The Effects of Group Characteristics and City Context on Neighborhood Qualities Among Racial and Ethnic Groups

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Abstract

In this paper, we argue that the structural contexts of the city in conjunction with group characteristics are important to explain variations in neighborhood qualities among racial and ethnic groups. We further argue that these city structural contexts have different effects on the attainment of neighborhood qualities of racial and ethnic groups. Analyses based on a unique data set from the 1991 Canadian Census supports our arguments. Policy implications of the results are also discussed.

Résumé

Les auteurs soutiennent que les contextes structuraux de la ville et les caractéristiques de groupe sont des éléments importants qui permettent d'expliquer les différences de qualités de voisinage parmi les groupes raciaux et ethniques. Ils affirment de plus que les contextes structuraux urbains produiraient différents effets déterminants sur le degré de ces qualités. Les analyses fondées sur un ensemble de données unique tiré du recensement de 1991 appuient ces hypothèses. Les incidences des résultats sur la politique sont également examinées.

Key words: *ethnicity, neighborhood, structural contexts*

Introduction

The effects of neighborhood contexts on an individual's and on a group's life chances have re-emerged as an important topic in sociological research. William Julius Wilson (1987) was among the first to systematically identify the importance of neighborhood contexts in understanding differential life chances among racial groups in contemporary American cities. Subsequent studies have looked at how neighborhood contexts affect fertility patterns (Mayer 1991), marriage patterns (Fossett and Kiecolt 1993; Lichter, LeClere, and McLaughlin 1991), educational achievements (Entwisle and Alexander 1994), and crime (Sampson and Groves 1989; Sampson and Wilson 1995) among racial groups.

Although most studies confirmed in general the impact of neighborhood contexts on individual well-being in society, the process by which groups are distributed to neighborhoods with different qualities remains unclear. Two hypotheses have dominated the literature. One stresses the significance of differential group characteristics, such as differences in socioeconomic resources (Clark 1986; Massey and Denton 1985; Farley, Schuman, Bianchi, Colasanto, and Hatchett 1978). The other emphasizes the importance of discrimination in the housing market, which filters groups into neighborhoods of different qualities (Galster 1988; Yinger 1986). However, research findings have been inconclusive in both of these perspectives. Thus, a broader understanding is needed in order to develop a model to disentangle how differential neighborhood qualities occur among racial and ethnic groups.

This article will extend our understanding of differences in neighborhood qualities among groups by utilizing the embedded context in which the sorting process occurs. The analysis will follow the theoretical critique made by Granovetter (1973) on the neoclassical economic perspective and questions the predictive power of micro-level analysis. We will argue that the attainment of various neighborhood qualities among groups is embedded in a larger social context beyond the groups' characteristics and the differential treatment of groups in the housing market. The inclusion of the concept of embeddedness in the analysis recognizes the significance of contextual factors in explaining differences in neighborhood qualities among groups.

To investigate how group characteristics and embedded social contexts affect differences in neighborhood qualities among groups, this study utilizes a unique data set requested from Statistics Canada that provides detailed socioeconomic information on each major racial and ethnic group in Canada. Canada provides an excellent setting for this kind of study because of its racial and ethnic diversity and because of its wealth of information available on each group.

The paper is divided into two major parts. The first part will discuss how group characteristics and embedded social contexts affect the attainment of neighborhood qualities among groups. The embedded social contexts refers to the social environment where the attainment of neighborhood qualities among groups takes place. To avoid a common problem of theoretical vagueness when

using the concept of embeddedness, specific elements of the embedded social context will be identified. The differential effects of these embedded social contexts on groups will also be discussed. The second part of the paper will study the neighborhood qualities among major racial and ethnic groups in Canada. The purpose is to understand the relative effects of group characteristics and the embedded social contexts on the attainment of neighborhood qualities among various groups.

Literature Review

One of the common approaches to study the differences in neighborhood qualities among racial and ethnic groups has been to focus on differences in group characteristics. Fostered by the classic works of Park (1952) and Burgess (1928) and the more contemporary works of Massey and Denton (1985; 1988; 1989), these studies emphasize the effects of differences in groups' socioeconomic achievements on their differences in neighborhood qualities. The basic reasoning of these studies is that because neighborhoods with better social and physical qualities are usually associated with higher housing price (Tiebout 1956), individual households with limited resources are less likely to move into neighborhoods with better qualities.

Scholars frequently identify acculturation level as another group characteristic to explain variations in neighborhood qualities (Alba and Logan 1991; Massey and Fong 1990). Research shows that newly arrived immigrants want to be close to other members of their own groups, where they can develop trust and establish ethnic networks (Portes and Sensenbrenner 1993; Hechter 1976). These close relationships, in turn, provide them with financial and emotional support. In particular, individuals with a low mastery of the "official" language may place a higher priority on living in close proximity to others who share their language than on living in neighborhoods of high social and physical qualities.

Research on group characteristics also emphasizes the effect of acts of discrimination in the housing market based on skin color (Massey and Denton 1993; Farley, et al. 1994). Extensive research has documented how the likelihood of Blacks to live in desirable neighborhoods is hampered by discriminatory practices by real estate agents, financial institutions, and non-black homeowners in the American housing markets (Galster 1988). As a result, Blacks are less able to translate their socioeconomic resources into the attainments of better neighborhood qualities.

