

## **Plural Geographies in Canadian Cities: Interpreting Immigrant Residential Spaces in Toronto and Montreal\***

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When it comes to immigrant integration questions, there is something intuitively appealing about comparing Toronto and Montreal. Both cities have long histories of migrants who either settled in their environs or passed through on their way to somewhere else, as well as a contemporary reputation as places where ethnicity and language seem to organise the geographies of everyday life. Each city certainly does have a significant foreign-born component, Toronto standing out as Canada's premier 'city of immigrants' with approximately 1,771,720 individuals or 41.9% of its population born outside of the country (1996). Montreal's immigrant population is relatively smaller at only 586,180 individuals or 17.8% of the metropolitan population, although compared to other North American cities the foreign-born population is still quite significant.<sup>1</sup> Furthermore, both Toronto and Montreal host a web of communities defined by culture, language and ethnicity (Lemon 1996; Germain 1995, 1999; McNicoll 1994; Olson and Kobayashi 1993); each one communicating its presence in both direct and subtle ways. But are these two cities truly comparable as settlement environments? Do immigrants construct and use space in the same way in each place? What is the nature of potential

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1. Montreal is now Canada's third largest city of immigrants. In 1996, 34.9% of Vancouver's population was born outside of Canada.

interaction between immigrant groups and the Canadian-born or 'host' community in residential space? How 'concentrated' or 'segregated' are immigrants in urban Canada? Is *segregation*, as formulated in American and European studies of racialised populations, a meaningful construct for interpreting immigrant life in Canadian cities?

This paper focuses solely on the residential geographies of immigrants in Toronto and Montreal, with the primary objective being to compare and contrast the relative concentration of visible minority immigrant groups.<sup>2</sup> There are of course several potential 'integrative' environments in cities, the workplace and public spaces such as parks, recreation centres and retail malls being some of the more obvious (Germain 1999; Olson 1991; Labelle et al 1984, 1987), but place of residence will be emphasized here primarily because of its social significance beyond being simply a place to live. To choose a neighbourhood and a house is to make a statement, whether intended or not, about an economic position, as well as to affirm a social and/or cultural identity (Cooper Marcus 1995; Adams 1984).

Given the societal importance attached to housing and neighbourhoods, the question of where immigrants live, and the potential interactions they have with neighbours, provides a window of opportunity to examine somewhat larger questions of social, cultural and economic integration. Furthermore, the diversity of settlement patterns and different degrees of concentration among immigrants in different cities may well contribute considerable insight into each city as a lived environment for many social groups regardless of their place of birth. Montreal and Toronto do share in common a socially and culturally diverse immigrant population, and the suburbs and inner city of each have undergone significant changes in the post-war decades due to population growth, sustained new dwelling construction, and inner-city redevelopment, renovation and gentrification (Rose 1996; Bourne 1996, 1993; Ley 1991). Notwithstanding these commonalities, as well as similar economic histories, there is much that distinguishes Toronto and Montreal as urban places and settlement locales. Montreal stands out as a city with a very low rate of home ownership and a distinctive culture of property based on a large number of small-scale landlords, and a large and varied stock of low-rise rental housing units ('plexes' of various configurations and low-rise garden-style

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2. The passage of the Employment Equity Act in 1986 created the need to both define and develop data for designated groups: women, Aboriginal peoples, persons with disabilities and those persons who are members of a visible minority. At its most basic, the visible minority concept is used to distinguish individuals who are identifiably non-white and/or non-Caucasian. Statistics Canada's definition of the visible minority concept is based on ethnic origin data supplemented by information on birthplace and mother tongue. Currently nine individual visible minority groups are recognised under this definition: Blacks, Chinese, Filipinos, Japanese, Koreans, Latin Americans, South Asians, South East Asians, and West Asians and Arabs. There is also an additional category for individuals who belong to multiple groups and those who do not belong to one of the specified groups (e.g. Pacific Islanders). In 1996, approximately 68% of people who fell under the visible minority designation were immigrants, and this paper will examine only visible minority immigrants from specific countries or regions.

apartments) (Choko and Harris 1989, 1990; Solomon and Vandell 1982). In contrast, Toronto has a much higher rate of home ownership, a more diversified dwelling stock overall, and a significant number of private and public high-rise apartment buildings constructed from the 1950s onward and scattered across both the inner city and suburbs (Ray 1998; Murdie 1994; Clayton Research Associates 1984; Bourne 1968).

The built environments of the two cities are further distinguished by important differences in their social histories and contemporary compositions. The culturally diversified population that Toronto is so well known for today is rather a recent phenomenon, the city's history being strongly rooted in British culture and the socio-religious institutions of Protestantism (Lemon 1996). Montreal, more so than any other Canadian city, has been strongly influenced by a history of two 'host' societies and language communities, English and French, as well as the considerable power of the Catholic Church to structure the geography of residential space and social life within neighbourhoods or parishes, as well as key institutions such as schools (McNicholl 1994). In more recent decades, and particularly following the Quiet Revolution, the social, business, religious and linguistic milieux of settlement in Montreal have changed, although it is difficult to argue that the landscapes of immigrant settlement have become any easier to interpret.

The built environment and socio-economic context of settlement are a reality for immigrants living in Toronto and Montreal today, and provide particularly challenging environments for examining residential concentration and its meanings. The paper has two main objectives: to describe the patterns of residential concentration of immigrant groups in the Census Metropolitan Areas (CMAs) of Toronto and Montreal and examine the evenness of the distribution of groups across areal units (census tracts); and to examine the potential contact or exposure of groups to one another within city areas based on their size and whether they share residential space. In this regard, the last section of the paper argues that residential concentration must be regarded as a multi-dimensional phenomenon that is not adequately captured by any one measure of concentration, and as a consequence interpretation of what the division of residential space means must always be done with caution, especially when comparing cities.

