	186,744	35.7	-13,771	-15.2	109,971	143.2
MEXICA	.	.	3,918	1.0	12,273	2.3	.	.	8,355	213.2
CUBAN	.	.	8,177	2.1	9,209	1.8	.	.	1,032	12.6
DOMNCA	.	.	.	.	87,261	16.7	.	.	.	.
Brooklyn:										
HISPAN	392,570	100.0	393,103	100.0	462,411	100.0	533	0.1	69,308	17.6
PTRICN	271,769	69.2	275,758	70.1	263,424	57.8	3,989	1.5	-12,334	-4.5
OTHHIS	120,801	30.8	117,345	29.9	198,987	43.0	-3,456	-2.9	81,642	69.6
MEXICA	.	.	8,681	2.2	18,512	4.0	.	.	9,831	113.2
CUBAN	.	.	10,301	2.6	9,481	2.1	.	.	-820	-8.0
DOMNCA	.	.	.	.	55,301	12.0	.	.	.	.
Manhattan:										
HISPAN	312,696	100.0	335,247	100.0	386,630	100.0	22,551	7.2	51,383	15.3
PTRICN	185,318	59.3	166,302	49.6	149,464	38.7	-19,016	-10.3	-16,838	-10.1
OTHHIS	127,378	40.7	168,945	50.4	237,166	61.3	41,567	32.6	68,221	40.4
MEXICA	.	.	6,297	1.9	10,948	2.8	.	.	4,651	73.9
CUBAN	.	.	20,587	6.1	18,671	4.8	.	.	-1,916	-9.3
DOMNCA	.	.	.	.	136,696	35.4	.	.	.	.
Queens:										
HISPAN	153,691	100.0	263,548	100.0	381,120	100.0	109,857	71.5	117,572	44.6
PTRICN	33,141	21.6	80,909	30.7	94,395	24.8	47,768	144.1	13,486	16.7
OTHHIS	120,550	78.4	182,639	69.3	286,725	75.2	62,089	51.5	104,086	57.0
MEXICA	.	.	4,463	1.7	12,794	3.4	.	.	8,331	186.7
CUBAN	.	.	23,291	8.8	18,406	4.8	.	.	-4,885	-21.0
DOMNCA	.	.	.	.	52,309	13.7	.	.	.	.
Richmond:										
HISPAN	12,320	100.0	19,353	100.0	30,239	100.0	7,033	57.1	10,886	56.2
PTRICN	4,838	39.3	11,499	59.4	17,472	57.8	6,661	137.7	5,973	51.9
OTHHIS	7,482	60.7	7,854	40.6	12,767	42.2	372	5.0	4,913	62.6
MEXICA	.	.	402	2.1	1,171	3.9	.	.	769	191.3
CUBAN	.	.	833	4.3	1,252	4.1	.	.	419	50.3
DOMNCA	.	.	.	.	1,146	3.8	.	.	.	.

Source: U.S. Census of Population, 1970 Fourth Count Summary Tapes (FCST), 1980 STF3 and 1990 STF3

Table 3.2.8 Non-Hispanic Asians and Others in New York City, by Location, 1970, 1980 and 1990

COUNTY	1970		1980		1990		70-80	80-90	70-80	70-80	80-90	80-90
	N	%	N	%	N	%	Diff in %	Diff in %	N Change	% Change	N Change	% Change
New York City	108,131	100.0	267,542	100.0	528,879	100.0	0.0	-0.0	159,411	147.4	261,337	97.7
Bronx	10,403	9.6	22,017	8.2	39,062	7.4	-1.4	-0.8	11,614	111.6	17,045	77.4
Brooklyn	19,848	18.4	53,482	20.0	117,222	22.2	1.6	2.2	33,634	169.5	63,740	119.2
Manhattan	52,411	48.5	80,889	30.2	113,031	21.4	-18.2	-8.9	28,478	54.3	32,142	39.7
Queens	23,792	22.0	103,478	38.7	242,079	45.8	16.7	7.1	79,686	334.9	138,601	133.9
Richmond	1,677	1.6	7,676	2.9	17,485	3.3	1.3	0.4	5,999	357.7	9,809	127.8

Source: U.S. Census of Population, 1970 Fourth Count Summary Tapes (FCST), 1980 STF3 and 1990 STF3

Table 3.2.9 New York City Population by Race and Location: 1980

Race	NYC	%	Bronx	%	Brooklyn	%	Manhattan	%	Queens	%	Richman	%
NSWHITE	3,703,203	52.4	401,856	34.4	1,095,946	49.1	721,588	50.5	1,183,038	62.6	300,775	85.4
NSBLK	1,694,505	24.0	349,961	29.9	688,405	30.9	290,561	20.3	341,261	18.0	24,317	6.9
HISPAN	1,406,389	19.9	395,138	33.8	393,103	17.6	335,247	23.5	263,548	13.9	19,353	5.5
NSASIAN	267,542	3.8	22,017	1.9	53,482	2.4	80,889	5.7	103,478	5.5	7,676	2.2
TOTPOP	7,071,639	100	1,168,972	100	2,230,936	100	1,428,285	100	1,891,325	100	352,121	100

Source: U.S. Census of Population, 1980 STF4.

Table 3.2.10 New York City Population by Race and Location: 1990

Race	NYC	%	Bronx	%	Brooklyn	%	Manhattan	%	Queens	%	Richman	%
NSWHITE	3,163,125	43.2	272,503	22.6	923,229	40.1	726,755	48.9	937,557	48.0	303,081	80.0
NSBLK	1,847,049	25.2	369,113	30.7	797,802	34.7	261,120	17.6	390,842	20.0	28,172	7.4
HISPAN	1,783,511	24.4	523,111	43.5	462,411	20.1	386,630	26.0	381,120	19.5	30,239	8.0
NSASIAN	528,879	7.2	39,062	3.2	117,222	5.1	113,031	7.6	242,079	12.4	17,485	4.6
TOTPOP	7,322,564	100	1,203,789	100	2,300,664	100	1,487,536	100	1,951,598	100	378,977	100

Source: U.S. Census of Population, 1990 STF3.

Chapter IV
GROWTH AND SHRINKAGE OF THE UNDERCLASS IN NEW YORK CITY
FOR THE PERIOD 1970-1980-1990

In the 1980s, journalists' writings about the underclass brought widespread public attention to the problems of the urban poor. Many writers suggested that the level of social pathologies had increased among young and minority residents in poor urban areas because of several reasons: involvement with illegal drugs, violent crimes, dropping out of school, unemployment, welfare dependency, teenage pregnancy among children of welfare recipients, and a disproportionate number of female-headed households. Wilson and other researchers came up with a theoretical framework to address these issues, while other social scientists put considerable effort into finding an empirical definition to resolve the difficult issue of the size, composition, and growth of the underclass. Without an empirical definition, policymakers could not target the group or decide if the implemented policies were working. Due to the complexity of the problem and limited data available debates and disagreements about how to define and to measure the underclass proliferated.

1. Empirical Definition and Measurement of the Underclass

Definitions of what constitutes an underclass have tended to emphasize the multiple dimensions of level of poverty, behavior of members of the underclass, attitudes, and the spatial context.

It is important to understand that though the poor and the underclass may be overlapping groups, they are not identical. The fact that some members of the underclass engage in profitable illicit activities, such as drug dealing, suggests that not all members of the underclass are poor. Similarly, many poor people, such as the elderly or disabled, may be persistently poor, but are not considered members of the underclass.

The spatial context is important because it emphasizes the clustering of these problems in certain neighborhoods, highly segregated by race and income and isolated from mainstream society. The underclass, which is concentrated in depressed ghettos, suffers from multiple social ills. One is the high proportion of female-headed households in underclass areas, due mainly to women having children out of wedlock and dependant on welfare, in contrast to single mothers in middle-class areas whose circumstance are due mainly to divorce, and not infrequently able to raise their children without public assistance. By the same token, men weakly attached to the labor force in upper or middle class areas may be supported by their families. The spatial context also helps to identify

areas where such problematic behaviors are commonplace, and to target any interventions designed to reduce the incidence of these social problem.

Researchers have developed four ways to define and measure the underclass: 1) the multiple problem population; 2) the persistently poor population; 3) the poverty area population; and 4) the underclass area population (Mincy 1992).

Several studies provide estimates of the underclass without accounting for spatial or social context, based only on the characteristics of individuals, i.e., the multiple problem population. Jencks (1989) disaggregates the underclass into economic, criminal, reproductive and educational underclasses. His index for an economic underclass is defined by chronic joblessness-unemployment among both mature men and teenagers. His definition of a moral underclass is mixed; it comprises both a criminal underclass and a reproductive underclass. For the indices of criminal underclass he uses murder, robbery, and aggravated assault victimization rates. His indices of a reproductive underclass are teenage mothers and unwed mothers. His measure of an educational underclass is high school dropout rates and college graduate rates, and reading scores for 17 year old who are enrolled in school. Using various data from the 1960s up to 1986, Jencks determined that the economic underclass was growing and the criminal underclass shrinking, teenagers were less likely to have

babies than they were in the 1960s, unwed mothers have increased, and the educational underclass was shrinking (1989).

Measuring the persistently poor population was a popular idea before Wilson's work (Aponte 1988). These studies used data from the Panel Study of Income Dynamics and included households in poverty for five or more years. These studies have been criticized because they included the elderly and disabled.

It soon became clear, however, that those who talk about the underclass have more in mind than just persistent poverty. Low income may be a necessary condition for membership in the underclass, but it is not sufficient. No one thinks the elderly per se are members of the underclass, no matter how poor they are, nor are low income families with 5 or 6 children necessarily part of the underclass, even if their income almost always falls below the poverty line.

Once recognized that it is not possible simply to equate the underclass with the persistently poor, several scholars tried to link the underclass with living in bad neighborhoods. They argue that living in a very poor inner-city neighborhood isolates an individual from mainstream institutions and role models and therefore increases the likelihood of that individual engaging in antisocial behaviors (e.g. Nathan 1986; Gottschalk 1986).

These scholars also directed their efforts at measuring and estimating the size and growth of the underclass by rely-

ing on estimates of concentrated poverty—the poor living in census tracts with a poverty rate of 20, 30 percent or more (e.g. Bane and Jargowsky 1988; Wilson 1987).

Another method is to measure the black and Hispanic poor living in poverty areas, defined as census tracts with poverty rates above 20 percent (Nathan 1986).

In "Defining and Measuring the Underclass," Ricketts and Sawhill (1988) developed an operational definition of the underclass that is consistent with the literature's emphasis on behavior rather than poverty. Using their definition, Ricketts and Sawhill analyzed data for all census tracts in the United States in 1980. They defined an "underclass area" as a census tract with a high proportion of (1) households headed by females with children; (2) households receiving public assistance; (3) males working fewer than twenty-six weeks during the year (their index for weak attachment to the labor force); (4) and teenagers who had dropped out of high school. A census tract had to score above the national average on all four of these problems to be counted as an underclass area. On the basis of these criteria, Ricketts and Sawhill estimate that 2.5 million people live in underclass areas. Most underclass tracts are in urban areas, and 59 percent of their residents are black and 10 percent are Hispanic. Not all of these people engage in underclass behavior, but all live in neighborhoods where such behaviors are common. According to this measurement, Ricketts and Sawhill found that

with less than 3 percent of the population, New York City accounted for 19 percent of the census tracts so defined.

By using these criteria, Ricketts and Mincy (1989) measured growth of the underclass in an absolute way. That is, they applied the 1980 cutoffs retrospectively to the data to determine which census tracts are underclass areas, whom to include in the underclass, and whether the underclass was growing. By comparing the number of tracts and the underclass populations derived for different periods, one could determine if the underclass is growing.

My research applies the 1980 cutoffs (one standard deviation above national means for the four indicators by Ricketts and Sawhill) retrospectively to census tract data for 1970, and prospectively to 1990 in New York City using the 1980 cutoffs as fixed standards.

In summary, studies of the underclass have yielded different estimates because of definitional, methodological, and temporal differences between the studies. According to Ricketts, national estimates of the size of the underclass range from less than 1 million to 11 million or from 3 to 50 percent of the poverty population in various years of the nation. Studies based on the persistence of income poverty have yielded estimates of the size of the underclass higher than those based on geographical concentration of the poor.

My research is based on 1970, 1980 and 1990 census data of New York City. The methods of empirical measurement used

are: (1) the multiple problem population; (2) poor people (ghetto poverty) in poverty areas (poverty rate more than 40 percent); (3) the poverty area population and (4) the underclass area population. I have estimated the size and growth in New York City over the period 1970-1990, and compared the results with other studies. Ricketts and Sawhill's definition is used in most parts of my research, because it is closer to the underclass concept addressed by most other researchers, is easily operationalized by census data, and is widely used by social scientists.

Having reviewed the empirical definition of underclass concepts by various researchers, I will now examine the underclass picture for New York City. I have used the described measurements to determine whether the underclass has been growing or shrinking for the period 1970-1980-1990. The strategy used is threefold:

(1) Disaggregating the underclass into criminal, reproductive, economic and educational underclasses (Jencks's method), and further Disaggregating by race if the data are available.

(2) Adding a spatial dimension, that of the poor living in poverty areas (defined as census tracts with a poverty rate above 40 percent, also called the poverty ghetto). Further breakdowns of the poor by race are also presented. The ghetto poor are defined as those poor, of any race or ethnic group, who live in such high-poverty level census tracts.

The level of ghetto poverty is defined as the percentage of the city's poor who live in poverty areas. The level of ghetto poverty has been used as an indicator to measure the degree of poverty concentration. Since most poor whites do not live in ghettos, levels of ghetto poverty is reported separately for blacks and Hispanics.

(3) An additional use of the spatial dimension involves comparing the population living in poverty areas (defined as census tracts with poverty rates above 40 percent) with the population living in underclass areas (defined by Ricketts and Sawhill as census tracts with high incidence of multiple social ills, i.e., female-headed households, dependence on public assistance, chronic unemployment, and school dropouts). The population will also be analyzed by race and locations in New York City.

(a) Disaggregated Measurement of the Underclass

Crime is often considered one of the most important underclass behaviors. According a special report (September, 1990) in New Yorker Magazine¹ "In the next 24 hours, 5 New Yorkers will be killed, 9 will be raped, 256 will be robbed, 332 homes and stores will be burglarized, and 347 cars will disappear. That's if things don't go too badly."

¹ New Yorker Magazine. Jonathan Greenberg, September, 1990.

The report presented a graph (see Figure 4.1) which indicated the rising tide of city crime (rape, robbery, burglary and homicide) over the decades in New York City.

Figure 4.1 RISING TIDE: City Crime Over the Decades

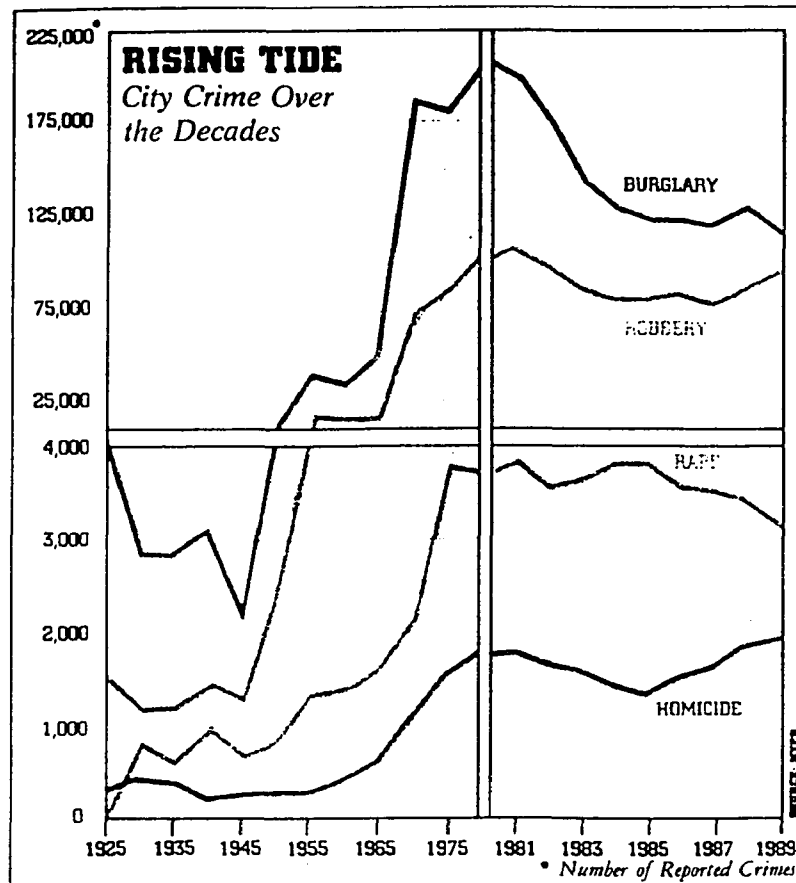


Figure 4.1 shows rapid growth in 1970 to 1980, and a peak in 1981. Another growth spurt is seen in 1990. In 1989, 712,419 serious crimes were reported, about one for every ten New Yorkers.

During the first half of 1990, homicides soared 25 percent to a historic high of 1,051. For the first three months

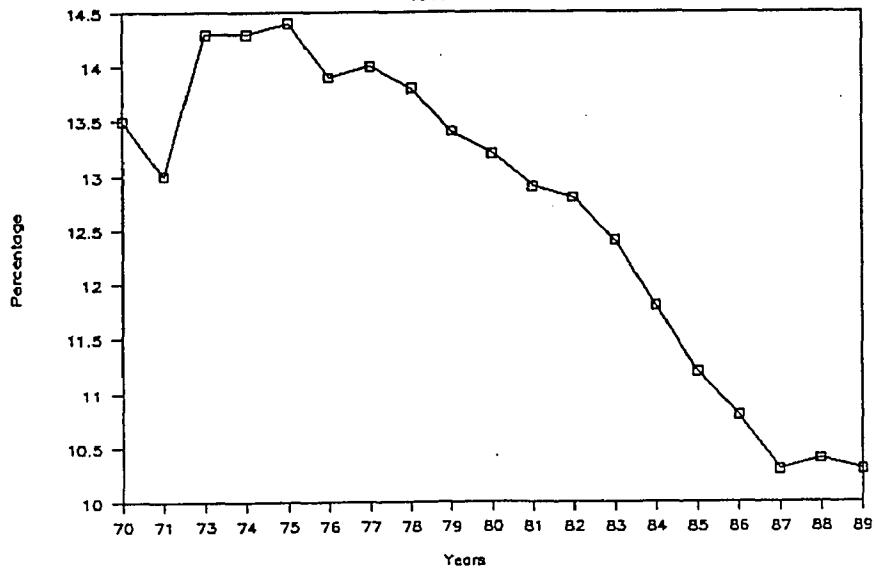
of the year, robberies jumped 11 percent, rapes increased 6 percent, and auto theft rose 14 percent.

The existence of a reproductive underclass is also seen as another important evidence of underclass behavior. Figure 4.2 is derived from data from the Department of Health of the City of New York. Births to teenage mothers in New York City were 13.5 percent in 1970, increased to 13.8 percent in 1978, peaking at 14.4 percent in 1975. There was a decline in the 1980s: 13.2 percent in 1980, 11.2 percent in 1985, and 10.3 percent in 1989 (see Figure 4.2).

Figure 4.3 shows a increasing incidence of out of wedlock births to teenagers, rising from 75.2 percent in 1979 to 82.7 percent in 1986, and then a slight decrease to 82 percent in 1989.²

Note: The data of out of wedlock births to teenagers before 1979 is not available.

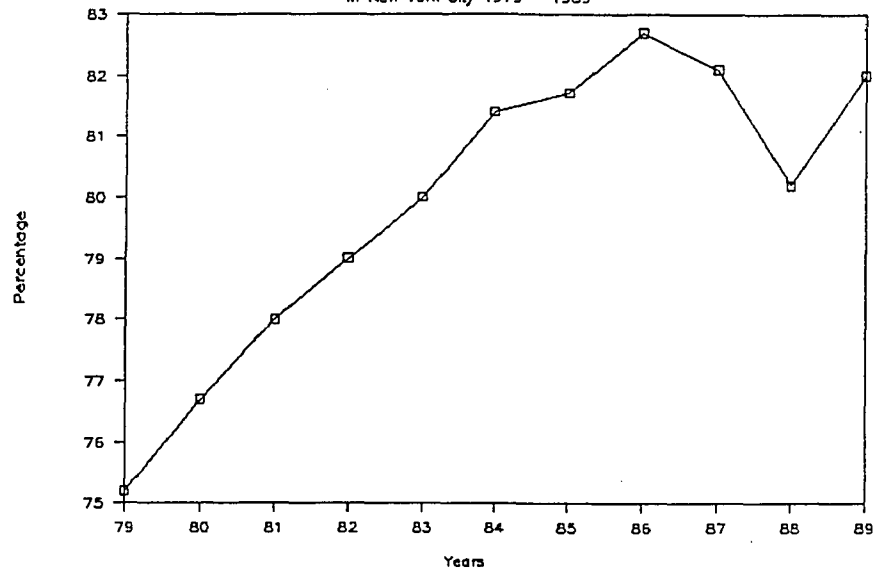
Figure 4.2
Birth to Teenagers in New York City
 1970 - 1989



Source: Department of Health, The City of New York

Figure 4.3

Out of Wedlock Birth to Teenagers
 in New York City 1979 - 1989



Source: Department of Health, The City of New York

To define the economic underclass—people who are poor or are more than likely to be poor—I have used the census data and Ricketts and Sawhill's indicators: number of families with children headed by women; household head with public assistance income (AFDC); adult males weakly attached to the labor force.

During the 1970s and the 1980s New York City experienced a dramatic increase in social problems because of the ever increasing number of welfare households, female-headed families, and unemployed males (see Table 4.1). The number of female-headed households with children increased from 216,000 in 1970 to 309,000 in 1980 (43 percent increase) to 344,000 in 1990 (11 percent increase). The number of adult males weakly attached to the labor force increased from 808,000 in 1970 to 995,000 in 1980 (23 percent increase) to 1,041,000 in 1990 (4.6 percent increase). The number of household heads with public assistance income more than doubled in the 1970s from 199,000 in 1970 to 404,000 in 1980 (103 percent), but decreased slightly (8.5 percent) in the 1980s to 370 thousand in 1990.

(Table 4.1 about here)

The number of high school dropouts decreased during the last two census decades: 19 percent in 1970, 16 percent in

1980 and 13.5 percent in 1990. The absolute number decreased by 29 percent during the 1980s.³

Since the distribution of this high-risk population varied by race, Table 4.2 disaggregates the four indicators by race in New York City for 1980. The table shows that Hispanics had the highest proportion of AFDC households (31 percent), more than twice the city average (14.5 percent). The rate among blacks was 24 percent. The rate of high school dropouts was 25 percent among Hispanics, 10 percent higher than the city average (15.6 percent); 15.8 percent of blacks were high school dropouts, which was about city average. The group with the highest rate of female-headed households with children was blacks (53 percent); 44 percent for Hispanic. In 1980 the number of adult males weakly attached to the labor force was 47 percent for blacks, and 42 percent for Hispanics. It is not possible to compare these results with 1990 data until the 1990 STF4 census file become available.

(b) Did the Ghetto Poor Grow during the Period 1970-1990?

This section analyzes the results of another underclass measurement, ghetto poor, i.e., the poor living in "ghettos," defined as census tracts with a poverty rate more than 40 percent. First, I examined the national pattern of ghetto

. Note: The indicator of dropouts for 1980 and 1990 refers to 16-19 years-old; the equivalent age group of table break was not available for 1970.

poverty for 1980, and then I compared it to New York City. Afterwards, I review the changes from 1970 to 1990.

In 1980, 27 million or 12.4 percent of the national population of the United States were poor people (Bane and Jargowsky 1988); in New York City, 1.4 million or 19.7 percent of the city's population were poor. Nationally, the total number of poor people who lived in metropolitan census tracts in which the poverty rate was greater than 40 percent was 2.4 million, 8.9 percent of all the U.S. poor in 1980. Comparing this to New York City, there were 460,000 poor living in poverty ghettos in 1980 (33 percent of all poor in the City) (See Table 4.3). This means that the poverty concentration in New York City was much higher than the national average.

The proportion of poor people living in ghettos varies dramatically by race. In 1980, throughout the United States 21 percent of poor blacks and 16 percent of poor Hispanics lived in poverty ghettos, compared with 43 percent of poor blacks and 44 percent of poor Hispanics in New York City.

According to Jargowsky and Bane's analysis, of the 2.4 million ghetto poor in the United States 64.9 percent were blacks and 21.8 percent Hispanics. According to my calculations (see Table 4.3), New York City had 460,000 ghetto poor: blacks constituted 47.5 percent; Hispanics, 47.2 percent. This shows that poverty ghettos are predominantly populated by blacks and Hispanics, and they are more likely to live in

ghettos than poor whites. Also, New York City had a higher proportion of Hispanic poor living in ghettos than the national level.

Much of the concern about ghetto poverty stems from a belief that the social problems in ghettos have gotten much worse in the last two decades.

According to Bane and Jargowsky's calculation, between 1970 and 1980, the number of metropolitan poor living in ghettos increased by 29.5 percent—from 1,890,925 in 1970 to 2,449,324 in 1980—for the 50 largest central cities in United States. (This aggregated number obscures the fact that some metropolitan areas had large increases and some large decreases). For New York City, from 1970 to 1980, the number of people living below the poverty line increased by only 19.5 percent, at the same time as ghetto poverty (number of poor people living in high poverty areas) increased by 254 percent, from 130,195 in 1970 to 460,376 in 1980, and the level of poverty increased from 11.2 percent in 1970 to 33.1 percent in 1980.

Between 1980 and 1990, the population living below the poverty line in New York City declined by 0.5 percent, and the ghetto poverty decreased by 7 percent and level of poverty decreased to 30.9 percent in 1990 (see Table 4.3). These results indicate that New York City experienced an extraordinary poverty concentration in the 1970s, and deconcentration in the 1980s. This result supports DeGiovanni and Minnite's

analysis (1991). Using the Housing and Vacancy Survey data for New York City in the 1980s, they reported that during 1980 to 1990, the predominant trend was one of deconcentration away from the areas that had the highest concentration of low income households.

In New York City, the number of poor blacks increased 28 percent during the 1970s and 2 percent in the 1980s. The number of poor Hispanics increased 3 percent during the 1980s. The number of black poor in ghettos increased 268 percent in the 1970s and decreased 5.6 percent in the 1980s. The Hispanic poor in ghettos grew by 3.3 percent in the 1980s, from 217,121 in 1980 to 224,238 in 1990 (see Table 4.3). This indicates that there was a general decline in the number of ghetto poor and the level of poverty in the city in the 1980s, but there were still more Hispanic poor living in the ghettos in the 1980s.

According to Bane and Jargowsky's calculation, in 1970 there were 134,139 ghetto poor in the New York and New Jersey SMSA, which accounted for 7 percent of the ghetto poor in the United States; in 1980, they numbered 477,621 which accounted for 20 percent of the ghetto poor in United States. New York City accounted for most of the ghetto poor in this area.

There are geographical variations for ghetto poverty within New York City. Table 4.4 shows the distribution of total ghetto poor by borough. In 1970 more than 90 percent of ghetto poverty was concentrated in the Bronx and Brooklyn, and

9 percent was concentrated in Manhattan. Shifts in the location of ghetto poverty between 1970 and 1980 are shown on in this table. In 1980, there were 42 percent in Brooklyn, 38.6 percent in the Bronx, 16.8 percent in Manhattan and 2.3 percent in Queens. In 1990, there were 42 percent in the Bronx, 36 percent in Brooklyn, 17.7 percent in Manhattan and 4 percent in Queens. The biggest increase in the 1970s happened in Manhattan, which grew by 553 percent, from 9 tracts with 11,857 ghetto poor in 1970 to 47 tracts with 77,407 ghetto poor in 1980. In the 1980s, the ghetto poor decreased in the city as a whole, with the biggest drop occurring in Brooklyn (20.5 percent), while there was a 58 percent increase in Queens and 1.2 percent increase in Bronx.

Changes in the city distribution of ghetto poor came about because of changes in the percentage of poor living in ghettos, which we call the level of ghetto poverty. The national data indicate that the level of ghetto poverty increased only modestly among blacks (1.2 percent) and decreased among Hispanics (-5.1 percent) in the 1970s. As with changes in the number of ghetto poor in the boroughs, the aggregate levels conceal substantial variations. My calculation shows that New York City had an increase of 28 percentage point in the level of ghetto poverty among blacks in the 1970s, which contributed substantially to poverty concentration in the City in this period. On the other hand, although the population living below the poverty line increased for both blacks and

Hispanics during the 1980s, the level of ghetto poverty for blacks and Hispanics declined. New York City had a decrease of 3.2 percentage points among blacks in the 1980s, and 4.2 percentage among Hispanics in 1980s. Both black and Hispanic poor were less likely to live in poor areas in 1990 than they did in 1970s (see Table 4.3). Deconcentrated black and Hispanic poor contributed to the decline in poverty concentration in New York City.

(c) A Comparison of Underclass Areas and Concentrated Poverty Areas

Finally, I use the number of poor living in poverty areas as a measure of the underclass. Some researchers treat this as a lower boundary of underclass population. In this section, I will compare tracts in the population living in poverty areas with the population living in underclass areas defined by Ricketts and Sawhill's four indicators. Some researchers treat these measurements as an upper bound of the underclass population.

Table 4.5 shows that according to Ricketts and Sawhill's four indicators or criteria, the number of underclass tracts increased substantially for the period of 1970 to 1980, but decreased for the period of 1980 to 1990. There were 27 underclass tracts in 1970, 140 in 1980, and 97 in 1990. This indicates a substantial growth in the underclass tract population in the 1970s. From 1970 to 1980 the population of the underclass tracts more than quadrupled from 94,000, 1.2 percent of

the city population, to 421,000, or 6 percent of the city population.

The total number of concentrated poverty tracts and the population in concentrated poverty tracts in New York City also grew dramatically in this period. There were 66 concentrated poverty tracts (3 percent of all tracts) and 289,000 people (4 percent of the population) living in these areas in 1970. In 1980 there were 298 concentrated poverty tracts (13 percent of all tracts) and 957,000 people (14 percent of the city's population) living in these areas.

Between 1980 and 1990 there was a decrease in the number of underclass tracts and their population, from an underclass population of 421,000 in 1980 to 305,000 (4.2 percent of the city's population) in 1990. The total number of concentrated poverty areas and population also went down, and there was a 14 percent decrease in number of tracts and 8 percent decrease in poverty areas population for this period.

Table 4.6 presents population composition by race/ethnicity, and location in New York City. In 1970, 1.2 percent of the population was living in underclass areas in the city: 3.5 percent of non-Hispanic blacks, 2.3 percent of Hispanics, and only 0.2 percent of non-Hispanic whites lived in these underclass areas. Comparing this to poverty areas, 3.7 percent of city's population lived in these areas: 8 percent of

non-Hispanic blacks, 10.8 percent of Hispanics, and only 0.6 percent of non-Hispanic whites.

By 1980, the underclass population in the city had increased to 6 percent. This included 9.9 percent of non-Hispanic blacks, 14.9 percent of Hispanics, and 1 percent of non-Hispanic whites. During the same period (1970 to 1980), the poverty population of the city increased to 13.5 percent, to 26.9 percent among non-Hispanic blacks, 29.3 percent of Hispanics, and only 2 percent of non-Hispanic whites. The higher proportion of Hispanics living in ghettos was due to the fact that Hispanics had the highest poverty rate of all groups: In 1980 the poverty rate among Hispanics was 35.4 percent and among blacks 28.6 percent (see Table 3.1.14).

In 1990, due to an improvement of the economy during the 1980s in the city, the poverty rate went down for all racial groups (see Table 3.1.14). Both underclass and poverty areas shrank, as reported above. By 1990, 4.2 percent of the population was living in underclass areas, comprising 8.2 percent of non-Hispanic blacks, 7.6 percent of Hispanics, and 0.4 percent of non-Hispanic whites (Table 4.6). The population of these areas accounted for 12 percent of total population of the city, and contained of 20.3 percent of non-Hispanic blacks, 24.3 percent of Hispanics, and 1.6 percent of non-Hispanic whites. Hispanic poverty rate were still higher (31.9 percent) than black (24.7 percent) in 1990. Hispanics had the highest proportion living in poverty areas, while non-

Hispanic blacks had the highest proportion living in underclass areas (Table 4.6).

My findings also show that the number of people in the underclass grew rapidly in the 1970s and declined in the 1980s. Ricketts and Sawhill estimated the number of people in the underclass by counting residents of underclass areas who were directly involved in at least one dysfunctional behavior. One of their measures was the sum of the number of household heads receiving public assistance income (most of whom are women) and the number of males not attached to the labor force.

Table 4.1 shows these figures for 1970, 1980 and 1990. According to these estimates, the number of people in the underclass grew by roughly 500 percent during the 1970s, and decreased by 30 percent in 1980s.

Focusing on individual social problems, each of the four indicators in Table 4.1 shows that all of the social problems (except high school dropouts) increased tremendously (about a 400 percent increase) in both underclass and concentrated poverty areas between 1970 and 1980, while all problems decreased between 1980 and 1990, except for female-headed households in poverty areas.

Comparing poverty areas and underclass areas on each social problem, we found that they show the same pattern over the three census decades with the exception of high school dropouts in underclass areas for 1980 and 1990.

One should note that 56 percent (1970), 70 percent (1980) and 55 percent (1990) of all underclass tracts were in areas of extreme poverty in New York City (Table 4.8). If one looks at Table 4.9, which cross-tabulates underclass tracts with level 3 and 4 against 40 percent poverty tracts, the overlap between poverty areas and underclass areas was even lower, 32 percent in 1970, 55 percent in 1980, 50 percent in 1990. Thus, although there is a high correlation between poverty and the underclass, they clearly are not the same thing. They measure different dimensions: low income versus social behavior.

2. The Demographic Composition of Underclass Areas in New York City

Table 4.7 presents trends in the demographic composition of underclass areas in New York City. It illustrates the high concentration of the underclass population in the boroughs of Manhattan and Brooklyn in 1970, but and its expansion to the Bronx in 1980. The Bronx's share of the underclass area population of the five boroughs grew from 17 percent in 1970, to 44 percent in 1980 and remained at 40 percent in 1990. The Bronx has experienced intensive neighborhood deterioration since 1970.

New York City has continued to lose non-Hispanic whites in the last few decades and they are rarely found in underclass tracts. The proportion of non-Hispanic whites in under-

class areas was 13 percent in 1970, 9 percent in 1980, and only 4 percent areas in 1990⁴. Minorities made up the greatest proportion of underclass area population, 87 percent (56 percent non-Hispanic blacks and 32 percent Hispanics) in 1970, 89 percent (40 percent non-Hispanic blacks and 50 percent Hispanics) in 1980, and 94 percent (49 percent non-Hispanic blacks and 45 percent Hispanics) in 1990. The majority of the Hispanics were Puerto Rican.

