Much attention is currently being paid to what Grillo (2000) calls plural, ethnically heterogeneous, cities. These, as Keyder and Öncü (1994) express it, have been the focus of bi-polar migration flows: at one extreme are the ‘globalized professionals’ whose lifestyles vary little from country to country; at the other are marginalized, poorly-skilled migrants. One consequence of their concentration in rapidly-expanding cities is fragmentation of both labour and housing markets there, with the latter producing what Davis (1992: 206) described for Los Angeles as ‘a complex class, ethnic and land-use mosaic’; such fragmentation is regarded as one of the four basic themes in postmodern urbanism, along with globalization, polarization and cybercities (Dear and Flusty, 1998).

There are many fertile hypotheses in the burgeoning ‘world cities’ literature about this fragmented mosaic (as expressed in Friedmann’s, 1986, seminal article; see also Sassen, 2000), but few have been rigorously tested in a comparative perspective. Instead, there are various generalizations, based largely on the United States experience. As Dear and Flusty (1998: 67) conclude:

A proper accounting of contemporary pattern and process will require a much more strenuous effort directed toward comparative urban analysis. Unfortunately, the empirical, methodological, and theoretical bases for such analyses are weak. There are a number of explicit comparative studies, but these tend to focus on already well-documented centres such as London, Tokyo and New York City ... Our methodological and theoretical apparatuses for cross-cultural urban analyses are also underdeveloped.

The major reasons for these empirical, methodological and theoretical weaknesses are threefold. First, there is a definitional problem, in that the definition of ethnicity and the size of census units vary between countries. Secondly, there is an access to comparative data problem, associated with difficulties in obtaining census information across national boundaries. Thirdly, there is an access to data in electronic form problem, with the result that a major effort towards the development of empirical methods has not eventuated. While it is and will remain virtually impossible to obtain uniform definitions of ethnicity and census enumeration areas for international comparative studies, considerable progress has recently been achieved on the second and third of these obstacles. Today we are in a position where the results of empirical analyses are more important to advancement of knowledge and theory than definitional differences in the data, though such differences will always need to be taken into account in the interpretation of results.

To explore whether the nature and extent of ethnic residential fragmentation is the same in plural cities operating in different cultural contexts, this article presents an
analysis of residential concentration employing a new empirical comparative methodology in three plural cities — New York, Sydney and Auckland. New York is the classic American city of immigration and the ghetto (Ward, 1971), while Sydney and Auckland are the largest cities in Australia and New Zealand respectively, each very much multiethnic in their composition. Our focus is on establishing if these two Pacific Rim cities conform to the ‘classic’ American experience as represented by New York.

Approaches to studying fragmentation: the theoretical backcloth

The nature and extent of the fragmentation of cities along ethnic lines has occasioned much academic study throughout most of the twentieth century. It results from twin sorting processes — assimilation and ghettoization — that operate within multiethnic cities, as identified by many students of the urban scene from the 1920s Chicago School on. The assimilation process involves an initial spatial separation of ethnic groups reflecting a combination of economic and cultural factors, with change in both leading to a subsequent reduction in segregation as a group’s economic status improves, so its members are better able to compete throughout the urban housing market, so that the only constraint on their wider distribution through its segments becomes cultural factors. As economic disadvantage is removed, therefore, so spatial segregation diminishes unless: (1) there is discrimination in the housing market, which denies access to areas for certain groups on grounds other than economic; and/or (2) to retain their cultural identity — perhaps as a reaction to perceived attitudes among the host community and/or other ethnic groups — (some) members decide to stay in relatively exclusive residential areas even though they could afford to move elsewhere, creating a pluralism pattern within the city. A ghettoization process, on the other hand, combines economic disadvantage, which severely restricts the housing choice of a group’s members, with overt discrimination, producing extreme spatial segregation that may continue even if some of the economic disadvantage is removed over time.

These two processes have both been widely observed in American urban areas throughout the twentieth century (Massey, 2001). The assimilation process was the norm for European immigrants, who initially clustered in low-income, inner-city areas but for whom assimilation saw not only the removal of economic disadvantages but also, increasingly, the erosion of their cultural identity too — with the result that as the migration flows dried up so the number of group members who wished to retain their cultural identity and live in ethnic enclaves declined. More recent migrants — such as Hispanic-Americans and Asians — have also entered this sequence; economic disadvantage has generally been greater among the Hispanic-Americans, however, who as a consequence have been more segregated than their Asian contemporaries (many of whom have entered the country as ‘globalized professionals’ or business migrants rather than as low-status manual workers), though there are significant clusters of these who, for cultural reasons, choose to live apart from other groups and occupy separate ethnic enclaves. Finally, African-Americans, who migrated to the large cities throughout much of the century, have suffered both economic and cultural discrimination in labour and housing markets, leading to their concentration in near-exclusive ‘black ghettos’.