### **Conceptualising Residential Concentration**

There is a substantial literature about residential concentration or, as it is more commonly termed, segregation in North American urban studies. With some notable exceptions that examine the residential concentration of ethnic groups in Canadian and American cities (Fong 1997, 1996; Moghaddam 1994; Kalbach 1990, 1981; Massey 1985; Balakrishnan and Kralt 1987; Darroch and Marston 1987; Balakrishnan 1982, 1976; Lieberman 1980, 1963; Lieberman and Waters 1988), the majority of studies have investigated patterns and processes of black,

white and to a lesser extent Hispanic segregation in American cities (Massey and Denton 1993, 1988; Clark 1986; Jakubs 1986; Winsberg 1986; Galster 1984). Canadian cities do not have the long history of either black-white residential segregation or conflict common to their American counterparts, although racism is far from absent in Canadian life, law and politics (Calliste 1996, 1993-94; Kobayashi 1990; Li 1990; Satzewich 1989). As a consequence, studies of the distribution of groups across urban space in Canada have tended to emphasize the experiences of ethnic rather than 'racial' groups and concentration rather than segregation. The focus on ethnic groups has in large part been a function of the availability of detailed data on ethnic origin relative to very broad birthplace categories, while concern with residential concentration rather than segregation reflects a general consensus that patterns of settlement reflect a subtle interplay between factors of choice and constraint/discrimination, and that ghettoisation or hypersegregation of individual groups as found in American cities is difficult to identify in Canada (Kalbach 1990; Balakrishnan 1982; Balakrishnan and Kralt 1987).

A number of these studies have found that some ethnic groups are considerably more concentrated than others in Canadian cities, and that levels of concentration vary between cities. Balakrishnan (1982, 1976), for instance, has focused on ethnic rather than immigrant groups and has consistently demonstrated that some groups, such as Jews, Italians, Greeks and Portuguese, are more concentrated than others and that spatial separation overall is more marked in Montreal relative to Toronto and Vancouver (Balakrishnan and Kralt 1987). The higher levels of residential concentration among Southern Europeans has generally been attributed to the size of their communities, institutional completeness and a desire for cultural proximity in order to continue the use of their language and/or to maintain formal and informal patterns of social contact. Furthermore, at least in terms of levels of concentration, Balakrishnan has shown that the visible/non-visible distinction is not a particularly strong indicator of residential concentration.

One limitation of these studies has been a reliance on the ethnic origin variable in measuring residential concentration. In Canada, ethnic origin refers to the ethnic or cultural group of a respondent's ancestors rather than self-identification, and if one accepts ethnicity to be a dynamic rather than ascribed characteristic, a truthful response to this question need not necessarily reflect how an individual currently defines her/his ethnicity. There have also been a number of changes made in reporting of ethnicity since the 1981 census that make comparison across time periods difficult and the consistency of group composition problematic. Furthermore, there is considerable heterogeneity within any one group no matter how it is defined as it can include individuals who were born outside of the country, as well as those for whom a non-Canadian ancestry is but the stuff of family lore.

The research to be presented here takes a somewhat more restricted approach to the definition of groups in that the focus is on immigrant rather than ethnic groups. In addition, measurement of their degree of residential concentration is made in relation to a narrowly defined population of British and French Canadians

who were born in Canada. The intent is not to challenge the results of research based on ethnic groups, as such studies have been revealing and constitute a benchmark against which subsequent work must be measured. Rather the objective is to focus on the settlement experiences of immigrants -- those individuals often assumed to be the most strongly concentrated and distant from the Canadian-born population.

### Measuring Immigrant Concentration

The Canadian censuses of 1991 and 1996 are the principal information sources used here, and the majority of the analysis is based on data from a special tabulation (1991). The creation of any special tabulation is a juggling exercise between a desire for specificity and data richness on the one hand and confidentiality and cost constraints on the other. This tabulation is organised at the census tract level and comprises three variables: place of birth, gender and household income (only the birthplace variable for the population 15 years of age and older will be examined in this paper) (Table 1). The adult population is the focus of attention in order to minimise the problem of Canadian-born children who share the same residence as their foreign-born parents being compared and contrasted as different birthplace groups.

As Table 1 indicates, the birthplace variable is divided into 14 categories which are in turn organised into Canadian-born and foreign-born groups. The Canadian-born population is divided into those individuals who define their ethnicity as British or French,<sup>3</sup> and those who identify some other ethnic origin. By no means does the former cohort represent the Canadian-born population as a whole. In fact, in Toronto the British/French Canadian<sup>4</sup> population constitutes only 25.1% of the total Canadian-born population of the city, while in Montreal French/British Canadians comprise 78.4% of the Canadian-born population. The British/French Canadian group was developed primarily to reflect the sociological fact that British- and French-Canadians are the benchmark groups against which the behaviour of immigrants groups conventionally has been measured **TABLE 1 Special Tabulation Birthplace Variable and Categories Comparing Group Sizes in Toronto and Montreal**

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3. Only people who define their ethnicity as either British or French are included in this category. People who stated multiple ethnic origins, such as British and Jamaican or French, Swiss and Italian, are not included in this category and instead are counted in the "Canadian Non-British, Non-French" category. The intent with the British/French Canadian category was to make it as culturally homogeneous as possible.
  4. This blended category of ethnicity and birthplace will be referred to as British/French Canadians in the context of Toronto and French/British Canadians in Montreal in order to reflect the differential numerical and cultural dominance of each subgroup in the two cities. In generic discussions about this group outside of a specific urban context, it will simply be called 'British/French Canadian'.