Non-Hispanic blacks accounted for 55.6 percent the population in underclass areas in 1970, decreased to 39.7 percent in 1980, and increased almost back to the 1970 level of 49.4 percent in 1990. For Hispanics, there were 31.5 percent in 1970, 49.6 percent in 1980, and a reduction to 44.5 percent in 1990. This means that Hispanics were highly concentrated in underclass area in 1980, and somewhat deconcentrated in 1990, even though the percentage of Hispanic population in the city increased from 19.9 percent in 1980 to 24.4 percent in 1990, and their poverty rate has remained higher than blacks. The share of non-Hispanic blacks in underclass areas increased by about 10 percent, from 39.7 percent in 1980 to 49.4 percent in 1990.

Census Bureau methods for coding race and ethnicity changed between 1970 and 1980 and 1990, so that it easy to separate Hispanic and Non-Hispanic whites in 1980 and 1990, but much more difficult in 1970. To calculate Non-Hispanic whites in 1970 I used the method developed by Massey and Denton (1987).

From 1970 to 1990 more than 50 percent of the adults in underclass areas had less than a high school education and more than 40 percent of the population was below the poverty line. Underclass areas tend to have a higher proportion of 14-24 year old than the city average.

Although New York City has experienced a dramatic increase in new immigration in the last two decades, the foreign-born population tends not to live in underclass areas. The proportion of foreign-born in underclass tracts was about 10 percent lower than the city average for all the three census decades. Persons 16 years and over who worked as managers, professionals and technicians were more than 100 percent lower in the underclass tracts than the city average. Underclass areas also had higher proportions of low income occupations, such as service workers.

Table 4.1 Estimate of Growth of Social Problems by Type of Areas in New York City

Social Problems	1970 Number	1970 Percent	1980 Number	1980 Percent	1990 Number	1990 Percent	1970-1980 Number of Change	1970-1980 Percent Change	1980-1990 Number of Change	1980-1990 Percent Change
New York city										
Household head with public assistance income	198,697	9.7	403,866	14.5	369,513	13.1	205,169	103.3	-34,353	-8.5
Families with children headed by a woman	216,168	23.9	308,812	34.3	343,714	37.7	92,644	42.9	34,902	11.3
Adult male not attached to the labor force	808,158	30.1	995,017	39.9	1,040,656	39.1	186,859	23.1	45,639	4.6
High school dropouts in the school age group	139,347	19.2	70,942	15.7	50,216	13.5	-	-	-20,726	-29.2
Underclass areas										
Household head with public assistance income	8,049	38.6	57,912	38.7	37,155	37.0	49,863	619.5	-20,757	-35.8
Families with children headed by a woman	6,920	90.4	40,589	58.3	32,038	65.3	33,669	486.5	-8,551	-21.1
Adult male not attached to the labor force	12,713	49.9	70,219	55.6	53,033	56.7	57,506	452.3	-17,186	-24.5
High school dropouts in the school age group	3,810	39.9	12,304	35.1	6,804	34.7	-	-	-5,500	-44.7
Concentrated poverty areas										
Household head with public assistance income	25,234	38.1	132,569	41.0	111,753	40.0	107,335	425.4	-20,816	-15.7
Families with children headed by a woman	22,253	96.5	96,489	59.2	97,561	66.3	74,236	333.6	1,072	1.1
Adult male not attached to the labor force	29,519	42.3	155,223	57.1	145,635	57.1	125,704	425.8	-9,588	-6.2
High school dropouts in the school age group	12,240	39.8	21,695	24.5	12,997	20.9	-	-	-8,698	-40.1

Source: U.S. Census of Population, 1970 Fourth Count Summary Tapes (FCST), 1980 STF4 and 1990 STF3.

Table 4.2 Estimates of Social Problems by Race
in New York City (1980)

Social Problems	Population (Thousand)		
	total	black	hispanic
Number of household head with public assistance income	404 (14.5 %)	155 (24.3 %)	143 (31.4 %)
Number of families with children headed by a woman	309 (34.3 %)	148 (52.6 %)	108 (44.4 %)
Number of adult male not attached to the labor force	995 (39.9 %)	253 (47.1 %)	179 (42.0 %)
Number of high school drops	71 (15.7 %)	23 (15.8 %)	29 (25.4 %)

Source: U.S. Census of Population, 1980 (STF4).

Table 4.3 Population Below the Poverty Line in New York City, By Race/Ethnicity, 1970, 1980 and 1990

	PVERTY70	PCT	PVERTY80	PCT	PVERTY90	PCT	PVTWT70	PCT	PVTWT80	PCT	PVTWT90	PCT
New York City:												
Total	1,164,640	100.0	1,391,955	100.0	1,384,994	100.0	740,166	100.0	534,340	98.3	462,798	100.0
UC	38,699	3.3	190,544	13.7	128,944	9.3	15,959	2.2	44,321	8.2	19,555	4.2
Not UC	1,125,941	96.7	1,201,411	86.3	1,256,050	90.7	724,207	97.8	490,019	90.2	443,243	95.8
Pov40	130,195	11.2	460,376	33.1	427,517	30.9	69,153	9.3	95,162	17.5	77,626	16.8
Not Pov40	1,034,445	88.8	931,579	66.9	957,477	69.1	671,013	90.7	439,178	80.8	385,172	83.2
Bronx:												
Total	282,610	100.0	315,357	100.0	334,137	100.0	187,362	100.0	92,178	100.0	80,092	100.0
UC	8,315	2.9	86,995	27.6	54,976	16.5	5,488	2.9	18,836	20.4	11,634	14.5
Not UC	274,295	97.1	228,362	72.4	279,161	83.5	181,874	97.1	73,342	79.6	68,458	85.5
Pov40	58,317	20.6	177,542	56.3	179,662	53.8	34,755	18.5	34,703	37.6	30,767	38.4
Not Pov40	224,293	79.4	137,815	43.7	154,475	46.2	152,607	81.5	57,475	62.4	49,325	61.6
Brooklyn:												
Total	453,887	100.0	530,106	100.0	514,163	100.0	272,834	100.0	193,854	100.0	174,791	100.0
UC	19,166	4.2	68,823	13.0	51,445	10.0	8,198	3.0	19,063	9.8	5,529	3.2
Not UC	434,721	95.8	461,283	87.0	462,718	90.0	264,636	97.0	174,791	90.2	169,262	96.8
Pov40	60,027	13.2	193,932	36.6	154,083	30.0	28,300	10.4	45,598	23.5	33,211	19.0
Not Pov40	393,860	86.8	336,174	63.4	360,080	70.0	244,534	89.6	148,256	76.5	141,580	81.0
Manhattan:												
Total	262,022	100.0	305,563	100.0	297,617	100.0	154,201	100.0	117,607	100.0	95,956	100.0
UC	11,218	4.3	32,116	10.5	21,088	7.1	2,273	1.5	6,276	5.3	2,392	2.5
Not UC	250,804	95.7	273,447	89.5	276,529	92.9	151,928	98.5	111,331	94.7	93,564	97.5
Pov40	11,857	4.5	77,407	25.3	75,763	25.5	6,104	4.0	13,382	11.4	11,642	12.1
Not Pov40	250,165	95.5	228,156	74.7	221,854	74.5	148,097	96.0	104,225	88.6	84,314	87.9
Queens:												
Total	148,668	100.0	212,558	100.0	210,057	100.0	110,718	9.5	112,282	100.0	94,361	100.0
UC	.	.	2,610	1.2	1,435	0.7	.	.	146	0.1	0	0.0
Not UC	148,668	100.0	209,948	98.8	208,622	99.3	110,718	9.5	112,136	99.9	94,361	100.0
Pov40	.	.	10,641	5.0	16,792	8.0	.	.	1,246	1.1	1,657	1.8
Not Pov40	148,674	100.0	201,917	95.0	193,265	92.0	110,724	9.5	111,036	98.9	92,704	98.2
Richmond:												
Total	17,453	100.0	28,371	100.0	29,020	100.0	15,051	100.0	18,419	100.0	17,598	100.0
Not UC	17,453	100.0	28,371	100.0	29,020	100.0	15,051	100.0	18,419	100.0	17,598	100.0
Pov40	.	.	854	3.0	1,217	4.2	.	.	233	1.3	349	2.0
Not pov40	17,453	100.0	27,517	97.0	27,803	95.8	15,051	100.0	18,186	98.7	17,249	98.0

Note: PVERTY - Population below the poverty line. PVTWT - White Population below the poverty line.
PVTBK - Black population below the poverty line. PVTHS - Hispanic population below the poverty line.
UC - Underclass (level 4) tracts. Pov40 - Tracts with more then 40 percent poverty rate.

Table 4.3 Population Below the Poverty Line in New York City, By Race/Ethnicity, 1970, 1980 and 1990 (Cont.)

	PVTBK70	PCT	PVTBK80	PCT	PVTBK90	PCT	PVTHS80	PCT	PVTHS90	PCT
New York City:										
Total	398,287	100.0	511,199	100.0	521,305	100.0	497,766	100.0	568,533	100.0
UC	22,261	5.6	74,310	14.5	67,507	12.9	108,325	21.8	65,098	11.5
Not UC	376,026	94.4	436,889	85.5	453,798	87.1	389,441	78.2	503,435	88.5
Pov40	59,433	14.9	218,589	42.8	206,255	39.6	217,121	43.6	224,238	39.4
Not Pov40	338,854	85.1	292,610	57.2	315,050	60.4	280,645	56.4	344,295	60.6
Bronx:										
Total	90,736	100.0	116,911	100.0	124,427	100.0	161,243	100.0	202,719	100.0
UC	2,773	3.1	32,333	27.7	18,367	14.8	53,370	33.1	38,085	18.8
Not UC	87,963	96.9	84,578	72.3	106,060	85.2	107,873	66.9	164,634	81.2
Pov40	22,962	25.3	75,641	64.7	72,988	58.7	101,289	62.8	118,699	58.6
Not Pov40	67,774	74.7	41,270	35.3	51,439	41.3	59,954	37.2	84,020	41.4
Brooklyn:										
Total	175,690	100.0	225,662	100.0	222,818	100.0	164,946	100.0	163,241	100.0
UC	10,842	6.2	24,862	11.0	33,454	15.0	40,027	24.3	18,898	11.6
Not UC	164,848	93.8	200,800	89.0	189,364	85.0	124,919	75.7	144,343	88.4
Pov40	31,224	17.8	98,545	43.7	78,111	35.1	80,373	48.7	65,427	40.1
Not Pov40	144,466	82.2	127,117	56.3	144,707	64.9	84,573	51.3	97,814	59.9
Manhattan:										
Total	94,486	100.0	97,804	100.0	108,858	100.0	119,904	100.0	135,250	100.0
UC	8,646	9.2	14,796	15.1	14,251	13.1	14,767	12.3	8,101	6.0
Not UC	85,840	90.8	83,008	84.9	94,607	86.9	105,137	87.7	127,149	94.0
Pov40	5,247	5.6	35,926	36.7	41,021	37.7	33,240	27.7	37,062	27.4
Not Pov40	89,239	94.4	61,878	63.3	67,837	62.3	86,664	72.3	98,188	72.6
Queens:										
Total	35,154	100.0	63,992	100.0	57,065	100.0	48,273	100.0	62,476	100.0
UC	.	.	2,319	3.6	1,435	2.5	161	0.3	14	0.0
Not UC	35,154	100.0	61,673	96.4	55,630	97.5	48,112	99.7	62,462	100.0
Pov40	.	.	7,996	12.5	13,346	23.4	2,029	4.2	2,671	4.3
Not Pov40	35,154	100.0	55,996	87.5	43,719	76.6	46,244	95.8	59,805	95.7
Richmond:										
Total	2,221	100.0	6,830	100.0	8,137	100.0	3,400	100.0	4,847	100.0
Not UC	2,221	100.0	6,830	100.0	8,137	100.0	3,400	100.0	4,847	100.0
Pov40	.	.	481	7.0	789	9.7	190	5.6	379	7.8
Not pov40	2,221	100.0	6,349	93.0	7,348	90.3	3,210	94.4	4,468	92.2

Source: U.S. Census of Population, 1970 Fourth Counts Summary Tapes (FCST), 1980 STF4 and 1990 STF3.

Table 4.4 Poverty Rate, Concentrated Poverty Areas (Poverty Rate > 40%) and Ghetto Poverty by Location in New York City for the Period 1970-1980-1990

	1970				1980				1990				1970-80 Change		1980-90 Change	
	Poverty Rate(%)	Poverty Tract	Ghetto Poverty	PCT	Poverty Rate(%)	Poverty Tract	Ghetto Poverty	PCT	Poverty Rate(%)	Poverty Tract	Ghetto Poverty	PCT	Ghetto Poverty	PCT	Ghetto Poverty	PCT
New York City:	14.8	66	130,195	100	19.7	298	460,376	100	18.9	249	427,517	100	330,181	253.6	-32,859	-7.1
Bronx:	19.2	19	58,317	44.8	27.0	102	177,542	38.6	27.8	100	179,662	42.0	119,225	204.4	2,120	1.2
Brooklyn:	17.4	38	60,027	46.1	23.8	135	193,932	42.1	22.3	89	154,083	36.0	133,905	223.1	-39,849	-20.5
Manhattan:	17.0	9	11,857	9.1	21.4	47	77,407	16.8	20.0	48	75,763	17.7	65,550	552.8	-1,644	-2.1
Queens:	7.5	0	0	-	11.2	13	10,641	2.3	10.8	10	16,792	3.9	10,641	-	6,151	57.8
Richmond:	5.9	0	0	-	8.1	1	854	0.2	7.7	2	1,217	0.3	854	-	363	42.5

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 (STF4) and 1990 (STF3).

Table 4.5 Growth in Population and Number of Tract by Type of Areas in New York City

Type of Areas	1970		1980		1990		Growth(70-80)	Growth(80-90)
	No.	%	No.	%	No.	%	%	%
Population (thousands)								
Underclass Areas in NYC	94	1.19	421	5.96	305	4.22	348	-28
Concentrated Poverty	289	3.66	957	13.53	876	12.04	231	-8
NYC	7,894	100.00	7,072	100.00	7,232	100.00	-10	4
Number of Tracts								
Underclass of NYC	27	1.3	140	6.5	97	4.5	419	-31
Concentrated Poverty	66	3.1	298	13.8	249	11.4	282	-14
NYC	2,147	100.0	2,166	100.0	2,175			

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

Table 4.6 Population in New York City, by Race/Ethnicity, 1970, 1980 and 1990

	TOTPOP70	PCT	TOTPOP80	PCT	TOTPOP90	PCT	NSWHITE70	PCT	NSWHITE80	PCT	NSWHITE90	PCT
New York City:												
Total	7,894,862	100.0	7,071,639	100.0	7,322,564	100.0	4,978,278	100.0	3,703,203	100.0	3,163,125	100.0
UC	94,450	1.2	421,497	6.0	305,356	4.2	11,999	0.2	36,567	1.0	13,329	0.4
Not UC	7,800,412	98.8	6,650,142	94.0	7,017,208	95.8	4,966,279	99.8	3,666,636	99.0	3,149,796	99.6
Pov40	289,418	3.7	956,515	13.5	876,218	12.0	27,621	0.6	74,002	2.0	49,877	1.6
Not Pov40	7,605,403	96.3	6,114,884	86.5	6,446,346	88.0	4,950,657	99.4	3,629,106	98.0	3,113,248	98.4
Bronx:												
Total	1,471,701	100.0	1,168,972	100.0	1,203,789	100.0	735,054	100.0	401,856	100.0	272,503	100.0
UC	16,414	1.1	185,274	15.8	122,078	10.1	1,616	0.2	11,294	2.8	7,893	2.9
Not UC	1,455,287	98.9	983,698	84.2	1,081,711	89.9	733,438	99.8	390,562	97.2	264,610	97.1
Pov40	126,696	8.6	366,081	31.3	362,388	30.1	8,198	1.1	16,328	4.1	7,538	2.8
Not Pov40	1,345,002	91.4	802,843	68.7	841,401	69.9	726,856	98.9	385,524	95.9	264,965	97.2
Brooklyn:												
Total	2,602,012	100.0	2,230,936	100.0	2,300,664	100.0	1,583,859	100.0	1,095,946	100.0	923,229	100.0
UC	46,910	1.8	146,811	6.6	124,738	5.4	8,459	0.5	17,558	1.6	3,132	0.3
Not UC	2,555,102	98.2	2,084,125	93.4	2,175,926	94.6	1,575,400	99.5	1,078,388	98.4	920,097	99.7
Pov40	134,823	5.2	401,733	18.0	309,532	13.5	15,517	1.0	44,742	4.1	30,984	3.4
Not Pov40	2,467,175	94.8	1,829,175	82.0	1,991,132	86.5	1,568,342	99.0	1,051,202	95.9	892,245	96.6
Manhattan:												
Total	1,539,233	100.0	1,428,285	100.0	1,487,536	100.0	833,878	100.0	721,588	100.0	726,755	100.0
UC	31,126	2.0	78,320	5.5	53,369	3.6	1,924	0.2	6,454	0.9	2,266	0.3
Not UC	1,508,107	98.0	1,349,965	94.5	1,434,167	96.4	831,954	99.8	715,134	99.1	724,489	99.7
Pov40	27,787	1.8	162,190	11.4	162,508	10.9	3,906	0.5	9,998	1.4	8,071	1.1
Not Pov40	1,511,442	98.2	1,266,023	88.6	1,325,028	89.1	829,972	99.5	711,554	98.6	718,684	98.9
Queens:												
Total	1,986,473	100.0	1,891,325	100.0	1,951,598	100.0	1,559,076	100.0	1,183,038	100.0	937,557	100.0
UC	.	.	11,092	0.6	5,171	0.3	.	.	1,261	0.1	38	0.0
Not UC	1,986,473	100.0	1,880,233	99.4	1,946,427	99.7	1,559,076	100.0	1,181,777	99.9	937,519	100.0
Pov40	112	0.0	24,537	1.3	38,955	2.0	0	0.0	2,547	0.2	2,862	0.3
Not Pov40	1,986,341	100.0	1,866,708	98.7	1,912,643	98.0	1,559,076	100.0	1,180,452	99.8	934,695	99.7
Richmond:												
Total	295,443	100.0	352,121	100.0	378,977	100.0	266,411	100.0	300,775	100.0	303,081	100.0
Not UC	295,443	100.0	352,121	100.0	378,977	100.0	266,411	100.0	300,775	100.0	303,081	100.0
Pov40	.	.	1,974	0.6	2,835	0.7	.	.	387	0.1	422	0.1
Not pov40	295,443	100.0	350,135	99.4	376,142	99.3	266,411	100.0	300,374	99.9	302,659	99.9

Note: TOTPOP - Total populaiton. NSWHITE - Non-Hispanic white population.
 NSBLK - Non-Hispanic black population. HISPAN - Hispanic Population.

Table 4.6 Population in New York City, by Race/Ethnicity, 1970, 1980 and 1990 (Cont.)

	NSBLK7	PCT	NSBLK8	PCT	NSBLK9	PCT	HISPAN7	PCT	HISPAN8	PCT	HISPAN9	PCT
New York City:												
Total	1,520,026	100.0	1,694,505	100.0	1,847,049	100.0	1,278,593	100.0	1,406,389	100.0	1,783,511	100.0
UC	52,556	3.5	167,168	9.9	150,946	8.2	29,746	2.3	209,021	14.9	135,891	7.6
Not UC	1,467,470	96.5	1,527,337	90.1	1,696,103	91.8	1,248,847	97.7	1,197,368	85.1	1,647,620	92.4
Pov40	121,325	8.0	455,856	26.9	374,986	20.3	137,867	10.8	412,502	29.3	433,526	24.3
No Pov40	1,398,701	92.0	1,238,623	73.1	1,472,063	79.7	1,140,726	89.2	993,880	70.7	1,349,985	75.7
Bronx:												
Total	318,286	100.0	349,961	100.0	369,113	100.0	407,316	100.0	395,138	100.0	523,111	100.0
UC	3,912	1.2	66,623	19.0	36,363	9.9	10,899	2.7	104,290	26.4	75,529	14.4
Not UC	314,374	98.8	283,338	81.0	332,750	90.1	396,417	97.3	290,848	73.6	447,582	85.6
Pov40	42,971	13.5	152,187	43.5	125,911	34.1	74,550	18.3	192,928	48.8	222,528	42.5
Not Pov40	275,315	86.5	197,756	56.5	243,202	65.9	332,766	81.7	202,203	51.2	300,583	57.5
Brooklyn:												
Total	603,016	100.0	688,405	100.0	797,802	100.0	392,570	100.0	393,103	100.0	462,411	100.0
UC	25,131	4.2	53,398	7.8	78,427	9.8	13,513	3.4	73,094	18.6	41,131	8.9
Not UC	577,885	95.8	635,007	92.2	719,375	90.2	379,057	96.6	320,009	81.4	421,280	91.1
Pov40	66,641	11.1	201,379	29.3	145,397	18.2	52,221	13.3	151,021	38.4	127,906	27.7
Not Pov40	536,375	88.9	487,026	70.7	652,405	81.8	340,349	86.7	242,082	61.6	334,505	72.3
Manhattan:												
Total	339,627	100.0	290,561	100.0	261,120	100.0	312,696	100.0	335,247	100.0	386,630	100.0
UC	23,513	6.9	37,816	13.0	31,312	12.0	5,334	1.7	31,264	9.3	18,992	4.9
Not UC	316,114	93.1	252,745	87.0	229,808	88.0	307,362	98.3	303,983	90.7	367,638	95.1
Pov40	11,713	3.4	83,639	28.8	73,297	28.1	11,096	3.5	63,812	19.0	75,965	19.6
Not Pov40	327,914	96.6	206,914	71.2	187,823	71.9	301,600	96.5	271,435	81.0	310,665	80.4
Queens:												
Total	244,554	100.0	341,261	100.0	390,842	100.0	153,691	100.0	263,548	100.0	381,120	100.0
UC	.	.	9,331	2.7	4,844	1.2	.	.	373	0.1	239	0.1
Not UC	244,554	100.0	331,930	97.3	385,998	98.8	153,691	100.0	263,175	99.9	380,881	99.9
Pov40	0	0.0	17,516	5.1	28,693	7.3	.	.	4,338	1.6	6,488	1.7
Not pov40	244,554	100.0	323,745	94.9	362,149	92.7	153,691	100.0	259,210	98.4	374,632	98.3
Richmond:												
Total	14,543	100.0	24,317	100.0	28,172	100.0	12,320	100.0	19,353	100.0	30,239	100.0
Not UC	14,543	100.0	24,317	100.0	28,172	100.0	12,320	100.0	19,353	100.0	30,239	100.0
Pov40	.	.	1,135	4.7	1,688	6.0	.	.	403	2.1	639	2.1
Not Pov	14,543	100.0	23,182	95.3	26,484	94.0	12,320	100.0	18,950	97.9	29,600	97.9

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

Table 4.7 Underclass Tracts (Level 4) by 40% Poverty Tracts in New York City: 1970, 1980 and 1990

	1970				1980				1990			
	Not UC	UC 4	%	Total	Not UC	UC 4	%	Total	Not UC	UC	%	Total
Not Pvt	2069	12	44.4	2081	1820	42	30.0	1862	1882	44	45.4	1926
Pvt40	51	15	55.6	66	200	98	70.0	298	196	53	54.6	249
Total	2120	27	100.0	2147	2020	140	100.0	2160	2078	97	100.0	2175

Note: UC 4 - Tracts with underclass level 4. Pvt40 - Tracts with more than 40 percent poverty rate.
Not Pvt - Tracts with less than 40 percent poverty rate.

Source: U.S. Census of Population, 1970 Fourth Count Summary Tapes (FCST), 1980 STF4 and 1990 STF3.

Table 4.8 Underclass Tracts (Level 3 or 4) by 40% Poverty Tracts in New York City: 1970, 1980 and 1990

	1970				1980				1990			
	Not UC	UC 3 or 4	%	Total	Not UC	UC 3 or 4	%	Total	Not UC	UC 3 or 4	%	Total
Not Pvt	1967	114	68.3	2081	1639	223	45.1	1862	1723	203	49.7	1926
Pvt40	13	53	31.7	66	27	271	54.9	298	44	205	50.3	249
Total	1980	167	100	2147	1666	494	100	2160	1767	408	100	2175

Note: UC 3 or 4 - Tracts with underclass level 3 or 4. Pvt40 - Tracts with more than 40 percent poverty rate.
Not Pvt - Tracts with less than 40 percent poverty rate.

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 and 1990 STF3.

Table 4.9 Trends in the Demographic Composition of Underclass Areas in NYC

Characteristics	1970 NYC	1980 NYC	1990 NYC	1970 Underclass Area	1980 Underclass Area	1990 Underclass Area
Percent of Underclass Population:						
Bronx	18.6	16.5	16.4	17.4	44.0	40.0
Brooklyn	33.0	31.5	31.4	49.7	34.8	40.9
Manhattan	19.5	20.2	20.3	33.0	18.6	17.5
Queens	25.2	26.7	26.7	.	2.6	1.7
Richmond	3.7	5.0	5.2	.	.	.
Non-hispanic White	63.1	52.4	43.2	12.7	8.7	4.4
Non-hispanic Black	19.3	24.0	25.2	55.6	39.7	49.4
Hispanics	16.2	19.9	24.4	31.5	49.6	44.5
Puerto Rican	10.3	12.1	11.8	27.2	38.5	29.2
Persons below Poverty level	14.8	19.7	18.9	41.0	45.2	42.2
Foreign born	15.4	23.6	28.4	5.0	15.9	17.0
Persons age 14-24 years old	17.4	18.1	15.2	18.8	21.6	18.5
Managerial and Administrative	7.8	11.4	13.5	3.2	4.6	6.7
Professional and Technicians	15.7	16.9	20.1	6.1	7.3	10.5
Blue collar workers	28.5	23.2	19.4	41.3	36.2	26.8
Service workers	13.5	14.6	16.0	24.7	23.0	26.3
Less than high school educated at 25 years and over	53.1	39.8	31.7	76.5	63.4	54.5

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

Chapter V

THE CHANGES IN ECOLOGICAL DISTRIBUTION OF THE UNDERCLASS OVER THE CITY SPACE FOR THE PERIOD 1970-1980-1990

Let us now turn to the ecological distribution of the underclass and concentrated poverty areas in New York City for the period from 1970 to 1990. Information on the location of the underclass and poverty was compiled on the census tract level.

After a detailed look at the ecological distribution of the underclass population within each borough, we examine the pattern of change for underclass areas over time, using an underclass transitional probability table. The table tells how many tracts have changed over the decade, how many tracts have remained the same, how many tracts are better or worse off, and to what extent.

Using different symbols located at tract centroids to represent where the underclass, the upper class, and the middle class live, next I will present social class ecology maps. These maps present a comprehensive view of New York City's social class ecology and its changing spatial form over time.

Racial segregation is an important dimension for understanding American cities and city neighborhoods. The mosaic hypothesis of American cities is one of the major contributions of the Chicago School of Park and Burgess. In New York City, Central Harlem, East Harlem, Chinatown, and other areas are discrete social entities that together help form a 'mosaic' of highly racially and ethnically segregated residential spaces. Racial segregation has shown almost no change from 1980 to 1990 despite the arrival of large numbers of immigrants in the last few decades.¹

Race is also a important dimension of underclass concentration. Non-Hispanic blacks and Hispanics account for more than 90 percent of the population in underclass areas. Are underclass areas all located in concentrated minority areas? If not, what is the relationship between racial segregation and class segregation in regard to the city's residential space?

Mass migration to the United States is concentrated in the nation's urbanized areas. According to theories of ethnic assimilation, new arrivals initially seek cheap housing close to jobs because of their poverty and desire to accumulate savings. After an extended length of time, the immigrants improve their socioeconomic status and begin to move to other areas. Subsequent moves result in the further dispersion of

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Note: Andrew Beveridge, New York Times, July 16, 1992.

group members and their assimilation into the surrounding society. We know that the foreign-born population is less likely to live in underclass areas. What then is the relationship between underclass areas and new immigrants' neighborhoods? To answer these questions the paper decomposes the population by race, foreign-born, and poverty status, and generates population density maps for each group for 1970, 1980 and 1990. Based on these maps a detailed spacial analysis will be conducted.

Now, I turn to report these major results, followed by a detailed analysis by borough.

Table 4.6 presents the distribution of the underclass population across the five boroughs of the city during the 1970 to 1990 period. Brooklyn, Queens and Manhattan have large populations in all three censuses. Relative to the distribution of the city's population, in 1970, the underclass populations in Brooklyn (1.8 percent) and Manhattan (2.0 percent) were higher than the city average (1.2 percent). Conversely, relative to the city's population, the underclass population was below the city average in the Bronx (1.1 percent) in 1970.

This relative distribution changed over time. In 1980, the underclass population was 15.8 percent in the Bronx, 6.6 percent in Brooklyn, 5.5 percent in Manhattan, and 0.6 percent in Queens, compared to a 6 percent city average. By 1990, underclass constituted 10.1 percent of the Bronx, 5.4 percent

of Brooklyn, 3.6 percent of Manhattan, and 0.3 percent of Queens, compared to a 4.2 percent city average. This indicates that neighborhoods deteriorated in the Bronx, Brooklyn and Manhattan after 1970, and that Bronx and Brooklyn residents were more likely to live in underclass neighborhoods than residents of other boroughs.

Tables 5.1 and 5.2 are underclass transitional probability tables showing the changes in tract by level of the underclass, 1970-80 and 1980-90. All these tracts have more than 400 residents within the same boundary over the census decades.

The left-to-right down diagonal indicates tracts where the level of underclass did not change during the decade. In Table 8, underclass level did not change in 1206 such tracts from 1970 to 1980, or 59 percent of the sample. The right hand side of the main diagonal indicates tracts where the level of underclass increased. Seven hundred eighty-seven tracts were worse off, accounting for 38 percent in the sample. Among these deteriorating tracts, 86 (5.6%) of the tracts jumped from 0 to 3, while 24 (1.6%) jumped from 0 to 4-- a dramatic shift from non-underclass to underclass. On the other hand, the level of underclass went down in 67 tracts (the left hand side of the diagonal) in this same period, accounting for 3 percent of the sample.

The underclass transition ratio measures the degree or extent of the transition. The numerator is the number of tracts located on the right hand side of the diagonal, in which underclass level increased. The denominator is number of tracts located on the left hand side of the diagonal, in which underclass level decreased. If the number of better off tracts and the number of worse off tracts were equal, then the ratio would be 1. The higher the ratio, greater the relative prevalence of worse off tracts compared to better off tracts. In Table 5.1, the number of worse off tracts is 787, and the number of better off tracts is 67, so the underclass transition ratio is 11.75. In other words, the number of deteriorated tracts was more than 11 times the number of improving tracts during the decades of the 1970s in New York City.

Table 5.2 (1980-1990) shows 1,262 tracts in the left-to-right down diagonal, accounting for 61 percent of the sample. Three hundred seventy-two tracts on the right hand side of the diagonal were worse off, accounting for 18 percent of the sample, and only 2 tracts changed from 0 to 3 and one tract from 0 to 4. There are 420 tracts on the left hand side of the diagonal, accounting for 20 percent of the sample. The underclass transition ratio is 0.87, which indicates that more neighborhoods improved during 1980 to 1990 than deteriorated. The table also shows that a few high level underclass tracts improved considerably: in the 1980s one tract changed from

underclass level 4 to 0 and 14 tracts changed from level 3 to 0. These neighborhoods were much better off in 1990 than in 1980.

Table 5.3 presents the symbols which will be shown on social ecology maps. The symbol '\$' indicates that the median household income of a census tract was in the top 10 percent for New York City.² The symbol '*' indicates a tract that meets this upper class criterion that also meets at least one of the four indicators. We can treat these '\$' or '*' as upper class neighborhoods. The symbols 1, 2, 3, and 4 indicate the number of underclass criteria that a census tracts meets. The symbol '.' represents a tract that meets neither the underclass criteria nor the upper class criteria. We can treat '.' as middle class neighborhoods. Table 5.3 shows that the number of tracts with underclass level 1 to 4 increased from 1970 to 1980 in New York City. The number of tracts with levels 3 and 4 together decreased from 494 in 1980 (23 percent) to 408 in 1990 (19 percent) (see the top part of Table 5.3). Tables 5.1 - 5.3 give a quick overview of neighborhood changes over time in the city.

The spatial analysis relies on population density maps by race and social class by borough for 1970, 1980 and 1990.

There is not a median household income variable in 1970 FCST file. Thus there are not '\$' and '*' on the table and map for 1970. The '.' represents tract which meet none of underclass indicators.

These maps show the changing distribution of social class over the time and the relationship between race and class segregation. For the population density map, each point represents 80 people. Heavy density point areas on the maps indicate areas of highly concentrated population. To make these maps easier to read, a bold line has been drawn around tracts with underclass levels 3 and 4, indicating a high concentration of underclass behaviors. A fine line around the '\$' and '*' symbols contains the higher income, upper class neighborhoods.

The large clusters of '3' and '4' areas and '\$' and '*' areas indicate a high degree of spatial homogeneity by class and a high degree of segregation between social classes.

In 1970, the areas of concentrated underclass population in Manhattan were Harlem and the Lower East Side, the neighborhoods of Brownsville and Fort Greene in North Brooklyn, and the neighborhoods of Mott Haven, Longwood and Tremont in the South Bronx.

In 1980, the largest concentrations of underclass occurred in Central Harlem, East Harlem and the Lower East Side in Manhattan, in northeast and northwest Brooklyn, in most parts of the South Bronx, and the Jamaica and Baisley Park neighborhoods of Queens.

In 1990, the concentrated underclass areas were the same areas as in 1980, but they had shrunk by various degrees. All were in black and Hispanic neighborhoods. It is also clear

that many high concentrations of the underclass occurred in census tracts with large public housing projects. Even when surrounding neighborhoods changed over the time, these public housing tracts remained stable, and their underclass concentration did not change. At the same time, these public housing tracts also had large numbers of both African black and Hispanic families.

According to Ricketts and Sawhill's four indicators, outlying boroughs had the fewest underclass tracts. There were no underclass tracts in Staten Island in 1970, 1980 and 1990, nor in Queens in 1970.

A comparison of population density maps by race over time, shows that settlement patterns for non-Hispanic whites, non-Hispanic blacks and Hispanics changed very little. Non-Hispanic blacks and Hispanics remain highly segregated from whites and to a lesser degree from each other. Hispanic neighborhoods tend to surround black neighborhoods not only in 1970 but in 1980 and 1990 as well. Hispanics tend to act as a buffer group between blacks and whites. Native-born blacks and West Indian blacks also tend to live in different neighborhoods within concentrated black areas. Comparing population density maps by race to social class ecology maps, one sees that class segregation exists within racially segregated neighborhoods.