Boal (1999) has recently summarized the outcomes of these processes in terms of four scenarios — assimilation, pluralism, segmentation and polarization: the more polarized the city (or the less integrated its ethnic groups are), the greater their degree of residential concentration. African-American ghettos reflect polarization and segmentation in operation (what Massey and Denton, 1989, term hypersegregation), as a result of economic and cultural discrimination in both labour and housing markets.

Both major processes and their spatial outcomes have characterized US cities over the last 100 years, leading to models of fragmented cities which contain ethnic enclaves.
Plural cities and ethnic enclaves

(reflecting both the various stages of the assimilation process and some degree of cultural pluralism) plus ghettoization for some groups. Such models, and their terminology, have been widely employed beyond the United States. But are cities elsewhere, even those with comparably diverse ethnic populations, similarly fragmented? Furthermore, what of the dominant group in society — frequently termed the ‘host society’ — who are economically, socially, culturally and politically hegemonic? Do they live in separate enclaves apart from minority/ethnic groups too, largely through cultural choice?

Answering such questions calls for a methodology that is viable for comparative studies. In a sequence of important recent articles, Peach (1996; 1998; 1999) has both queried the validity of the conventional measures of housing market fragmentation and residential segregation — the indices of dissimilarity and segregation pioneered by Duncan and Duncan (1955) — and, following Philpott (1978), suggested the need, using absolute data, to focus on three separate aspects of an ethnic group’s residential pattern:

1 The degree of residential concentration — the extent to which there are residential areas in which the group predominates;

2 The degree of assimilation — the extent of sharing residential space with the ‘host society’;¹ and

3 The degree of encapsulation — the extent to which the group is isolated residentially from both the ‘host society’ and other ethnic groups.

A methodology for measuring these three is introduced here. If the general notion of a fragmented plural city — as argued by Friedmann (1986) in his original conception of a world city and demonstrated by a number of authors, many of them making particular reference to Los Angeles (e.g. Clark, 1993; Soja, 1999) — is to be tested completely, then patterns of ethnic residential segregation have to be examined in the light of each of those three elements. In particular, answers are needed to the following questions:

• Are there areas in which the ethnic group in question (including the city’s ‘host society’) form a substantial proportion of the total population? And, if so
• What proportion of the group’s members live in those areas?

The approach

The cities and their ethnic structure

New York, Sydney and Auckland were selected for this study because each is the largest city in its respective country and has experienced substantial immigration (much of it international migration) over long periods, including significant flows in recent decades. For each, we measure the degree of concentration of both the major recent (twentieth century) migrant groups and the host society. In this introductory first article on the comparative method, we concentrate on major ethnic groups only — such as Asians — fully recognizing that within some of these there is residential segregation of various sub-groups. The idea of a two-level hierarchy in ethnic studies is not new and has been long recognized by the US Census, which distinguishes between data on race (which is a form of macro-classification — e.g. White, Black, Asian) and nationality (e.g. German, Mexican, Vietnamese). We also recognize that different definitions of ethnicity exist and that the size of the census units between the cities varies. But, as argued above, the

¹ Throughout we use the term ‘host society’ as a shorthand for the dominant group in the relevant urban society — whether or not it is a majority or even (as in the case of all three cities discussed here) the original settlers. An alternative term for the dominant group within a society, employed in Canadian studies but not widely elsewhere, is ‘charter group’.
importance of the information gained from these comparative empirical studies far outweighs the data issues, and can be adjusted for in the interpretation of the results. Put most simply, if major differences do exist in our empirical analyses they are most likely the result of a mix of cultural experiences and government policies than of data issues.