Birthplace	Toronto	Montreal
Jamaica	76 970	7 030
Haiti	505	76 970
Guyana	51 920	3 135
Remainder of the Caribbean	58 900	11 035
Vietnam	37 290	18 975
East Asia (China, Taiwan, Hong Kong)	143 360	18 015
South Asia	118 640	19 600
Central America (Excludes Mexico)	12 620	12 675
South America	37 595	19 015
Peru	4 990	3 605
Africa	67 915	46 875
United States/United Kingdom/Europe (excluding Italy)	630 275	202 335
Italy	157 380	77 545
Canada (only British and French ethnicity)	605 775	1 914 205
Canada (all non-British/French ethnicities)	1 658 825	588 930
All Birthplaces Not Otherwise Specified	165 670	82 875

(Moghaddam 1994; Breton et al 1990). It is also an implicit recognition of differential power relations within the Canadian-born population, as British/French Canadians have collectively been influential in shaping the political, economic and socio-cultural institutions of Canadian cities (Anderson 1991; Breton et al 1990; Porter 1965). The remaining foreign birthplace groups are a mixture of culturally specific and other more regionally defined categories. A number of specific groups -- Jamaicans, Guyanese, Haitians, Vietnamese and East Asians -- have been specified as they constitute large components of the visible minority immigrant population in both cities and because previous research identified these groups as being spatially concentrated and as experiencing housing problems. The subdivision of the visible minority category also reflects a theoretical and empirical concern regarding cultural specificity within this quite heterogeneous grouping. There is one important caveat that must be made with regard to the Haitian and Guyanese groups. Reflecting the character of chain migration from Haiti and Guyana to Canada, the number of Haitians in Toronto (approximately 500) and Guyanese in Montreal (approximately 3,000) is extremely tiny and consequently are not considered. Absence in one city, however, is matched by a strong presence in the other, and Haitian and Guyanese immigrants are examined in Montreal and Toronto respectively.

For the remaining groups, the basic criterion for amalgamating nationalities under more 'regional' labels was the degree of social distance<sup>5</sup> between groups and

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5. Bogardus' (1959) seminal work on social distance scales and Pineo's (1977) study of 'social standing' among ethnic and racial groups in Canada indicate that religious affiliation, cultural dissimilarity, ethnicity and/or race can create social distance between groups which do not differ significantly in socio-economic status. Social distance refers

their absolute size within either Toronto or Montreal. Inadequate as these regional categorisations are, it is quite clear that they do have resonance with the Canadian public that for the most part organises great blocks of the world's population into very heterogeneous groupings. Moreover, it has been shown that immigrants situate themselves in relation to such made-in-Canada categories, although they may not personally identify themselves in this manner (Moghaddam et al 1994).

The analysis uses two well known measures of 'segregation': the Index of dissimilarity (ID) and the  $P^*$  Index. The first is the conventional standard for studies of spatial concentration and attempts to capture the evenness of the residential distribution of social groups across the areal units of a city or set of cities. The second index examines a different, although related, aspect of residential segregation, that being exposure or the probability of contact between groups within city areas based on whether the groups share residential space.<sup>6</sup>

A number of attempts have been made over the years to improve conceptual rigour with regard to segregation and its measurement. As will be argued in this paper, there is a conceptual difference between 'evenness' and 'exposure' which needs to be more fully appreciated when constructing arguments about degrees of concentration between cities and the implications for the nature of inter-group contact. The dissimilarity index is a measure of departure from evenness in that it is "... the sum of either the positive or negative differences between the proportional distributions of two ethnic populations. The index ranges from zero to unity, indicating complete similarity or dissimilarity between the residential distributions of two ethnic populations" (Balakrishnan and Kralt 1987: 149).<sup>7</sup> Conceptually the dissimilarity index "... represents the proportion of minority members that would have to change their area of residence to achieve an even distribution, with the number of minority members moving being expressed as a proportion of the number that would have to move under conditions of maximum segregation" (Massey and Denton 1988: 284). Given that the index is calculated

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to an evaluated status and is usually measured by the degree to which individuals will willingly associate with people who are not from their own ethnic or 'racial' background. For instance, in Canada it has been found that the social distance between Western European immigrant groups is minimal and that the greatest social distance tends to exist between Asian and Western European groups.

6. The study of residential segregation is a well established branch of urban geography and sociology, and the analytical techniques used are largely based upon methodological debates and demonstrations by Duncan and Duncan (1955a, 1955b) and Taeuber and Taeuber (1965), as well as more recent examinations of the rigour and validity of various measures (Massey and Denton 1988; White 1986; James and Taeuber 1985).
7. The formula for computing the Index of Dissimilarity is as follows:

$$ID = \frac{\sum_{i=1}^n |t_i - P|}{2TP}$$

where  $t_i$  and  $p_i$  are the total population and minority group proportion of areal unit  $i$ , and  $T$  and  $P$  are the population size and minority group proportion of the entire city, which is subdivided into  $n$  areal units (census tracts).

on the percentage distributions of two groups, a change in the number of individuals in either group, if the percentage distribution among subareas remains constant, does not change the ID value.