Population density maps showing the increase in the foreign-born population (1980-1990) highlight an interesting

phenomenon: new immigrants scattered themselves along subway lines. In these areas, the extent of concentrated underclass tracts decreased most rapidly, typically in Brooklyn, Queens and the Bronx.

1. BROOKLYN

Now let me present the patterns in detail for the borough of Brooklyn.

Brooklyn has the largest population in the city and has absorbed a large number of recent immigrants in the last two decades. Thirty-nine percent of all recent immigrants to Brooklyn were from non-Hispanic Caribbean nations. In addition, in the 1980s, 9 percent were from the Dominican Republic and 7 percent from China (Department of City Planning 1992).

Brooklyn's poverty rate was 17.2 percent in 1970, 23.8 percent in 1980 and 22.3 percent in 1990 (Table 5.4). The level of poverty (percentage of poor people living in tracts that were more than 40 percent poor) was 13.2 percent in 1970, 36.6 percent in 1980 and 30 percent in 1990. Brooklyn had the second highest poverty concentration of the city from 1970 to 1990. It experienced a substantially increased poverty concentration in the 1970s and a declining concentration in 1980s (Table 5.4).

During the 1970s, the number of underclass tracts and the underclass population increased dramatically in Brooklyn, as

did concentrated poverty tracts. But during the 1980s, the number of underclass tracts decreased by 27 percent, the underclass population decreased by 15 percent, and tracts with underclass level 3 and 4 shrank from 29 percent to 22 percent (see Table 5.3). Simultaneously, the concentrated poverty tracts and their population shrank by 23 percent, the biggest poverty population decrease in the city (see Tables 5.4 and 5.5).

The underclass transitional probability tables for Brooklyn show that in the 1970s 394 tracts did not change underclass level (Table 5.6), which accounts for 52 percent of the sample in Brooklyn. Three hundred thirty-three tracts (44 %) deteriorated (1970-1980). Of these, 5 tracts changed underclass level from 0 in 1970 to 4 in 1980. Only 25 Brooklyn tracts became improved. The underclass level transitional ratio was 13.32 in the 1970s, exceeding the city-wide average of 11.75.

In the 1980s (see Table 5.7), 401 tracts (54 %) remained stable; 150 tracts (20 %) were worse off, and 191 tracts (25 %) became better off. One tract changed from level 4 in 1980 to 0 in 1990 and 7 tracts decreased 3 levels (from 3 to 0 or 4 to 1), indicating that these neighborhoods were much better off than formerly. The underclass level transitional ratio was 0.53, less than the city average (0.87). The top ten percentile income tracts, tracts with '\$' and '*' increased

from 33 to 42. All these results indicate that Brooklyn neighborhoods became much better off from 1980 to 1990.

(Tables 5.6 and 5.7 about here)

Now let us turn to see the social class ecology and population distribution maps of Brooklyn.

Comparing social class ecology maps for Brooklyn from 1970 to 1990 (see Figures 5.1.1, 5.1.2 and 5.1.3), we note that census tracts with underclass levels 3 and 4 expanded tremendously in the 1970s and then shrank in the 1980s. In 1980, these areas were spread over the northern part of Brooklyn (Prospect Heights, Bedford-Stuyvesant, Brownsville, and Williamsburg) and some southern ends of Brooklyn (e.g., Coney Island, which included a large public housing project). These tracts were populated by African-Americans and Hispanics (Figures 5.1.5 and 5.1.6). Some underclass areas developed in the west part of Brooklyn, in Red Hook and Sunset Park, but by 1990 they had retreated into a few tracts. In Sunset Park and Windsor Terrace they totally disappeared.

I have compared social class ecology maps to the 1990 population distribution map (Hispanics) and found that Hispanics were concentrated on the fringes of those black settlement areas with high underclass concentration in the north part of Brooklyn (see Figure 5.1.6).

In central Brooklyn, Flatbush, East Flatbush and Crown Heights received large numbers of immigrants from Caribbean countries, who settled in the more southern part of central

Brooklyn. If we overlay the map of poverty population (see Figure 5.1.7), we find some highly concentrated poverty tracts and underclass level 1 and 2 tracts in the immigrant areas. This indicates the new immigrants were poor in economic terms but not much involved in underclass behaviors. East Flatbush, New York's most West Indian neighborhood, contains many '\$' and '.' symbols. It is a Caribbean upper and middle class residential area.

In the non-Hispanic white areas of southern Brooklyn, poor people were highly dispersed. This indicates that the white poor do not live in underclass areas and are integrated in white neighborhoods. Most of '\$', '*' and '.' occur in the southern and middle parts of Brooklyn and a few are located in northwest (e.g. Brooklyn Heights). These are non-Hispanic white middle and upper class residential areas (see Figure 5.1.4).

Let us conclude by looking at the spatial relationship between new immigrants and changes in Brooklyn's underclass areas. About one third (29.2%) of Brooklyn's population was foreign-born in 1990. This foreign-born population had increased by 26.7 percent in the 1980s (Table 3.2.6). The map of increase in the foreign-born population (1980-1990) (Figure 5.1.8) shows that they are distributed along the IRT 3 and 4 subway lines passing through central Brooklyn, the L train passing through north Brooklyn, the IRT 2 and 5 trains passing through central Brooklyn to Flatbush, the A, C, and H trains

passing through central Brooklyn to Queens, and the B, N, R, and M trains passing through Sunset Park to the south.

Comparing this map to the 1980 and 1990 social class ecology maps, it is clear that the level of underclass decreased almost exactly along these subway lines. Many of these neighborhoods became much better off than in 1980. A few even became '\$'. One example is Sunset Park; in the 1980s there was a substantial increase of Chinese immigration and an influx from the Dominican Republic. It became a new Chinatown. Crown Heights, Flatbush and East Flatbush are the new homes of West Indian blacks. Many new immigrants bought their own houses and started their own business in these areas.

2. THE BRONX

The poverty rate in the Bronx was 19.2 percent in 1970, 27 percent in 1980 and 27.8 percent in 1990 (Table 4.4). The level of poverty was 20.6 percent in 1970, 56.3 percent in 1980 and 53.8 percent in 1990 (Table 4.3). All these figures indicate that the Bronx had the highest poverty concentration of any of five boroughs.

During the 1970s, in the Bronx, the number of underclass tracts increased from 4 with a population of 16,414 in 1970 to 54 with a population of 185,274 in 1980, and there was a more than ten-fold increase in underclass population (Table 5.4). It was the greatest increase in the city in the 1970s. It was also associated with a substantial increase in poverty tracts

and population, 19 tracts with a population of 126,696 in 1970 to 102 tracts with a population of 366,081 in 1980, almost double that of 1970 (Table 5.5).

Table 5.8 presents an underclass transitional probability in the Bronx from 1970 to 1980. There were 137 tracts in which underclass level did not change, which accounts for 42 percent of the Bronx sample. In 14 tracts the underclass levels went from 0 to 4, accounting for 4 percent of the tracts. Forty-two tracts increased 3 levels (from 0 to 3 or 1 to 4), accounting for 13 percent of tracts. One hundred eight-two tracts were worse off, and 7 tracts better off during this period in which the underclass transition ratio was 26, and the Bronx experienced intensive neighborhood deterioration.

During the 1980s, the population living below the poverty line increased from 315,000 in 1980 to 334,000 in 1990 (a 6 percent increase), while the number of underclass tracts decreased by 33 percent, and the underclass population decreased by 34 percent, the concentrated poverty tracts and population decreased 1 percent. Looking at Table 5.3 we find that tracts with underclass levels of 3 and 4 also showed little change (41 percent in 1980 and 39 percent in 1990). The level of poverty changed from 56.3 in 1980 to 53.8 in 1990, which indicates a deconcentration of poverty in this period. The underclass transition probability table shows

that 79 tracts were worse off, and 37 tracts better off. The underclass transition ratio was 2.14, much higher than the city average (0.87). This may indicate that all kinds of people left worse neighborhoods, even the poor, while many neighborhoods continued to deteriorate due to an increasing poverty rate from 1980 to 1990.

Examining the distribution map of population by race and the social class ecology maps, we find that non-Hispanic whites spread from the northwest to the southeast in the Bronx (Figure 5.2.4). Non-Hispanic blacks were concentrated in the southwest and the northeast of the Bronx (5.2.5). Hispanics were scattered alongside the non-Hispanic black areas in the southwest of the borough (5.2.6).

In 1970, the bold line areas with underclass levels of 3 and 4, were primarily located in the southwest Bronx, with their centers at Tremont, Morrisania and the Civic Center (Figure 5.2.1). In 1980 the areas expanded west to University Heights, Morris Heights and Highbridge, and north to Bedford Park, remaining stable until 1990 (Figures 5.2.2 and 5.2.3); a few tracts spread to the southeast at Soundview, Castle, Hunts Points, and Throgs Neck, and to the North Bronx, at Willamsbridge. All of these areas were populated with a concentration of blacks and Hispanics, and recent immigrants from the Dominican Republic. The '\$', upper class areas located in the northeast, North Riverdale, Riverdale and

Spuyten Duyvil, in the central Bronx, had a concentration of upper and middle class non-Hispanic whites. A few 'S' appear in the northeast Bronx near the end of the 5 and 2 subway lines. What makes these neighborhoods distinctive relative to others in the Bronx is the dominance of non-Hispanic Caribbean immigrants. Most of these immigrants, who initially had settled in Wakefield and Williamsbridge between 1983 and 1989, were from Jamaica, which became an upper and middle class black neighborhood in 1990.

Foreign-born population increased in the southwest, along the D, C and number 4 subway lines. Withdrawal of the bold line area to Civic Center may have been influenced by an increase of new immigrants in this area (5.2.7).

3. MANHATTAN

The poverty rate was 17 percent in 1970, 21 percent in 1980 and 20 percent in 1990 in Manhattan (Table 4.4).

In Manhattan, during the 1970s there was a large increase in concentrated poverty tracts and population (about 5 time increase), and also a moderate increase in the number of underclass tracts and population (a 150% increase) (see Tables 5.4 and 5.5).

During the 1980s the number of tracts with underclass level of 3 or 4 decreased from 92 (32%) in 1980 to 77 (26%) in 1990 (see Table 5.3). The underclass population decreased by

31 percent while the concentrated poverty population remained stable (0.2 percent increase).

The level of poverty experienced increased tremendously in the 1970s but remained stable in the 1980s, from 4.5 percent in 1970 to 25.3 percent in 1980, and only to 25.5 percent in 1990 (Table 4.3).

One hundred and thirteen tracts increased underclass level, while 15 tracts decreased, and the underclass level transitional ratio were 7.53 during the 1970s. In the 1980s, 35 tracts increased underclass level, and 66 decreased. The underclass level transitional ratio was 0.53, less than the city average of 0.87 (see Tables 5.10 and 5.11).

Meanwhile the number of '\$' and '*', top ten median households income tracts increased from 33 to 54 in the 1980s. This indicates that many affluent people moved back to Manhattan in the 1980s.

Next I will examine the distribution of social class ecology across Manhattan over time. In 1970, the bold line areas with underclass levels 3 and 4 were concentrated in Central Harlem, which traditionally is an African black neighborhood. A few tracts were located on the Lower East Side which were concentrated Hispanic population. One tract was located at Mid-town, Clinton (Figure 5.3.1).

In 1980, the bold line areas expanded overall in Central Harlem to the east, East Harlem, and to the north, Hamilton Heights and Inwood which were Hispanic neighborhoods (Figure 5.3.2). There were expanded areas in the Lower East Side, and Clinton and Chelsea which were blue collar working class neighborhoods. The most of the '\$' were concentrated in Central Park East, a few spread to West Side, Lincoln Center, Murray Hill, Stuyvesant Town, and the East Village. These were traditionally white upper- and middle-class residential areas.

The 1990 map shows that bold line areas shrunk at Central Harlem, Lower East Side, and Mid-Town areas, but expanded to Washington Heights (Figure 5.2.3). The '\$' areas also expanded from Central Park West to north, Upper East Side, to south, United Nations, to west, Lincoln Center, and Ansonia. There were also expanded '\$' areas in East Village, Greenwich Village and Battery Park.

Several factors may explain these changes: one is the increasing number of immigrants, other is the special attraction of Manhattan. Two large new immigrant groups in Manhattan came from the Dominican Republic and China. According to the Department of City Planning's report, during the period of 1983 to 1989, 51,700 Dominican and 26,000 Chinese immigrants settled initially in Manhattan. Washington Heights was the initial place of settlement of almost 35,000 immigrants. Eighty-nine percent of these newcomers were

Hispanic, mostly from the Dominican Republic (80 percent). It has been noted that Washington Heights was an extreme poverty and socially stressed Dominican community. It has experienced an overcrowded decline since 1980. The area is consistently identified as one of the most depressed areas within the city. In 1980, close to one-quarter of the families in the area lived below the poverty line; between 1980 and 1984, the percentage of households receiving welfare assistance increased from 19 percent to 24 percent (Torres Saillant 1985). Still other symptoms of poverty plague this area: one of the highest rates of lead poisoning, a dangerous lack of pre-natal care (28.5 percent of all births), more overcrowding than in any New York city school district, and the highest homicide rate in the city (Guterrez, 1988). The increasing population of poor immigrants made the neighborhood worse off in the 1980s.

On the other hand, immigration into the southern part of the borough was heavily Chinese. The hub of this immigration was Chinatown and its environs, which during the 1983-1989 period was the place of settlement for 26,000 immigrants, mostly from China. These new immigrants spread from the Chinatown area to the north, the East Village, Stuyvesant Town and the Lower East Side. Some of the Chinese businessmen from Hongkong and Taiwan bring with them capital and invest in real estate, banking, the garment industry, restaurants and grocery stores, which make the neighborhood boom, revitalizing the

surrounding areas and shrinking the underclass areas of the Lower East Side.

In addition to its famed ethnic enclaves, Manhattan and its cultural attractions have traditionally attracted successful upwardly-mobile individuals from both across the world and across the country. This type of movement has generated a community of individuals whose identification is socioeconomic rather than ethnic or native based. The West Side and East Side absorbed these immigrants from a cross-section of European, Asian and South American countries. Manhattan is the only borough which had an increase in non-hispanic whites in the last few decades (0.7 percent).

The East Village and Greenwich Village used to be areas of the manufacturing industry. The process of deindustrialization led to factories moving out of the city. Instead, the East Village and Greenwich Village have become expensive upper- and middle-class residential areas. There were many new buildings in Battery Park, which has become a upper- and middle-class neighborhoods.

4. QUEENS

Queens has the second largest population in the city, and has absorbed the largest influx of immigrants in the last two decades. Between 1980 to 1990, the foreign-born population grew by 31 percent to 707,000 in 1980, and represented 36

percent of the population in Queens. Queens used to be an upper and middle class residential area.

In 1970, the poverty rate was 7.5 percent, compare to the city average of 14.8 percent, and there were no underclass and poverty tracts. In the 1980, the poverty rate increased to 11.2 percent, and associated with the poverty concentration an underclass occurred (Figure 4.4). There were 8 underclass tracts and 13 concentrated poverty tracts (see Table 5.4 and 5.5), and level of poverty was 5 percent.

In 1990, the poverty rate decreased to 10.8 percent. The number of underclass tracts and underclass population dropped by 50 percent. The number of poverty tracts decreased from 13 in 1980 to 10 in 1990, while the population living in these areas increased by 59 percent, and the level of poverty increased to 8 percent in 1990.

In the 1970s, 113 tracts increased underclass level, 15 decreased, and the underclass transitional ratio was 8.4, less than the city average (11.7) (Table 5.12).

In the 1980s, 105 tracts increased underclass level, 90 decreased, and the underclass transitional ratio was 1.16, higher than the city average (0.89) in this period. This means that there were more tracts which were worse off in this period (see Table 5.13). In the meantime, the top ten income tracts with '\$' decreased from 109 in 1980 to 80 in 1990. This indicates that there was much upper middle class flight from Queens in this period. These fact may be offset by the

influx of recent immigrants, who are poor in terms of income and are concentrated in specific neighborhoods, but are less likely to be heavily involved in underclass behavior. The increasing minority cause the "white middle and upper class flight."

Now we examine the distribution of social class ecology. In 1970, a few tracts with underclass level 3 were located in the central part of Queens, South Jamaica (Figure 5.4.1).

By 1980, the bold line areas had expanded from South Jamaica to the south, Baisley, and also spread to many other spots: northwest Queens, Long Island City, Corona; southwest Queens, Ridgewood; southeast Queens, Far Rockaway. There were public housing project in these spots (Figure 5.4.2).

If we overlay the distribution map of population on the social ecology map (see Figures 5.4.4, 5.4.5 and 5.4.6), we will find that South Jamaica, Baisley Park, Corona, Long Island City and Far Rockaway have concentrated black populations. The Long Island City, Corona and Ridgewood all have Hispanic population concentrations.

Examining the map of Foreign-born Population Increase (1980-1990) (Figure 5.4.7), I find that in the northwest Queens, concentrations of new immigrants from Asia, Europe, the Caribbean, Central America, South America, and Africa increased along the line of the IRT 7 train. The subway line also passes through the South Jamaica section, which has had

a heavy increase in foreign-born population due primarily to new immigrants from Guyana and Jamaica. The increase of foreign-born population also occurred in Ridgewood and Far Rockaway where the bold line area also shrunk during the 1980s.

The '\$' '*' and '.' areas indicate mostly concentrated white populations, except for Southwest Queens, Queens Village, Cambria Heights, and Laurelton where a growing number of West Indians have moved in. These are very solid West Indian black upper- and middle-class residential areas. In 1980 the housing owner-occupancy rate of this area was 69.8, the highest in the city outside of Staten Island (Kasinitz 1992). Although the '\$' areas have shrunk in Queens in the 1980s, the neighborhoods of Cambria and Laurelton have remained stable (Figure 5.4.3).

Table 5.1 Change in Tract by Level of the Underclass, 1970-80
(for the Tract Population more then 400) in New York City

Census Tract in 1970	Census Tract in 1980					Total
	0	1	2	3	4	
0	1072 69.66	247 16.05	110 7.15	86 5.59	24 1.56	1539 74.71
1	29 14.08	37 17.96	42 20.39	83 40.29	15 7.28	206 10.00
2	1 0.64	8 5.10	20 12.74	88 56.05	40 25.48	157 7.63
3	0 0.00	2 1.49	9 6.72	71 52.99	52 38.81	134 6.50
4	0 0.00	0 0.00	1 4.17	17 70.83	6 25.00	24 1.17
Total	1102 53.50	294 14.27	182 8.83	345 16.75	137 6.65	2060 100.00

Table 5.2 Change in Tract by Level of the Underclass, 1980-90
(for the Tract Population more then 400) in New York City

Census Tract in 1980	Census Tract in 1990					Total
	0	1	2	3	4	
0	885 80.45	176 16.00	36 3.27	2 0.18	1 0.09	1100 53.55
1	129 44.03	107 36.52	43 14.68	14 4.78	0 0.00	293 14.26
2	20 10.87	56 30.43	62 33.70	39 21.20	7 3.80	184 8.96
3	14 4.07	33 9.59	67 19.48	176 51.16	54 15.70	344 16.75
4	1 0.75	7 5.26	25 18.80	68 51.13	32 24.06	133 6.48
Total	1049 51.07	379 18.45	233 11.34	299 14.56	94 4.58	2054 100.00

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

Note: The number of 0, 1, 2, 3 and 4 indicate the number of Ricketts and Sawhills' indicators meet the 1980 cutoffs, e.g. one or more standard deviations above the national means in the census tract.

Table 5.3 Census Tracts by Type of Areas and Boroughs in New York City

Type of Tract	1970		1980		1990	
	Number of Tracts	%	Number of Tracts	%	Number of Tracts	%
New York City						
\$	-	-	210	9.7	189	8.7
*	-	-	9	0.4	28	1.3
.	1583	73.7	944	43.6	911	41.9
1	229	10.7	313	14.5	387	17.8
2	168	7.8	196	9	252	11.6
3	140	6.5	354	16.3	311	14.3
4	27	1.3	140	6.5	97	4.5
Bronx						
\$	-	-	10	2.9	8	2.3
*	-	-	1	0.3	3	0.9
.	226	66.9	113	32.8	79	23
1	34	10.1	41	11.9	56	16.3
2	32	9.5	38	11	64	18.6
3	42	12.4	87	25.3	98	28.5
4	4	1.2	54	15.7	36	10.5
Brooklyn						
\$	-	-	32	4.1	37	4.8
*	-	-	1	0.1	5	0.6
.	521	67.2	312	40.2	290	37.4
1	86	11.1	127	16.4	173	22.3
2	82	10.6	82	10.6	100	12.9
3	72	9.3	163	21	127	16.4
4	14	1.8	59	7.6	43	5.5
Manhattan						
\$	-	-	32	11	47	16
*	-	-	1	0.3	7	2.4
.	167	58.6	97	33.4	95	32.3
1	45	15.8	48	16.6	37	12.6
2	42	14.7	20	6.9	31	10.5
3	22	7.7	73	25.2	63	21.4
4	9	3.2	19	6.6	14	4.8

Type of Tract	1970		1980		1990	
	Number of Tracts	%	Number of Tracts	%	Number of Tracts	%
Queens						
\$	-	-	105	16	67	10.1
*	-	-	4	0.6	13	2
.	580	89.1	376	57.3	399	60.2
1	58	8.9	89	13.6	109	16.4
2	10	1.5	46	7	52	7.8
3	3	0.5	28	4.3	19	2.9
4			8	1.2	4	0.6
Richmond						
\$	-	-	31	31	30	30.3
*	-	-	2	2		
.	89	90.8	46	46	48	48.5
1	6	6.1	8	8	12	12.1
2	2	2	10	10	5	5.1
3	1	1	3	3	4	4

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

Note: The numbers 1-4 indicate Ricketts and Sawhills' numbers of indicators meeting the 1980 cutoffs, e.g. one or more standard deviations above the national mean of the census tract. The symbol '\$' indicates a tract which did not meet any of the underclass criteria but for which the median household income is in the top ten percent of all household incomes of the city. The symbol '*' indicates a tract which meets at least one of the four underclass criteria and also meets the high household income criterion. The symbol '.' means a tract which meets none of the above criteria of underclass or the top ten household income criterion. There is no median household income variable for 1970 FCST file. The symbol '.' represents tracts which meet none of underclass indicators.

Table 5.4 Underclass Tracts and Population by Borough in New York City for 1970-90

	1970 Underclass Tract	1980 Underclass Tract	1990 Underclass Tract	1970 Underclass Population	1980 Underclass Population	1990 Underclass Population	1970-1980 Percent Change	1980-1990 Percent Change
New York City	27	140	97	94,450	421,497	305,356	346.3	-27.6
Bronx	4	54	36	16,414	185,274	122,078	1028.8	-34.1
Brooklyn	14	59	43	46,910	146,811	124,738	213.0	-15.0
Manhattan	9	19	14	31,126	78,320	53,369	151.6	-31.9
Queens	.	8	4	.	11,092	5,171	.	-53.4

Source: U.S. Census of Population, 1970 Fourth Count Summary Tapes (FCST), 1980 STF4 and 1990 STF3.

Table 5.5 Concentrated Poverty tracts and Population by Borough in NYC for 1970-90

	1970 Poverty Tract	1980 Poverty Tract	1990 Poverty Tract	1970 Population in Poverty Area	1980 Population in Poverty Area	1990 Population in Poverty Area	1970-1980 Percent Change	1980-1990 Percent Change
New York City	66	298	249	289,418	956,515	876,218	230.5	-8.4
Bronx	19	102	100	126,696	366,081	362,388	188.9	-1.0
Brooklyn	38	135	89	134,823	401,733	309,532	198.0	-23.0
Manhattan	9	47	48	27,787	162,190	162,508	484.7	0.2
Queens	.	13	10	.	24,537	38,955	.	58.8
Richmond	.	1	2	.	1,974	2,835	.	43.6

Source: U.S. Census of Population, 1970 Fourth Count Summary Tapes (FCST), 1980 and 1990 STF3.

Table 5.6 Change in Tract by Level of Underclass, 1970-80
(for Tract Population more than 400) in Brooklyn

Census Tract in 1980						
Census Tract in 1970	0	1	2	3	4	Total
0	330 64.71	109 21.37	36 7.06	30 5.88	5 0.98	510 67.82
1	6 7.41	10 12.35	21 25.93	40 49.38	4 4.94	81 10.77
2	0 0.00	3 3.85	13 16.67	43 55.13	19 24.36	78 10.37
3	0 0.00	1 1.41	6 8.45	38 53.52	26 36.62	71 9.44
4	0 0.00	0 0.00	0 0.00	9 75.00	3 25.00	12 1.60
Total	336 44.68	123 16.36	76 10.11	160 21.28	57 7.58	752 100.00

Table 5.7 Change in Tract by Level of Underclass, 1980-90
(for Tract Population more than 400) in Brooklyn

Census Tract in 1990						
Census Tract in 1980	0	1	2	3	4	Total
0	252 76.13	67 20.24	12 3.63	0 0.00	0 0.00	331 44.61
1	47 39.50	49 41.18	17 14.29	6 5.04	0 0.00	119 16.04
2	8 10.53	30 39.47	20 26.32	16 21.05	2 2.63	76 10.24
3	4 2.50	22 13.75	33 20.63	71 44.38	30 18.75	160 21.56
4	1 1.79	3 5.36	11 19.64	32 57.14	9 16.07	56 7.55
Total	312 42.05	171 23.05	93 12.53	125 16.85	41 5.53	742 100.00

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

Note: On Table 5.6 to 5.15 the numbers 0-4 indicate Ricketts and Sawhills' numbers of indicators meeting the 1980 cutoffs, e.g. one or more standard deviations above the national mean of the census tract.

**Table 5.8 Change in Tract by Level of Underclass, 1970-80
(for Tract Population more than 400) in The Bronx**

Census Tract in 1980						
Census Tract in 1970	0	1	2	3	4	Total
0	113 51.60	35 15.98	23 10.50	34 15.53	14 6.39	219 67.18
1	2 6.06	2 6.06	6 18.18	15 45.45	8 24.24	33 10.12
2	0 0.00	0 0.00	4 12.90	17 54.84	10 32.26	31 9.51
3	0 0.00	0 0.00	2 5.13	17 43.59	20 51.28	39 11.96
4	0 0.00	0 0.00	1 25.00	2 50.00	1 25.00	4 1.23
Total	115 35.28	37 11.35	36 11.04	85 26.07	53 16.26	326 100.00

**Table 5.9 Change in Tract by Level of Underclass, 1980-90
(for Tract Population more than 400) in the Bronx**

Census Tract in 1990						
Census Tract in 1980	0	1	2	3	4	Total
0	72 62.07	35 30.17	8 6.90	0 0.00	1 0.86	116 35.58
1	10 27.03	17 45.95	8 21.62	2 5.41	0 0.00	37 11.35
2	1 2.70	3 8.11	20 54.05	9 24.32	4 10.81	37 11.35
3	0 0.00	2 2.35	15 17.65	56 65.88	12 14.12	85 26.07
4	0 0.00	0 0.00	6 11.76	26 50.98	19 37.25	51 15.64
Total	83 25.46	57 17.48	57 17.48	93 28.53	36 11.04	326 100.00

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

**Table 5.10 Change in Tract by Level of Underclass, 1970-80
(for Tract Population more than 400) in Manhattan**

Census Tract in 1980						
Census Tract in 1970	0	1	2	3	4	Total
0	104 67.53	28 18.18	13 8.44	9 5.84	0 0.00	154 59.00
1	6 15.00	11 27.50	4 10.00	18 45.00	1 2.50	40 15.33
2	1 2.63	2 5.26	1 2.63	24 63.16	10 26.32	38 14.56
3	0 0.00	0 0.00	0 0.00	15 71.43	6 28.57	21 8.05
4	0 0.00	0 0.00	0 0.00	6 75.00	2 25.00	8 3.07
Total	111 42.53	41 15.71	18 6.90	72 27.59	19 7.28	261 100.00

**Table 5.11 Change in Tract by Level of Underclass, 1980-90
(for Tract Population more than 400) in Manhattan**

Census Tract in 1990						
Census Tract in 1980	0	1	2	3	4	Total
0	101 87.83	11 9.57	2 1.74	1 0.87	0 0.00	115 43.07
1	23 52.27	12 27.27	6 13.64	3 6.82	0 0.00	44 16.48
2	4 21.05	3 15.79	6 31.58	6 31.58	0 0.00	19 7.12
3	5 7.04	5 7.04	12 16.90	40 56.34	9 12.68	71 26.59
4	0 0.00	0 0.00	5 27.78	9 50.00	4 22.22	18 6.74
Total	133 49.81	31 11.61	31 11.61	59 22.10	13 4.87	267 100.00

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

**Table 5.12 Change in Tract by Level of Underclass, 1970-80
(for Tract Population more than 400) in Queens**

Census Tract in 1980						
Census Tract in 1970	0	1	2	3	4	Total
0	457 79.76	69 12.04	31 5.41	11 1.92	5 0.87	573 90.52
1	14 28.00	14 28.00	10 20.00	10 20.00	2 4.00	50 7.90
2	0 0.00	2 25.00	1 12.50	4 50.00	1 12.50	8 1.26
3	0 0.00	0 0.00	1 50.00	1 50.00	0 0.00	2 0.32
Total	471 74.41	85 13.43	43 6.79	26 4.11	8 1.26	633 100.00

**Table 5.13 Change in Tract by Level of Underclass, 1980-90
(for Tract Population more than 400) in Queens**

Census Tract in 1990						
Census Tract in 1980	0	1	2	3	4	Total
0	395 84.22	60 12.79	13 2.77	1 0.21	0 0.00	469 74.21
1	45 52.33	27 31.40	11 12.79	3 3.49	0 0.00	86 13.61
2	6 13.95	16 37.21	14 32.56	6 13.95	1 2.33	43 6.80
3	5 19.23	4 15.38	7 26.92	7 26.92	3 11.54	26 4.11
4	0 0.00	4 50.00	3 37.50	1 12.50	0 0.00	8 1.27
Total	451 71.36	111 17.56	48 7.59	18 2.85	4 0.63	632 100.00

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

**Table 5.14 Change in Tract by Level of Underclass, 1970-80
(for Tract Population more than 400) in Staten Island**

Census Tract in 1980					
Census Tract in 1970	0	1	2	3	Total
0	68 81.93	6 7.23	7 8.43	2 2.41	83 94.32
1	1 50.00	0 0.00	1 50.00	0 0.00	2 2.27
2	0 0.00	1 50.00	1 50.00	0 0.00	2 2.27
3	0 0.00	1 100.00	0 0.00	0 0.00	1 1.14
Total	69 78.41	8 9.09	9 10.23	2 2.27	88 100.00

**Table 5.15 Change in Tract by Level of Underclass, 1980-90
(for Tract Population more than 400) in Staten Island**

Census Tract in 1990					
Census Tract in 1980	0	1	2	3	Total
0	65 94.20	3 4.35	1 1.45	0 0.00	69 79.31
1	4 57.14	2 28.57	1 14.29	0 0.00	7 8.05
2	1 11.11	4 44.44	2 22.22	2 22.22	9 10.34
3	0 0.00	0 0.00	0 0.00	2 100.00	2 2.30
Total	70 80.46	9 10.34	4 4.60	4 4.60	87 100.00