**New York**

New York is the USA’s largest metropolitan area; according to the 1990 Census its Consolidated Statistical Metropolitan Area (NYCSMA), contained 18.1 million persons. (Compared with the five boroughs that constitute New York City, the NYCSMA includes 26 boroughs and counties in three states — Connecticut, New Jersey and New York.) Using those Census data, we look at the residential patterns of five major population groups defined according to race (i.e. self-defined ethnic status or ethnicity) — Whites, Asians, African-Americans, American Indians and Hispanic-Americans, which comprised 65%, 4%, 17%, <1% and 14% of the total population respectively. The data analysed refer to census tracts, of which there were 4,800, with an average population of circa 4,200; tracts with populations of fewer than 20 were excluded from the analyses of all three cities.

**Sydney**

Sydney is Australia’s largest city, with a population of some 3.3 million in its Census-defined Urban Centre in 1996. The five major population groups selected for study, defined according to birthplace (the Australian Census does not collect data on ethnic status or self-defined identity) are: Australian-born (excluding Australian Aboriginals and those born in the Torres Strait Islands), Asians, Europeans, New Zealanders and Aborigines (including Torres Strait Islanders), who comprised 62%, 8%, 11%, 2% and 1% respectively of the total population. The analyses use the 5,700 census collectors’ districts, with an average population of circa 570 persons.

**Auckland**

Finally, Auckland is New Zealand’s largest city, with a population of just under one million in its defined urban areas at the 1996 Census. Five population groups (defined by self-identified ethnic status) are also studied here — European New Zealanders (most of them of UK background but including those born in New Zealand), Recent European Migrants, New Zealand Maori, Asians and Pacific Islanders (on ethnicity in New Zealand cities generally, see Poulsen *et al.*, 2001); these formed 45%, 15%, 12%, 10% and 12% respectively of the 1996 population. The data refer to the 297 Census Areal Units (CAUs), which have an average population of some 3,347 persons.

The multiethnic character of each of these cities reflects the bipolar distinction introduced by Keyder and Öncü (1994). Many of the European migrants to each city have been in the poorly-skilled category, but over time have been culturally assimilated into the ‘host society’ as their economic situation has improved. As a consequence, we expect Europeans and Recent European Migrants in Sydney and Auckland respectively to live dispersed among their ‘host societies’ (there are no data on similar European migrants in New York; the streams from those countries are now very shallow). Each of the cities has also experienced streams of similar low-status migrants in recent years, both from outside

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2 Some 3.7% of the census respondents did not state where they were born and a further 8% were from countries not individually identified in the data source; the remainder were from a range of other countries from which only a small number of immigrants left for Australia.

3 Just over 5% did not answer the ethnic status question.

4 Data are available for Auckland at a much smaller spatial scale — 7,100 census mesh blocks with average populations of 140 persons — but the larger Census Areal Units are employed here for ease of comparison with the American case.
their respective country and from within it. Regarding the former, New York has experienced a massive influx of Hispanic-Americans and Auckland a comparable flow of Pacific Islanders (the two groups make up 14% and 13% of the city populations respectively). With regard to internal migration (urbanization), New York has a large African-American population (17% of its total), while 12% of Aucklanders identify themselves as New Zealand Maori. Economic and housing discrimination has not affected the Maori to anything like the extent experienced by African-Americans, however, and whereas the latter should display a segmented/polarized pattern, the residential distribution of Maori in Auckland is more likely to be consistent with the assimilation model.

Recent Asian migration streams to each of the three cities have included substantial numbers of ‘globalized professionals’ (business migrants), many of whom have been encouraged to migrate and invest in their new homeland. They should suffer little economic disadvantage in the housing markets, therefore, and any observed residential segregation should largely reflect cultural factors (as in Boal’s pluralism scenario). Finally, the ‘host society’ in New York is more likely to be distributed according to the segmented model than the situation in Sydney and Auckland, where, reflecting the relative absence of discriminatory segregation in Australia and New Zealand (Forrest and Johnston, 1999), more multiethnic mixing is likely.

Measuring residential concentration

Most studies of ethnic residential patterns in cities use one or more of a number of indices, which measure some aspect of the difference between two maps (e.g. the much-used index of dissimilarity introduced by Duncan and Duncan, 1955, measures the ‘unevenness’ of two maps, such as the distributions of two separate ethnic groups across a city’s constituent areas). Massey and Denton (1988; 1989) have evaluated a wide range of these indices, and suggested that they measure five, orthogonal, aspects of group distributions, which they call unevenness, exposure, concentration, centralization and clustering. The values for all such indices are very dependent on each group’s absolute and relative size within any city, however, making difficult both intercity comparisons at any one time and comparisons of the situation in any one city over time (see, for example, Voas and Williamson, 2000). Furthermore, none of them measure all three key aspects of the degree to which residential space is shared by the ethnic groups identified above — the degree of concentration, assimilation and encapsulation. We have therefore extended the procedure used by Philpott (1978), to develop an index of residential concentration which gives a profile of each ethnic group’s geography (rather than employing a single concentration threshold as in Jargowsky, 1997, or Peach, 1996). Importantly, we use absolute rather than relative data, to allow, within the constraints of the set of areas and ethnic group definitions employed, ready comparisons across space and time.