Although research in general supports these arguments, most of these studies show that using group characteristics alone cannot explain a large portion of observed differences in neighborhood qualities among groups (Massey and Fong 1990; Massey, Condran, and Denton 1987). A comprehensive study done by Massey, Condran, and Denton (1987) on neighborhood qualities of Blacks and Whites in Philadelphia found that socioeconomic resources are positively related to better neighborhood qualities. However, socioeconomic resources explained

less than 20% of the variance in neighborhood characteristics. Using the 1970 Neighborhood Characteristics Public Use Sample, one study (Massey and Denton 1985) investigated how socioeconomic resources and acculturation levels of Hispanics and blacks in New York and Los Angeles affect the proportion of whites in the neighborhoods. The results revealed similar findings that group characteristics explained very little of the variations in neighborhood characteristics. Similarly, Darroch and Marston (1972), using Canadian data, demonstrated that socioeconomic resources account for only small proportions of ethnic residential distribution. In addition, they found that acculturation factors are virtually insignificant in explaining ethnic residential patterns.

To explain the discrepancies between the research findings and our theoretical understanding of the role of group characteristics in determining variations in neighborhood qualities among groups, we propose to focus on the role of the embedded environments, which are city contexts in this case, in conjunction with group characteristics. This approach suggests that the patterns of neighborhood qualities are not only the reflection of the differences in group characteristics, but also the result of the effects of city contexts on different groups.

Given the theoretical and empirical importance of city contexts in studying of neighborhood qualities, it is surprising that few studies have directly examined their effects. Many studies emphasize the effects of city contexts on the geographic distribution of racial and ethnic groups such as residential segregation (Farley and Frey 1994), residential mobility (South and Deane 1993), and suburbanization (Alba and Logan 1991). However, no study has yet disentangled the effects of city contexts and group characteristics on group differences in neighborhood qualities.

We suggest here that several city contexts are potentially important in understanding the variations in neighborhood qualities among groups. The first city context is the proportion of a group in a city. It has been suggested that this factor relates to the spatial distribution process. An increase in the proportion of a group may raise ethnic or racial awareness in the city (Lieberson 1980). This awareness is disproportionately salient for minority groups with darker skin color, whose physical traits are visibly and markedly different from the majority white population (Telles 1992). A large proportion of visible minority groups in a city may pose a threat to the majority group. The majority group, in turn, may impose constraints against the visible minority moving into certain neighborhoods with desirable qualities. The constraints are usually facilitated through collective and institutional actions, by neighborhood groups, real estate agents, and lending institutions in the housing market (Massey and Denton 1993).

Secondly, the labor market situation often has a strong effect on the achievements of neighborhood qualities for some groups. When a city's labor market is weak and employment security is threatened, households may be reluctant to invest additional economic resources in improving their neighborhood qualities (Fong, 1996). However, the effects of the labor market

on the qualities of neighborhoods vary by groups. For example, groups with large proportion of recent immigrants face different labor market situation than others. The changes in immigration policies in Canada in the 1970s led to a massive influx of Asian and Black immigrants. Most of these recent immigrants were selected based on their high level of socioeconomic resources and training. The high level of human capital of these groups and the drastic increase in group size created a growth in ethnic enclaves in most major cities. Employment generated from the ethnic enclaves continues to provide these minority group members with socioeconomic resources, even when they face harsh competition in the labor market. Thus, both Asians and Blacks will be less affected by the labor market situation (Fong, 1996). However, some other groups, such as the European groups, who have stronger attachment to the mainstream labor market, will more likely be affected when the labor market is weak.

Thirdly, the housing market is another structural factor which determines neighborhood qualities among groups. When the housing market is strong, new construction encourages some groups with more socioeconomic resources to move into newer, better quality neighborhoods than they previously inhabited. The next lower income group is then able to move into the neighborhood previously occupied by the higher income group (Alonso 1964). Thus, all groups benefit from the process. However, when the housing market is stagnant, this 'filtering down' process will slow down. The filtering down process is, however, more strongly affected in the South East Asian group, which traditionally has strong family ties (Light 1972). Taking advantage of a strong housing market, South East Asians are more likely to pool their financial resources together to improve their neighborhood qualities.

Data

The analysis in this study is based on the 1991 Census 2B Profile file and a data set specially requested from Statistics Canada. This unique data set provides detailed socioeconomic information on major ethnic groups at the tract level. The study included tracts in the fifteen largest census metropolitan areas (CMAs) in Canada, which comprise the majority of the urban population in Canada.

In this study, the census tract is used to represent the neighborhood. The census tract is used because it is the smallest geographic unit that provides detailed census ethnic data without suffering from severe suppression problem. Although the tract data related to a group with a population of less than 40 persons is suppressed because of confidentiality, more data of minority groups based on a smaller unit, such as an enumeration area (with an average population of 250), is suppressed under the same confidentiality requirement. Therefore, the data regarding minority racial and ethnic groups is more likely to be obtained from census tract data than from a smaller geostatistical unit.

Although a census tract is a geostatistical area defined by Statistics Canada, it is theoretically compatible with the concept of neighborhood because each census

tract has to satisfy three major criteria. First, census tract boundaries must follow "easily recognizable physical features." Second, each census tract must have a population between 2,000 and 8,000, with an average of 4000. Third, each census tract has to be homogeneous in terms of social and economic conditions.