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

New York City
Boroughs



SOCIAL CLASS ECOLOGY -- BROOKLYN 1970
SOCIAL CLASS IN CENSUS TRACTS



DATA SOURCE: CENSUS 1970 RCT

Figure 5.1.1

SOCIAL CLASS ECOLOGY -- BROOKLYN 1980
SOCIAL CLASS IN CENSUS TRACTS

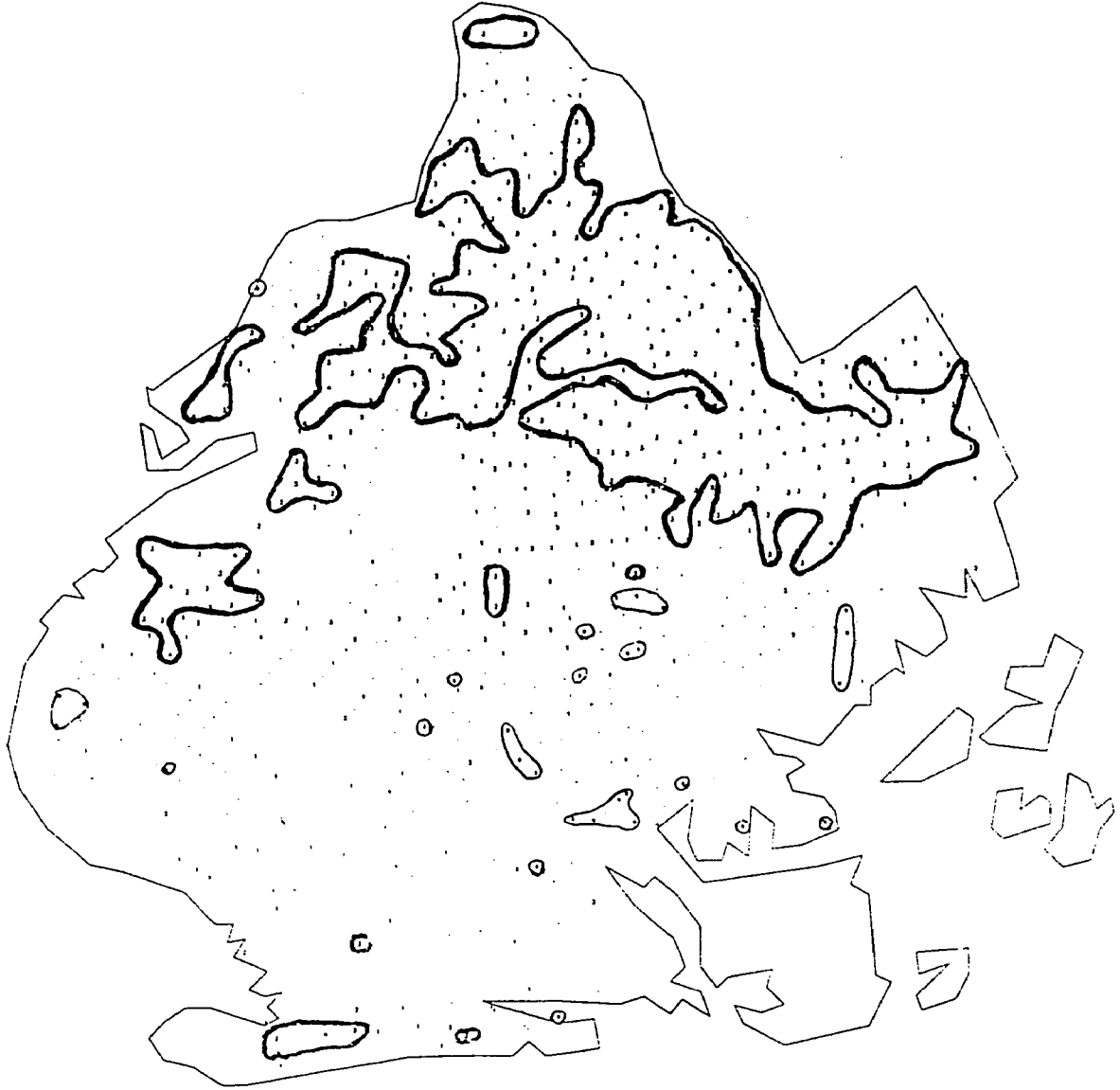


Figure 5.1.2

CATA SOURCE CENSUS 1980 ST73

SOCIAL CLASS ECOLOGY -- BROOKLYN 1990
SOCIAL CLASS IN CENSUS TRACTS



DATA SOURCE: CENSUS 1990 S773

Figure 5.1.3

**DISTRIBUTION MAP OF POPULATION IN BROOKLYN COUNTY 1990
NON-HISPANIC WHITES IN CENSUS TRACTS**



DATA SOURCE CENSUS 1990, EACH POINT MEANS 80 PEOPLE

Figure 5.1.4

MAPPED BY O HUANG

DISTRIBUTION MAP OF POPULATION IN BROOKLYN COUNTY 1990
NON-HISPANIC BLACK IN CENSUS TRACTS



DATA SOURCE: CENSUS 1990, EACH POINT MEANS 80 PEOPLE

Figure 5.1.5

MAPPED BY G. HJANG

**DISTRIBUTION MAP OF POPULATION IN BROOKLYN COUNTY 1990
HISPANICS IN CENSUS TRACTS**



DATA SOURCE: CENSUS 1990, EACH POINT MEANS 80 PEOPLE

Figure 5.1.6

MAPPED BY O HUANG

**DISTRIBUTION MAP OF POPULATION IN BROOKLYN COUNTY 1990
POPULATION BELOW THE POVERTY LINE IN CENSUS TRACTS**



DATA SOURCE: CENSUS 1990 EACH POINT MEANS 80 PEOPLE

Figure 5.1.7

MAPPED BY Q. HUANG

**DISTRIBUTION MAP OF POPULATION IN BROOKLYN COUNTY
FOREIGN-BORN POPULATION INCREASE (1980-1990) IN CENSUS TRACTS**

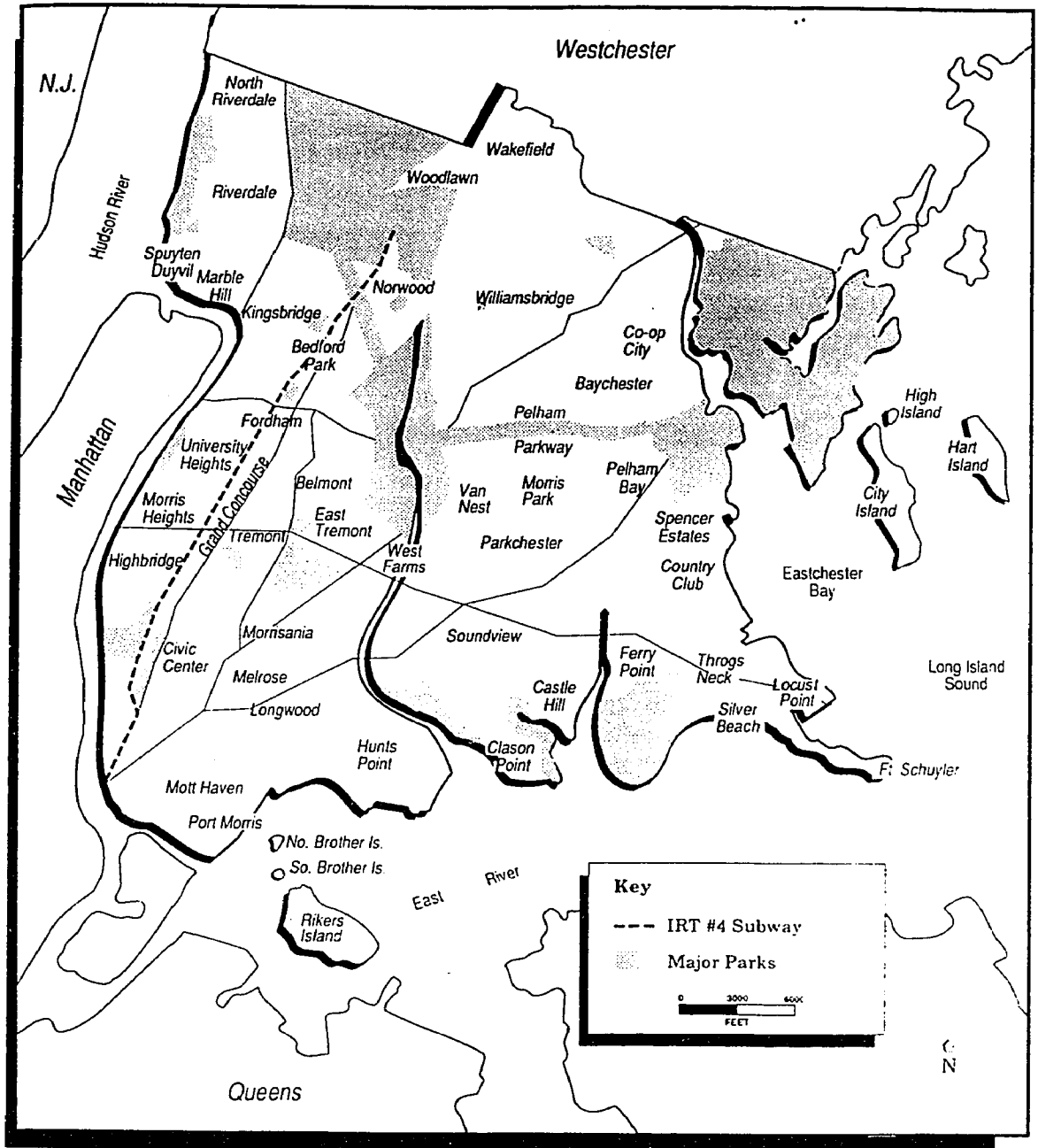


DATA SOURCE: 1980 AND 1990 SENSUS. EACH POINT MEANS 40 PEOPLE

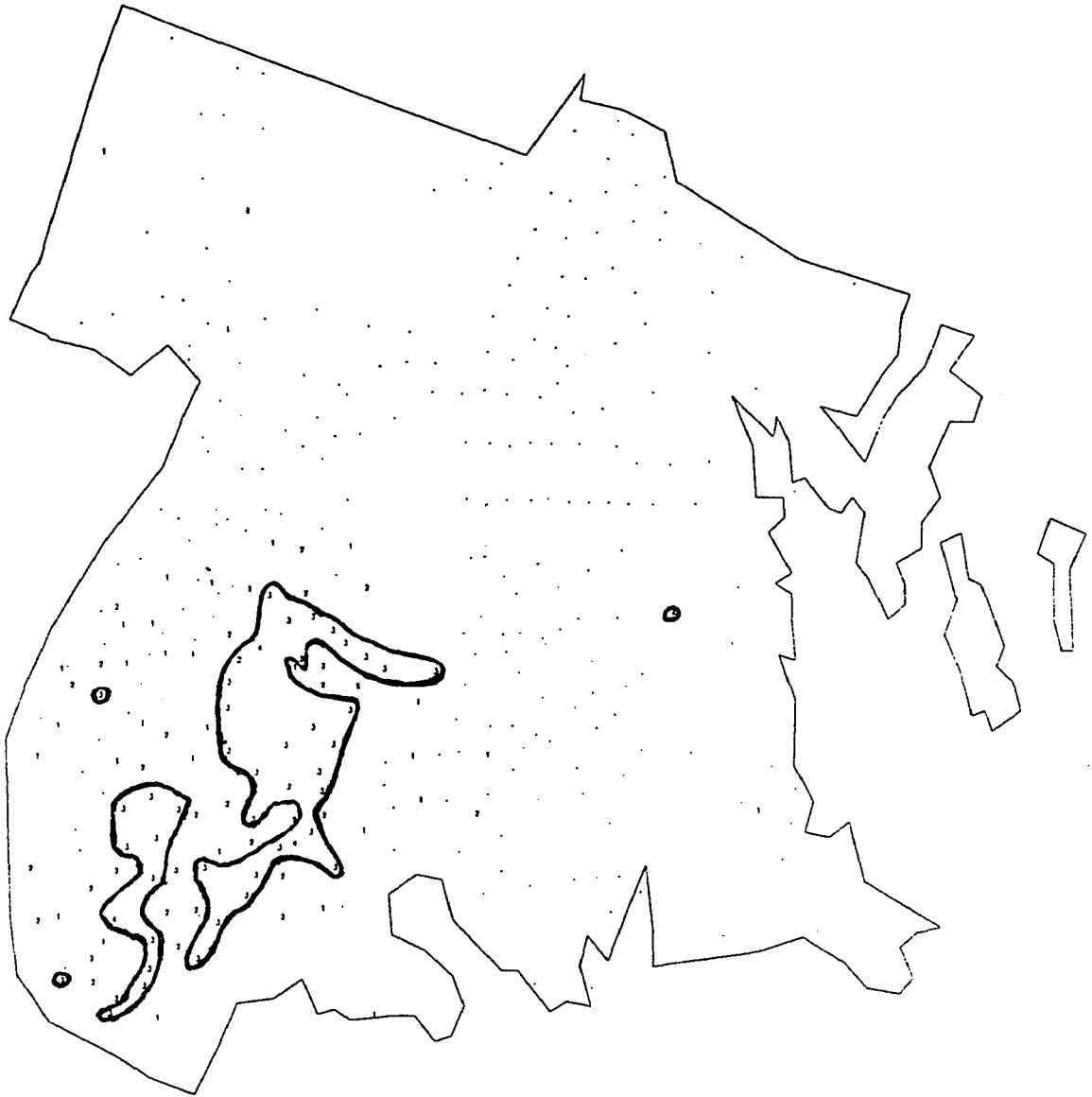
Figure 5.1.8

MAPPED BY: Q. HUAN-G

The Bronx



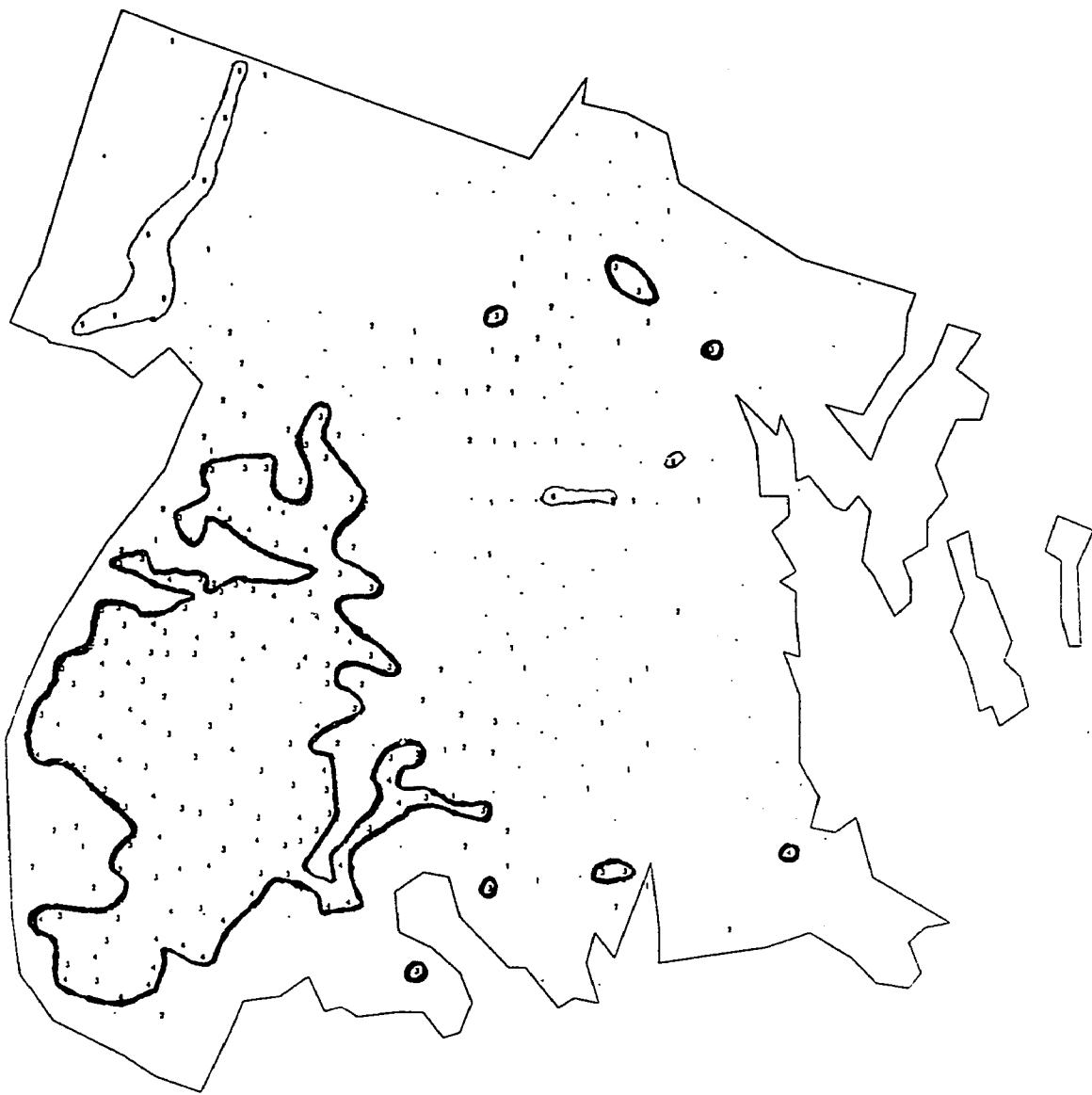
SOCIAL CLASS ECOLOGY -- BRONX 1970
SOCIAL CLASS IN CENSUS TRACTS



DATA SOURCE: CENSUS 1970 FCST

Figure 5.2.1

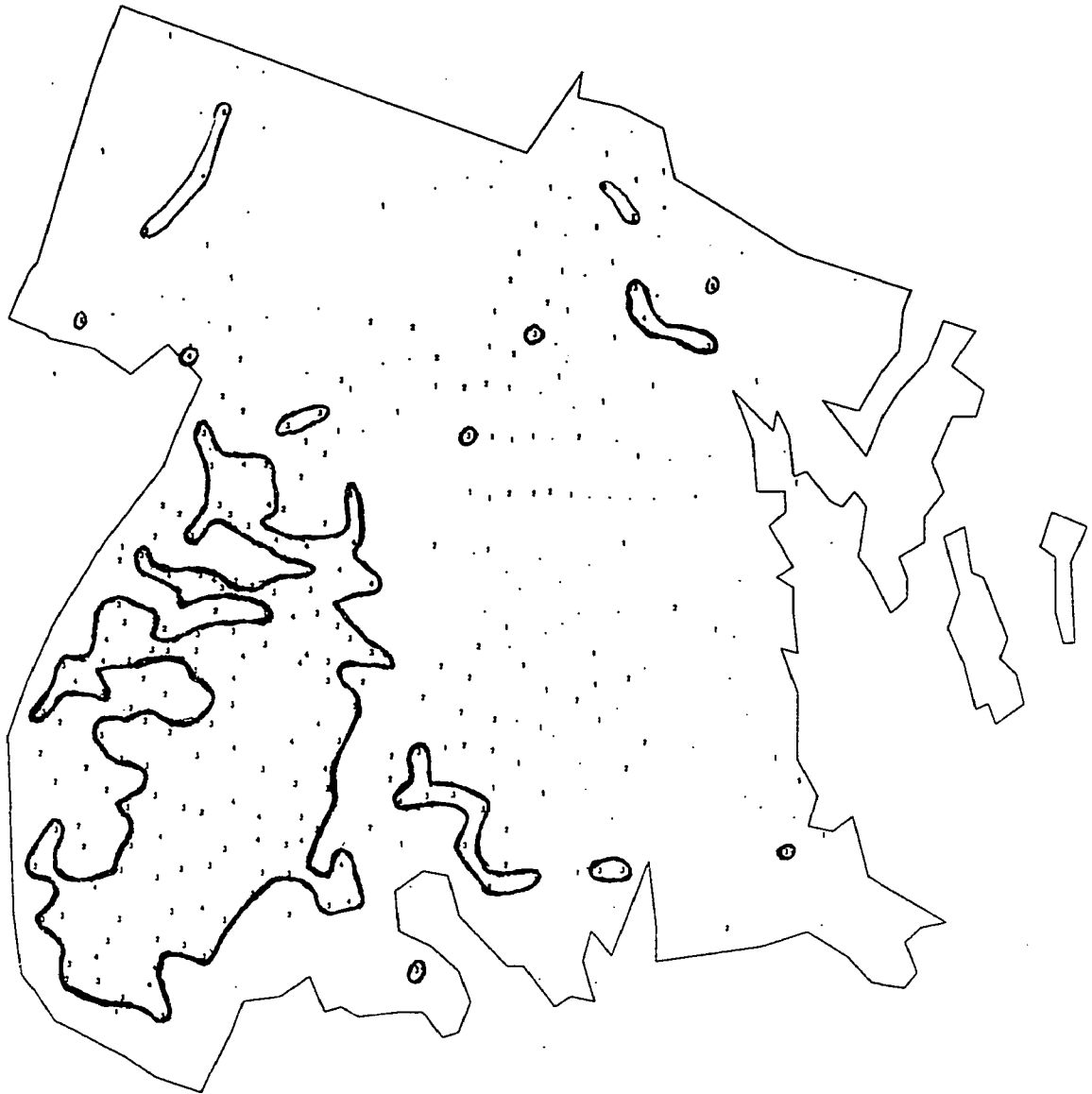
SOCIAL CLASS ECOLOGY -- BRONX 1980
SOCIAL CLASS IN CENSUS TRACTS



DATA SOURCE: CENSUS 1980 STF3

Figure 5.2.2

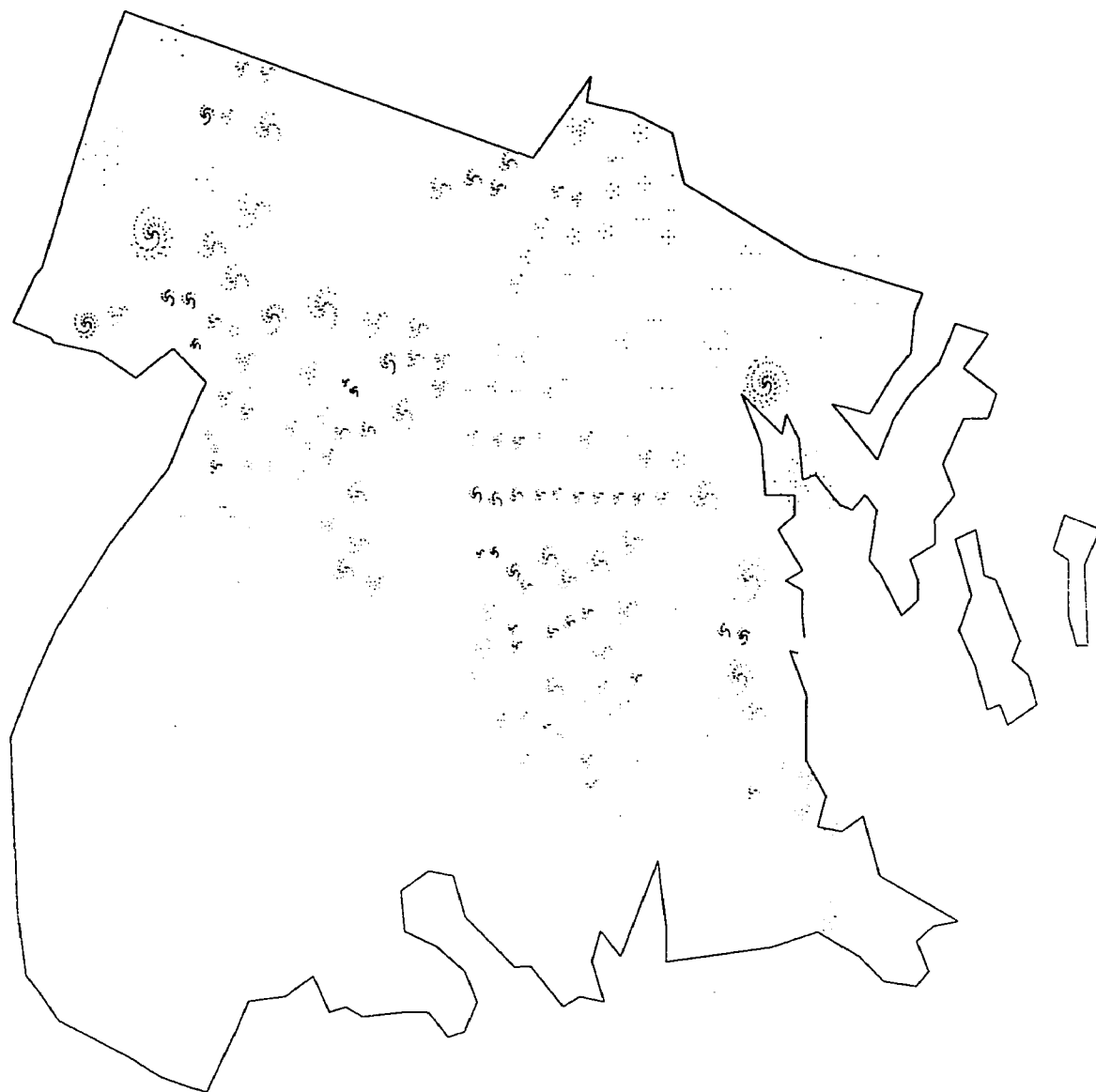
SOCIAL CLASS ECOLOGY -- BRONX 1990
SOCIAL CLASS IN CENSUS TRACTS



DATA SOURCE: CENSUS 1990 STF3

Figure 5.2.3

**DISTRIBUTION MAP OF POPULATION IN BRONX COUNTY 1990
NON-HISPANIC WHITES IN CENSUS TRACTS**



DATA SOURCE: CENSUS 1990. EACH POINT MEANS 80 PEOPLE

Figure 5.2.4

MAPPED BY O. HUANG

**DISTRIBUTION MAP OF POPULATION IN BRONX COUNTY 1990
NON-HISPANIC BLACKS IN CENSUS TRACTS**

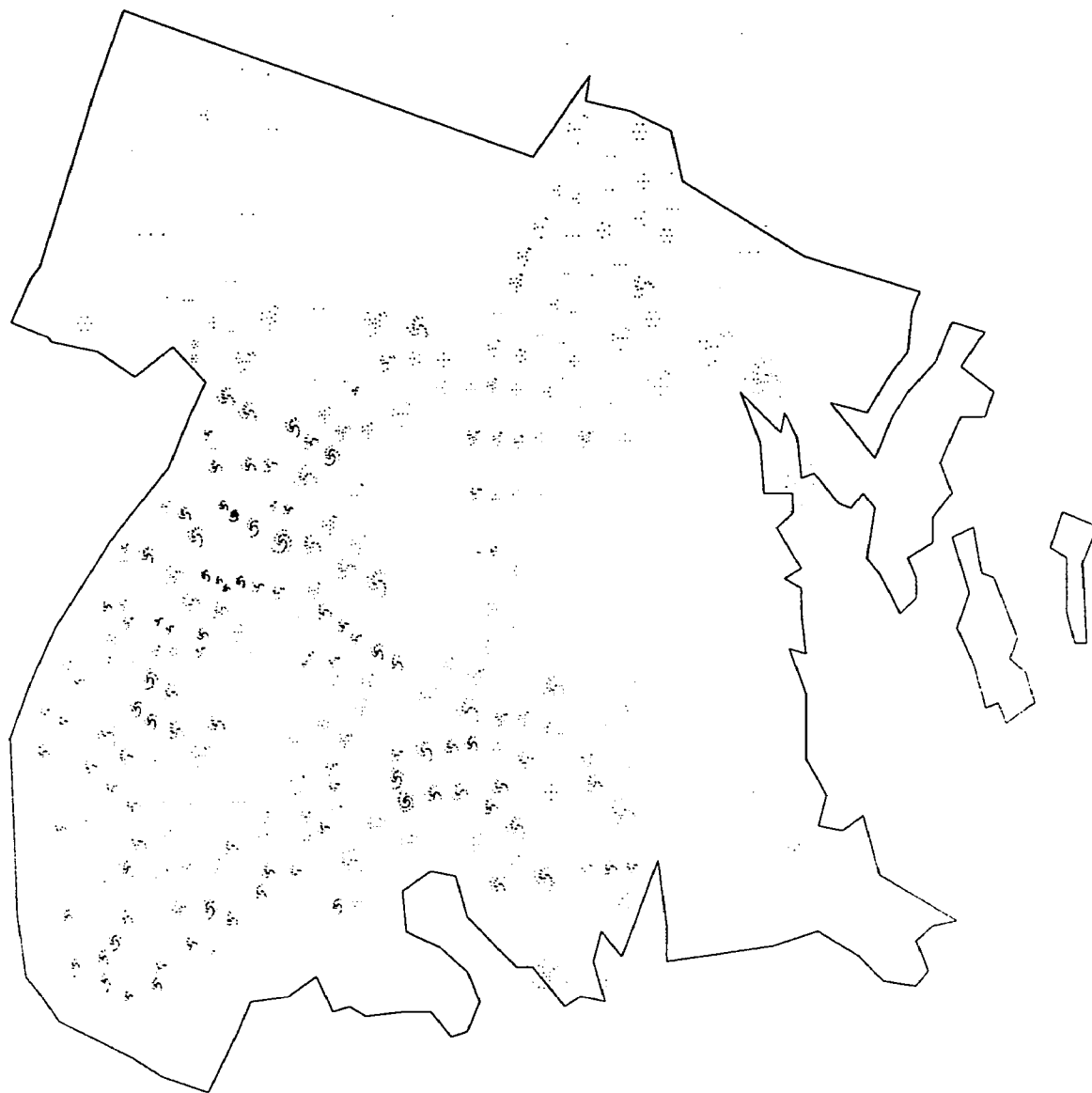


DATA SOURCE: CENSUS 1990. EACH POINT MEANS 80 PEOPLE

Figure 5.2.5

MAPPED BY O. HJAJIG

DISTRIBUTION MAP OF POPULATION IN BRONX COUNTY 1990
HISPANICS IN CENSUS TRACTS



DATA SOURCE: CENSUS 1990, EACH POINT MEANS 80 PEOPLE

Figure 5.2.6

MAPPED BY O HUANG

**DISTRIBUTION MAP OF POPULATION IN BRONX COUNTY
FOREIGN-BORN POPULATION INCREASE (1980-1990) IN CENSUS TRACTS**

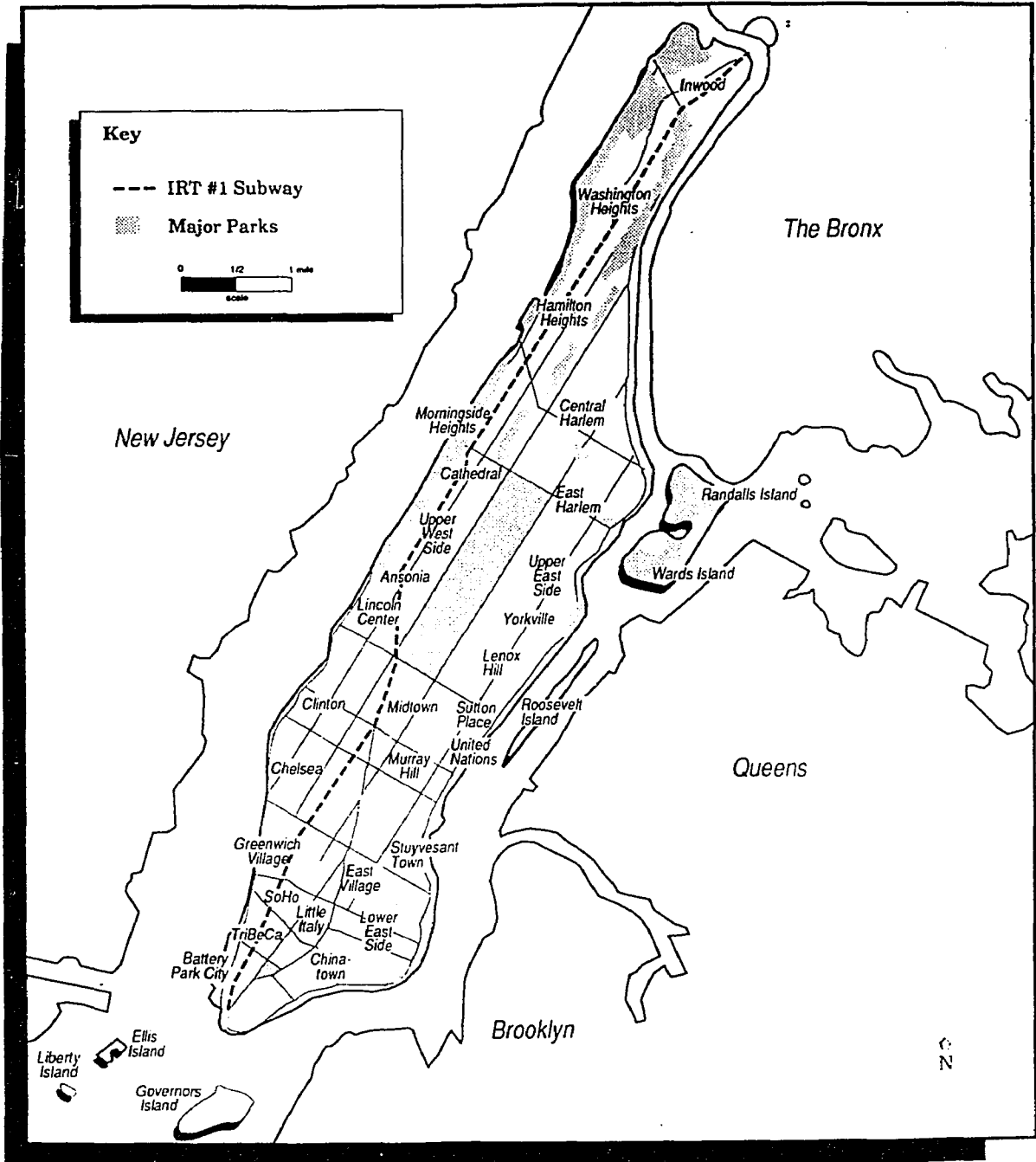


DATA SOURCE: 1980 AND 1990 CENSUS. EACH POINT MEANS 40 PEOPLE

Figure 5.2.7

MAPPED BY O HUANG

Manhattan



SOCIAL CLASS ECOLOGY -- MANHATTAN 1970
SOCIAL CLASS BY CENSUS TRACTS

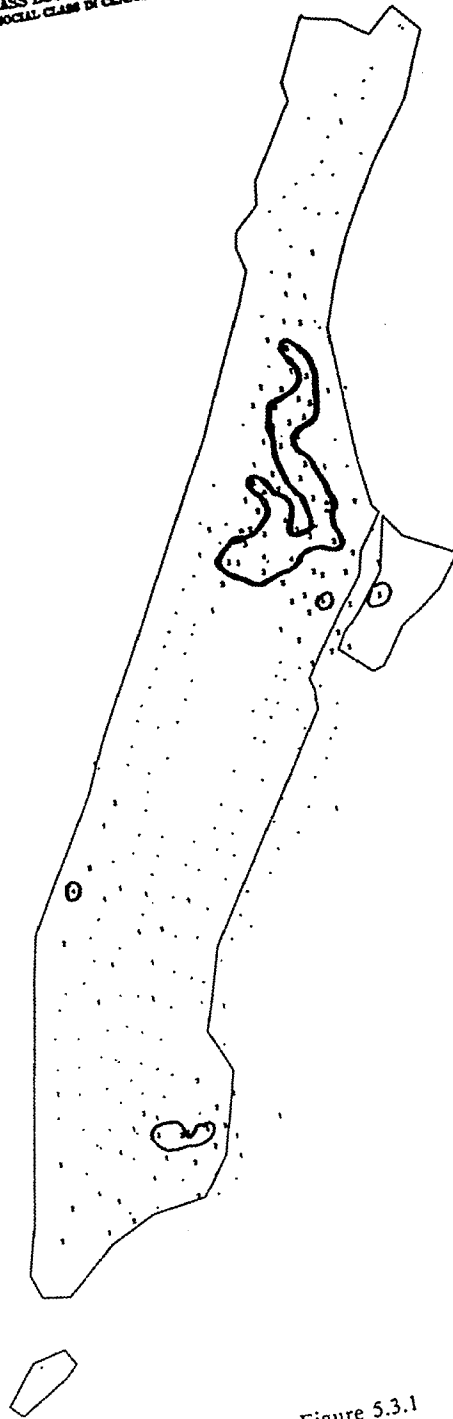
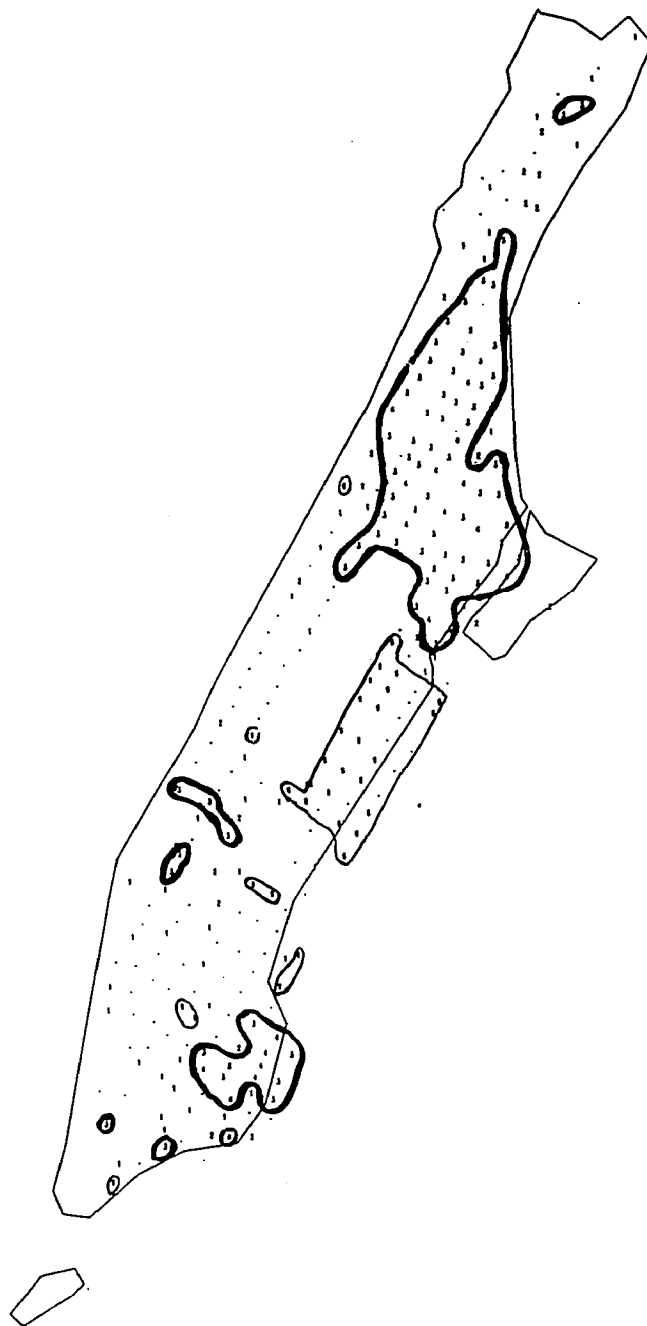