The index of dissimilarity is just one way to conceive of and measure residential concentration, and it is not hard to imagine that groups might live apart from each other in several different ways. It is possible, for instance, to conceive of the phenomenon of residential concentration not solely in terms of under- or over-representation or evenness of the distribution across areas, but also in terms of potential exposure between groups. "Residential exposure refers to the degree of potential contact, or the possibility of interaction, between minority and majority group members within geographic areas of a city. Indices of exposure measure the extent to which minority and majority members physically confront one another by virtue of sharing a common residential area" (Massey and Denton 1988: 287). Conceptually, exposure measures may be thought of in terms of the likelihood that two groups might share the same neighbourhood and therefore have at least some possible interaction or knowledge of each other as local residents. For Massey and Denton (1988: 287) the contribution which such exposure measures make to the study of segregation is an emphasis on potential experience for minority and majority members "rather than measuring segregation as departure from some abstract ideal of 'evenness'".

There are two basic measures of residential exposure: interaction and isolation (Massey and Denton 1988; Lieberson and Carter 1982). The interaction index measures the extent to which members of minority group  $X$  are exposed to members of majority group  $Y$ . It is the minority-weighted average of each spatial unit's majority proportion, and has been denoted by  ${}_xP_y^*$  by Lieberson (1981).<sup>8</sup> The isolation index ( ${}_xP_x^*$ ) is the converse of the interaction index in that it measures the extent to which group members are exposed only to one another, rather than to other ethnic group members. It is computed as the minority-weighted average of each unit's minority proportion.<sup>9</sup> Both indices vary between 0 and 1.0, and they may be interpreted as the probability that a randomly selected member of  $X$  group shares an area (e.g. census tract or neighbourhood) with a member of  $Y$  group (in the case of  ${}_xP_y^*$ ), or that she/he shares an area with another member of  $X$  (in the

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8. In its most general form, the equation for the interaction  ${}_xP_y^*$  index is:

$${}_xP_y^* = \sum_{i=1}^n \left( \frac{x_i}{X} \right) \left( \frac{y_i}{t_i} \right)$$

where  $x_i$ ,  $y_i$ , and  $t_i$  are the numbers of  $X$  members,  $Y$  members, and the total population of unit  $i$ , respectively, and  $X$  is the number of  $X$  members city-wide.

9. In its most general form, the equation for the isolation  ${}_xP_x^*$  index is:

$${}_xP_x^* = \sum_{i=1}^n \left( \frac{x_i}{X} \right) \left( \frac{x_i}{t_i} \right)$$

where all symbols have the same meaning as in footnote 8.