In this study, neighborhood qualities are defined by various social characteristics of the neighborhood. They are: average number of persons per room; proportion of persons who have completed university; median household income; proportion of immigrants; proportion not knowing official languages (English and French); proportion of low income families; and proportion of unemployed in the neighborhood. The discussion focuses on the social dimension of neighborhood qualities because the effects of social characteristics of neighborhoods on individual behavior and life chances are well documented in the literature. There is less emphasis on the physical characteristics of the neighborhoods because the inclusion of physical characteristics may complicate interpretation of the results. For instance, it is difficult to determine neighborhood qualities if the analysis compares only the average age of the buildings in the tract. The fact that a neighborhood has a large proportion of old buildings may imply a deteriorating physical condition of the neighborhood. However, it is equally possible to interpret the same data as an indicator of an established and possibly wealthy neighborhoods.

We will investigate the neighborhood qualities of nine major racial and ethnic groups in Canada: British, French, Northern European, Western European, Southern European, Eastern European, East and South East Asian, South Asian, and Black. We will not focus on individual ethnic groups, such as Greeks or Italians, because most data about these individual groups are suppressed due to their small numbers in the census tracts. Most groups are categorized according to the geographic locations of their ethnic origins because research in Canada suggests that the housing market experiences of ethnic groups from the same geographic regions are similar (Balakrishnan 1976; Balakrishnan and Jarvis 1979). Groups included in each category are based on the detailed classification provided by Statistics Canada. Categories of Blacks are taken directly from one of the categories in the census question regarding ethnic origin.¹

Results

We begin our analysis with a fundamental question: Are there differences in neighborhood qualities among groups in Canada? Table 1 presents the average neighborhood qualities of major racial and ethnic groups in Canada. The figures clearly show considerable variations among groups, even among European groups. British, Northern Europeans, and Western Europeans are living in desirable neighborhoods with social qualities preferable to those of other groups. They are living in neighborhoods with low density, high education level, high

Table 1. Neighborhood Qualities of Major Racial and Ethnic Groups in Canada, 1991

Neighborhood Qualities	Northern					Western		Southern		Eastern		South		SouthEast		Black
	British	French	European	European	European	European	European	European	European	European	European	Asian	Asian	Asian	Asian	
Average persons per room	0.291	0.603	0.273	0.290	0.567					0.348	0.618	0.558				0.579
Proportion Completed University	0.207	0.190	0.208	0.192	0.170					0.197	0.195	0.198				0.179
Median Household Income	43,822	35,129	41,943	42,166	41,673					40,608	44,974	39,224				39,508
Proportion Immigrants	0.216	0.109	0.217	0.205	0.334					0.249	0.366	0.334				0.354
Proportion Knowing English and French	0.015	0.011	0.016	0.014	0.044					0.021	0.038	0.040				0.037
Proportion Low Income Family	0.120	0.174	0.128	0.122	0.162					0.148	0.152	0.196				0.196
Proportion Unemployed	0.052	0.065	0.052	0.051	0.065					0.057	0.065	0.067				0.071

income level, low proportion of immigrants, low proportion of people not knowing both official languages, low proportion of low income families, and low proportion of unemployed.

Although French Canadians are one of the founding groups in Canada, their neighborhood qualities do not benefit from their early presence in the country. Their neighborhood environments are less desirable than those of the other charter group in Canada, the British, or of the old European immigrant groups, the Northern and Western Europeans. In particular, French Canadians live in neighborhoods that have remarkably low levels of immigrants and of people not knowing either official language. This may suggest that French Canadians have a strong level of ethnic cohesion which may affect the likelihood of living in neighborhoods with high proportions of immigrants and neighbors not knowing either official language (Trovato and Halli 1990). However, it is equally possible to interpret that immigrants are less likely to move into predominantly French neighborhoods.

Data consistently show that blacks in Canada live in the least desirable neighborhoods. They are living in relatively dense neighborhoods with an average of 0.58 persons per room, as compared to 0.29 for people of British descent. Their neighborhoods have low education levels, with about 18% of the population in neighborhood having completed university education, whereas British Canadians live in neighborhoods where an average of 21% of the residents have completed university. In addition, their neighborhoods on average have a higher proportion of immigrants, a higher proportion of people not knowing either official language, a higher proportion of low income families, and a higher proportion of unemployed. Compared to blacks, Southern Europeans, Eastern Europeans, and Asian groups share better neighborhood qualities. Yet, their average neighborhood qualities still fall behind the British.

Effects of Group Characteristics

Based on the foregoing discussion on how group characteristics, such as socioeconomic and acculturation factors, affect various neighborhood qualities for each major racial and ethnic group, we use a multivariate causal model to estimate the effects of these variables. Since some neighborhood qualities are in proportions that range from 0 to 1, these variables are transformed by a logit function, $\log(p/(1-p))$, in order not to violate the OLS assumptions. Because distribution of racial and ethnic groups in the tracts varies substantially, estimation of the model is weighted by the proportion of the racial or ethnic group in the tract under study.