Figure 5.3.1

DATA SOURCE: CENSUS 1970 FOST

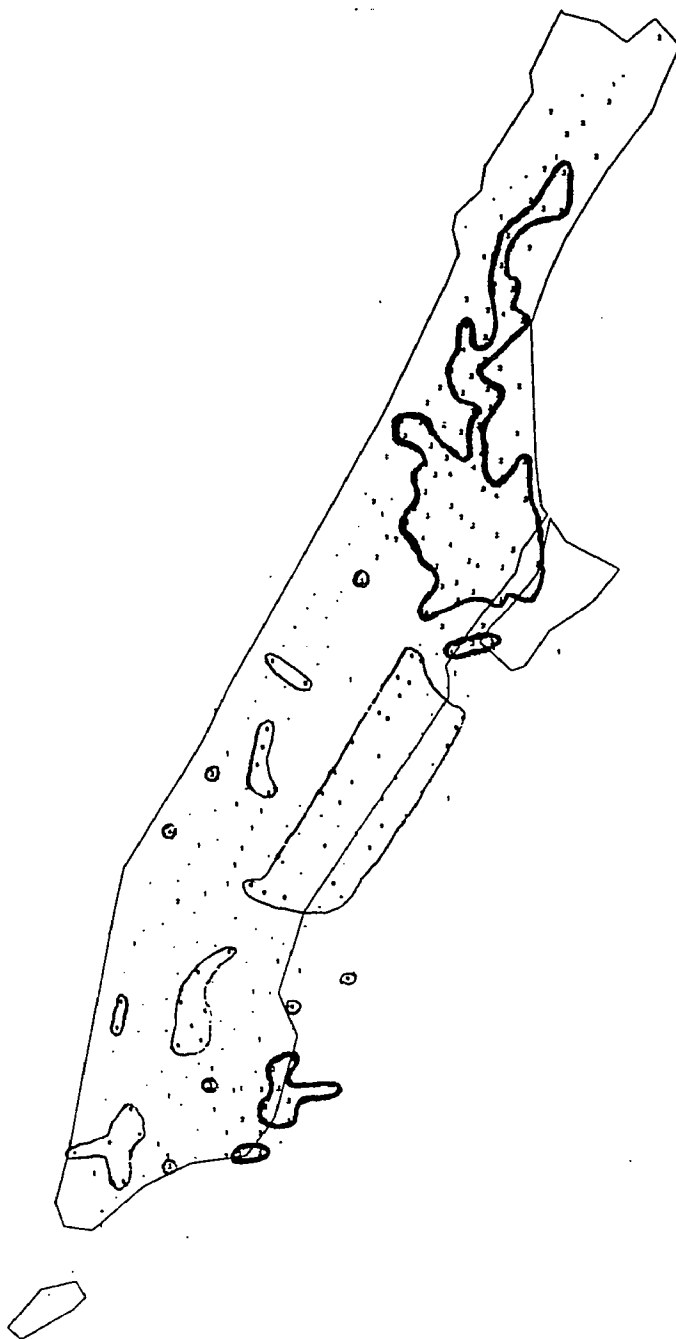
SOCIAL CLASS ECOLOGY -- MANHATTAN 1980
SOCIAL CLASS IN CENSUS TRACTS



DATA SOURCE: CENSUS 1980 STF3

Figure 5.3.2

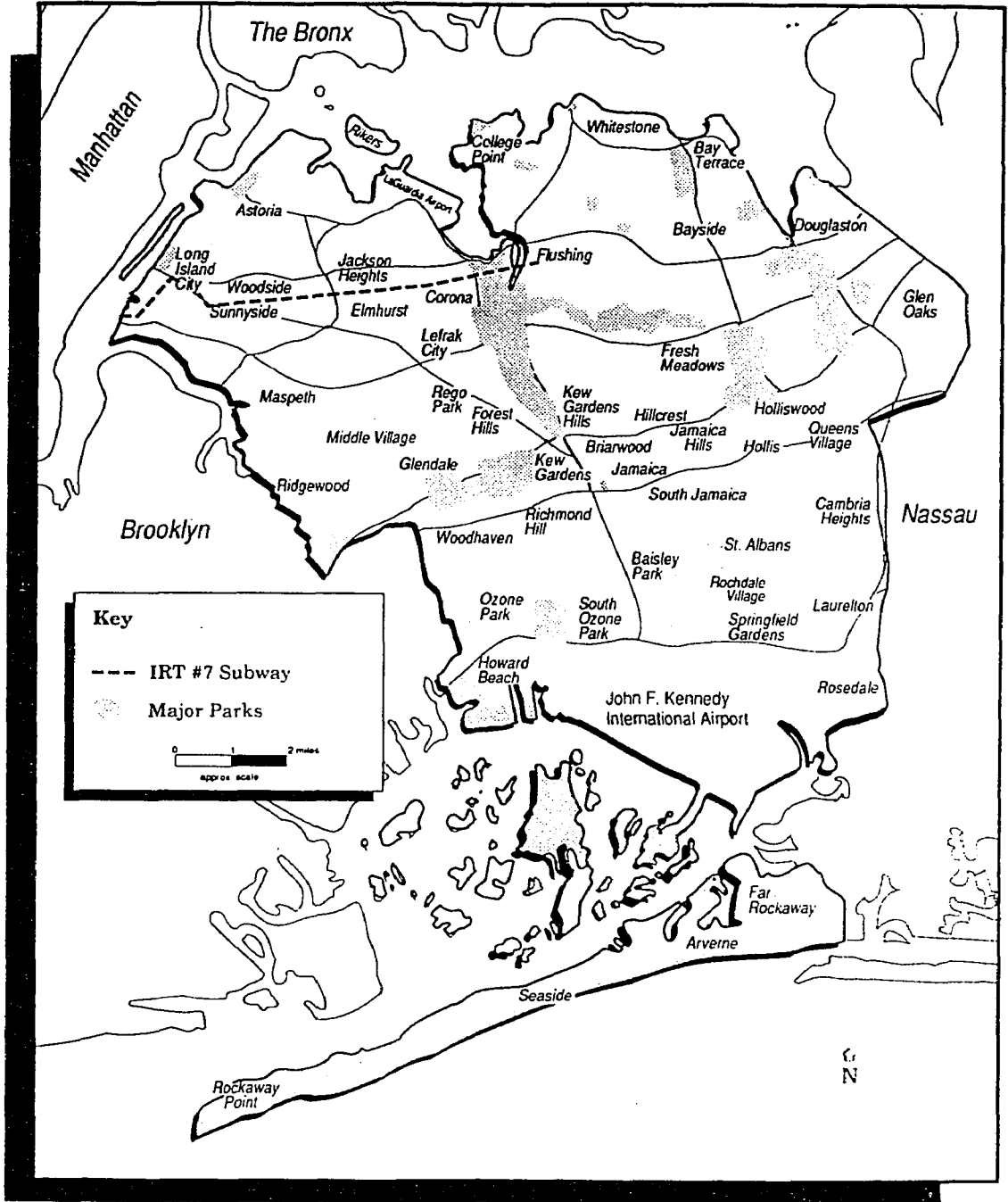
SOCIAL CLASS ECOLOGY -- MANHATTAN 1990
SOCIAL CLASS IN CENSUS TRACTS



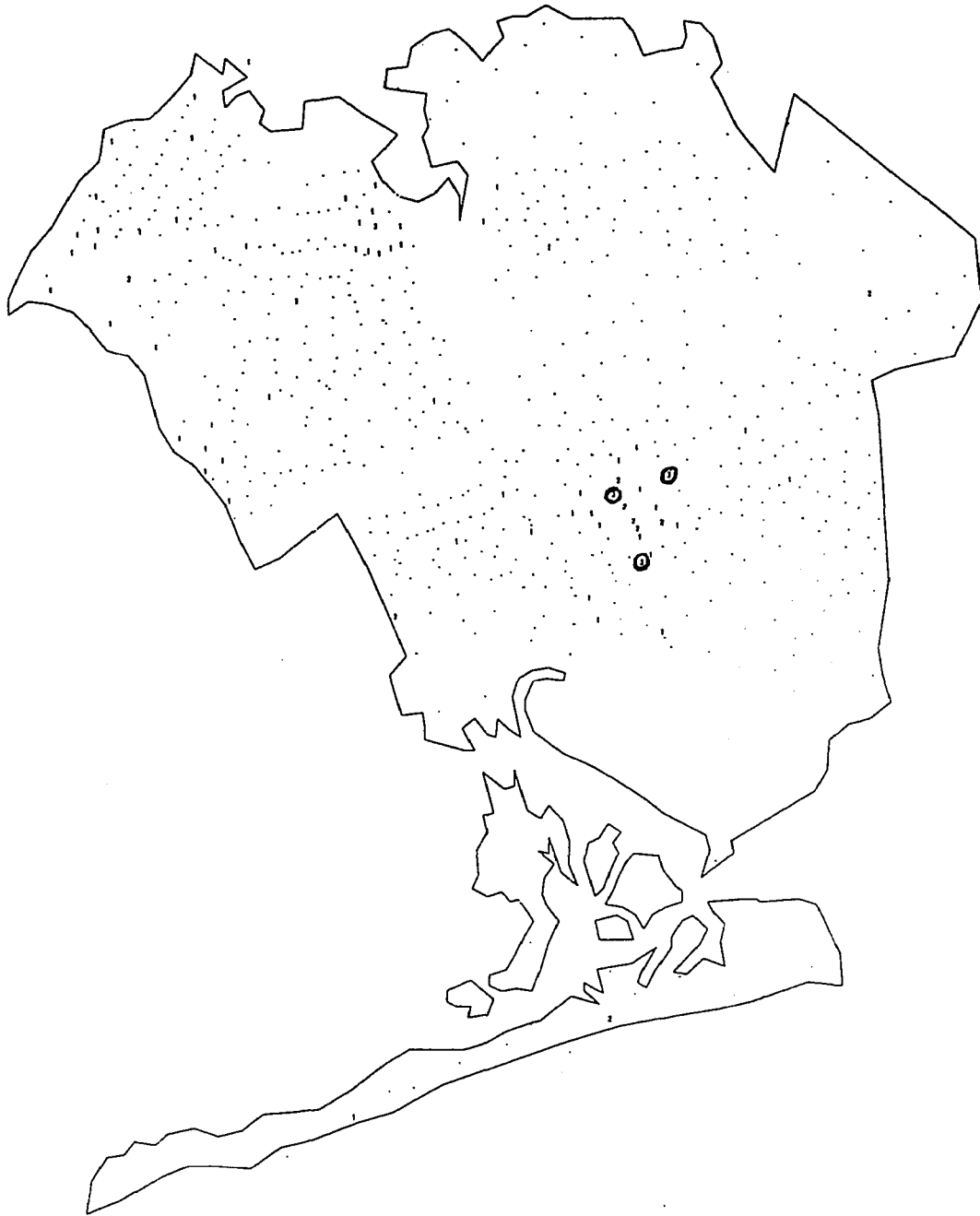
DATA SOURCE: CENSUS 1990 STF3

Figure 5.3.3

Queens



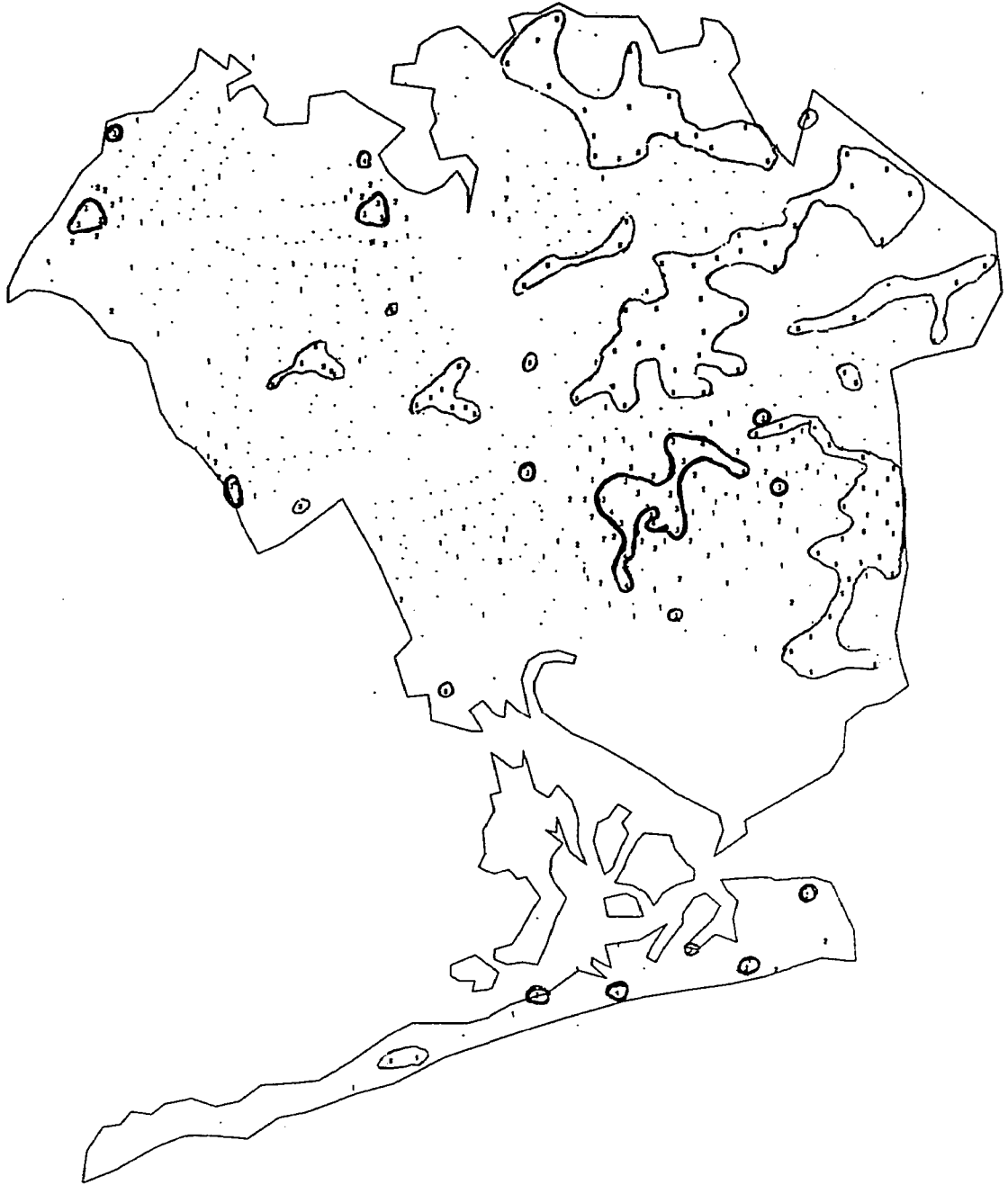
SOCIAL CLASS ECOLOGY -- QUEENS 1970
SOCIAL CLASS IN CENSUS TRACTS



DATA SOURCE: CENSUS 1970 FCST

Figure 5.4.1

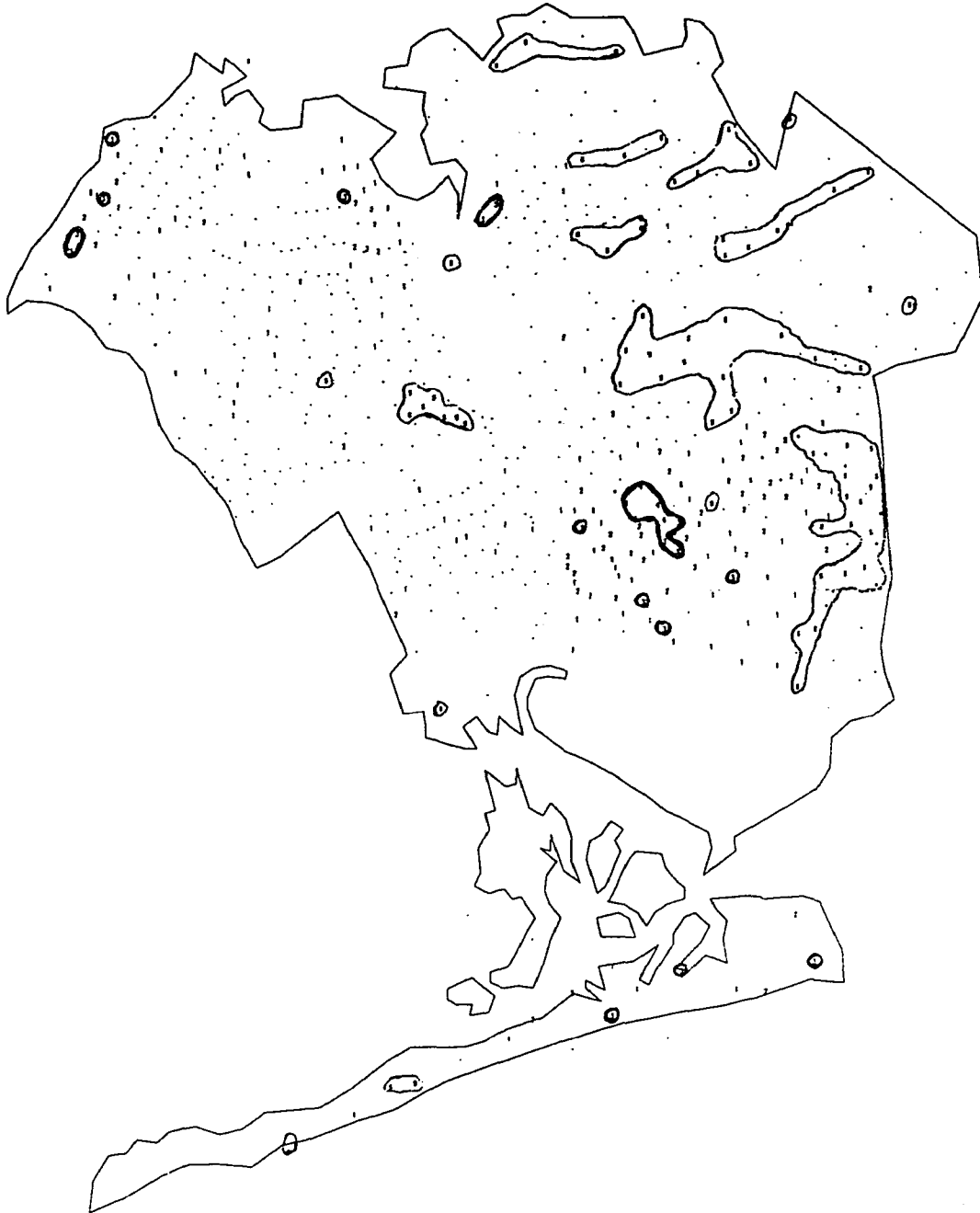
SOCIAL CLASS ECOLOGY -- QUEENS 1980
SOCIAL CLASS IN CENSUS TRACTS



DATA SOURCE: CENSUS 1980 STF3

Figure 5.4.2

SOCIAL CLASS ECOLOGY -- QUEENS 1990
SOCIAL CLASS IN CENSUS TRACTS



DATA SOURCE: CENSUS 1990 STF3

Figure 5.4.3

**DISTRIBUTION MAP OF POPULATION IN QUEENS COUNTY 1990
NON-HISPANIC WHITES IN CENSUS TRACTS**



DATA SOURCE CENSUS 1990, EACH POINT MEANS 80 PEOPLE

Figure 5.4.4

MAPPED BY G. HUANG

**DISTRIBUTION MAP OF POPULATION IN QUEENS COUNTY 1990
NON-HISPANIC BLACKS IN CENSUS TRACTS**



DATA SOURCE: CENSUS 1990, EACH POINT MEANS 80 PEOPLE

Figure 5.4.5

MAPPED BY Q. HUANG

**DISTRIBUTION MAP OF POPULATION IN QUEENS COUNTY 1990
HISPANICS IN CENSUS TRACTS**



DATA SOURCE: CENSUS 1990. EACH POINT MEANS 80 PEOPLE

Figure 5.4.6

MAPPED BY C. HUANG

**DISTRIBUTION MAP OF POPULATION IN QUEENS COUNTY
FOREIGN-BORN POPULATION INCREASE (1980-1990) IN CENSUS TRACTS**



DATA SOURCE 1980 AND 1990 CENSUS. EACH POINT MEANS 40 PEOPLE

Figure 5.4.7

MAPPLD BY: C HUANG

Chapter VI

THE CAUSES OF THE UNDERCLASS

The studies cited in Chapter II illustrate the disagreement about the cause of the emergence, presence and growth of the underclass in the inner city. In this chapter I will examine these theories by operationalizing selected variables in census data. I will treat selected socioeconomic variables as major independent variables, and underclass level (underclass index in regression models) as a dependent variable.

First, I will use a tabular analysis. One of the analyses is comparing the difference between aggregative average in the city and in underclass tracts (level 4) at one point in time. In other analysis I trace census tracts that changed from levels 0,1, and 2 to levels 3 and 4 during the census decades. I will determine how these factors and changes affect the presence and growth of underclass behaviors in these neighborhoods.

Second, the poverty rate has been a major variable that explains the growth of the underclass in neighborhoods in terms of the "concentration effects" theory and results of many empirical studies. By using the bivariate method and the data concerning the black population, I will demonstrate what

kind of relationship exist between underclass behavior and poverty rate. Is it linear, upward curve linear, downward curve linear, or a threshold?

Third, by using a multivariate method, I have designed cross-sectional and longitudinal ecological models to predict underclass presence across the city, and its growth over time.

Our analysis of underclass presence postulates that underclass presence and growth depend on the following socioeconomic conditions in a neighborhood.

(1) Observers have agreed that racial composition is an important factor affecting underclass presence in the neighborhood. The variables may affect minority group members differently than non-minorities, because of discrimination in the labor market, segregation in the housing and marriage markets, cultural differences, etc. Blacks and Hispanics are more likely to be involved in underclass behaviors and live in underclass neighborhoods. This was shown in the last chapter. The question I am asking is to what extent? How about Asians? Therefore, we stratify the sample into several racial groups to test the hypothesis that the effects of the set of variables on underclass presence and growth vary by racial or ethnic concentration.

(2) Observers have strenuously debated whether the behavioral components of our measure of underclass presence and growth cause poverty or whether poverty causes these behaviors. To the extent that these behaviors are simply an

adaptation or response to a lack of income and opportunity, we should expect greater presence and growth of the underclass in those neighborhoods with the highest poverty rates, other things being equal. On the other hand, in longitudinal analysis, to the extent to which the behaviors themselves are "contagious," because of social norms and independent of economic conditions, we should expect greater growth of the underclass in those tracts. As long as there is sufficient independent variation in initial poverty rates and index scores across neighborhoods, we should be able to sort out the relative importance of the two competing hypotheses.

(3) The foreign-born population consists mostly of new immigration who arrived with limited education and financial resources and are looking for economic opportunities in the United States. They are spatially concentrated in inner-city enclaves. Does the concentration of foreign-born population affect underclass behaviors in New York City neighborhoods? If it does, to what extent? If not, is it of significant? The regression model will answer these questions.

(4) Opportunity in the labor market is an important factor affecting underclass behaviors. We hypothesize that few men in the labor force or men only sporadically attached to the labor force results in a lessening of potential marriage partners and makes it more likely that female headed and welfare dependent families will presence and increase. We operationalize Wilson's "male marriageable pool index"—a

measure of the ratio of employed males to women of the same age—as a independent variable.

(5) Several occupational variables, such as manufacturing workers and service workers, are important, because of the effect of deindustrilization on the economic structure in the city. These variables will test whether deindustrilization, "manufacturing flight," and an increasing percentage of service workers, have affected underclass presence and growth.

(6) Family income variables have been selected. Incomes have been divided into four categories, from low to high. The percentage of middle class families selected to be included in the regression models is one of those factors of neighborhood effect. The higher the percentage of the middle class, the less the isolation from main stream society in the neighborhood, and the less underclass presence and growth, all the other factors controlled (even the poverty rate). The middle class provides a "social buffer" and "role model" for neighborhood in inner-city. In the longitudinal model this variable will test the hypothesis of the effect of "middle class flight."

(7) The age structure has been seen as one of the factors in the underclass. Some observers believe that underclass behaviors more are likely to occur among people in the younger age group. The flow of immigrants affects the average age of an ethnic group. Blacks and Hispanics are younger than whites on the average, and tend to have higher unemployment and crime

rates. They are also associated with out-of-wedlock births, female-headed homes, and welfare dependency (Wilson 1987). Thus, the higher the percentage of young people, the higher the presence of underclass in an area. Thus the percentage of young people (age 14 to 25) has been selected to be included in the analysis.

(8) Ecological variables—distance from the established underclass neighborhood (the tract with underclass level 4) and established black or Hispanic neighborhoods (blacks or Hispanics greater 50 percent of the population)—have been included in the regression models. This is an indicator of "proximity," according to Robert Park's "theory of social distance." The closer a neighborhood from existing underclass tracts, from majority black or Hispanic tracts, the higher its index of underclass behavior.

(9) The proportion of college educated has been selected as an important socioeconomic factor. Young people who live in underclass areas are more likely to drop out of high school and less likely to complete a college education.

In the next sections I will report the results by a tabular analysis and then by multi-variate regression analysis.

1. Tabular Analysis of the Causes of the Underclass

Table 6.1 presents the selected socioeconomic characteristics of the city and underclass tracts (level 4) for 1970, 1980 and 1990.

In the table the first three columns present the proportion of city average, the second three present the proportion of underclass tracts average and the third three present the ratio of the underclass tracts average to the city average. There were a 1.2 percent (1970), 6 percent (1980) and 4.2 percent (1990) of the population living in underclass tracts in the city (Table 4.6).

Racially, the ratio of non-Hispanic whites was 20 percent in 1970, 17 percent in 1980 and only 10 percent of the city average. The ratio of non-Hispanic Asians and others was 47 percent in 1970, 50 percent in 1980 and 24 percent in 1990 of the city average. The ratio of non-Hispanic blacks was 289 percent (1970), 166 percent (1980), and 196 percent (1990) of the city average. The ratio of Hispanics was about twice (194 percent) in 1970, more than twice (249 percent) in 1980 and 183 percent in 1990 that of the city average. Noteworthy were the greater proportions of Puerto Ricans in underclass tracts, the ratio was more than twice (264 percent and 249 percent) in 1970 and 1980, and more than three times (319 percent) in 1990 that of the city average. This indicates that a concentration of Puerto Ricans is more likely to affect underclass presence than concentrations of other groups.

For income variables, the proportion of lowest income groups in underclass tracts were more than twice that of their proportion in the city as a whole for all three censuses, and the proportion of highest income groups in underclass tracts was about 20 percent for 1970 and 1980, 27 percent in 1990 of that of the city average.

For occupation variables, the table shows that the blue collar, service and operative workers in underclass tracts were more than 1.5 times as common as the city average, and the white collar, managerial, administrative, professional and technical workers in underclass tracts all were less than 50 percent of the city average for all three censuses.

For education variable, adults completing a college education were 17 percent in 1970, 25 percent in 1980 and 27 percent in 1990 of the city average, while adults with less than high school education were about 1.5 times higher than the city average for these census decades.

Labor force participation rates were about 70 percent of the city average, and male labor force participation rates were about 80 percent of the city average for all three censuses. The proportion of young people (age 14 to 25) was higher than the city average, 108 percent in 1970, 120 percent in 1980 and 122 percent in 1990. The proportions of foreign-born population was less than the city average, 32 percent in 1970, 67 percent in 1980 and 60 percent in 1990. Poverty rates were more than twice the city average. The

ratio of underclass tract average to the city average was 2.78 in 1970, 2.30 in 1980 and 2.23 in 1990.

I will now discuss a longitudinal analysis of the causes of the underclass.

I will follow census tracts that changed from levels 0,1, and 2 to levels 3 and 4 during these census decades. These tracts were located on the right hand side of the left down to right diagonal in Tables 5.1 and 5.2. These neighborhoods deteriorated during the census decades. I gathered these tracts collectively, adding up the changes in the individual neighborhoods and obtained a measure of aggregate change for these tracts. To compare changes in socioeconomic characteristics I use the measurements "ratio" and "change in ratio." The "ratio" was made by dividing aggregated percentage in targeted tracts by the city average, which is the same measure as used in the cross sectional analysis and is used to determined relative differences in the same census year. The "change in ratio" is obtained by subtracting the "ratio" from that of the previous year, determined the absolute change. I will describe how these changes in the socioeconomic characteristics affect the increase in the underclass level in these tracts.

First I traced census tracts that changed from levels 0 to 2 in 1970 to levels 3 or 4 in 1980. Among 336 of these tracts in the city, that account for 16 percent of the sample,

98 tracts were in the Bronx, 141 in Brooklyn, 33 in Queens, 62 in Manhattan and only 2 in Staten Island.

Table 6.2 summarizes changes in the demographic composition of these tracts. First, the population of non-Hispanic whites dropped by 339,936 (68 percent) in these neighborhoods. Non-Hispanic blacks dropped by 1 percent. The population increase came from Hispanics (an increase of 13,756) and Asians (an increase of 10,409). After balancing outgo and influx, the population in these tracts was reduced by 322,432 (19 percent), compared to a 10 percent loss in the city as a whole in this period. In 1970, there were 30 percent non-Hispanic whites, 37 percent non-Hispanic blacks, 32 percent Hispanics (23 percent Puerto Ricans) and 1 percent Asians in these tracts. This indicates that these neighborhoods were racially diversified in 1970. The dynamic population shift caused a change in racial composition. Ten years later, the share of the minority (black and Hispanics) had increased to 86 percent (46 percent non-Hispanic blacks and 40 percent Hispanics) in 1980 from 68 percent in 1970 due to substantial "white flight." Puerto Ricans increased to 29 percent in 1980 from 23 percent in 1970. The proportion of Puerto Ricans was more than twice (2.28 in 1970 and 2.43 in 1980) the city average, with an increase of ratio change of 0.15. This indicates that an increasing minority concentration, associated with an increasing underclass level in these tracts, caused the "white flight" and these neighborhoods were worse off.

Now we look at changes in family income distribution. In 1970, 72 percent of families were in the categories of the two lower income groups (less than \$17.1k and \$17.1k to \$34.2k), compared to 52 percent in the city; 9.5 percent in the highest income group (more than \$51.3k), 18 percent in the second highest (\$34.2k to \$51.3k). This indicates that these neighborhoods were composed of lower and working class people in 1970. In the 1970s the lowest income group increased by 31 percent and all other groups decreased in size. Fifty-four percent of families were in the lowest income groups in 1980, the ratio to city average was 1.83. The number of people living below the poverty line increased by 38 percent, and the poverty rate increased to 39 percent in 1980 from 23 percent in 1970. This indicates that the position of the neighborhoods deteriorated with regard to income and poverty.

The ratio of labor force participation rate to the city average was 0.92 in 1970 and dropped to 0.84 in 1980, and the ratio of male labor force participation rate to the city average was 0.95 in 1970 and dropped to 0.87 in 1980. This indicate that the labor force participation rate is a factor that causes an increase in the underclass level of the census tracts.

In these neighborhoods there were a increasing foreign-born population, but the proportion was still lower then that of the city average (70 percent for both 1970 and 1980).

As for occupation variables, we note that there were 12 percent managerial, administration, professional and technical workers in these neighborhoods, about 50 percent of the city average. The ratio decreased during the 1970s, and the change in ratio decreased by about 0.1 percent in this period due to "middle class flight." At the same time, operative workers working in the manufacture industry dropped markedly (43 percent), but the ratio to the city average increased to 1.76 in 1980 from 1.51 in 1970. This may reflect that "manufacture flight" affected these tracts less than the city as a whole. The share of service workers increased to 22 percent in 1980 from 19 percent in 1970 with a change in ratio of 0.09 during this period.

The age 14 to 24 population was higher than the city average, and the ratios were 1.07 in 1970 and 1.22 in 1980. This indicates that the higher proportion of this group was a factor that affected underclass behaviors.

The college educated population was much less than the city average, and the ratios were 0.36 in 1970 and 0.32 in 1980 with a negative change in ratio of -0.03 in this period; the percentage of people with less than a high school education was much higher than the city average, with ratios of 1.24 in 1970 and 1.46 in 1980. These figures reflect a relatively lower social economic status in terms of education.

Now let's trace the change in demographic composition of those census tracts that changed from levels 0,1 or 2 in 1980

to 3 or 4 in 1990. There were 63 such tracts, which accounted for 3 percent of the sample.

Table 6.3 reports the results. Comparing this table (1980-1990) to table 6.2 (1970 to 1980), we note that they are similar in the following aspects:

(1) These tracts were racially diversified before changing into higher underclass levels in 1990. There were 24 percent non-hispanic whites, 36 percent of non-Hispanic blacks and 38 percent Hispanics in 1980. The minority (non-Hispanic blacks and Hispanics) increased to 81 percent in 1990 from 74 percent in 1980 because of more than one-third (33 percent) white flight.

(2) Lower income, working class and lower middle class families were concentrated in these neighborhoods. More than 70 percent of the families were in the two lower income categories, a much higher percentage than the city average. Ten years later, the ratio of the low income family group to the city average had increased, and ratio of higher income groups decreased. Here we see that the change in the ratio for the lowest income groups increased 0.26 during the 1980s. The poverty rate was 27 percent in 1980 and went up to 31 percent in 1990. This indicates that socioeconomic status was lower and declined further during this census decade in these neighborhoods.