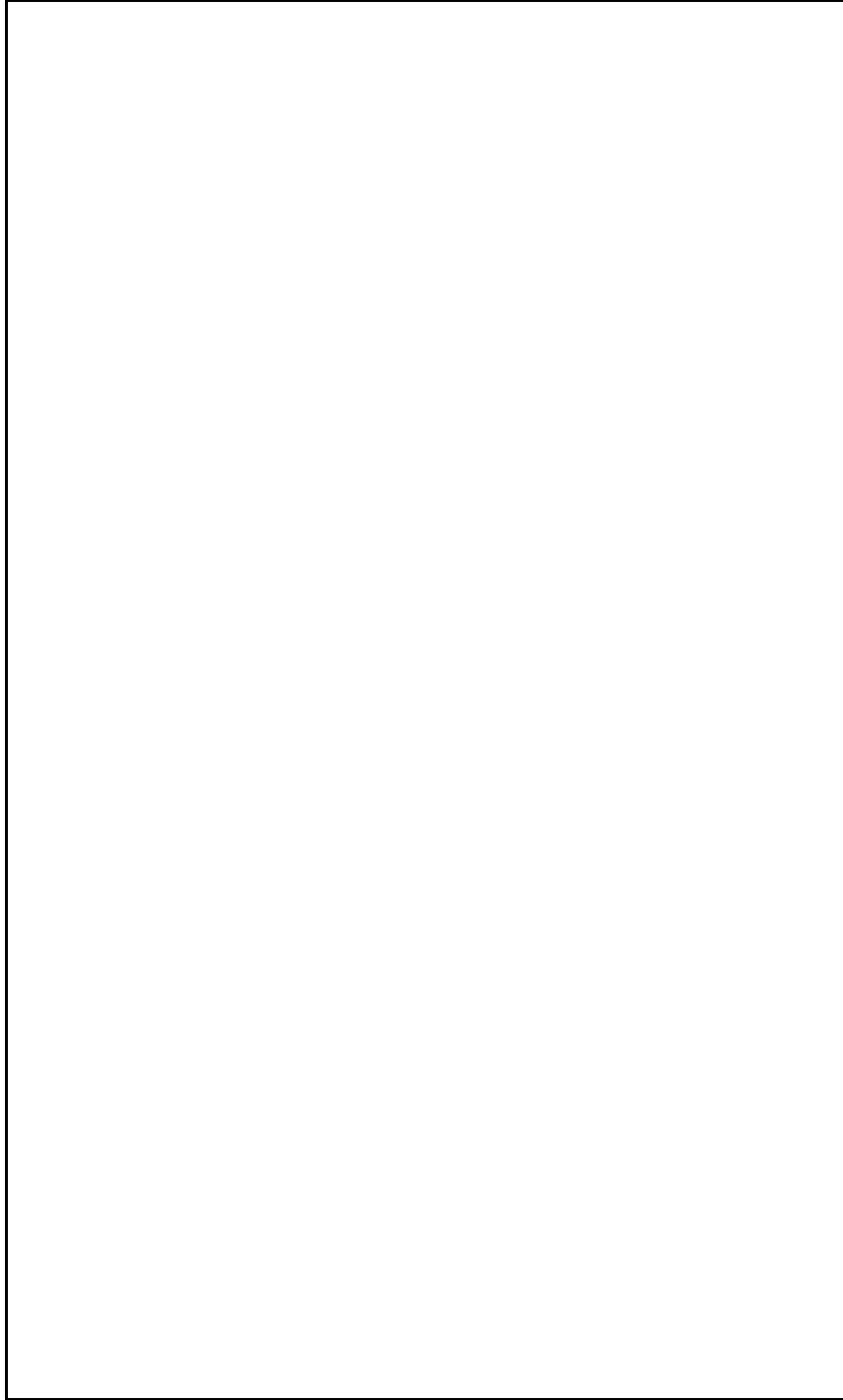


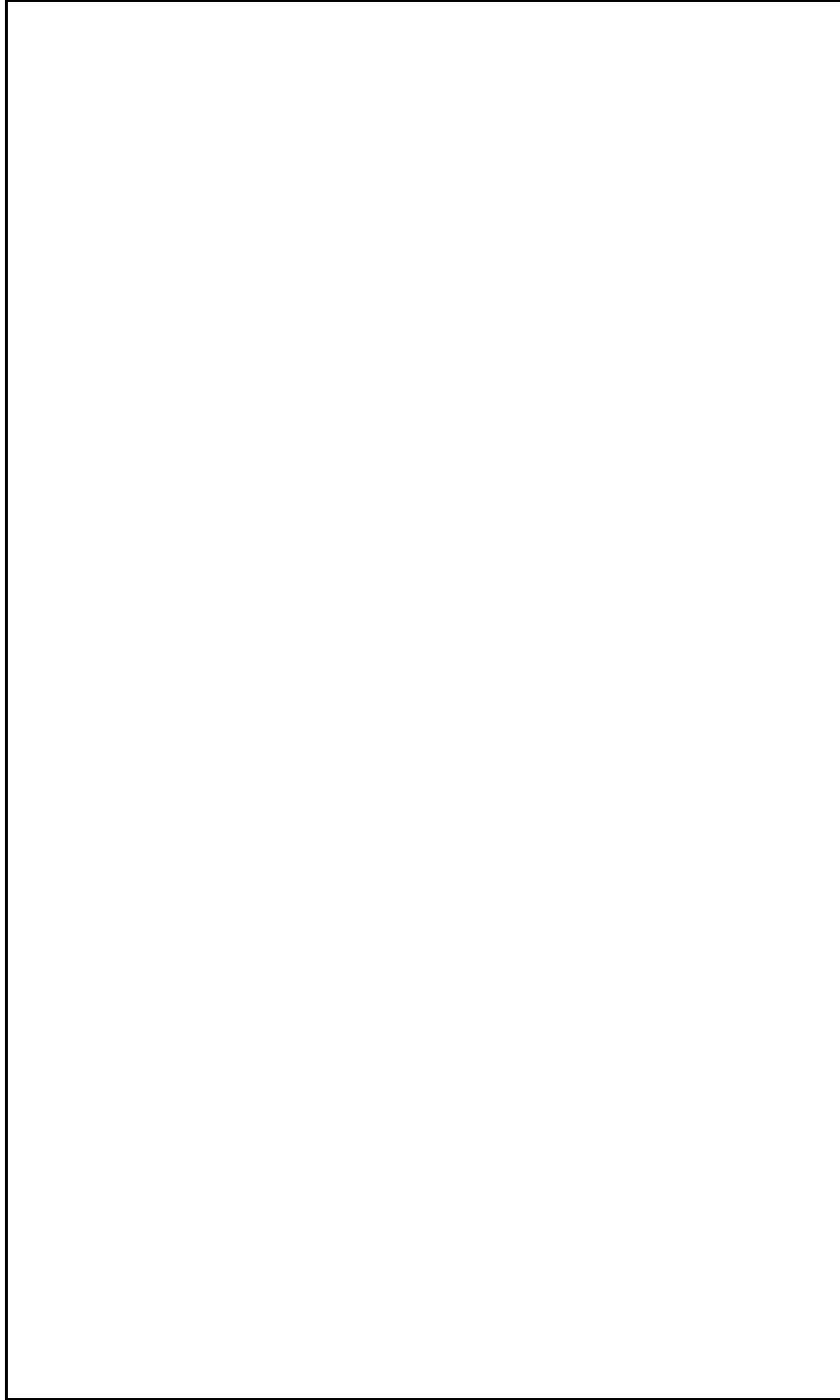
case of  ${}_xP_x^*$ ). Unlike the ID index, these interaction indices are compositionally dependent and therefore asymmetric in that  ${}_xP_y^*$  does not normally equal  ${}_yP_x^*$ .

The analysis of residential concentration in Toronto and Montreal presented below uses both of these indices in recognition of the multidimensional character of urban spatial structure generally and residential settlement specifically. As Massey and Denton (1988: 309) have argued, segregation "... does not stem from a single process, but from a complex interplay of many different social and economic processes that generate various constellations of outcomes interpreted as 'segregation'". In short, it may well be more empirically profitable and theoretically rigorous to examine concrete spatial outcomes, such as evenness or exposure, rather than a generic notion of 'segregation'.