Using geographical data to estimate statistical models may sometimes create technical problems. It is because the census tract is an arbitrary geostatistical unit (Massey and Denton 1985). If the geostatistical unit used in the study is a smaller unit, such as enumeration area, the results of the estimation may be different. No research has been published based on Canadian data comparing the

use of different geostatistical units in statistical estimation. Studies based on American census data show that the estimated relative importance of variables using census tracts is the same as using the smaller geostatistical unit such as census block (Massey and Denton 1985). Research has further shown that using a larger geostatistical area, census tract, as a unit of analysis may lead to more conservative results than using a smaller geostatistical unit. Contradictory conclusions are not likely if different geostatistical units are used for analysis (Massey and Denton 1985). Since both the American and the Canadian censuses use very similar sampling procedures, and the definition of geostatistical units, such as a census tract, is closely resembled, the decision to use the geostatistical areas suggested by American census data can be applied to Canadian census data. Nevertheless, the interpretation of results should be made cautiously.

Table 2 documents regression results of group characteristics on a variety of neighborhood qualities for each major racial and ethnic group. Socioeconomic status of each group is measured by the proportion who have completed university education and the median household income of the group in the tract. Acculturation level of the group is measured by the proportion of the group who are foreign born. Based on the above discussion, we hypothesize that education and income are positively related to the neighborhood qualities, whereas proportion of foreign born is inversely related to neighborhood qualities.

Table 2 shows some uniformities regarding the effect of the independent variables on various neighborhood characteristics. In general, the results support the positive effects of socioeconomic status and the inverse relationship of the proportion of foreign born with neighborhood qualities. Increased education and income levels enhance better neighborhood qualities. At the same time, a high proportion of foreign born, which is a proxy measure for a low level of acculturation, is negatively related to neighborhood qualities.

A closer look suggests that the relative effect of these factors on neighborhood qualities is varied. In most instances, education and the proportion of immigrants in the neighborhoods have a relatively stronger effect on neighborhood qualities than on income level.

However, results also show that the effects of these factors on neighborhood qualities differ extensively among groups. The British group most successfully translates socioeconomic achievements, education and income to better neighborhood qualities. For example, with an increase in income of \$1000, the British can increase 0.827 in logit of median household income in the neighborhood. With the same amount of increase in income, blacks increase only 0.383 in the logit. Surprisingly, the neighborhood qualities of groups of whom a large proportion recently arrived Canada, such as South Asians, South East Asians, and blacks, are not always strongly related to their acculturation level. Perhaps the Canadian immigration criteria, which have selected a group of immigrants ready to integrate into Canadian society and share similar neighborhood qualities with other groups, are instrumental here.

Table 2. Coefficients for the Effects of Group's Characteristics on Selected Neighborhood Qualities in Canada, 1991

Group Characteristics	British	French	Northern European	Western European	Southern European	Eastern European	South Asian	SouthEast Asian	Black
Average persons per room									
Education	-0.128 **	-0.100 **	-0.009 **	-0.027 **	-0.105 **	-0.038 **	-0.053 **	-0.031 **	-0.034 **
Income	-0.000 **	-0.000 **	-0.000 **	-0.000 **	-0.000 **	-0.000 **	-0.000 **	-0.000 **	-0.000 **
Prop. Immigrants	0.084 **	-0.069 **	0.005 *	0.012 *	-0.008	0.028 **	0.011 *	0.047 **	0.026 **
Intercept	0.099 **	0.125 **	0.041 **	0.053 **	0.122 **	0.055 **	0.094 **	0.046 **	0.072 **
Adjusted R ²	0.176	0.157	0.024	0.026	0.138	0.075	0.086	0.099	0.051
N	2557	2530	1694	2485	2547	2473	1948	2242	1694
Proportion Completed University									
Education	4.543 **	3.866 **	0.529 **	1.992 **	2.600 **	2.468 **	1.433 **	1.302 **	0.955 **
Income	0.007 **	0.003 **	0.007 **	0.007 **	0.004 **	0.007 **	0.004 **	0.003 **	0.002 **
Prop. Immigrants	-0.183	1.623 **	0.229 **	-0.111 *	0.201	0.254 **	-0.518 **	-0.603 **	-0.210 **
Intercept	-4.475 **	-3.859 **	-2.253 **	-3.161 **	-3.133 **	-3.465 **	-2.154 **	-2.021 **	-2.117 **
Adjusted R ²	0.669	0.558	0.151	0.311	0.256	0.401	0.197	0.249	0.101
N	2557	2530	1694	2485	2547	2473	1948	2242	1694
Median Household Income									
Education	-5.019 **	-3.206 **	3.150 **	8.093 **	10.363 **	17.310 **	8.562 **	10.948 **	2.627 *
Income	0.827 **	0.802 **	0.275 **	0.576 **	0.682 **	0.443 **	0.234 **	0.258 **	0.383 **
Prop. Immigrants	-3.142	-20.830 **	3.189 **	3.669 **	-18.651 **	-0.042	-2.964	-19.432 **	1.200
Intercept	3.192 **	2.210 **	25.433 **	7.161 **	12.349 **	10.363 **	30.404 **	33.736 **	22.525 **
Adjusted R ²	0.758	0.738	0.259	0.514	0.523	0.477	0.206	0.375	0.366
N	2557	2530	1694	2485	2547	2473	1948	2242	1694
Proportion Immigrants									
Education	-0.351 **	1.758 **	0.009	0.391 **	-1.473 **	0.053	-0.488 **	0.300 **	-0.216 **
Income	-0.002 **	-0.010 **	-0.001	-0.002 **	0.015 **	0.003 **	-0.001	-0.000	0.002 **
Prop. Immigrants	6.894 **	10.324 **	0.817 **	2.084 **	2.254 **	1.833 **	0.380 **	0.231 **	0.995 **
Intercept	-1.975 **	-2.78 **	-1.515 **	-2.273 **	-2.170 **	-2.082 **	-0.541 **	-1.008 **	-1.187 **
Adjusted R ²	0.376	0.172	0.118	0.327	0.216	0.362	0.014	0.006	0.060
N	2557	2530	1694	2485	2547	2473	1948	2242	1694