(3) With regard to occupation status, this table shows that the proportion of people working in managerial, admin-

istrative, professional and technical categories was about 50 percent of city average for 1980 and 1990. The percentage of service workers, one of the lowest income occupations, was much higher than the city average, 1.47 in 1980 and 1.43 in 1990. Meanwhile the numbers working in manufacturing dropped by a substantial 37 percent. This indicates that social economic status was lower with regard to occupation and was continually hit by change in the economic structure of the city.

(4) These tables also show that total labor force participation and male labor force participation rates were lower than the city average. Both ratios of change were negative, which indicates a declined position in absolute change.

(5) The percentage of people who completed college education was much lower than the city average (39 percent in 1980 and 40 percent in 1990), and the percentage of people with less than a high school education was higher than the city average (1.33 in 1980 and 1.47 in 1990), although the absolute number decreased during the 1980s. This reflects lower social economic status in terms of education for these neighborhoods.

(6) The percentage of the population in the 14 to 25 age group was little higher than that of the city average, but the ratio to the city average increased in both of census decades. The ratio in change increased by 0.03.

(7) Foreign-born population increased in these neighborhoods in both census decades. The proportion of foreign-born population were less than that of the city average in 1970 and about the same as the city average in 1980 and 1990. The proportion was much less than the city average in underclass tracts with a level 4 in all three censuses (see above). This indicates that these new immigrants were less likely to live in these deteriorated neighborhoods on the one hand, but, on the other hand the cheaper and more available housing in these neighborhoods attracted some of the new immigrants. This may have contributed to an increased poverty rate in these tracts. I have observed that a large influx of new immigrants has made many neighborhoods in the city better off, especially those neighborhoods which had experienced a rapid growth in new immigrants in the 1980s. In a later analysis shows that this pattern has caused a turn-around in underclass areas. The basic pattern was one of shrinkage of concentrated underclass areas due to the increase in the proportion of new immigrants in many neighborhoods from 1980 to 1990.

In summary, Tables 6.1, 6.2 and 6.3 present a statistical portrait of the targeted tracts. It is clear that the higher concentration of minorities with lower socioeconomic status in these tracts and changes in selected socioeconomic characteristics did have a effect on the presence of underclass behaviors in the city from 1970 to 1990.

The increase in underclass level was associated with a decline in the neighborhoods between the decades. However, a noteworthy difference was that the dominant pattern was an "emptying-out decline" in the 1970s and an "overcrowding decline" in the 1980s. Further research shows that there were 263 "emptying-out decline" tracts, accounting for 78 percent of this sample (336 tracts) (see Table 5.1) between 1970 and 1980, and only 25 emptying-out decline tracts, accounting for 31 percent of this sample (68 tracts) in the table 5.2 between 1980 and 1990.

Tabular analysis (bi-variate analysis) has demonstrated the validity of a single causal mechanism as an explanation for the presence of underclass behavior. Wilson also compares time plots of the black male marriageability index and rates of out-of-wedlock births. In reality the relationship between individual social behavior and socioeconomic characteristics of neighborhoods is complicated, and there is no single explanation for the deterioration of the social conditions of the urban underclass; all the factors interact with each other. We need a multi-variable method to sort out these factors and perform a more comprehensive analysis.

Before presenting the results of multi-variable regressions I examine one of most important factor that affect presence of the underclass in neighborhoods—"poverty concentration."

2. Poverty concentration and linear issues

In this section, I will compare two OLS regressions: (1) the underclass index against the poverty rate and the poverty rate squared -- to test for a curvilinear relationship, and (2) the underclass index that had been regressed on the poverty rate and a dummy variable (1 represents a more than 40 percent poverty rate in census tracts, 0 otherwise). I will repeat these analyses for each of the underclass indicators separately: percent of female-headed households, welfare households and men not in the labor force households.

Table 6.4 shows that the poverty rate is a powerful predictor of the underclass index and its components in all ten equations. However, all dummy terms (poverty rate over 40 percent) and quadratic terms are either not significant, or significant with a negative coefficient, except for one equation, percentage of families on welfare in 1980, which shows positive significance in quadratic terms.

These indicate that there is a strong linear relationship between underclass behavior and the poverty rate. They do not show an upward curve linear or a threshold relationship, what Massey and his colleagues described as a "concentration effect." The quadratic term has a negative sign in most of the equations, and negative significant quadratic and dummy terms indicate that underclass behavior decreases when the poverty rate increases. This result suggests that might be a

somewhat lower rate of underclass behaviors in the poorest city neighborhoods than they are in less-poor neighborhoods.

A re-analysis of Massey's own figures on underclass behaviors shows a similar result; that is, the rate of all underclass behaviors (major crime rate, families on welfare, female headed families and high school student scores below the 15th percentile) in proportion to the number of poverty families declined when the poverty rate increased (Table 6.5).

3. A Multi-Variable Method to Predict Underclass Presence and Growth

The Model

We define underclass as the incidence of deviant behaviors associated with residents of a neighborhood. We derive this index by adapting the spatial and behavioral definition of "underclass areas" developed by Ricketts and Sawhill. In accordance with this definition, I have created an underclass behavior index consisting of the sum of the census tract's standardized (z-score) values of the four Ricketts and Sawhill's indicators as a dependent variable. This yields a continuous measure of the coincidence of Ricketts and Sawhill's underclass behaviors in census tracts. This index can be regressed on several predictors, each of which operationalizes the causal mechanisms that leading scholars have hypothesized.

Because some researchers use aggregate or tract-level measures of behavior based on all persons in a tract, regardless of race (Ricketts, Sawhill, and Mincy 1988), yet in some of the literature, the inner-city underclass is implicitly considered to be black, we have designed two kinds of model. One is that all the variables in the model are the total population in census tract, regardless of race (race inclusive model). This model will predict the presence and growth of underclass behavior among racial groups. The other is that all the variables in the models are black or Hispanic (race exclusive model). This model will predict the presence and

growth of underclass behavior within racial groups. It means that the effect of the racial factor has been controlled.

For each model I developed two analyses. One analysis makes use of cross-sectional models, in which all variables are at one point in time, e.g., 1970, 1980, or 1990. The other analysis is based on longitudinal models, in which dependent variables and independent variables are the changed score at different points in time. The independent variables consist of change in percentage or percentage change of the predictors, and the dependent variable is the change in the underclass index between the census decades. This model will predict the change in the incidence of behaviors affected by changes in socioeconomic factors in the neighborhoods.

Although theory and previous empirical work suggest that many factors are potentially important, we do not present a full specified structural model of all the possible causes of underclass presence and growth. The number of possible interactions and correlations among the variables suggest that, at best, our model is a reduced form test of various hypotheses. The next section describes the specification of the variables.

We initially analyzed all census tracts with the same boundaries over the decades within the five boroughs of New York City. However, we dropped tracts with a total population of less than 400 people, because the stability of estimates for very small tracts is suspect. In addition, the Census

Bureau protects, by a process called "suppression", the confidentiality of respondents by censoring data which might enable individuals to be identified. In the race exclusive models, we therefore dropped those census tracts from the sample in which the bureau had suppressed relevant variables for the black or the Hispanic population, or for which the black or Hispanic population had fewer than 300 persons.

In cross-sectional models the dependent variable, underclass index, is made of by adding up Ricketts and Sawhill's four indicators. Because the rate of high school drop-outs declined over the census decades I dropped this variable in the longitudinal model. Thus the sum of three indicators is better than the sum of the four indicators in reflecting internal and consistency reliability over census decades. The multi-variables regression results were reported as follows. The reported regressions usually include only statistically significant variables; some interesting but insignificant result are discussed in the text.

Multi-variable Regression Results

(a) Cross-sectional models.

Table 6.7 reports the results of OLS regressions of the underclass behavior index on several independent factors drawn from the earlier literature review, and operationalized by the variables described at the beginning of this chapter.

Separated models were run for the total population in 1970, 1980 and 1990, as well as for blacks and Hispanic in 1980.

The OLS regression results indicate that the models explained 89 percent of the variance in underclass index for 1970, 90 percent for 1980, and 88 percent for 1990, as well as 87 percent for blacks and 78 percent for Hispanics in 1980. The best predictor for the incidence of underclass behavior was, as expected, the poverty rate, which accounted for 56 percent of the explained variance in 1970, 58 percent (58 percent for blacks and 63 percent for Hispanics) in 1980 and 44 percent in 1990.

Wilson's contention that the presence or absence of middle class people (when controlling the poverty rate and all the other factors) affects the incidence of underclass behavior is largely born out by the models of 1970, 1980 (total population, blacks and Hispanics) and 1990. It is the second best predictor for 1980 (16 percent) and 1990 (25 percent).

The results show that the presence of foreign-born residents was an important factor in 1980 (total population, blacks and Hispanics) and 1990, but not in 1970. This explains the 20 percent variance in the underclass index of 1990 and the 10 percent variance in 1980. It is the second best predictor for blacks (20 percent) and Hispanics (13 percent) in 1980. All negative signs indicate that a higher percentage of foreign-born population in the tracts is

associated with a lower rate of underclass behaviors, while controlling for other factors. This further suggests that the large concentration of new immigrants in given neighborhoods in 1980 and 1990 was an important factor in neighborhood improvement.

Occupational status variables intended to capture aspects of deindustrialization seemed less effective in explaining variance in the underclass index. The proportion of people working as operatives proved not significant in most of the equations. However, the proportion employed in service occupations was positively and consistently related to the underclass index for all three census decades.

The proportion of young people (14 to 24) is a positive factor affecting the underclass index in most of the equations.

In the race inclusive model, the concentration of minority population (non-Hispanic blacks and Hispanics), shows a positive effect on the increase in the underclass index—the greater the proportion of blacks and Hispanics, the greater the incidence of underclass behavior. Only in 1970 did the presence of Asians have a significantly negative effect, that is, more Asians were associated with less underclass behavior.

Wilson's Marital Index—the ratio of males in the labor army force to the number of marriage-age women in the census tracts—had a (negative) significant effect in all three census decades; that is, the higher the Marital Index, the lower the

incidence of underclass behavior, while other factors remain constant.

The distance to established underclass tracts (level 4), and majority black or Hispanic neighborhoods has a significantly negative effect on underclass behavior, net of other factors. The closer these neighborhoods, the higher the index of underclass behavior.

(b) Longitudinal models

The results of longitudinal models, presented in Table 6.8, are consistent with the findings of the cross-sectional models.

The dependent variable is underclass index change, independent variables consist of changes in percentage between census decades (1970-1980 and 1980-1990) plus a distance variable (the distance to established underclass tracts in the previous year of the racial inclusive models).

Change in poverty rate is the best predictor of underclass index, which explains the 43 percent variation in the change in underclass index in the 1970s, 38 percent in the 1980s in the racial inclusive model, and 54 percent in 1980s in the black model.

All three models indicate that changes in the middle class had significant effect on the changes in the underclass index. This result support the Wilson thesis that "middle class flight" is an important factor affecting the presence of

an underclass in the city's neighborhoods, while controlling the changes in poverty rate and other factors.

The increase in the proportion of foreign-born residents was associated with a decrease in underclass behaviors, again, all else being equal.

The deindustrialization thesis is noticeable, we found that the change in the number operative workers was not of significance. Increases in the percentage of service workers were related to an increased underclass index.

Change in the Marital Index was a strong factor which affected on change in the underclass index in all three equations. Here the Marital Index is associated with males who are not in the labor force in the neighborhoods. These facts support Waldinger's argument. That is, instead of "manufacture flight" as an important factor affecting the increase in underclass growth in the city, the increasing proportion of males who were out of labor force and the higher proportion of service workers in the neighborhoods were significant factors causing a growth in underclass behavior in the city's neighborhoods.

The 1970-1980 and 1980-1990 racial inclusive models are similar in racial variables. Change in the percentage of non-Hispanic blacks and Hispanics predicted change in underclass behavior over time, in the expected direction. The greater the proportion of blacks or Hispanics, the greater the increase in underclass index over the decade.

The ecological variable, the distance from established underclass tracts of the previous decade, is a significant factor in the race inclusive model. The closer to underclass tracts, the more likely an increase in underclass behavior in the later decade. This indicates that "social distance" is an important factor.

Table 6.1 Demographic Composition of Underclass Tracts (Underclass Level = 4)
In 1970, 1980 and 1990 in New York City

VARIABLE	New York City (%)			Underclass Tracts (%)			Ratio		
	1970	1980	1990	1970	1980	1990	1970	1980	1990
NSWHIT	63.1	52.4	43.2	12.7	8.7	4.4	0.20	0.17	0.10
NSBLK	19.3	24.0	25.2	55.6	39.7	49.4	2.89	1.66	1.96
HISPAN	16.2	19.9	24.4	31.5	49.6	44.5	1.94	2.49	1.83
NSASNO	1.4	3.8	7.2	0.6	1.9	1.7	0.47	0.50	0.24
PTRICN	10.3	12.1	11.8	27.2	38.5	29.2	2.64	3.19	2.49
Family income:									
Less than \$17.1k	20.8	29.4	24.9	52.3	59.6	53.2	2.51	2.02	2.13
\$17.1k-34.2k	31.1	28.9	24.9	33.0	26.4	26.0	1.06	0.91	1.04
\$34.3k-51.3k	24.5	20.9	21.3	10.3	9.8	13.0	0.42	0.47	0.61
Over 51.3k	23.6	20.8	28.9	4.5	4.2	7.9	0.19	0.20	0.27
Labor force	56.7	57.2	61.7	41.0	45.4	48.9	0.72	0.79	0.79
Male labor for.	74.1	69.5	71.0	56.7	58.2	59.2	0.77	0.84	0.83
MANAD	7.8	11.4	13.5	3.2	4.6	6.7	0.41	0.40	0.50
PROTEC	15.7	16.9	20.1	6.1	7.3	10.5	0.39	0.43	0.52
OPET	11.0	7.7	4.9	19.1	15.6	7.4	1.74	2.03	1.52
OPTR	3.9	3.4	3.7	6.3	4.8	5.2	1.59	1.38	1.42
SERV	13.5	14.6	16.0	24.7	23.0	26.3	1.83	1.57	1.64
FBORN	15.4	23.6	28.4	5.0	15.9	17.0	0.32	0.67	0.60
PVTY	14.8	19.7	18.9	41.0	45.2	42.2	2.78	2.30	2.23
YOUTH	17.4	18.1	15.2	18.8	21.6	18.5	1.08	1.20	1.22
ED16A	10.6	17.3	23.0	1.8	4.4	6.3	0.17	0.25	0.27
EDHLES	53.1	39.8	31.7	76.5	63.4	54.5	1.44	1.59	1.72

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

Note: TOTPOP - Total population. NSWHIT - Non-Hispanic whites. NSBLK - Non-Hispanic blacks. HISPAN - Hispanics. NSASIAN - Non-Hispanic Asians. PTRICN - Puerto Ricans. TOTFAM - Total family. MANAD - Managers and administrators. PROTEC - Professionals and Technicians. OPET - Machine Operators. OPTR - Operators in transportation. SERV - Service worker. FBORN - Foreign-born. YOUTH - Persons at age 14-24 years old. ED16A - Person with college and graduate degree. EDHLES - Less than high school.

Table 6.2 Change in Demographic Composition in Tracts on Levels 0-2 in 1970 and Levels 3 or 4 in 1980 in New York City

	New York City						Tracts on levels 0-2 in 1970						Ratio		
	1970	1970	1980	1980	1970-80	1970-80	1970	1970	1980	1980	70-80	70-80	1970	1980	70-80
	N	%	N	%	N	%	N	%	N	%	N	%	%	%	%
TOTPOP	7,894,862	100.0	7,071,639	100.0	-823,223	-10.4	1676,301	100.0	1353,871	100.0	-322430	-19.2	1.00	1.00	0.00
NSWHITE	4,978,278	63.1	3,703,203	52.4	-1,275,075	-25.6	502,630	30.0	162,694	12.0	-339936	-67.6	0.48	0.23	-.25
NSBLK	1,520,026	19.3	1,694,505	24.0	174,479	11.5	625,959	37.3	619,926	45.8	-6,033	-1.0	1.94	1.91	-.03
HISPAN	1,278,593	16.2	1,406,389	19.9	127,796	10.0	531,695	31.7	545,451	40.3	13,756	2.6	1.96	2.03	0.07
NSASIAN	108,131	1.4	267,542	3.8	159,411	147.4	15,471	0.9	25,880	1.9	10,409	67.3	0.67	0.51	-.17
PTRICN	811,838	10.3	852,833	12.1	40,995	5.0	392,851	23.4	396,053	29.3	3,202	0.8	2.28	2.43	0.15
TOTFAM	2,058,889	100.0	1,770,966	100.0	-287,923	-14.0	416,233	100.0	327,488	100.0	-88,745	-21.3	1.00	1.00	0.00
Family incom:															
Less than \$17.1k	428,999	20.8	521,311	29.4	92,312	21.5	134,428	32.3	175,935	53.7	41,507	30.9	1.55	1.83	0.28
\$17.1k-34.2k	639,872	31.1	511,329	28.9	-128,543	-20.1	165,567	39.8	95,421	29.1	-70,146	-42.4	1.28	1.01	-.27
\$34.2k-51.3k	504,603	24.5	370,103	20.9	-134,500	-26.7	76,732	18.4	37,975	11.6	-38,757	-50.5	0.75	0.55	-.20
Over \$51.3k	485,415	23.6	368,223	20.8	-117,192	-24.1	39,506	9.5	18,157	5.5	-21,349	-54.0	0.40	0.27	-.14
Labor force	3,344,311	56.7	3,167,613	57.2	-176,698	-5.3	598,318	52.5	451,908	47.8	-146410	-24.5	0.92	0.84	-.09
Male labor for.	1,988,701	74.1	1,732,120	69.5	-256,581	-12.9	356,496	70.2	243,289	60.3	-113207	-31.8	0.95	0.87	-.08
MANAD	250,184	7.8	333,255	11.4	83,071	33.2	21,314	3.8	19,661	5.0	-1,653	-7.8	0.48	0.44	-.04
PROTEC	502,140	15.7	492,327	16.9	-9,813	-2.0	49,344	8.7	34,534	8.8	-14,810	-30.0	0.56	0.52	-.03
OPET	351,290	11.0	224,220	7.7	-127,070	-36.2	93,662	16.6	53,062	13.6	-40,600	-43.3	1.51	1.76	0.26
OPTR	125,861	3.9	100,581	3.4	-25,280	-20.1	29,805	5.3	17,410	4.4	-12,395	-41.6	1.34	1.29	-.05
SERV	431,419	13.5	426,350	14.6	-5,069	-1.2	109,780	19.4	87,348	22.3	-22,432	-20.4	1.44	1.53	0.09
FBORN	1,216,755	15.4	1,670,177	23.6	453,422	37.3	184,019	11.0	235,720	17.4	51,701	28.1	0.71	0.74	0.02
PVERTY	1,164,640	14.8	1,391,955	19.7	227,315	19.5	386,937	23.1	533,341	39.4	146,404	37.8	1.56	2.00	0.44
YOUTH	1,370,779	17.4	1,276,734	18.1	-94,045	-6.9	310,546	18.5	299,095	22.1	-11,451	-3.7	1.07	1.22	0.16
ED16A	506,492	10.6	776,535	17.3	270,043	53.3	33,802	3.8	39,298	5.6	5,496	16.3	0.36	0.32	-.03
EDHLES	2,534,777	53.1	1,786,608	39.8	-748,169	-29.5	589,265	65.9	411,243	58.3	-178022	-30.2	1.24	1.46	0.22

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

Note: TOTPOP - Total population. NSWHIT - Non-Hispanic whites. NSBLK - Non-Hispanic blacks. HISPAN - Hispanics. NSASIAN - Non-Hispanic Asians. PTRICN - Puerto Ricans. TOTFAM - Total family. MANAD - Managers and administrators. PROTEC - Professionals and Technicians. OPET - Machine Operators. OPTR - Operators in transportation. SERV - Service worker. FBORN - Foreign-born. YOUTH - Persons at age 14-24 years old. ED16A - Persons with college and graduate degree. EDHLES - Less than high school.

Table 6.3 Change in Demographic Composition of Tracts on Levels 0-2 in 1980 and Levels 3 or 4 in 1990 in New York City

	New York City						Tracts on levels 0-2 in 1980						Ratio		
	1980	1980	1990	1990	1980-90	1980-90	1980	1980	1990	1990	80-90	80-90	1980	1990	80-90
	N	%	N	%	N	%	N	%	N	%	N	%	%	%	%
TOTPOP	7,071,639	100.0	7,322,564	100.0	250,925	3.5	229,296	100.0	245,095	100.0	15,799	6.9	1.00	1.00	0.00
NSWHIT	3,703,203	52.4	3,163,125	43.2	-540,078	-14.6	54,203	23.6	36,380	14.8	-17,823	-32.9	0.45	0.34	-.11
NSBLK	1,694,505	24.0	1,847,049	25.2	152,544	9.0	81,780	35.7	89,221	36.4	7,441	9.1	1.49	1.44	-.05
HISPAN	1,406,389	19.9	1,783,511	24.4	377,122	26.8	86,999	37.9	108,857	44.4	21,858	25.1	1.91	1.82	-.08
NSASNO	267,542	3.8	528,879	7.2	261,337	97.7	6,386	2.8	10,637	4.3	4,251	66.6	0.74	0.60	-.14
PTRICN	852,833	12.1	861,122	11.8	8,289	1.0	53,219	23.2	52,103	21.3	-1,116	-2.1	1.92	1.81	-.12
TOTFAM	1,770,966	100.0	1,755,718	100.0	-15,248	-0.9	56,860	100.0	58,616	100.0	1,756	3.1	1.00	1.00	0.00
Family income:															
Less Than \$17.1k	521,311	29.4	437,500	24.9	-83,811	-16.1	23,211	40.8	24,007	41.0	796	3.4	1.39	1.64	0.26
\$17.1k-34.2k	511,329	28.9	437,184	24.9	-74,145	-14.5	19,653	34.6	18,112	30.9	-1,541	-7.8	1.20	1.24	0.04
\$34.2k-51.3k	370,103	20.9	374,372	21.3	4,269	1.2	9,146	16.1	9,741	16.6	595	6.5	0.77	0.78	0.01
Over \$51.3k	368,223	20.8	506,663	28.9	138,440	37.6	4,850	8.5	6,756	11.5	1,906	39.3	0.41	0.40	-.01
Labor force	3,167,613	57.2	3,586,428	61.7	418,815	13.2	88,685	52.8	98,837	54.5	10,152	11.4	0.92	0.88	-.04
Male labor for.	1,732,120	69.5	1,891,211	71.0	159,091	9.2	47,445	65.3	50,035	63.5	2,590	5.5	0.94	0.89	-.05
MANAD	333,255	11.4	440,090	13.5	106,835	32.1	4,988	6.2	6,421	7.6	1,433	28.7	0.55	0.56	0.01
PROTEC	492,327	16.9	656,286	20.1	163,959	33.3	7,637	9.6	10,790	12.7	3,153	41.3	0.57	0.63	0.07
OPET	224,220	7.7	158,981	4.9	-65,239	-29.1	10,376	13.0	6,538	7.7	-3,838	-37.0	1.69	1.58	-.11
OPTR	100,581	3.4	120,642	3.7	20,061	19.9	3,398	4.3	4,104	4.8	706	20.8	1.24	1.31	0.07
SERV	426,350	14.6	520,974	16.0	94,624	22.2	17,182	21.5	19,404	22.9	2,222	12.9	1.47	1.43	-.04
FBORN	1,670,177	23.6	2,082,931	28.4	412,754	24.7	55,905	24.4	70,272	28.7	14,367	25.7	1.03	1.01	-.02
PVTY	1,391,955	19.7	1,384,994	18.9	-6,961	-0.5	61,516	26.8	75,960	31.0	14,444	23.5	1.36	1.64	0.28
YOUTH	1,276,734	18.1	1,110,589	15.2	-166,145	-13.0	45,322	19.8	41,978	17.1	-3,344	-7.4	1.09	1.13	0.03
ED16A	776,535	17.3	1,122,328	23.0	345,793	44.5	8,891	6.8	13,594	9.3	4,703	52.9	0.39	0.40	0.01
EDHLES	1,786,608	39.8	1,547,147	31.7	-239,461	-13.4	69,488	52.9	68,269	46.5	-1,219	-1.8	1.33	1.47	0.14

Source: U.S. Census of Population, 1970 Fourth Count Summary Tapes (FCST), 1980 STF4 and 1990 STF3.

Note: TOTPOP - Total population. NSWHIT - Non-Hispanic whites. NSBLK - Non-Hispanic blacks. HISPAN - Hispanics. NSASIAN - Non-Hispanic Asians. PTRICN - Puerto Ricans. TOTFAM - Total family. MANAD - Managers and administrators. PROTEC - Professionals and Technicians. OPET - Machine Operators. OPTR - Operators in transportation. SERV - Service worker. FBORN - Foreign-born. YOUTH - Persons at age 14-24 years old. ED16A - Persons with college and graduate degree. EDHLES - Less than high school.

Table 6.4

**Linear and Non-Linear Effects of Black Poverty Rate
on Black Underclass Behaviors.**

Dependent Variable: Black Underclass Behavior Index in 1970 & 1980

	1970	1980
Intercept	-2.01	-2.32
Poverty rate, b (S.E.)	13.24** (0.88)	10.64 ** (0.73)
Poverty Squared (S.E.)	-5.57* (1.64)	-0.38 n.s. (1.19)
r-square /n	0.68 /771	0.77 /888
Intercept	-1.86	-2.23
Poverty rate, b (S.E.)	11.15** (0.30)	10.09 ** (0.29)
Poverty dummy >40%	-0.66** (0.13)	0.13 n.s. (0.10)
r-square /n	0.68 /771	0.77 /888

* p <0.01 ** p<0.0001

Source: Data from 1970 & 1980 censuses of population, STF4 tapes.
Unit of analysis is the census tract. Sample: All non-suppressed
New York City tracts, black population variables.

Table 6.4 (Continued)

**Linear and Non-Linear Effects of Black Poverty Rate
on Black Underclass Behaviors.**

Year:	1970	1980
Dependent:	% Female Headed	
Intercept	0.42	0.52
Poverty b (S.E.)	0.67 ** (0.03)	0.86 ** (0.02)
Poverty squared	-1.17 ** (0.17)	-0.80 ** (0.14)
R-square / n	0.54 / 764	0.63 / 880
Dependent:	% Men not in labor force	
Intercept	0.34	0.46
Poverty b (S.E.)	0.45 ** (0.02)	0.60 ** (0.02)
Poverty squared	0.05 n.s. (0.17)	0.17 n.s. (0.13)
R-square / n	0.27 / 771	0.51 / 888
Dependent:	% Families on Welfare	
Intercept	0.26	0.23
Poverty b (S.E.)	0.80 ** (0.02)	0.79 ** (0.02)
Poverty Squared	-0.37 * (0.12)	0.26 * (0.10)
R-square / n	0.72 / 765	0.74 / 884

* p < .01, ** p <= 0.0001, n.s. = not statistically significant.
(Independent variables are centered to avoid multicollinearity.)

Table 6.5

**Neighborhood conditions as a function of black poverty rate:
Reinterpreting Massey's simulation data.**

Neighborhood Condition:	20% Poverty	30% Poverty
Major Crime Rate:		
per 1000 people.	68.3	84.2
per poverty percent	3.42	2.81
Families on Welfare:		
percent	36.1	51.0
per poverty percent	1.85	1.70
Female Headed Families:		
percent	33.5	45.5
per poverty percent	1.68	1.52
High School Students Scoring Below 15th Percentile:		
percent	47.1	58.7
per poverty percent	2.35	1.93

Source: Massey and Denton (1993, p.133), derived from Massey(1990) plus my recalculations. These are simulated data referring to completely segregated neighborhoods. Thus, in the first column, neighborhoods with 20% poverty, the crime rate per 1000 persons is 68.3, while the crime rate per percent of population in poverty is 3.42. Compare this 3.42 rate with the crime rate per percent of poverty in neighborhoods with 30% poverty, which is lower: 2.81. Similarly across other indicators.

Table 6.6 Cross-Sectional Models Predicting Underclass Index Within Census Tracts in New York City - 1970, 1980 and 1990

	1970 total pop			1980 total pop			1990 total pop			1980 blacks			1980 Hispanics		
	b	Beta		b	Beta		b	Beta		b	Beta		b	Beta	
BLACK (% of total pop)	0.36	0.05	**	0.91	0.09	**	2.05	0.21	**						
HISPAN (% of total pop)	0.95	0.05	**	1.63	0.10	**	2.07	0.15	**						
ASIAN (% of total pop)	-3.95	-0.05	**	-0.27	-0.01		0.54	0.02							
FBORN (% of total pop)	-0.87	-0.02		-2.27	-0.10	**	-3.88	-0.20	**	-2.23	-0.20	**	-1.32	-0.13	**
PVERTY (% of total pop)	16.79	0.57	**	12.23	0.58	**	9.27	0.44	**	6.96	0.58	**	8.28	0.63	**
YOUTH (% age 14-24 of total pop)	4.20	0.04	**	-0.72	-0.01		1.67	0.03	**	3.75	0.09	**	2.68	0.05	**
MDCLS(% inc >51.3k of tot family)	-0.99	-0.05	**	-3.10	-0.16	**	-3.88	-0.25	**	-2.88	-0.17	**	-2.23	-0.07	**
SERV (% service of tot occp.)	8.74	0.19	**	2.72	0.07	**	2.33	0.06	**	1.43	0.05	**	1.05	0.04	**
OPET (% operative of tot occp.)	3.10	0.31	**	-0.69	-0.01		0.02	0.001		0.21	0.01		0.98	0.05	
MARYDX (% marriageability index)	-1.62	0.77	**	-2.06	-0.11	**	-0.06	-0.03	**	-0.74	-0.13	**	-0.84	0.10	**
Distance to est. Underclass tract	-0.06	0.66	**	-0.04	0.70	**	-0.05	-0.05	**						
Distance to est. Minority tract										-0.11	-0.03	*	-0.17	-0.08	**
R-square		0.89			0.90			0.88			0.87			0.78	
N		1449			2016			2017			874			946	

* p < 0.05 ** p < 0.001

Table 6.7 Longitudinal Models Predicting Underclass Index Change in New York City

	Undcls Index Change			Undcls Index Change			Undcls Index Change		
	1970-1980			1980-1990			1970-1980 (Black)		
	b	Bata		b	Bata		b	Bata	
Black Change in %	1.91	0.11	**	2.17	0.14	**	0.96	0.09	*
Hispanic Change in %	2.11	0.15	**	1.16	0.07	**			
Asian Change in %	1.03	0.02		-0.58	-0.03				
Poverty Rate Change	6.96	0.43	**	6.10	0.38	**	7.20	0.54	**
Middle Class Chinge in %	-1.09	-0.05	**	-2.83	-0.21	**	-1.96	-0.09	**
Foreign-born Change in %	-1.50	-0.10	**	-0.78	-0.05	*	-2.14	-0.14	**
Operative Worker % Change	0.03	0.01		-0.09	-0.04	*	-0.01	0.00	
Serveice Worker Change in %	1.30	0.05	**	0.72	0.04	*	1.07	0.05	*
Marriageability Change in %	-5.42	-0.36	**	-3.58	-0.34	**	-0.35	-0.07	*
Distance to est. Underclass tract of Previous Decade	0.07	0.10	**	0.03	0.05	*			
R-Square		0.63			0.45			0.39	
N		1428			1996			683	

* P < 0.05 ** P < 0.001

Chapter VII

NEIGHBORHOOD CHANGE AND THE UNDERCLASS

In the last few chapters we have seen how changes in the economy and population have shaped New York City and created the urban underclass, and how changes in socioecocomic factors have caused the presence and growth of the underclass in census tracts. These changes have profoundly impacted on neighborhood evolution. In this chapter I examine the changes in demographic composition on the process of the neighborhood evolution.

Before we study the changes in detail I will give a brief review of the major theories and research paradigms of neighborhood evolution.

1. Models of Neighborhood Evolution and Research Paradigms

Neighborhood stage theory is an attempt to describe the natural evolution of the housing and population composition of neighborhoods. Hoover and Vernon (1962) describe neighborhood evolution as occurring in five stages. In the first stage the initial urbanization of undeveloped farm land takes place. In the second stage, *transition*, the neighborhood experiences continued population growth. The third stage, *downgrading*,

sees the older housing stock converted to higher residential densities, and population density continues to rise. Population decline begins in the fourth stage, *thinning*. In the fifth and final stage, *renewal*, obsolete housing is replaced with multifamily housing, and the quality and effective use of space is improved.

Another five-stage theory is offered by Anthony Downs (1981). The five stages are: (1) healthy and viable; (2) incipient decline; (3) clearly declining; (4) accelerated decline, indicated by heavy deterioration; and (5) abandoned, unhealthy, and nonviable. In the third and fourth stages the neighborhood witnesses decline in relative socioeconomic status, conversion to higher density, and pessimism about the future of the neighborhood in the real estate market. What distinguishes Downs's final formulation is the possibility of two-way movement along the continuum, either in the direction of decline, or in the direction of revitalization. Downs differentiates two kinds of decline in the United States, one is emptying-out decline and the other is overcrowding decline. He notes out that emptying-out decline is both more widespread and harder to remedy.

These stage theories are paralleled in the sociological literature on succession, which describes changing demographic composition linked to neighborhood evolution. As social groups move outward with socioeconomic betterment, the neighborhoods filter down to the next lower group on the ladder.

A neighborhood declines in socioeconomic status as the process of invasion and succession brings to it repeated waves of new residents. This outlook is consistent with the stage model of Hoover and Vernon.

The analysis used aggregated longitudinal data, and measure the racial and ethnic change—racial succession. On occasion a handful of neighborhoods are examined for particular insights into the process of racial change.

A comprehensive succession paradigm involves classifying neighborhood racial transition into a variety of categories, depending on the relative and absolute population changes of the neighborhoods concerned (Duncan and Duncan 1965, Taeuber and Taeuber 1965). Conventional succession analyses include only measures of total population by ethnicity and a few socioeconomic characteristics. An alternative approach uses a variety of characteristics in a previous decade to predict racial composition in the present (White 1984, Massey and Denton 1990).

The succession model provides a good approach to ways in which neighborhood change can come about. Using status as a measurement of neighborhood turnover, we can enumerate the ways a neighborhood's status changes. For a neighborhood to experience a decrease in status, the fraction of lower status residents must increase. Usually this results from higher status persons moving out, and being replaced by lower status persons. However, a neighborhood may experience an absolute

increase in both upper and lower status groups, but the lower status group may grow more quickly. Conversely, depopulating neighborhoods may witness varying rates of exit among the different status groups.