### **Patterns of Immigrant Settlement in Toronto and Montreal**

To set the stage for the analysis of residential concentration, it is necessary to discuss in general terms the distribution of immigrants across both cities and residential geographies of some of the largest immigrant groups. The long-prevailing succession model that suggests immigrants settle in inner-city neighbourhoods and subsequently move to more affluent districts as they become more integrated into the social and economic life of the city is difficult to identify in either Toronto or Montreal (Kalbach 1990). If only tracts are mapped that have a slightly higher than the metropolitan average representation of immigrants (50% in Toronto and 25% in Montreal) and where at least 25% of the foreign-born population arrived in the most recent time period (1991-1996), a plurality of settlement locales becomes clear (Figures 1 and 2). While certain inner-city tracts, especially those dominated by relatively inexpensive rental housing, are significant locales of settlement, some of the most important immigrant districts are in post-World War II suburbs. This is especially true in Toronto, where the mega-city of Toronto (formerly Metro Toronto) stands out, as well as areas within the former municipalities of Etobicoke, North York and Scarborough (Figure 1). The suburbanisation of immigrants in Montreal is somewhat less marked than in Toronto, especially in terms of areas off of the Island of Montreal





**FIGURE 2 Zones of Recent Immigration within the Montreal CMA, 1996**

(Figure 2). On the Island, some of the most important immigrant neighbourhoods are on the west side of downtown and are quintessentially multi-ethnic in composition (Germain 1999), but there are some important locales to the east as well (typically neighbourhoods of Haitian, Italian and Hispanic migrants).

These maps provide a useful initial description of where major birthplace groups live in Toronto and Montreal, and point to an important trend of suburbanisation among long-established and new immigrant groups alike. What is difficult to gauge from the maps, primarily due to the problem of making visual comparisons across cities, is the degree of evenness in the distribution of groups or potential for exposure to others. As a consequence, we turn now to the ID and  $P^*$  indices to make more precise comparative measures of residential concentration.

### **Residential Concentration: Comparing Evenness and Exposure**

This section of the paper is divided into two parts: the first examines the evenness of the distribution of birthplace groups in Montreal, while the second investigates the probability of contact between birthplace groups in the two cities. The intent of the section is to provide both an analysis of residential concentration in Canada's two largest cities and to demonstrate that concentration itself is multidimensional.

#### **Evenness of Distribution**

Table 2 presents ID values for specific immigrant groups relative to the British/French Canadian population.<sup>10</sup> The table also shows the results organised at the CMA and inner city levels to give an indication of how the evenness of distributions changes when suburban areas are added to the analysis.<sup>11</sup>

The most immediately striking aspect of Table 2 is the generally higher degree of concentration among groups in Montreal relative to Toronto. For each birthplace group that can be meaningfully compared, there is a consistently higher level of concentration in Montreal. For the majority of the groups, the **TABLE 2**

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10. A similar analysis was conducted for immigrant groups relative to the entire Canadian-born population (undifferentiated by ethnicity). In general, the ID values decrease slightly when the entire Canadian-born population is used as the reference group. This is in part a function of the possibility that people of the same ethnic ancestry can be split between the two groups analysed here (e.g. immigrant Italians in one group and people born in Canada of Italian ancestry in the other).

11. Canadian inner cities have been defined in a number of ways (Ley 1991) and the analysis presented here relies on a widely known and used definition (Ley 1988, 1985) developed by Brown and Burke (1979).

**Indices of Dissimilarity of Each Birthplace Group from British/French Canadians, Toronto and Montreal, 1991**

Birthplace	Toronto		Montreal	
	CMA	Inner City	CMA	Inner city
Jamaica	.51	.48	.82	.84
Haiti	--	--	.59	.49
Guyana	.52	.43	--	--
Caribbean (Other)	.43	.39	.74	.76
Vietnam	.69	.58	.66	.50
East Asia	.60	.45	.71	.59
South Asia	.52	.48	.74	.65
Central America	.68	.58	.72	.60
South America	.54	.50	.55	.47
Peru	.74	.70	.78	.74
Africa	.48	.38	.58	.50
Europe/U.S.A.	.23	.31	.48	.47
Italy	.59	.68	.65	.60
Canada (Not Br/Fr)	.16	.16	.38	.34

Source: Special Tabulation: Statistics Canada, 1991.

degree of contrast between the cities is modest, although Jamaican, Caribbean and South Asian immigrants show much higher levels of concentration in Montreal. It is also important to note that some of the most culturally homogeneous groups, both small and large, have strong levels of concentration relative to the British/French Canadian population (e.g. Italian, Vietnamese, South Asian, Central American and Peruvian). Consistent with the literature on social distance, in both cities European/UK/USA immigrants are among the least concentrated groups (.23 Toronto; .48 Montreal). These findings are entirely in keeping with earlier studies of residential concentration among ethnic groups, although the values of concentration are somewhat higher for many of the immigrant groups examined here (see Balakrishnan and Kralt 1987).

The ID values for the inner cities are revealing more for what they do not show. There is not an appreciable difference in values between the inner city and CMA in either Toronto or Montreal. In both cities, the ID values for most of the groups are slightly lower in the inner city relative to the CMA, as might be expected in a region composed of dense and socially heterogeneous neighbourhoods. Yet the fact that ID values are only modestly lower in the inner cities also points to considerable ethnic heterogeneity in the suburbs of Toronto and Montreal.

The interactions between pairs of individual immigrant groups also point to the complexity of group distributions across the two cities as many immigrant groups are strongly separated from one another. Table 3 presents the ID values for groups in Toronto and Montreal. Consistent with earlier research, Italian immigrants in Toronto stand out as among the most unevenly distributed in that they have high ID values in relation to all groups, including European/UK/USA



immigrants (.52). The degree of concentration for Jamaican, Guyanese and Caribbean immigrants is also marked in relation to Vietnamese, East Asian, Central American, Peruvian and Italian immigrants, and East Asian immigrants are strongly separated from Vietnamese, Central American, South American, Peruvian and Italian immigrants (Table 3). There is also consistent evidence of the role played by social distance in that most often groups whose social distance is small tend not to be spatially separated from one another. For instance, the ID values between immigrants from Jamaica, Guyana and the Caribbean are low, as are those between immigrants from South and Central America. One of the most interesting dimensions of the table is the high ID values between pairs of visible minority groups, in turn challenging the efficacy of using such a category in analyses of residential concentration. In Canadian cities, skin colour or 'race' is an insufficient starting point for explanations of where people live. Without doubt, it is an important factor but one that is mediated by cultural identity.