Table 2. Coefficients for the Effects of Group's Characteristics on Selected Neighborhood Qualities in Canada, 1991
(Continued)

Group Characteristics	British	French	Northern European	Western European	Southern European	Eastern European	South Asian	South East Asian	Black
Proportion Knowing English and French									
Education	-0.610 **	1.489 **	-0.083	-0.148	-3.770 **	-0.918 **	-1.447 **	-0.566 **	-0.418 **
Income	-0.018 **	-0.031 **	-0.005 **	-0.013 **	0.002	-0.007 **	-0.004 **	-0.007 **	-0.007 **
Prop. Immigrants	4.224 **	7.267 **	0.577 **	1.586 **	3.050 **	1.953 **	0.088	0.851 **	0.856 **
Intercept	-3.818 **	-4.219 **	-4.327 **	-4.362 **	-3.779 **	-4.203 **	-2.631 **	-3.504 **	-3.609 **
Adjusted R ²	0.104	0.168	0.032	0.086	0.321	0.226	0.075	0.091	0.046
N	2557	2530	1694	2485	2547	2473	1948	2242	1694
Proportion Low Income Family									
Education	-0.280 **	-0.533 **	-0.234 **	0.107	1.312 **	-1.052 **	-0.663 **	-0.918 **	-0.402 **
Income	-0.038 **	-0.045 **	-0.012 **	-0.029 **	-0.034 **	-0.022 **	-0.012 **	-0.013 **	-0.021 **
Prop. Immigrants	0.255	1.885 **	-0.279 **	0.047	-1.205 **	0.267 **	-0.033	1.152 **	0.023
Intercept	-0.001	0.656 **	-1.200 **	-0.703 **	-0.259 **	-0.386 **	-0.853 **	-1.219 **	-0.530 **
Adjusted R ²	0.549	0.681	0.167	0.309	0.501	0.372	0.204	0.358	0.341
N	2557	2530	1694	2485	2547	2473	1948	2242	1694
Proportion Unemployed									
Education	-0.565 **	-0.237 **	-0.082 **	0.058	-0.662 **	-0.351 **	-0.527 **	-0.383 **	-0.273 **
Income	-0.013 **	-0.016 **	-0.006 **	-0.011 **	-0.012 **	-0.009 **	-0.004 **	-0.006 **	-0.006 **
Prop. Immigrants	0.319 **	1.808 **	-0.032	0.149 **	0.461 **	0.410 **	-0.001	0.600	0.126
Intercept	-2.013 **	-1.947 **	-2.639 **	-2.528 **	-2.077 **	-2.457 **	-2.270 **	-2.646 **	-2.351 **
Adjusted R ²	0.351	0.367	0.124	0.172	0.318	0.263	0.144	0.303	0.138
N	2557	2530	1694	2485	2547	2473	1948	2242	1694

p** < 0.05; p* < 0.1

Finally, the explained variance by group characteristics differs among groups. The group characteristic models of both charter groups, British and French, explain the largest proportion of variance. However, the same model explains smaller proportions of variance for visible minority groups, such as South Asians, South East Asians and Blacks. The results suggest that, for groups other than the charter groups, other factors have to be considered. To disentangle the determinants of neighborhood qualities among groups, the effects of city context will also be examined.

Effects of Group Characteristics and City Context

Table 3 documents regression analysis of the effects of socioeconomic resources, acculturation levels, and city contextual factors on various neighborhood qualities for each group. City contextual factors include: the proportion of the group in the city, the labor market situation in the city, and housing values in the city. Information on the proportion of the group in the city was obtained directly from the census data. The labor market situation is the ratio of the number of people of working age to the total employment in the city. The ratio summarizes the strength of the labor market. It can be interpreted as the ratio of supply to demand in the city's labor market. The larger the ratio, the weaker the labor market, which implies an intense competition for jobs. Housing value is measured by the ratio of the current median housing price in the city to the median price ten years ago. The measure is intended to capture the inflation in housing prices. A low rate implies a stagnant housing market, which suggests a merely moderate increase in housing prices. We also controlled for regional location because previous research showed that residential patterns vary among regions (Fong, 1996).

Because of space limitations, we have presented the effects of variables on only three neighborhood qualities in Table 3. Nevertheless, the table provides valuable information about the effects that groups' socioeconomic resources, their acculturation levels, and city contextual factors have on neighborhood qualities.

When city contextual factors are introduced to the model, the effects of groups' socioeconomic characteristics and acculturation levels on neighborhood qualities mostly remain in the expected direction. Moreover, most city contextual factors affect selected neighborhood qualities in the expected direction in most instances. A weak labor market and high housing values hamper groups in trying to achieve better neighborhood qualities.