Now I turn to what methods and analysis I am going to use. By using the same method as did in the last chapter in the table analysis, I will follow the census tracts, aggregate the data according to the characteristics of demographic composition, compare the result among 1970, 1980 and 1990. First, this analysis is designed to tell us the consequences of underclass tracts in terms of racial composition and selected socioeconomic characteristics. Did they remain the same? Did they deteriorate continually? Or were they better off? How different the patterns were in the 1970s and in the 1980s.

Second, we have found that a basic transitional pattern of the neighborhoods was low underclass level in 1970, high level in 1980 and return to low in 1990 in the city. I will describes the changes in these neighborhoods.

Third, there are many solid ghettos that retained a high underclass level in 1970, 1980 and 1990. I will describe the characteristics of demographic composition for these neighborhoods.

These analyses are based on adding up the changes in the individual neighborhoods and yielding the aggregated change in them. Of course, as presented the analysis obscures the

diversity of experiences that occur at individual level, but it does reflect the changes in pattern. The results lead to inferences concerning changes in individual neighborhoods. These kinds of changes can be observed on the micro-scale in a few neighborhoods in the city. We can use these neighborhoods as a window on the wider changes in the city neighborhoods.

2. Consequences of the Underclass

Table 7.1 describes changes in demographic composition between 1970 and 1980 in the tracts on underclass level 4 in 1970. These tracts were selected from the samples in Table 5.1.

Twenty-four tracts were on underclass level 4 in 1970. Ten years later, 6 tracts remained on the same level 4, 17 tracts had changed to level 3 and one tract changed to level 1 by 1980. This indicates that most of the tracts remained on a higher underclass level after being an underclass tract in 1970 except for one tract which decreased 2 levels (Table 5.1).

One of the most serious consequences was that these neighborhoods lost population very rapidly; 41 percent (from 91,000, accounting for 1.2 percent of the city population in 1970, to 54,000, only 0.75 percent of the city population in 1980) in comparison to the city population loss of 10 percent in the same period.

Perhaps it is not surprising that these underclass ghettos lost population over the decade. Given the harsh conditions of life in these neighborhoods, anyone who could leave probably did. The poor were leaving, but the non-poor left faster. Table 7.1 shows that although mostly whites left (61 percent), blacks (32 percent) and Hispanics (52 percent) left also. The lowest income group lost 39 percent, all other groups lost more than 50 percent.

As a result, the proportion of minorities (blacks and Hispanics) increased to 91 percent in 1980 from 88 percent in 1970, and the poverty rate increased to 43 percent in 1980 from 41 percent in 1970. These neighborhoods became "persistent slums."

Table 7.1 shows that these neighborhoods lost 4,098 of their poorest families, accounting for 44 percent of the total family loss in these neighborhoods. Where did the poor and all other move? Did they move out of the city or to better neighborhoods in the city?

The theory of housing market filtering may explain these population movements. According to this theory, the filtering process begins when economic growth makes it possible for high-income families to move to the suburbs. As they move out, their old housing becomes available and more affordable to middle-income families. Their housing, in turn, becomes available to families with somewhat lower incomes. Eventually, poor people living in poverty neighborhoods are able to

move into housing outside their neighborhood, housing that moderate-income families are leaving. They leave behind the poorest of their neighbors. As the poverty neighborhoods empty out, the worst housing within them drops out of the housing market or stands vacant.

What happened in New York City was that changes in the economy and the deterioration of city neighborhoods caused the people (most are minorities) living in underclass ghettos to seek better housing, but within the segregated housing market they found their chief opportunities in those nearby neighborhoods being abandoned by whites. The population, poor and non-poor, was spreading out from underclass tracts into "next ring areas" that were not poor, with mixed income and race, that is, "next ring areas" become home to a larger proportion of this poor black and Hispanic population. There was greater movement of blacks and Hispanics residing in segregated housing tracts into poverty than out of it. The white and more affluent left these areas, which also lost population overall.

According to Downs, a number of specific factors increase a neighborhood's susceptibility to decline: a city rapidly losing population; close to very low-income neighborhoods or to shifting to low-income occupancy; high turnover and transition among residents; high crime and vandalism, etc. (Down 1981, p.66). The "next ring area" follows the process of change from stages two to five: incipient decline, clearly

declining, accelerating decline and rapid abandonment. Overall trends in these neighborhoods were "emptying-out decline." This reflects that a large number of tracts on levels 0, 1, and 2 in 1970 changed to level 3 or 4 in 1980.

As a result, we see an expanding underclass ghetto in 1980, as shown on the maps in the previous chapter. An observer who visited New York City in 1970 and again in 1980, unaware of the large population flow would notice that the ghetto areas had expanded beyond their 1970 boundaries. This happened typically in the South Bronx, northern Manhattan, the Lower East Side, and central Brooklyn. There were a large amount of abandoned housing. The housing market collapsed totally in these areas (Mollenkopf and Castells 1991). New York City became the capital of the urban underclass, and expanding ghettos became underclass strongholds.

Now let us examine the changes which took place in the underclass ghettos during the 1980s. Were they still "persistent slums" after being underclass ghettos ten years later?

Table 7.2 shows the changes in demographic composition between 1980 and 1990 in the tracts on underclass level 4 in 1980. These tracts are noted on the last line of Table 5.2. Among 133 tracts, accounting for 6 percent of the sample, 32 tracts remained on the same level, 68 had changed to level 3, 25 to level 2, 7 to level 1, and 1 had changed to 0. This

indicates that 75 percent of these tracts remained on a high underclass level (level 3 or 4), while 25 percent of them experienced a significant improvements.

Table 7.2 indicates that there were 9 percent non-Hispanic whites in these tracts in 1980. Not only did these tracts lose 34 percent of their white population during the 1980s, but that exodus broadened to include native blacks and Puerto Ricans (15 percent lost).

While there were further losses of poor families from the underclass areas in the 1980s (poor families decreased by 12 percent between 1980 and 1990), many working and middle class families have moved in since 1980, and repopulated these neighborhoods.

There was a 6 percent population increase in these tracts between 1980 and 1990. The source of the increase came from the large influx of new immigrants from Asian, Central American and Caribbean countries (see Table 7.2) a 61 percent increase of foreign-born, a 94 percent increase of Asian and a 19 percent increase of Hispanics.

The result is a revitalized underclass neighborhood with a much higher proportion of foreign born (23 percent in 1990 compared to 15 percent in 1980), more employed men and fewer people living below the poverty line. The table also shows that socioeconomic status overall increased in terms of income, occupation and education over the decade.

3. Neighborhood Evolution from the Underclass Level: Low-High-Low

In this part of the paper I will describe the processes by which the same tracts on lower underclass levels (0,1,2) in 1970 changed to high level (3,4) in 1980, and then back to lower levels (0,1,2) in 1990. These tracts experienced intensive neighborhood evolution, deteriorating in the first decade and improving in the next. Among 127 of these tracts in the city, 23 were in the Bronx (accounting for 7 percent of the Bronx tracts), 61 in Brooklyn (8 percent), 21 in Manhattan (8 percent) and 22 in Queens (3 percent).

Table 7.3 describes the experience of these neighborhoods in the city. The companion information for the city is reported so that we can investigate the changing relative fortunes of the neighborhoods as well as absolute shifts in population and socioeconomic composition.

Data in Table 7.3 reveal several characteristics in the initial transitional year in 1970: (1) The neighborhoods were mixed by race and ethnicity, with 41 percent non-Hispanic whites, 31 percent non-Hispanic blacks, 26 percent Hispanics and 1 percent Asians and others. (2) The income distribution was concentrated in the two lowest categories, which accounted for 64 percent of the total families. (3) Occupation was concentrated in the blue collar category (operatives and service workers). Sixteen percent were workers in manufac-

ture, compared to 8 percent in the city as a whole. (4) Only 5 percent of adults were college educated, compared with 11 percent in the city. (5) The ratio of the foreign-born population to the city average was 0.94. The poverty rate was higher than the city average with a ratio of 1.3. All this indicates that there were working and low middle class neighborhoods, which were vulnerable to the economic changes that have swept the city since 1970.

Between 1970 and 1980 the city lost 10 percent of its population, 14 percent of its families and one quarter of its non-Hispanic whites, while the neighborhoods mentioned above lost 13 percent of their population, 18 percent of their families and 59 percent of their non-Hispanic whites. Non-Hispanic blacks and Hispanics (mostly Puerto Ricans) increased markedly. Blacks and Hispanics constituted 78 percent of the population in these neighborhoods in 1980. The condition of these neighborhoods deteriorated with regard to income, occupation and education: the ratio of families in the lowest income grew by one-third, the other three higher categories fell by one fifth. The change in ratio between 1970 and 1980 for the managerial, administrative, professional and technical worker, and adults with college educated were negative. The change in ratio in the poverty rate grew by more than 44 percent. Labor force participation in these neighborhoods fell sharply. In 1980 male labor force participation dropped

by 24 percent, compared to a 13 percent drop for the city as a whole.

Between 1980 and 1990 the city gained 3.5 percent in population, but the population in these neighborhood grew by 6.3 percent while continuing to lose non-Hispanic whites at a rate of 21 percent. Hispanics increased by 20 percent in despite 13 percent Puerto Ricans moving out. Even though many native American blacks left the neighborhoods, there was still an increase of 1 percent in the black population. There was a significant increase, 96 percent, in Asian population. The source of the increasing minority population lies in the substantial increase in the number of foreign-born, new immigrants. There was a 94 percent increase in the foreign-born population over the decade, from 25 percent in 1980 to 34 percent in 1990, much higher than the city average, 28 percent. It can be noted that there was significant increase in average socioeconomic status over the decade. The lowest income group decreased by 23 percent while other higher income groups increased, with a 96 percent increase in the highest income group. Managerial, administrative, professional and technical workers increased by more than 80 percent. The labor force participation rate increased by more then 20 percent. The proportion of the population in poverty fell from 34 percent to 28 percent.

Among these tracts I have observed 27 tracts which experienced more intensive transition, from 0,1 or 2 in 1970 to 4

in 1980 and to 0,1 or 2 in 1990. I list these tracts as follows:

In The Bronx: Tracts 189 (0,4,2), 199 (1,4,2), and 221 (0,4,2) were located in Morris Heights in the south west Bronx; tracts 387 (0,4,2), 399.02 (0,4,2) in the Norwood and Williamsbridge section of the north Bronx.

In Brooklyn: Tracts 122 (0,4,0), and 84 (0,4,2) in the Sunset Park section, tract 59 (2,4,2) in the Red Hook; tract 125 (2,4,2) in Brooklyn Heights, tract 217 (1,4,2) and 267 (2,4,2) in the Prospect Park area, tracts 439 (1,4,1) and 435 (2,4,2) at the Bushwick in north Brooklyn.

In Manhattan: Tract 14.02 (2,4,2) in the Lower East Side, tracts 170 (2,4,2) and 166 (2,4,2) in East Harlem, tract 200 at the Central Harlem.

In Queens: Tract 369 (0,4,1) in the Corona in North Queens, tracts 198 (1,4,1), 188 (0,4,1), 270 (1,4,2), 410 (0,4,1), 402 (0,4,2), and 182 (0,4,2) in the area of the Jamaica and South Jamaica.

These neighborhoods experienced extensive white loss in the past two decades, during which there was a loss of more than 80 percent over 1970 (Table 7.4). Some of these tracts turned over totally from white to black and Hispanic, such as tracts 439 in the Bushwick section in north Brooklyn (Table 7.5). In 1970 the population was 68 percent non-Hispanic whites, and twenty years later, only 5 percent was still white. We found the same situation in north Bronx, for exam-

ple, in tract 399.02 in the Norwood section (Table 7.6), 79 percent non-Hispanic whites in 1970, and then it lost 94 percent of its white population, so there was only 4 percent non-Hispanic white left in the neighborhood in 1990. Notably, all these tracts are near city subway lines, and were repopulated by minority people, primarily new immigrants.

I will choose two tracts, tract 122 and tract 399.02, as a representative of change in neighborhoods. Tract 122 is located in Sunset Park in Brooklyn. It is the only tract in the city that changed from underclass level 0 in 1970 to level 4 in 1980 and then back to 0 in 1990, and is a typical case reflecting neighborhood evolution. Tract 399.02 is located in Williamsbridge in the north Bronx.

Table 7.7 presents the changes in the demographic composition of tract 122. The basic change in pattern is the same as that in the aggregated tract data. Underclass level increase from 0 to 4 between 1970 and 1980 associated with a decrease of socioeconomic status, and led back to 0 in 1990 with an increase in status again. The difference was that there were a predominance of non-Hispanic whites (90 percent) and with some Hispanics in 1970 (10 percent). Since 1970 a large number of Hispanics, mostly Puerto Ricans have moved in, and 36 percent of the non-Hispanic whites moved out. The tracts gained population by 15 percent in 1980, in the opposite direction to the trend in the city as a whole. What

happened here was an "overcrowding decline" (as defined by Downs). During the 1980s 36 percent of Puerto Ricans moved out, while non-Puerto Rican Hispanics (mostly new immigrants from the Dominican Republic) and Asians moved in. As a result, the neighborhood became very racially mixed, with 36 percent non-Hispanic whites, 39 percent Hispanics and 28 percent Asians; by 1990, 43 percent of the population was foreign born.

Table 7.6 reports the changes in the demographic composition of my tract 399.02. Underclass level increase from 0 to 4 between 1970 and 1980 was associated with a decrease in socioeconomic status, and reduction to level 2 in 1990 with a higher socioeconomic status. There were 79 percent non-Hispanic whites, 11 percent Hispanics and 9 percent non-Hispanic blacks in 1970. Between 1970 and 1980 a large number of Hispanics (mostly Puerto Ricans) and non-Hispanic blacks moved in, and 81 percent of the non-Hispanic whites moved out. In 1980 there were 32 percent non-Hispanic blacks, 46 percent Hispanics, 17 percent non-Hispanic whites and 5 percent Asians, plus others. The tract lost 8 percent of its population in the 1970s. During the 1980s 6 percent of the Puerto Ricans moved out, and non-Puerto Rican Hispanics (mostly new immigrants from the Dominican Republic and Asian) moved in, and the neighborhood lost non-Hispanic whites continually (69 percent). As a result of racial turnover, the neighborhood became Hispanic dominated, with only 4 percent of non-Hispanic

whites, 56 percent Hispanics, 30 percent non-Hispanic blacks and 10 percent Asians and others; 37 percent of the 1990 population were foreign-born.

4. Neighborhood Change and "Persistent Slums"

After discussing changes in highly transitional neighborhoods, we now turn to examine the changes that have taken place in the solid underclass neighborhoods. These neighborhoods are truly the "persistent slums."

The studies found that 125 tracts remained on a higher level (3 or 4) over two decades. Forty of these tracts were in the Bronx, 63 in Brooklyn, and 22 in Manhattan. Notably, only 1 tract remained on level 4 over the three census periods (the tract was located in central Harlem, in Manhattan), while all other tracts changed their levels between 3 and 4 over these decades.

Table 7.8 presents the aggregated characteristics of demographic composition for these tracts. The data indicate that socioeconomic status was lower with regard to income, occupation and education for all these decades. After studying the table in detail, I found that non-Hispanic blacks and Hispanics constituted 90 percent of the population (54 percent blacks) in 1970, 95 percent (62 percent blacks) in 1980, and 94 percent (57 percent black) in 1990. Non-Hispanic blacks comprised a major part of the population in twenty years

periods. The difference in percentage between non-Hispanic blacks and Hispanics was more than 20 points in each of these periods. However, the difference was smaller in Table 4.9 (which presents demographic composition in underclass tracts in the city in three censuses), the percentage of Hispanics was even higher than that of blacks in 1980 (50 percent Hispanics compared to 40 percent non-Hispanic blacks).

Table 7.9 reports changes in demographic composition for tract 218 in Manhattan, which remained on level 4 from 1970 to 1990. There is a predominance of African American blacks in the population (98 percent in 1970 and 1980, 90 percent in 1990) in this tract. Population declined continually, 45 percent in the 1970s and 12 percent in 1980s. Socioeconomic status was extremely low in terms of income, occupation and education. Most of the families were in the lower income categories. More than 60 percent of the families were concentrated in the lowest categories (less \$17.1K) in 1980 and 1990. Occupational distribution was characterized by operative and service categories in 1970, and then lost about 90 percent of manufacturing workers in the 1970s, 13 percent in the 1980s. As a result, the proportion of service workers increased, as did the poverty rate—33 percent in 1970, 42 percent in 198 and 53 percent in 1990.

The facts show that "persistent slums" made up of a majority of blacks find it most difficult to raise their consistent low-level status. People living in these segregat-

ed black ghettos are truly disadvantaged. Segregation, interacting with a high or rising poverty rate, guarantees that blacks face a harsh and uniquely disadvantaged social environment. The effect of segregation is a structural factor determined opportunity structure for these blacks (Massey and Denton 1993).

Table 7.1 Change in Demographic Composition of Tracts on Level 4 in 1970 and Levels 0-4 in 1980 in New York City

	New York City						Tracts on levels 4 in 1970, 0-4 in 1980						Ratio		
	1970 N	1970 %	1980 N	1980 %	1970-80 N Change	1970-80 % Change	1970 N	1970 %	1980 N	1980 %	70-80 N Change	70-80 % Change	1970 %	1980 %	70-80 % Change
TOTPOP	7,894,862	100.0	7,071,639	100.0	-823,223	-10.4	91,258	100.0	53,554	100.0	-37,704	-41.3	1.00	1.00	0.00
NSWHIT	4,978,278	63.1	3,703,203	52.4	-1,275,075	-25.6	11,023	12.1	4,281	8.0	-6,742	-61.2	0.19	0.15	-0.04
NSBLK	1,520,026	19.3	1,694,505	24.0	174,479	11.5	51,858	56.8	35,248	65.8	-16,610	-32.0	2.95	2.75	-0.20
HISPAN	1,278,593	16.2	1,406,389	19.9	127,796	10.0	28,386	31.1	13,628	25.4	-14,758	-52.0	1.92	1.28	-0.64
NSASIAN	108,131	1.4	267,542	3.8	159,411	147.4	605	0.7	405	0.8	-200	-33.1	0.48	0.20	-0.28
Puerto Rican	811,838	10.3	852,833	12.1	40,995	5.0	24,526	26.9	10,608	19.8	-13,918	-56.7	2.61	1.64	-0.97
Total family	2,058,889	100.0	1,770,966	100.0	-287,923	-14.0	20,129	100.0	10,908	100.0	-9,221	-45.8	1.00	1.00	0.00
Family income:															
Less than \$17.1k	428,999	20.8	521,311	29.4	92,312	21.5	10,502	52.2	6,404	58.7	-4,098	-39.0	2.50	1.99	-0.51
\$17.1k-34.2k	639,872	31.1	511,329	28.9	-128,543	-20.1	6,693	33.3	3,217	29.5	-3,476	-51.9	1.07	1.02	-0.05
\$34.2k-51.3k	504,603	24.5	370,103	20.9	-134,500	-26.7	2,058	10.2	901	8.3	-1,157	-56.2	0.42	0.40	-0.02
More than \$51.3k	485,415	23.6	368,223	20.8	-117,192	-24.1	876	4.4	386	3.5	-490	-55.9	0.18	0.17	-0.01
Labor force	3,344,311	56.7	3,167,613	57.2	-176,698	-5.3	23,014	40.9	14,288	37.9	-8,726	-37.9	0.72	0.66	-0.06
Male labor force	1,988,701	74.1	1,732,120	69.5	-256,581	-12.9	13,795	56.2	7,895	47.0	-5,900	-42.8	0.76	0.68	-0.08
MANAD	250,184	7.8	333,255	11.4	83,071	33.2	683	3.2	653	5.6	-30	-4.4	0.41	0.49	0.08
PROTEC	502,140	15.7	492,327	16.9	-9,813	-2.0	1,281	6.1	988	8.5	-293	-22.9	0.39	0.51	0.12
OPET	351,290	11.0	224,220	7.7	-127,070	-36.2	4,041	19.1	1,193	10.3	-2,848	-70.5	1.74	1.34	-0.40
OPTR	125,861	3.9	100,581	3.4	-25,280	-20.1	1,307	6.2	519	4.5	-788	-60.3	1.57	1.30	-0.27
SERV	431,419	13.5	426,350	14.6	-5,069	-1.2	5,282	25.0	3,117	26.9	-2,165	-41.0	1.85	1.84	-0.01
FBORN	1,216,755	15.4	1,670,177	23.6	453,422	37.3	4,444	4.9	6,322	11.8	1,878	42.3	0.32	0.50	0.18
PVERTY	1,164,640	14.8	1,391,955	19.7	227,315	19.5	37,584	41.2	23,085	43.1	-14,499	-38.6	2.79	2.19	-0.60
YOUTH	1,370,779	17.4	1,276,734	18.1	-94,045	-6.9	17,178	18.8	11,518	21.5	-5,660	-32.9	1.08	1.19	0.11
ED16A	506,492	10.6	776,535	17.3	270,043	53.3	736	1.7	1,071	3.8	335	45.5	0.16	0.22	0.06
EDHLES	2,534,777	53.1	1,786,608	39.8	-748,169	-29.5	33,161	76.7	17,738	62.1	-15,423	-46.5	1.44	1.56	0.12

Source: U.S. Census of Population, 1970 Fourth Count Summary Tapes (FCST), 1980 STF4 and 1990 STF3.

Note: TOTPOP - Total population. NSWHIT - Non-Hispanic whites. NSBLK - Non-Hispanic blacks. HISPAN - Hispanics. NSASIAN - Non-Hispanic Asians
 MANAD - Managers and administrators. PROTEC - Professionals and Technicians. OPET - Operators. OPTR - Operators in transportation.
 SERV - Service worker. FBORN - Foreign-born. YOUTH - Persons age 14-24 years old. ED16A - Person with college and graduate degree.
 EDHLES - Less than high school.

Table 7.2 Change in Demographic Composition of Tracts on Level 4 in 1980 and Levels 0-4 in 1990 in New York City

	New York City						Tracts on levels 4 in 1980, 0-4 in 1990						Ratio		
	1980	1980	1990	1990	1980-90	1980-90	1980	1980	1990	1990	80-90	80-90	1980	1990	80-90
	N	%	N	%	N	%	N	%	N	%	N	%	%	%	%
TOTPOP	7,071,639	100.0	7,322,564	100.0	250,925	3.5	407,981	100.0	429,196	100.0	21,215	5.2	1.00	1.00	0.00
NSWHIT	3,703,203	52.4	3,163,125	43.2	-540,078	-14.6	35,957	8.8	23,854	5.6	-12,103	-33.7	0.17	0.13	-.04
NSBLK	1,694,505	24.0	1,847,049	25.2	152,544	9.0	163,917	40.2	153,211	35.7	-10,706	-6.5	1.68	1.42	-.26
HISPAN	1,406,389	19.9	1,783,511	24.4	377,122	26.8	199,658	48.9	237,231	55.3	37,573	18.8	2.46	2.27	-.19
NSASNO	267,542	3.8	528,879	7.2	261,337	97.7	7,681	1.9	14,900	3.5	7,219	94.0	0.50	0.48	-.02
PTRICN	852,833	12.1	861,122	11.8	8,289	1.0	158,931	39.0	145,970	34.0	-12,961	-8.2	3.23	2.89	-.34
TOTFAM	1,770,966	100.0	1,755,718	100.0	-15,248	-0.9	98,668	100.0	99,265	100.0	597	0.6	1.00	1.00	0.00
Family income:															
Less than \$17.1k	521,311	29.4	437,500	24.9	-83,811	-16.1	58,849	59.6	51,765	52.1	-7,084	-12.0	2.03	2.09	0.07
\$17.1k-34.2k	511,329	28.9	437,184	24.9	-74,145	-14.5	25,997	26.3	26,200	26.4	203	0.8	0.91	1.06	0.15
\$34.2k-51.3k	370,103	20.9	374,372	21.3	4,269	1.2	9,625	9.8	13,146	13.2	3,521	36.6	0.47	0.62	0.15
Over \$51.3k	368,223	20.8	506,663	28.9	138,440	37.6	4,197	4.3	8,154	8.2	3,957	94.3	0.20	0.28	0.08
Labor force	3,167,613	57.2	3,586,428	61.7	418,815	13.2	126,127	45.1	156,746	52.2	30,619	24.3	0.79	0.85	0.06
Male labor for.	1,732,120	69.5	1,891,211	71.0	159,091	9.2	70,661	58.0	85,120	63.6	14,459	20.5	0.83	0.90	0.06
MANAD	333,255	11.4	440,090	13.5	106,835	32.1	4,942	4.6	8,637	6.6	3,695	74.8	0.40	0.49	0.08
PROTEC	492,327	16.9	656,286	20.1	163,959	33.3	7,882	7.3	14,485	11.0	6,603	83.8	0.44	0.55	0.11
OPET	224,220	7.7	158,981	4.9	-65,239	-29.1	16,504	15.4	13,065	9.9	-3,439	-20.8	2.00	2.04	0.04
OPTR	100,581	3.4	120,642	3.7	20,061	19.9	5,091	4.7	6,465	4.9	1,374	27.0	1.38	1.33	-.05
SERV	426,350	14.6	520,974	16.0	94,624	22.2	24,581	22.9	31,905	24.3	7,324	29.8	1.57	1.52	-.05
FBORN	1,670,177	23.6	2,082,931	28.4	412,754	24.7	61,918	15.2	99,351	23.1	37,433	60.5	0.64	0.81	0.17
PVTY	1,391,955	19.7	1,384,994	18.9	-6,961	-0.5	185,336	45.4	178,447	41.6	-6,889	-3.7	2.31	2.20	-.11
YOUTH	1,276,734	18.1	1,110,589	15.2	-166,145	-13.0	88,039	21.6	78,783	18.4	-9,256	-10.5	1.20	1.21	0.02
ED16A	776,535	17.3	1,122,328	23.0	345,793	44.5	9,201	4.4	18,117	7.7	8,916	96.9	0.26	0.33	0.08
EDHLES	1,786,608	39.8	1,547,147	31.7	-239,461	-13.4	131,570	63.2	128,775	54.7	-2,795	-2.1	1.59	1.73	0.14

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

Note: TOTPOP - Total population. NSWHIT - Non-Hispanic whites. NSBLK - Non-Hispanic blacks. HISPAN - Hispanics. NSASIAN - Non-Hispanic Asians. PTRICN - Puerto Ricans. TOTFAM - Total family. MANAD - Managers and administrators. PROTEC - Professionals and Technicians. OPET - Machine Operators. OPTR - Operators in transportation. SERV - Service worker. FBORN - Foreign-born. YOUTH - Persons at age 14-24 years old. ED16A - Person with college and graduate degree. EDHLES - Less than high school.

Table 7.3 Change in Demographic Composition of Tracts
on levels 0,1,2 in 1970, levels 3,4 in 1980 and levels 0,1,2 in 1990

	New York City			Tracts on levels 0-2 in 1970, 3-4 in 1980 and 0-2 in 1990								Ratio				
	1970	1980 %	1990	1970		1980		1990		70-80	89-90	1970	1980	1990	70-80	80-90
				N	%	N	%	N	%	% Change	% Change				% Change	% Change
TOTPOP80	100.0	100.0	100.0	522,718	100.0	455,964	100.0	484,554	100.0	-12.8	6.3	1.00	1.00	1.00	0.00	0.00
NSWHITE	63.1	52.4	43.2	217,966	41.7	89,361	19.6	70,211	14.5	-59.0	-21.4	0.66	0.37	0.34	-0.29	-0.04
NSBLK	19.3	24.0	25.2	159,697	30.6	177,986	39.0	179,560	37.1	11.5	0.9	1.59	1.63	1.47	0.04	-0.16
HISPAN	16.2	19.9	24.4	137,766	26.4	177,021	38.8	212,881	43.9	28.5	20.3	1.63	1.95	1.80	0.32	-0.15
NSASIAN	1.4	3.8	7.2	6,922	1.3	11,374	2.5	21,902	4.5	64.3	92.6	0.97	0.66	0.63	-0.31	-0.03
PTRICN	10.3	12.1	11.8	87,585	16.8	109,521	24.0	95,164	19.6	25.0	-13.1	1.63	1.99	1.67	0.36	-0.32
TOTFAM	100.0	100.0	100.0	134,397	100.0	110,486	100.0	111,346	100.0	-17.8	0.8	1.00	1.00	1.00	0.00	0.00
Family income:																
Less than \$17.1k	20.8	29.4	24.9	37,125	27.6	53,788	48.7	41,221	37.0	44.9	-23.4	1.33	1.65	1.49	0.33	-0.17
\$17.1k-34.2k	31.1	28.9	24.9	50,776	37.8	32,630	29.5	33,407	30.0	-35.7	2.4	1.22	1.02	1.20	-0.19	0.18
\$34.2k-51.3k	24.5	20.9	21.3	29,032	21.6	15,822	14.3	20,543	18.4	-45.5	29.8	0.88	0.69	0.87	-0.20	0.18
Over \$51.3k	23.6	20.8	28.9	17,464	13.0	8,246	7.5	16,175	14.5	-52.8	96.2	0.55	0.36	0.50	-0.19	0.14
Labor force	56.7	57.2	61.7	213,281	55.7	173,939	52.5	219,906	60.7	-18.4	26.4	0.98	0.92	0.98	-0.06	0.07
Male labor for.	74.1	69.5	71.0	125,439	71.8	94,778	63.9	118,417	71.0	-24.4	24.9	0.97	0.92	1.00	-0.05	0.08
MANAD	7.8	11.4	13.5	8,734	4.3	9,025	5.9	16,574	8.6	3.3	83.6	0.55	0.52	0.63	-0.04	0.12
PROTEC	15.7	16.9	20.1	21,031	10.4	15,617	10.2	29,118	15.0	-25.7	86.5	0.66	0.60	0.75	-0.06	0.14
OPET	11.0	7.7	4.9	31,557	15.6	20,395	13.3	15,907	8.2	-35.4	-22.0	1.42	1.73	1.68	0.31	-0.05
OPTR	3.9	3.4	3.7	9,893	4.9	6,359	4.1	8,859	4.6	-35.7	39.3	1.24	1.20	1.24	-0.04	0.03
SERV	13.5	14.6	16.0	36,063	17.9	31,827	20.8	43,226	22.3	-11.7	35.8	1.32	1.42	1.40	0.10	-0.02
FBORN	15.4	23.6	28.4	75,930	14.5	114,140	25.0	162,202	33.5	50.3	42.1	0.94	1.06	1.18	0.12	0.12
PVERTY	14.8	19.7	18.9	100,052	19.1	155,753	34.2	136,329	28.1	55.7	-12.5	1.30	1.74	1.49	0.44	-0.25
YOUTH	17.4	18.1	15.2	91,834	17.6	91,344	20.0	82,622	17.1	-0.5	-9.5	1.01	1.11	1.12	0.10	0.01
ED16A	10.6	17.3	23.0	15,757	5.1	19,729	7.7	40,282	13.7	25.2	104.2	0.48	0.45	0.60	-0.04	0.15
EDHLES	53.1	39.8	31.7	191,655	62.3	138,909	54.3	129,682	44.0	-27.5	-6.6	1.17	1.36	1.39	0.19	0.03

Source: U.S. Census of Population, 1970 Fourth Count Summary Tapes (FCST), 1980 STF4 and 1990 STF3.

Note: TOTPOP - Total population. NSWHIT - Non-Hispanic whites. NSBLK - Non-Hispanic blacks. HISPAN - Hispanics. NSASIAN - Non-Hispanic Asians. PTRICN - Puerto Ricans. TOTFAM - Total family. MANAD - Managers and administrators. PROTEC - Professionals and Technicians. OPET - Machine Operators. OPTR - Operators in transportation. SERV - Service worker. FBORN - Foreign-born. YOUTH - Persons at age 14-24 years old. ED16A - Persons with college and graduate degree. EDHLES - Less than high school.

Table 7.4 Change in Demographic Composition of Tracts
in 1970 (levels 0-2), 1980 (level 4) and 1990 (levels 0-2)

	New York City			Tracts on levels 0-2 in 1970, 4 in 1980 and 0-2 in 1990						Ratio						
	1970	1980	1990	N	%	N	%	N	%	70-80	89-90	1970	1980	1990	70-80	80-90
		%								% Change	% Change				Change	Change
TOTPOP	100.0	100.0	100.0	104,773	100.0	85,165	100.0	85,092	100.0	-18.7	-0.1	1.00	1.00	1.00	0.00	0.00
NSWHITE	63.1	52.4	43.2	35,326	33.7	9,812	11.5	6,335	7.4	-72.2	-35.4	0.53	0.22	0.17	-0.31	-0.05
NSBLK	19.3	24.0	25.2	36,535	34.9	35,980	42.2	32,021	37.6	-1.5	-11.0	1.81	1.76	1.49	-0.05	-0.27
HISPAN	16.2	19.9	24.4	31,619	30.2	36,756	43.2	42,155	49.5	16.2	14.7	1.86	2.17	2.03	0.31	-0.14
NSASIAN	1.4	3.8	7.2	1,831	1.7	2,349	2.8	4,581	5.4	28.3	95.0	1.28	0.73	0.75	-0.55	0.02
PTRICN	10.3	12.1	11.8	24,538	23.4	27,886	32.7	23,194	27.3	13.6	-16.8	2.28	2.72	2.32	0.44	-0.40
TOTFAM	100.0	100.0	100.0	26,764	100.0	21,085	100.0	20,105	100.0	-21.2	-4.6	1.00	1.00	1.00	0.00	0.00
Family income:																
Less than \$17.1k	20.8	29.4	24.9	7,546	28.2	10,878	51.6	8,306	41.3	44.2	-23.6	1.35	1.75	1.66	0.40	-0.09
\$17.1k-34.2k	31.1	28.9	24.9	10,572	39.5	5,981	28.4	5,726	28.5	-43.4	-4.3	1.27	0.98	1.14	-0.29	0.16
\$34.2k-51.3k	24.5	20.9	21.3	5,403	20.2	2,787	13.2	3,395	16.9	-48.4	21.8	0.82	0.63	0.79	-0.19	0.16
Over 51.3k	23.6	20.8	28.9	3,243	12.1	1,439	6.8	2,679	13.3	-55.6	86.1	0.51	0.33	0.46	-0.19	0.13
Labor force	56.7	57.2	61.7	41,461	55.0	30,503	50.0	36,020	57.6	-26.4	18.1	0.97	0.87	0.93	-0.10	0.06
Male labor for.	74.1	69.5	71.0	24,188	71.0	16,548	61.4	19,481	69.1	-31.6	17.7	0.96	0.88	0.97	-0.07	0.09
MANAD	7.8	11.4	13.5	1,577	4.0	1,437	5.4	2,484	7.9	-8.9	72.9	0.51	0.47	0.58	-0.04	0.11
PROTEC	15.7	16.9	20.1	3,609	9.2	2,235	8.4	4,194	13.3	-38.1	87.7	0.58	0.50	0.66	-0.09	0.16
OPET	11.0	7.7	4.9	6,117	15.6	3,373	12.6	2,726	8.6	-44.9	-19.2	1.42	1.64	1.77	0.23	0.13
OPTR	3.9	3.4	3.7	1,960	5.0	1,165	4.4	1,534	4.9	-40.6	31.7	1.27	1.26	1.31	-0.00	0.05
SERV	13.5	14.6	16.0	7,926	20.2	6,309	23.6	7,140	22.6	-20.4	13.2	1.49	1.61	1.41	0.12	-0.20
FBORN	15.4	23.6	28.4	12,733	12.2	15,860	18.6	23,891	28.1	24.6	50.6	0.79	0.79	0.99	-0.00	0.20
PVERTY	14.8	19.7	18.9	20,761	19.8	31,772	37.3	26,085	30.7	53.0	-17.9	1.34	1.90	1.62	0.55	-0.27
YOUTH	17.4	18.1	15.2	19,034	18.2	17,689	20.8	14,950	17.6	-7.1	-15.5	1.05	1.15	1.16	0.10	0.01
ED16A	10.6	17.3	23.0	2,443	4.1	2,561	5.5	5,264	10.5	4.8	105.5	0.39	0.32	0.46	-0.07	0.14
EDHLES	53.1	39.8	31.7	38,652	64.7	27,551	59.2	24,053	48.0	-28.7	-12.7	1.22	1.49	1.52	0.27	0.03

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

Note: TOTPOP - Total population. NSWHIT - Non-Hispanic whites. NSBLK - Non-Hispanic blacks. HISPAN - Hispanics. NSASIAN - Non-Hispanic Asians. PTRICN - Puerto Ricans. TOTFAM - Total family. MANAD - Managers and administrators. PROTEC - Professionals and Technicians. OPET - Machine Operators. OPTR - Operators in transportation. SERV - Service worker. FBORN - Foreign-born. YOUTH - Persons at age 14-24 years old. ED16A - Person with college and graduate degree. EDHLES - Less than high school.