The situation in Montreal is slightly different from that found in Toronto (Table 3). In Montreal, the ID values overall are much higher relative to those for similar paired groups in Toronto, and the degree of separation between several groups from the Developing World is also quite stark. Vietnamese and Central Americans are notable for their degree of spatial separation from virtually every other group, although the most dramatic example is between Jamaicans and immigrants from Haiti, Central America, Vietnam and East Asia. The very high values for Haitians relative to Jamaicans (.81) and Caribbeans (.78) also stands out given that the groups are all from the Caribbean and are frequently, and uncritically, categorised as 'Caribbean' or 'black'. In Montreal, home language use has a strong influence on where groups live, and the preference of Jamaicans and Caribbeans for anglophone and/or multi-ethnic districts, while Haitians most often opt for predominantly francophone locales, lends further weight to this contention. It is undeniable, however, that as measured solely by the evenness of distribution, Montreal consistently emerges as a more segregated environment than Toronto. Multi-ethnic neighbourhoods are an extremely important part of the social landscape of Montreal (Germain 1995, 1999), but the immigrant geography of the city is also marked by some fundamental separations between groups that social distance alone would suggest should be more integrated. The same is of course true in Toronto, although the degree of separation between groups is more muted. Likewise, in both cities some of the most critical differences in terms of spatial separation are between immigrant groups and not solely in relation to the French/British Canadian population.

#### **Potential for Contact: Exposure to Others**

Does the fact that some groups are less dispersed than others mean that there is little opportunity for contact between groups? Is the lived experience of this uneven distribution understood differently for individuals in the same immigrant

**TABLE 4 P' Indices of Interaction and Isolation for Immigrant Groups in Relation to British/**

**French Canadians, Toronto and Montreal, 1991**

	Toronto		Montreal			
	$P^*_{Immig. Br/Fr}$	$P^*_{Immig.}$	$P^*_{x-x}$	$P^*_{Immig. Fr/Br}$	$P^*_{Fr/Br}$	$P^*_{Immig. x-x}$
Jamaica	.1247	.0159	.0421	.3422	.0013	.0176
Haiti	--	--	--	.5214	.0100	.0509
Guyana	.1295	.0111	.0343	--	--	.0070
Caribbean	.1344	.0131	.0265	.3758	.0022	.0198
East Asia	.1130	.0268	.1365	.4216	.0040	.0374
South Asia	.1218	.0239	.0738	.3494	.0036	.0360
Central America	.1206	.0025	.0157	.4479	.0030	.0213
South America	.1182	.0074	.0248	.4994	.0050	.0163
Peru	.1221	.0010	.0065	.4866	.0010	.0088
Africa	.1239	.0140	.0427	.4003	.0099	.0441
Europe/UK/USA	.1575	.1638	.1938	.4525	.0479	.1223
Italy	.1090	.0283	.1443	.4696	.0191	.1146
Canada Non-Br/Fr	.1656	.4533	.4491	.5078	.1563	.2539
Canada Br/Fr	--	--	.1927	--	--	.7129

Source: Special Tabulation, Statistics Canada, 1991.

group and who that have similar ID values, but who live in different cities? This final empirical section examines some of these questions in terms of the degree of *exposure* that immigrant groups potentially have with the British/French Canadian population.

In Table 4, the first column under each city presents the  $xP^*_y$  or interaction index for immigrant groups in relation to the British/French Canadian population in Toronto and Montreal. The subscripts preceding and following  $P^*$  refer, respectively, to the groups from which and toward which interaction is directed and the calculated values indicate the probability of interaction between groups within the same residential area (in this case census tracts). One of the immediately striking results of the  $xP^*_y$  analysis is that there is a much higher probability that immigrant groups will have contact with the British/French Canadian population in Montreal relative to Toronto. The probability, for example, of Jamaicans interacting with the British/French Canadian population is only .1247 in Toronto compared to .3422 in Montreal. Reflecting where individual immigrant groups live in Montreal, it is not surprising that the  $xP^*_y$  values are highest for those groups most likely to live in francophone areas of the city: Haitians (.5214), South Americans (.4994), Peruvians (.4866) and Italians (.4696). Interestingly, the probability of contact is somewhat lower among groups that more commonly live in multi-ethnic neighbourhoods and/or anglophone districts (Jamaicans, Caribbeans and South Asians). These groups are most certainly unevenly distributed across Montreal, but this does not mean that they have little potential contact with the 'host' population. This is in large part due to the fact that the numerically large French/British Canadian population in Montreal surrounds immigrants and, in a city that is far



from hypersegregated, it is difficult not to share space with the majority population.