However, a closer look suggests that the effects of these variables on the achievement of neighborhood qualities vary among groups. The neighborhood qualities of Northern and Western Europeans, the old European immigrant groups, are more strongly affected by labor market status than other groups. The coefficient of labor market status is 3.67 for Northern Europeans and 3.05 for Western Europeans on reducing the proportion of people in the neighborhood not knowing either official language. However, the effect on the same

**Table3. Coefficients for the Effects of Group's Characteristics and City's Structural Contexts
on Selected Neighborhood Qualities in Canada, 1991**

Group Characteristics and City Structural Contexts	British	French	Northern European	Western European	Southern European	Eastern European	South Asian	SouthEast Asian	Black
Average persons per room									
<i>Group Characteristics</i>									
Education	-0.125 **	-0.129 **	-0.004	-0.028 **	-0.076 **	-0.020 **	-0.047	-0.031 **	-0.023 **
Income	-0.000 **	0.000 *	-0.000 **	0.000	-0.000 **	-0.000	-0.000 **	-0.000 **	0.000
Prop. Immigrants	0.070 **	0.010	0.003	-0.020 **	-0.020	0.038 **	0.009	0.040 **	0.012 **
<i>City Structural Context</i>									
Prop. Group in City	-0.152 **	0.028 **	-1.951 **	-0.205 **	0.470 **	0.204 **	0.559	1.359 **	1.680 **
Labor Market Status	0.020 **	-0.006 *	0.099 **	0.066 **	0.047 **	0.038 **	0.040 **	0.033 **	0.033 **
Housing Market Status	0.002	0.002	-0.002	0.005	-0.005 **	-0.003	0.023 **	-0.013 *	0.018 **
Western Provinces	-0.036 **	0.016 *	0.043 **	0.027 **	0.010	-0.000	-0.009	-0.016	0.050 **
Ontario	-0.017 **	0.006	0.014 **	0.008 **	-0.013 *	-0.000	0.015	0.006	0.006 *
Quebec	-0.015 **	0.011 *	0.007 *	0.010 **	0.003	0.008	0.011 **	0.010 **	0.014 **
Intercept	0.129 **	0.087	-0.030 **	-0.050 **	-0.006	-0.027 *	0.044 **	-0.016 **	-0.078 **
Adjusted R ²	0.283 **	0.304 **	0.207 **	0.135 **	0.353 **	0.150 **	0.237 **	0.260 **	0.306 **
N	2555	2527	1692	2483	2544	2472	1947	2241	1962
Proportion Knowing English and French									
<i>Group Characteristics</i>									
Education	0.512 **	2.820 **	0.108	0.226	-2.721 **	-0.475 **	-0.591 **	-0.333 **	-0.038
Income	-0.014 **	-0.026 **	-0.002 **	-0.007 **	-0.003	-0.003 **	-0.003 **	-0.006 **	-0.005 **
Prop. Immigrants	3.140 **	4.179 **	0.446 **	1.074 **	2.765 **	2.243 **	0.101	0.689 **	0.372 **
<i>City Structural Context</i>									
Prop. Group in City	-2.264 **	-3.156 **	4.961 **	-2.275 **	12.728 **	-3.490 **	26.548 **	34.598 **	40.498 **
Labor Market Status	2.236	1.241 **	3.665 **	3.049 **	1.822 **	1.537 **	2.287 **	1.671 **	1.766 **
Housing Market Status	-0.146 **	-0.238	-0.291 **	-0.171	-0.344 **	-0.549 **	-0.166	-0.949 **	-0.069
Western Provinces	0.150	0.918 **	0.621 *	0.945 **	1.011 **	1.193 **	0.698 **	0.202	1.724 **
Ontario	0.390 **	0.878 **	0.773 **	0.541 **	0.137	0.709 **	0.387 **	0.799 **	0.684 **
Quebec	-0.161 **	0.887 **	0.359 **	0.131	0.209 *	0.268 *	0.359 **	0.397 **	0.440 **
Intercept	-6.418 **	-6.749 **	-8.494 **	-9.286 **	-7.796 **	-6.835 **	-7.781 **	-6.060 **	-8.287 **
Adjusted R ²	0.219 **	0.272 **	-10.342 **	0.199 **	0.490 **	0.308 **	0.361 **	0.298 **	0.317 **
N	2555	2527	1692	2483	2544	2472	1947	2241	1962

Table 3. Coefficients for the Effects of Group's Characteristics and City's Structural Contexts on Selected Neighborhood Qualities in Canada, 1991 (Continued)