Table 7.5 Change in Demographic Composition of Tract 439 in Bushwick, Brooklyn in 1970 (level 1), 1980 (level 4) and 1990 (level 1)

	New York City			Tract on level 1 in 1970, 4 in 1980 and 1 in 1990						Ratio						
	1970	1980 %	1990	N	1970 %	N	1980 %	N	1990 %	70-80 % Change	89-90 % Change	1970	1980	1990	70-80 Change	80-90 Change
TOTPOP	100.0	100.0	100.0	3,190	100.0	3,811	100.0	3,825	100.0	19.5	0.4	1.00	1.00	1.00	0.00	0.00
NSWHITE	63.1	52.4	43.2	2,156	67.6	490	12.9	191	5.0	-77.3	-61.0	1.07	0.25	0.12	-0.83	-0.13
NSBLK	19.3	24.0	25.2	362	11.3	531	13.9	590	15.4	46.7	11.1	0.59	0.58	0.61	-0.01	0.03
HISPAN	16.2	19.9	24.4	627	19.7	2,569	67.4	2,781	72.7	309.7	8.3	1.21	3.39	2.99	2.18	-0.40
NSASIAN	1.4	3.8	7.2	45	1.4	73	1.9	263	6.9	62.2	260.3	1.03	0.51	0.95	-0.52	0.45
PTRICN	10.3	12.1	11.8	472	14.8	2,125	55.8	1,409	36.8	350.2	-33.7	1.44	4.62	3.13	3.18	-1.49
TOTFAM	100.0	100.0	100.0	852	100.0	917	100.0	914	100.0	7.6	-0.3	1.00	1.00	1.00	0.00	0.00
Family income:																
Less than \$17.1k	20.8	29.4	24.9	219	25.7	429	46.8	379	41.5	95.9	-11.7	1.23	1.59	1.66	0.36	0.07
\$17.1k-34.2k	31.1	28.9	24.9	351	41.2	270	29.4	183	20.1	-23.1	-32.1	1.33	1.02	0.81	-0.31	-0.21
\$34.2k-51.3k	24.5	20.9	21.3	211	24.8	124	13.5	219	23.9	-41.2	76.2	1.01	0.65	1.12	-0.36	0.47
Over \$51.3k	23.6	20.8	28.9	71	8.3	94	10.3	133	14.6	32.4	41.9	0.35	0.49	0.51	0.14	0.01
Labor force	56.7	57.2	61.7	1,315	55.5	1,247	49.1	1,690	63.0	-5.2	35.5	0.98	0.86	1.02	-0.12	0.16
Male labor for.	74.1	69.5	71.0	797	74.6	714	65.6	970	77.4	-10.4	35.9	1.01	0.94	1.09	-0.06	0.14
MANAD	7.8	11.4	13.5	24	1.9	55	5.1	153	10.5	129.2	178.2	0.25	0.45	0.78	0.20	0.33
PROTEC	15.7	16.9	20.1	131	10.5	62	5.7	140	9.6	-52.7	125.8	0.67	0.34	0.48	-0.33	0.14
OPET	11.0	7.7	4.9	267	21.4	284	26.3	188	12.9	6.4	-33.8	1.94	3.42	2.65	1.48	-0.77
OPTR	3.9	3.4	3.7	15	1.2	27	2.5	30	2.1	80.0	11.1	0.30	0.72	0.56	0.42	-0.17
SERV	13.5	14.6	16.0	228	18.3	225	20.8	238	16.4	-1.3	5.8	1.35	1.42	1.02	0.07	-0.40
FBORN	15.4	23.6	28.4	475	14.9	755	19.8	1,517	39.7	58.9	100.9	0.97	0.84	1.39	-0.13	0.56
PVERTY	14.8	19.7	18.9	541	17.0	1,482	38.9	1,439	37.6	173.9	-2.9	1.15	1.98	1.99	0.83	0.01
YOUTH	17.4	18.1	15.2	528	16.6	872	22.9	643	16.8	65.2	-26.3	0.95	1.27	1.11	0.31	-0.16
ED16A	10.6	17.3	23.0	58	3.0	55	3.0	145	6.7	-5.2	163.6	0.28	0.18	0.29	-0.11	0.12
EDHLES	53.1	39.8	31.7	1,453	75.2	1,255	69.5	1,140	53.0	-13.6	-9.2	1.42	1.75	1.67	0.33	-0.07

Source: U.S. Census of Population, 1970 Fourth Count Summary Tapes (FCST), 1980 STF4 and 1990 STF3.

Note: TOTPOP - Total population. NSWHIT - Non-Hispanic whites. NSBLK - Non-Hispanic blacks. HISPAN - Hispanics. NSASIAN - Non-Hispanic Asians. PTRICN - Puerto Ricans. TOTFAM - Total family. MANAD - Managers and administrators. PROTEC - Professionals and Technicians. OPET - Machine Operators. OPTR - Operators in transportation. SERV - Service worker. FBORN - Foreign-born. YOUTH - Persons at age 14-24 years old. ED16A - Persons with college and graduate degree. EDHLES - Less than high school.

Table 7.6 Change in Demographic Composition of Tract 399.02 In Norwood, the Bronx in 1970 (level 0), 1980 (level 4) 1990 (level 2)

	New York City			Tract on level 0 in 1970, 4 in 1980 and 2 in 1990						Ratio						
	1970	1980	1990	1970	1980	1990	70-80	89-90	1970	1980	1990	70-80	80-90			
	%	%	%	N	%	N	%	N	%	% Change	% Change	% Change	% Change			
TOTPOP	100.0	100.0	100.0	4,519	100.0	4,164	100.0	4,902	100.0	-7.9	17.7	1.00	1.00	1.00	0.00	0.00
NSWHITE	63.1	52.4	43.2	3,553	78.6	686	16.5	212	4.3	-80.7	-69.1	1.25	0.31	0.10	-0.93	-0.21
NSBLK	19.3	24.0	25.2	427	9.4	1,333	32.0	1,464	29.9	212.2	9.8	0.49	1.34	1.18	0.85	-0.15
HISPAN	16.2	19.9	24.4	502	11.1	1,926	46.3	2,723	55.5	283.7	41.4	0.69	2.33	2.28	1.64	-0.05
NSASIAN	1.4	3.8	7.2	37	0.8	219	5.3	503	10.3	491.9	129.7	0.60	1.39	1.42	0.79	0.03
PTRICN	10.3	12.1	11.8	291	6.4	1,489	35.8	1,393	28.4	411.7	-6.4	0.63	2.97	2.42	2.34	-0.55
TOTFAM	100.0	100.0	100.0	1,226	100.0	1,115	100.0	1,213	100.0	-9.1	8.8	1.00	1.00	1.00	0.00	0.00
Family income:																
Less than \$17.1k	20.8	29.4	24.9	325	26.5	718	64.4	548	45.1	120.9	-23.7	1.27	2.19	1.81	0.92	-0.38
\$17.1k-34.2k	31.1	28.9	24.9	426	34.7	272	24.4	299	24.7	-36.2	10.1	1.12	0.84	0.99	-0.27	0.15
\$34.2k-51.3k	24.5	20.9	21.3	223	18.2	85	7.6	217	17.9	-61.9	155.1	0.74	0.36	0.84	-0.38	0.47
Over 51.3k	23.6	20.8	28.9	252	20.6	40	3.6	149	12.3	-84.1	273.0	0.87	0.17	0.43	-0.70	0.25
Labor force	56.7	57.2	61.7	1,964	54.7	1,572	52.4	1,916	56.9	-20.0	21.9	0.96	0.92	0.92	-0.05	0.01
Male labor for.	74.1	69.5	71.0	1,153	71.7	836	66.9	1,049	75.5	-27.5	25.5	0.97	0.96	1.06	-0.00	0.10
MANAD	7.8	11.4	13.5	106	5.5	98	7.1	51	3.1	-7.5	-48.0	0.71	0.63	0.23	-0.08	-0.39
PROTEC	15.7	16.9	20.1	225	11.8	116	8.5	186	11.4	-48.4	60.3	0.75	0.50	0.57	-0.25	0.07
OPET	11.0	7.7	4.9	118	6.2	124	9.0	115	7.1	5.1	-7.3	0.56	1.18	1.45	0.62	0.27
OPTR	3.9	3.4	3.7	96	5.0	43	3.1	63	3.9	-55.2	46.5	1.27	0.91	1.05	-0.36	0.14
SERV	13.5	14.6	16.0	300	15.7	305	22.2	388	23.8	1.7	27.2	1.16	1.52	1.49	0.36	-0.03
FBORN	15.4	23.6	28.4	1,075	23.8	832	20.0	1,792	36.6	-22.6	115.4	1.54	0.85	1.29	-0.70	0.44
PVERTY	14.8	19.7	18.9	805	17.8	1,611	38.7	1,683	34.3	100.1	4.5	1.21	1.97	1.82	0.76	-0.15
YOUTH	17.4	18.1	15.2	773	17.1	932	22.4	759	15.5	20.6	-18.6	0.99	1.24	1.02	0.25	-0.22
ED16A	10.6	17.3	23.0	168	5.8	115	5.2	308	11.4	-31.5	167.8	0.54	0.30	0.49	-0.25	0.20
EDHLES	53.1	39.8	31.7	1,681	57.6	1,354	60.6	1,321	48.7	-19.5	-2.4	1.09	1.52	1.54	0.44	0.01

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

Note: TOTPOP - Total population. NSWHIT - Non-Hispanic whites. NSBLK - Non-Hispanic blacks. HISPAN - Hispanics. NSASIAN - Non-Hispanic Asians. PTRICN - Puerto Ricans. TOTFAM - Total family. MANAD - Managers and administrators. PROTEC - Professionals and Technicians. OPET - Machine Operators. OPTR - Operators in transportation. SERV - Service worker. FBORN - Foreign-born. YOUTH - Persons at age 14-24 years old. ED16A - Person with college and graduate degree. EDHLES - Less than high school.

Table 7.7 Change in Demographic Composition of Tract 122 in the Sunset Park, Brooklyn
in 1970 (level 0), 1980 (level 4) 1990 (level 0)

	New York City			Tracts on level 0 in 1970, 4 in 1980 and 0 in 1990						Ratio						
	1970	1980	1990	N	1970	1980	1990	70-80	89-90	1970	1980	1990	70-80	80-90		
	%	%	%		%	%	%	% Change	% Change				Change	Change		
TOTPOP	100.0	100.0	100.0	3,245	100.0	3,715	100.0	4,069	100.0	14.5	9.5	1.00	1.00	1.00	0.00	0.00
NSWHITE	63.1	52.4	43.2	2,939	90.6	1,896	51.0	1,438	35.3	-35.5	-24.2	1.44	0.97	0.82	-0.46	-0.16
NSBLK	19.3	24.0	25.2	0	0.0	109	2.9	88	2.2	.	-19.3	0.00	0.12	0.09	0.12	-0.04
HISPAN	16.2	19.9	24.4	264	8.1	1,461	39.3	1,604	39.4	451.0	9.8	0.65	1.98	1.62	1.33	-0.36
NSASIAN	1.4	3.8	7.2	42	1.3	189	5.1	939	23.1	350.0	396.8	0.94	1.34	3.20	0.40	1.85
PTRICN	10.3	12.1	11.8	182	5.6	1,221	32.9	787	19.3	570.9	-35.5	0.55	2.73	1.64	2.18	-1.08
TOTFAM	100.0	100.0	100.0	835	100.0	914	100.0	976	100.0	9.5	6.8	1.00	1.00	1.00	0.00	0.00
Less than \$17.1k	20.8	29.4	24.9	200	24.0	352	38.5	281	28.8	76.0	-20.1	1.15	1.31	1.16	0.16	-0.15
\$17.1k-34.2k	31.1	28.9	24.9	250	29.9	263	28.8	315	32.3	5.2	19.8	0.96	1.00	1.30	0.03	0.30
\$34.2k-51.3k	24.5	20.9	21.3	193	23.1	173	18.9	121	12.4	-10.4	-29.8	0.94	0.91	0.58	-0.04	-0.32
Over 51.3k	23.6	20.8	28.9	192	23.0	126	13.8	258	26.5	-34.4	104.9	0.98	0.66	0.92	-0.31	0.25
Labor force	56.7	57.2	61.7	1,296	52.5	1,226	45.6	1,929	61.0	-5.4	57.3	0.93	0.80	0.99	-0.13	0.19
Male labor for.	74.1	69.5	71.0	755	69.7	678	60.2	1,033	70.6	-10.2	52.4	0.94	0.87	0.99	-0.07	0.13
MANAD	7.8	11.4	13.5	114	9.4	94	8.9	142	7.8	-17.5	51.1	1.20	0.78	0.58	-0.43	-0.19
PROTEC	15.7	16.9	20.1	96	7.9	94	8.9	241	13.3	-2.1	156.4	0.50	0.52	0.66	0.02	0.14
OPET	11.0	7.7	4.9	80	6.6	81	7.6	201	11.1	1.2	148.1	0.60	0.99	2.28	0.39	1.28
OPTR	3.9	3.4	3.7	48	4.0	46	4.3	78	4.3	-4.2	69.6	1.01	1.26	1.16	0.25	-0.09
SERV	13.5	14.6	16.0	214	17.7	248	23.4	292	16.1	15.9	17.7	1.31	1.60	1.01	0.29	-0.59
FBORN	15.4	23.6	28.4	540	16.6	822	22.1	1,776	43.6	52.2	116.1	1.08	0.94	1.53	-0.14	0.60
PVERTY	14.8	19.7	18.9	507	15.6	1,181	31.8	899	22.1	132.9	-23.9	1.06	1.62	1.17	0.56	-0.45
YOUTH	17.4	18.1	15.2	622	19.2	818	22.0	793	19.5	31.5	-3.1	1.10	1.22	1.28	0.12	0.07
ED16A	10.6	17.3	23.0	58	3.0	196	9.6	332	13.2	237.9	69.4	0.28	0.56	0.57	0.28	0.02
EDHLES	53.1	39.8	31.7	1,151	59.1	1,086	53.3	1,155	45.9	-5.6	6.4	1.11	1.34	1.45	0.23	0.11

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

Note: TOTPOP - Total population. NSWHIT - Non-Hispanic whites. NSBLK - Non-Hispanic blacks. HISPAN - Hispanics. NSASIAN - Non-Hispanic Asians. PTRICN - Puerto Ricans. TOTFAM - Total family. MANAD - Managers and administrators. PROTEC - Professionals and Technicians. OPET - Machine Operators. OPTR - Operators in transportation. SERV - Service worker. FBORN - Foreign-born. YOUTH - Persons at age 14-24 years old. ED16A - Persons with college and graduate degree. EDHLES - Less than high school.

Table 7.8 Change in Demographic Composition of Tracts
in 1970 (level 3,4), 1980 (level 3,4) and 1990 (level 3,4) in New York City

	New York City			Tracts on levels 3,4 in 1970, 3,4 in 1980 and 3,4 in 1990								Ratio				
	1970	1980	1990	1970		1980		1990		70-80	89-90	1970	1980	1990	70-80	80-90
		%		N	%	N	%	N	%	% Change	% Change				% Change	% Change
TOTPOP	100.0	100.0	100.0	522,623	100.0	276,068	100.0	297,605	100.0	-47.2	7.8	1.00	1.00	1.00	0.00	0.00
NSWHITE	63.1	52.4	43.2	51,880	9.9	11,681	4.2	11,639	3.9	-77.5	-0.4	0.16	0.08	0.09	-0.08	0.01
NSBLK	19.3	24.0	25.2	281,296	53.8	171,041	62.0	169,954	57.1	-39.2	-0.6	2.80	2.59	2.26	-0.21	-0.32
HISPAN	16.2	19.9	24.4	186,527	35.7	90,080	32.6	110,518	37.1	-51.7	22.7	2.20	1.64	1.52	-0.56	-0.12
NSASIAN	1.4	3.8	7.2	2,940	0.6	2,624	1.0	5,494	1.8	-10.7	109.4	0.41	0.25	0.26	-0.16	0.00
PTRICN	10.3	12.1	11.8	151,956	29.1	68,954	25.0	72,315	24.3	-54.6	4.9	2.83	2.07	2.07	-0.76	-0.00
TOTFAM	100.0	100.0	100.0	121,526	100.0	62,639	100.0	66,458	100.0	-48.5	6.1	1.00	1.00	1.00	0.00	0.00
Family income:																
Less than \$17.1k	20.8	29.4	24.9	56,081	46.1	37,071	59.2	34,145	51.4	-33.9	-7.9	2.21	2.01	2.06	-0.20	0.05
\$17.1k-34.2k	31.1	28.9	24.9	44,632	36.7	17,400	27.8	17,135	25.8	-61.0	-1.5	1.18	0.96	1.04	-0.22	0.07
\$34.2k-51.3k	24.5	20.9	21.3	14,829	12.2	5,860	9.4	9,399	14.1	-60.5	60.4	0.50	0.45	0.66	-0.05	0.22
Over 51.3k	23.6	20.8	28.9	5,984	4.9	2,308	3.7	5,779	8.7	-61.4	150.4	0.21	0.18	0.30	-0.03	0.12
Labor force	56.7	57.2	61.7	152,525	47.7	81,963	43.1	105,895	50.7	-46.3	29.2	0.84	0.75	0.82	-0.09	0.07
Male labor for.	74.1	69.5	71.0	91,581	66.1	44,981	54.3	53,741	59.4	-50.9	19.5	0.89	0.78	0.84	-0.11	0.05
MANAD	7.8	11.4	13.5	3,987	2.8	2,689	3.9	6,280	7.2	-32.6	133.5	0.36	0.34	0.53	-0.02	0.19
PROTEC	15.7	16.9	20.1	8,160	5.8	5,195	7.5	10,866	12.5	-36.3	109.2	0.37	0.44	0.62	0.08	0.17
OPET	11.0	7.7	4.9	29,072	20.6	9,028	13.0	6,194	7.1	-68.9	-31.4	1.87	1.70	1.45	-0.17	-0.24
OPTR	3.9	3.4	3.7	8,450	6.0	3,100	4.5	4,251	4.9	-63.3	37.1	1.52	1.30	1.32	-0.22	0.02
SERV	13.5	14.6	16.0	33,045	23.4	18,251	26.4	21,916	25.1	-44.8	20.1	1.73	1.81	1.57	0.08	-0.23
FBORN	15.4	23.6	28.4	27,459	5.3	34,799	12.6	51,989	17.5	26.7	49.4	0.34	0.53	0.61	0.19	0.08
PVERTY	14.8	19.7	18.9	190,073	36.4	125,858	45.6	125,381	42.1	-33.8	-0.4	2.47	2.32	2.23	-0.15	-0.09
YOUTH	17.4	18.1	15.2	99,388	19.0	59,843	21.7	53,885	18.1	-39.8	-10.0	1.10	1.20	1.19	0.11	-0.01
ED16A	10.6	17.3	23.0	4,052	1.7	5,625	3.9	13,021	7.9	38.8	131.5	0.16	0.23	0.34	0.07	0.12
EDHLES	53.1	39.8	31.7	179,229	73.9	87,974	61.7	86,046	52.2	-50.9	-2.2	1.39	1.55	1.65	0.16	0.10

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

Note: TOTPOP - Total population. NSWHIT - Non-Hispanic whites. NSBLK - Non-Hispanic blacks. HISPAN - Hispanics. NSASIAN - Non-Hispanic Asians. PTRICN - Puerto Ricans. TOTFAM - Total family. MANAD - Managers and administrators. PROTEC - Professionals and Technicians. OPET - Machine Operators. OPTR - Operators in transportation. SERV - Service worker. FBORN - Foreign-born. YOUTH - Persons at age 14-24 years old. ED16A - Person with college and graduate degree. EDHLES - Less than high school.

Table 7.9 Change in Demographic Composition of Tract 218 in Central Harlem, Manhattan
in 1970 (level 4), 1980 (level 4) 1990 (level 4)

	New York City			Tract on leve 4 in 1970, 4 in 1980 and 4 in 1990						Ratio						
	1970	1980	1990	1970	1980	1990	70-80	89-90	1970	1980	1990	70-80	80-90			
	%			N	%	N	%	N	%	% Change		Change				
TOTPOP80	100.0	100.0	100.0	8,804	100.0	4,827	100.0	4,258	100.0	-45.2	-11.8	1.00	1.00	1.00	0.00	0.00
NSWHITE	63.1	52.4	43.2	38	0.4	0	0.0	34	0.8	-100	.	0.01	0.00	0.02	-0.01	0.02
NSBLK	19.3	24.0	25.2	8,590	97.6	4,721	97.8	3,825	89.8	-45.0	-19.0	5.07	4.08	3.56	-0.99	-0.52
HISPAN	16.2	19.9	24.4	165	1.9	33	0.7	378	8.9	-80.0	1045	0.12	0.03	0.36	-0.08	0.33
NSASIAN	1.4	3.8	7.2	11	0.1	0	0.0	21	0.5	-100	.	0.09	0.00	0.07	-0.09	0.07
PTRICN	10.3	12.1	11.8	90	1.0	16	0.3	149	3.5	-82.2	831.3	0.10	0.03	0.30	-0.07	0.27
TOTFAM	100.0	100.0	100.0	2,133	100.0	955	100.0	888	100.0	-55.2	-7.0	1.00	1.00	1.00	0.00	0.00
Family income:																
Less than \$17.1k	20.8	29.4	24.9	1,013	47.5	590	61.8	555	62.5	-41.8	-5.9	2.28	2.10	2.51	-0.18	0.41
\$17.1k-34.2k	31.1	28.9	24.9	730	34.2	310	32.5	137	15.5	-57.5	-55.7	1.10	1.12	0.62	0.02	-0.50
\$34.2k-51.3k	24.5	20.9	21.3	293	13.7	55	5.8	145	16.3	-81.2	163.9	0.56	0.28	0.77	-0.28	0.49
Over \$51.3k	23.6	20.8	28.9	97	4.5	0	0.0	50	5.6	-100	.	0.19	0.00	0.20	-0.19	0.20
Labor force	56.7	57.2	61.7	3,078	49.0	1,299	33.4	1,528	46.5	-57.8	17.6	0.86	0.58	0.75	-0.28	0.17
Male labor for.	74.1	69.5	71.0	1,624	60.1	676	39.5	747	50.6	-58.4	10.5	0.81	0.57	0.71	-0.24	0.14
MANAD	7.8	11.4	13.5	106	3.7	22	2.2	34	2.8	-79.2	54.5	0.48	0.19	0.21	-0.28	0.02
PROTEC	15.7	16.9	20.1	122	4.3	51	5.1	187	15.5	-58.2	266.7	0.27	0.30	0.77	0.03	0.47
OPET	11.0	7.7	4.9	460	16.2	48	4.8	42	3.5	-89.6	-12.5	1.47	0.63	0.71	-0.85	0.09
OPTR	3.9	3.4	3.7	158	5.6	32	3.2	36	3.0	-79.7	12.5	1.41	0.93	0.81	-0.48	-0.12
SERV	13.5	14.6	16.0	940	33.1	381	38.3	409	34.0	-59.5	7.3	2.45	2.62	2.12	0.17	-0.49
FBORN	15.4	23.6	28.4	264	3.0	262	5.4	487	11.4	-0.8	85.9	0.19	0.23	0.40	0.04	0.17
PVERTY	14.8	19.7	18.9	2,861	32.5	2,040	42.3	2,234	52.5	-28.7	9.5	2.20	2.15	2.77	-0.06	0.63
YOUTH	17.4	18.1	15.2	1,378	15.7	830	17.2	736	17.3	-39.8	-11.3	0.90	0.95	1.14	0.05	0.19
ED16A	10.6	17.3	23.0	95	1.8	113	3.6	202	7.5	18.9	78.8	0.17	0.21	0.33	0.03	0.12
EDHLES	53.1	39.8	31.7	3,827	72.9	1,800	56.6	1,317	49.0	-53.0	-26.8	1.37	1.42	1.55	0.05	0.12

Source: U.S. Census of Population, 1970 Fourth Count Summary Tape (FCST), 1980 STF4 and 1990 STF3.

Note: TOTPOP - Total population. NSWHIT - Non-Hispanic whites. NSBLK - Non-Hispanic blacks. HISPAN - Hispanics. NSASIAN - Non-Hispanic Asians. PTRICN - Puerto Ricans. TOTFAM - Total family. MANAD - Managers and administrators. PROTEC - Professionals and Technicians. OPET - Machine Operators. OPTR - Operators in transportation. SERV - Service worker. FBORN - Foreign-born. YOUTH - Persons at age 14-24 years old. ED16A - Persons with college and graduate degree. EDHLES - Less than high school.

Chapter VIII

SUMMARY AND CONCLUSION

The purpose of this research was to investigate the problems of the underclass in New York City. I began with a brief historical review of urban poverty and underclass research. I then analyzed various theoretical hypotheses by major social scientists, and presented the social, economic and demographic conditions which caused the upsurge of the underclass in New York City in the past two decades. I have attempted to determine the size and extent of the problem in New York City and to learn if the problem was getting worse. I have also discussed causes of the underclass. Lastly, I have focused on problems of the underclass which have consequently affected the evolution of the neighborhood in the city.

My tentative answers to our empirical questions about New York City's underclass reveal a much different picture than was anticipated. Our reading of the U.S. census data for 1970, 1980 and 1990 had led us to the following conclusions.

As in many stagnant central cities in the Northeast and Midwest, New York City has confronted crime, poverty, and

social inequality for the past few decades. All have converged on the City, and the urban underclass has emerged more prominently. The disaggregated measurement indicated that serious and more violent crimes, teenage pregnancies, welfare dependent households, single-parent (female-headed) families and poverty rate were recorded high in the 1970s.

With the movement toward an increasingly white-collar urban economy, the creation of manufacturing jobs has steadily declined, and the increase in managerial jobs in the urban centers has provided relatively few benefits for the urban poor.

Using Ricketts and Sawhill's definition of the underclass, our results show that since 1970 New York City has experienced a substantial increase in welfare households, female-headed families, and unemployment. Using Ricketts and Mincy's cutoffs (1980), we identify a subset of neighborhoods as "underclass areas," defined by very high rates of female headed households, men not working, and elevated high school drop-outs rates and welfare rates. From 1970 to 1980 these areas rapidly expanded, the number of underclass tracts increased considerably, and the population living in underclass areas more than quadrupled, to the extent that New York City might be called the capital of the underclass and "urban decay." Given New York's economic woes, it was expected that the years between 1980 to 1990 would result in a continuation of this trend. 1990 census data reveal, how-

erer, that between 1980 and 1990, the situation stabilized and in important aspects even improved.

Between 1980 to 1990, the number of underclass areas decreased, from 421 tracts in 1980 to 305 in 1990, and the underclass population decreased by 23 percent as measured by Ricketts' and Mincy's method.

Similar patterns also prevailed for the number of concentrated poverty areas and their populations. During the decade from 1970 to 1980, there was an upsurge in poverty and a substantial increase in poverty concentration; The areas of concentrated poverty (poverty rate greater than 40 percent) spread rapidly into neighboring districts. Although there were still areas of high poverty concentration in the city, these areas shrank, from 957 tracts in 1980 to 876 in 1990, and a smaller proportion of the City's poor live in them. In sum, the poor were decentralized and more widely distributed across the City in 1990 than in 1980.

In the 1970s, there was a pattern of population decline in the most of the impoverished areas in the city, as the underclass character intensified. The process was driven by a combination of increases in the poverty rate and differential out-migration of the poor and non-poor from these neighborhoods. As a result, poor families, working families and middle-class families spread out from underclass tracts into "next ring areas", which became new ghettos in 1980.

Between 1980 and 1990, there were further losses of poor families in underclass areas. This occurred as working and middle class families moved in. The changes also reflect racial composition. Native blacks and Puerto Ricans joined the exodus of the remaining whites from underclass tracts. Meanwhile, an influx of new immigrants arrived in these neighborhoods, balancing the flight of the native New Yorker. The end result has been the revitalization of many underclass neighborhoods showing a much higher proportion of foreign born and a rising socioeconomic status in these neighborhoods.

Spatial analysis using computer mapping techniques show that highly concentrated underclass areas were located within the highly segregated black and Hispanic neighborhoods. Hispanics had higher poverty rates than those of other racial groups in the city during the last few decades. I found that in the "persistent slum" neighborhoods, those tracts retaining higher underclass levels in three censuses, the percentage of non-Hispanic blacks was much higher than that of Hispanics. This suggests that the segregated black ghettos have the most difficulty in improving their condition. Blacks living in these ghettos face a uniquely disadvantaged social environment. This fact supports Massey's argument, that segregation is a structural factor in forcing African American to become an urban underclass.

The maps show that underclass areas expanded in the 1970s, and shrank in the 1980s. During the 1980s, some underclass neighborhoods revived very strongly; Sunset Park in Brooklyn, South Jamaica in Queens and the lower East side of Manhattan are examples. The maps also reveal an unexpected pattern underlying this relocation process. The neighborhoods that have received the highest influx of immigrants and whose character has changed most are those situated along subway lines.

The phenomenon of "ethnic succession," whereby one group moves out to be replaced by more recent immigrants, has generally typified American cities for over a century. It was thought that underclass neighborhoods would be passed by in this immigrating process, that they would be so depressed economically or so socially dangerous that new immigrants would shun them. This does not seem to have been the case. My research revealed that once again ethnic succession via new immigration is changing New York City neighborhoods.

These trends changed direction under the impact of economic growth and immigration. Poverty and the urban underclass are ultimately shaped by the economy of state and city, and the changes in business cycles.

The United States has entered a postindustrial revolution characterized by capital-intensive restructuring of the industrial and manufacturing sectors and a growth of the

service sector. Traditional heavy industries no longer are a major source of jobs. Instead, the expansion of the labor market will take place mainly in high technology, service sector, government, food services and sales.

The city's economy experienced a decline in the 1970s and then a boom in the 1980s. Real family income and urban poverty in the city followed this cycle.

Trends in income distribution are a major factor in explaining the growth and shrinkage of the underclass and poverty. My data reveal that the lowest family income group grew, and higher income groups shrank between 1970 and 1980. Conversely, in the 1980s, lower income groups shrank, and higher income groups grew substantially.

The proportion of the city's population living below the poverty line increased to 19.7 percent from 14.8 percent in 1970, and then dropped to 18.9 percent in 1990. The changes were most marked for minority groups: the black poverty rate increased to 28.6 percent in 1980 from 24 percent in 1970, and then fell to 24.7 percent in 1990, while the Hispanic poverty rate fell from 35.4 percent in 1980 to 31.9 percent in 1990.

Following the liberalization of United States immigration policies, immigrants from Central America, South America and Asia poured into urban areas of the city. The proportion of the foreign-born in the city increased to 28.4

percent in 1990 from 23.6 percent in 1980, 15.4 percent in 1970, with 2 million foreign-born people in 1990.

Today's immigrants were uprooted - pushed out of their countries by economic and political conditions or pulled here by the chance for a new life. As a group and individually, the immigrants brim with hope. Many have surprisingly high levels of education and aspiration. They work long and hard, often for wages unacceptable to the nativeborn and often in jobs far below their status at home.

These immigrants took advantage of the booming economy in the city during the 1980s. More and more of them graduated to the middle class. Some of them experienced greater economic success in terms of employment and earnings during this period.

Overall, my tabular analysis, cross-sectional and longitudinal regression models show consistent results.

The longitudinal data on the tables reveal that increasing underclass level occurred in those neighborhoods where there were significant concentration of low and working-class family, though diversified by race during both the 1970s and the 1980s. This indicates that these working and minority families were more likely to be hit by the changes in the economic and social structure within the city.

The results of cross-sectional and longitudinal regression indicate that the poverty rate is the most important predictor variable for the presence of an underclass in a

census tract; however, the proportion of middle class residents, the percentage of blacks and Hispanics, the percentage of foreign-born population, and distance from established underclass tracts are also important explanatory variables. Our regression models also support the bulk of Wilson's thesis about causal factors behind the increase in underclass behaviors, that is male marriageability, and middle class presence. The direct measures of declining blue-collar and manufacturing employment did not prove significant in most cases. However, we did observe that the shift to service occupations predicted increased underclass behavior in cross-sectional and longitudinal models. This could be thought of as viewing de-industrialization from its end point, that is, increasing lower-paying service jobs and a large number of lower educated people, especially young males were out of the labor force, which reflected the low Marital Index. In this sense, our findings are supportive of the de-industrialization thesis, and also consistent with Waldinger's argument.

Although we have found that poverty rate is the most important predictors in all the regression models, after systematically testing different situations, we did not find "thresholds" of the poverty rate which Massey and his colleagues had asserted as an effect of the "concentration of poverty." Our findings, based on both bivariate and multivariate analyses, showed a predominantly linear rela-

tionship between black poverty rate and black underclass behavior. For some behaviors, rate of underclass behaviors per poverty population decrease with increasing neighborhood poverty.

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