It must, however, be born in mind that the  ${}_xP_y^*$  index is asymmetrical and consequently the probability that the British/French population will interact with individual immigrant groups merits consideration. The second column for each city in Table 4 shows the probability that 'majority' to 'minority' interaction might occur, and in both cities the probability is quite low and the role of social distance clearly stands out. British/French Canadians have a much greater probability of interacting with European/UK/USA immigrants than any other immigrant group in either Toronto or Montreal, and their probability of interaction with small visible minority groups is extremely low. For instance, the probability of contact with Central Americans in Toronto and Montreal is only .0025 and .0030 respectively, and the values are only modestly higher for interaction with larger immigrant groups such as Jamaicans (.0159 Toronto; .0013 Montreal) and South Asians (.0239 Toronto; .0036 Montreal). It is also evident that the probability of contact in residential space is significantly lower for French/British Canadians in Montreal than in Toronto which primarily reflects the dispersion of a significant portion of the 'majority' population off of the Island of Montreal and into exurban suburbs; a trend which few immigrants have followed (Figure 2). While the  ${}_xP_y^*$  index reveals that immigrants have a strong probability of contact with the host population in the residential spaces of both cities, and most especially in Montreal, the converse relationship  ${}_yP_x^*$  is markedly lower.

The final column under each city heading in Table 4 shows the isolation index ( ${}_xP_x^*$ ) for each birthplace group. The  ${}_xP_x^*$  index measures the probability that group members are exposed only to one another, and the results largely support conclusions drawn from the analysis of the interaction indices. In both Toronto and Montreal, no group is strongly isolated. The two most 'isolated' immigrant groups in both cities are European/UK/USA immigrants and Italians, and the isolation values for all of the visible minority immigrant groups are extremely low, particularly in Montreal. There is, however, a significant difference between Toronto and Montreal in the probability that British/French Canadian group members will be exposed only to one another. The  ${}_xP_x^*$  value for the 'majority' group rises from .1927 in Toronto to .7129 in Montreal, adding credence to the contention made above that a significant proportion of the British/French Canadian population in Montreal does not share neighbourhood space with other groups. The intent is not to suggest that the same phenomenon is not occurring in Toronto. While the isolation index for British/French Canadians is low in Toronto, in part reflecting the size of this group, the value for Non-British/French Canadians is significant (.4491). In both cities Canadian-born individuals, regardless of ethnicity, are the most likely to live in culturally homogeneous or relatively 'isolated' districts.

## Discussion and Conclusion

This study of immigrant group concentration in Toronto and Montreal highlights significant differences in concentration levels between the same birthplace groups living in the two cities. Interpretation of what these differences mean, however, must be undertaken in full recognition of concentration or 'segregation' as a multidimensional phenomenon that may be experienced and understood in a number of different ways.

The levels of residential concentration as measured by the indices of dissimilarity, interaction and isolation speak to the complexity of immigrant settlement geographies. First, the somewhat lower levels of concentration among visible minority immigrant groups compared to some more long-established European groups remains an enduring feature of Canadian cities. The status of being a member of a visible minority immigrant group does not translate directly into higher residential segregation which suggests that other factors such as language knowledge and cultural ties may play important, if largely under-investigated, roles. The strong degree of separation between some visible minority immigrant groups in both cities further emphasizes the fact that the simple status of 'visible minority' is insufficient to understand where groups settle and their relative levels of separation from one another.

As numerous earlier studies have demonstrated, Montreal stands out relative to Toronto as a place where immigrants and ethnic groups are unevenly distributed across space. Yet to conclude that Montreal is Canada's most 'segregated' city is far too simplistic as such a statement ignores the multiple ways in which groups cohabit and interact in residential areas. The index of dissimilarity measures but one aspect of spatial segregation, evenness of distribution, and this proves problematic in assessing the potential experience of segregation in different cities. Consideration of the probability of interaction or 'exposure' with the 'host' or 'majority' population and the probability of interaction only with co-ethnics confounds any straightforward assessment of Montreal as the most 'segregated' city. The  $P^*$  analyses in fact show that immigrant groups have a far greater probability of sharing residential space with the French/British Canadian majority population in Montreal than in Toronto, even though they are more unevenly distributed across the CMA. In keeping with the contention that most neighbourhoods occupied by immigrants are in fact multiethnic and not enclaves of single ethnic groups (Germain 1995, 1999), no immigrant groups were found to be 'isolated'.

Residential concentration is a complex phenomenon, a fact that is exceedingly well demonstrated in Canada's two largest cities. This census based analysis demonstrates that greater theoretical and empirical precision with regard to describing patterns and degrees of concentration is possible. Likewise it is possible, indeed imperative, to look at residential concentration among immigrant and ethnic groups as a multidimensional question that is not adequately captured by either symmetrical or asymmetrical indices alone. A number of researchers have long argued for the need to use several different measures of segregation to portray adequately residential concentration, and this study gives substantial weight to this assertion (Massey and Denton 1988, 1993; White 1986; Lieberman 1981;

Lieberson and Carter 1982; James and Taueber 1985). The index of dissimilarity is the standard used to measure concentration, but its very strength in eliminating population composition may be one of its principal weaknesses if we seek to understand more fully the experience of sharing space between social groups.

As revealing as census based analyses of residential concentration may be, to date they have provided largely indirect insight into the factors and processes which underlie observed patterns. Socio-economic status, period of immigration, social distance, language facility, religious affiliations and cultural values, as well as discrimination and prejudice, may all be factors that contribute to some immigrant groups' higher levels of spatial concentration. The other factors which this study points to, but which have been largely uninvestigated, are the histories of the cities themselves and how groups have constructed neighbourhood spaces over time. Toronto and Montreal are distinctly different cities in terms of historical evolution, power relations between social groups, economic development and population growth. Perhaps in trying to understand why contemporary immigrant groups have come to settle in each city in sometimes quite distinct ways, we also need to consider histories of place and the power of social relations of the past to reverberate through to the present.

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