Group Characteristics and City Structural Contexts	British	French	Northern European	Western European	Southern European	Eastern European	South Asian	SouthEast Asian	Black
Proportion Unemployed									
<i>Group Characteristics</i>									
Education	-0.416 **	0.045	-0.008 **	0.260 **	-0.367 **	-0.137 **	-0.308 **	-0.175 **	-0.055
Income	-0.011 **	-0.012 **	-0.004 **	-0.007 **	-0.007 **	-0.006 **	-0.004 **	-0.004 **	-0.003 **
Prop. Immigrants	0.580 **	0.841 **	-0.018 **	-0.143 **	0.389 **	0.339 **	0.130 **	0.483 **	0.054
<i>City Structural Context</i>									
Prop. Group in City	0.049	-1.125 **	1.930 **	-0.077 **	1.233 **	-1.344 **	4.486 **	3.386 **	5.934 **
Labor Market Status	0.740 **	0.362 **	1.872 **	1.737 **	1.068 **	0.952 **	1.287 **	0.760 **	0.843 **
Housing Market Status	-0.233 **	-0.324 **	-0.215 **	-0.221 **	-0.141 **	-0.259 **	-0.096 **	-0.126 **	-0.006
Western Provinces	-0.138 **	-0.133	-0.352 **	-0.207 **	-0.177	0.168	-0.190	-0.144	-0.039
Ontario	0.060 *	0.197 **	0.006	0.031	-0.067	0.005	-0.093	0.002	-0.055
Quebec	0.049 *	0.318 **	0.048	0.000	-0.007	0.001	-0.008	0.038	0.021
Intercept	-2.772 **	-2.276 **	-4.845 **	-4.551 **	-3.641 **	-3.318 **	-3.829 **	-3.645 **	-3.781 **
Adjusted R ²	0.410 **	0.472 **	0.367 **	0.381 **	0.496 **	0.399 **	0.388 **	0.456 **	0.387 **
N	2555	2527	1692	2483	2544	2472	1947	2241	1962

p** < 0.05; p* < 0.1

neighborhood qualities is 1.82 for Southern Europeans and 1.24 for the French. Since the economy was very strong at the end of the 1980s, Northern and Western Europeans are able to take the advantages and improve their neighborhood qualities.

Nevertheless, the proportion of a group in the city consistently has strong effects on visible minorities, Asian groups and blacks, as compared to other groups. In particular, the effect is consistently strongest for blacks. It suggests that the proportion of group size has significantly stronger effects on groups with darker skin color. With the same group size, groups with darker skin color are more visible than groups with lighter skin color. Since most Asian groups and blacks are concentrated in the large cities, their clustering in these cities has seriously affected their attainment of better neighborhood qualities.

Also consistent with our suggestion, the neighborhood qualities of South East Asians are consistently and strongly related to housing values. A stagnant housing market reduces about 0.95 in logit of proportion of not knowing any official language in the neighborhood for South East Asians. However, it reduces only 0.29 in logit for Northern Europeans and 0.42 for British. The results may suggest that South East Asians utilize their strong family ties to pool economic resources and to improve neighborhood qualities whenever a stagnant housing market exists.

Finally, the inclusion of city contexts definitely narrows the differences in variance explained among groups. For instance, the adjusted R^2 only ranges from 0.37 to 0.50 among groups after the inclusion of city contexts for proportion of unemployed in the neighborhoods. The limitation of using group characteristics to understand neighborhood qualities among recent immigrant groups can be amended by the inclusion of the city context in the model.

However, the results reported in Table 3 may be a statistical artifact. The group characteristics of some racial and ethnic groups, such as British, Northern Europeans, and Western Europeans, may be highly related to the neighborhood qualities than the city contexts. Therefore, less variation of the neighborhood qualities is left to be accounted for by city contexts. For other groups, such as South Asians, South East Asians, and blacks, their group characteristics may be less related to the neighborhood qualities than the city contexts, so more variation of the neighborhood qualities is left to be accounted for by city contexts. The result is a narrow range in R^2 in Table 3.

To address the issue, we presented another set of regressions with only the city contexts as independent variables. If the above mentioned statistical artifact exists, we will probably find that the same set of racial and ethnic groups, whose neighborhood characteristics are strongly affected by group characteristics, are also strongly affected by the city context when only the structural contexts are used as independent variables. The results are reported in Table 4, which clearly show that this is not the case. Results suggest that the variance of the neighborhood qualities of racial and ethnic groups, such as British, Northern Europeans, and Western Europeans, that are more related to the group

Table 4. Coefficients for the Effects of City's Structural Contexts on Selected Neighborhood Qualities in Canada, 1991

City Structural Contexts	British	French	Northern European	Western European	Southern European	Eastern European	South Asian	SouthEast Asian	Black
Average persons per room									
Prop. Group in City	-0.052 **	-0.002 **	-0.015 **	-0.011 **	0.035 **	0.007 **	0.018 **	0.025 **	0.026 **
Labor Market Status	-0.014 **	0.025 **	0.046 **	0.030 **	-0.022	-0.003	-0.009	-0.032 **	0.064 **
Housing Market Status	-0.027 **	0.025 **	0.030 **	0.007	-0.045 **	-0.001	0.018	-0.015	0.018 **
Western Provinces	-0.085 **	0.049 **	0.007	0.012	0.026 *	0.026	0.029 **	0.003	0.043 **
Ontario	0.061 **	0.026 **	0.103 **	0.075 **	0.075 **	0.052 **	0.054 **	0.051 **	0.038 **
Quebec	0.018 **	-0.001	-0.001	0.011 **	-0.012 **	0.000	-0.015 **	-0.005	0.020 **
Intercept	-0.128 **	-0.016	-0.219 **	-0.142 **	0.099 **	-0.017	0.071 **	0.104 **	0.046 **
Adjusted R ²	0.168 **	0.173 **	0.140 **	0.127 **	0.269 **	0.120 **	0.190 **	0.197 **	0.287 **
N	2554	2526	1691	2482	2543	2471	1946	2240	1961
Proportion Knowing English and French									
Prop. Group in City	-0.676 **	-0.272 **	1.004 **	-0.421 **	1.047 **	-0.445 **	0.718 **	0.741 **	0.618 **
Labor Market Status	0.628 **	1.225 **	-0.701	1.547 **	-0.037	1.740 **	0.396	-0.531	2.037 **
Housing Market Status	1.124 **	0.694 **	1.248 **	1.330 **	-0.539	2.464 **	0.264	0.618	1.605 **
Western Provinces	-0.582 *	1.142 **	2.135 **	0.323	-0.830 *	1.518 **	0.779 **	0.304	1.390 **
Ontario	2.548 **	1.369 **	3.737 **	3.343 **	3.210 **	2.269 **	2.518 **	2.137 **	1.931 **
Quebec	-0.325 **	0.826 **	-0.246 *	0.086	-0.593 **	-0.473 **	0.035	-0.797 **	-0.093
Intercept	-8.936 **	-9.780 **	-4.278 **	-11.755 **	-3.773 **	-9.793 **	-5.004 **	-2.432 **	-5.310 **
Adjusted R ²	0.164 **	0.119 **	0.179 **	0.182 **	0.319 **	0.188 **	0.351 **	0.276	0.303 **
N	2554	2526	1691	2482	2543	2471	1946	2240	1961

**Table 4. Coefficients for the Effects of City's Structural Contexts on Selected Neighborhood Qualities in Canada, 1991
(Continued)**

City Structural Contexts	British	French	Northern European	Western European	Southern European	Eastern European	South Asian	SouthEast Asian	Black
Proportion Unemployed									
Prop. Group in City	0.112 **	-0.045 **	0.170 **	0.060 **	0.063 **	-0.061 **	0.124 **	0.039 **	0.085 **
Labor Market Status	0.036	0.148	-0.416 **	-0.317 **	-0.144	-0.114	-0.155	0.235	-0.053
Housing Market Status	0.115 *	-0.043	-0.035	-0.031	-0.136	0.104	-0.228	-0.138	-0.101
Western Provinces	0.381 **	0.269 **	0.332 **	0.031	-0.036	0.110	0.059	0.002	0.058
Ontario	1.363 **	0.767 **	2.068 **	1.941 **	1.539 **	1.271 **	1.217	1.041 **	0.965 **
Quebec	-0.126 **	0.205 **	-0.192 **	-0.253 **	-0.128 **	-0.217 **	0.012	0.124 **	-0.045
Intercept	-4.475 **	-4.524 **	-4.293 **	-4.726 **	-4.380 **	-4.378 **	-3.840 **	-3.649 **	-3.533 **
Adjusted R ²	0.271 **	0.328 **	0.326 **	0.336 **	0.427 **	0.305 **	0.317 **	0.345 **	0.357 **
N	2554	2526	1691	2482	2543	2471	1946	2240	1961

p** < 0.05; p* < 0.1

characteristics regressions are explained less by the city context regressions as compared to other groups such as Asians and blacks.

Conclusion

The major contribution of this paper was argued and showed the importance of the embedded environments of the housing market in conjunction with group characteristics to explain variations in neighborhood qualities among groups. This theoretical framework went beyond the conventional understanding of the differences in racial and ethnic groups neighborhood characteristics based on group characteristics. In addition, we contributed to the literature of understanding racial and ethnic residential patterns by avoiding theoretical vagueness when using the concept of embeddedness. We further clarified the embedded context into specific elements: the proportion of the group in the city, labor market status, and housing values.

The first stage of analysis included only group characteristics. The analysis suggests that the British group is more successful in translating its socioeconomic resources into better neighborhood qualities. However, results also indicate that the model that emphasizes group characteristics explains the attainment of neighborhood qualities for the earlier immigrant groups much better than for those recently arrived.

The second stage of analysis included both group characteristics and city contexts. The results show that all city contexts have significant effects on neighborhood qualities among groups. The findings also show that the substantial differences in variances among groups explained by group characteristics alone are largely reduced by the inclusion of city contexts.

Taken together, the results explain the variations of neighborhood qualities among groups. The attainment of neighborhood qualities for Northern and Western Europeans are strongly affected by the labor market. This stronger attachment to the mainstream labor market benefits the attainments of neighborhood qualities of both groups when the labor market was still strong at the end of the 1980s.

Although South East Asians are able to take the advantage of the stagnant housing market at the end of the 1980s by pooling financial resources from family members to improve their neighborhood qualities, the group, similar to other visible minorities, in general is largely hampered by their group sizes in the city in the process of attainment of neighborhood qualities. This effect is even stronger for blacks. The findings imply that the darker skin color of visible minorities, such as Asians and blacks, makes it easy for others to identify their existence. Since most Asians and blacks live in the large cities, their presence strongly affects their attainment of a better neighborhood.

These insights about the relationship between the attainments of neighborhood qualities and city contexts have important policy implications. Based on

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previous studies that stressed on group characteristics, most efforts to improve the neighborhood qualities of groups emphasize the improvement of group socioeconomic status or the equal treatment of groups in the housing market. However, our results suggest that more attention has to be focused on the city contexts. The policy challenge remains: how to organize city contexts so that they narrow the differences of neighborhood qualities among groups. For example, policies must be developed so that the effect of labor market on the attainment of neighborhood qualities becomes equal for all groups.

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Endnote:

1. According to Census dictionary, "black" includes respondents who identified themselves as African Blacks, Blacks, Black Americans, Canadian Blacks, West Indian Blacks, and other Blacks. Therefore, "black" is a racial category rather than ethnic category.

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