Our measure of the degree of concentration for each of the five groups in each city involves two separate steps to produce an index of residential concentration, which incorporates the concepts of both concentration and encapsulation introduced above in a measure of what proportion of an ethnic group lives in areas where they exceed a predefined threshold percentage of the total population. First, for each ethnic group, each census small area is categorized according to whether its percentage of the total population exceeds the following thresholds — 20%, 30%, 40%, 50%, 60%, 70% and 80% of the area’s population. (Selection of the actual thresholds is to some extent arbitrary. As long as a wide range is selected, however, the number of thresholds merely influences the detailed shape of the derived profile. As the figures in this article show, our choice of a range from 20–80% gives a clear indication of variations among groups and cities in the degree of concentration of different groups.) Second, for each group, the percentage of its total population living in areas which were above each threshold was...
calculated. In New York, for example, just over 80% of all African-Americans lived in areas where African-Americans formed at least 20% of the area’s population, and about 45% lived in areas where African-Americans comprised at least 70% of the area’s total.

The test of any methodology’s worth lies in what it allows us to achieve. Often, proposed complex solutions for comparative studies — such as Wu and Sui’s (2001) raster-based pattern recognition methodology — while valuable in their own right, contain major limitations to their usage. The study of concentrations outlined here provides measures of a geographic entity that is both universal and for which a set of standard measurements can be obtained, as well as providing a range of measures to facilitate comparative and temporal studies. Thus, these indices of residential concentration allow comparison of the experience of both different groups in the same city and similar groups in different cities. The comparisons across cities are first approximations only, because the relative size of the Census small areas vary (though given that the largest areas are for New York, this makes one of the major differences that we discover much more impressive). Similarly, the population groups are the best available approximations to each city’s major migrant streams, given the different cultural contexts and the constraints of census-classification methods.

Patterns of residential concentration

The patterns shown by the indices of concentration are displayed diagrammatically, in two sets of graphs: the first gives intra-city and the second intercity comparisons. In general, the more segregated a group, the more horizontal the profile of its index of residential concentration.

Intra-city comparisons

The indices of concentration at the various threshold levels for each of the five groups in each of the three cities are shown in Figures 1–3. For New York (Figure 1), the clearest patterns refer to Whites (the ‘host society’) and African-Americans, both of whom live at very high levels of residential encapsulation from other groups. Almost 85% of all African-Americans live in areas with at least 20% of their populations African-American, and over 64% of them live in areas where African-Americans are in the majority; the degree of concentration declines as the threshold is increased but, even so, some 47% of African-Americans live in areas where they form at least 70% of the population and 40% where they form at least 80%. For Whites, the degree of concentration is even greater, and the decline as the threshold increases is slight: over 98% of them live in areas where Whites form at least 20% of the population total; some 92% live in areas where Whites form a majority of the total; and fully 77% of Whites live in areas where Whites form 80% or more of the total.

Hispanic-Americans are also spatially concentrated, especially at the lower thresholds: almost 70% of them live in areas where they form at least 20% of the population, for example, as do 47% in areas where Hispanic-Americans form at least 40%. However, few live in areas where there is a substantial majority of Hispanic-Americans: 38% at the 50% threshold, 16% at the 70% threshold and 7% at the highest; this pattern is consistent with Clark’s (1992) survey findings on Hispanic-Americans’ residential preferences. The concentration of Asians is much less than that of African-Americans so that, despite the existence of a well-documented Chinatown (Lin, 1998), only about one-quarter of them live in areas where they form even 20% of the total population, and fewer than 5% in areas where they form a majority of the total. Finally, there is no evidence at all of residential concentration of the very small Native American population using this index.
Turning to Sydney, Figure 2 shows very little residential concentration for all groups except the Australian-born, almost all of whom live in areas where they form up to 40% of the total population and nearly three-quarters are in areas where they form at least 60%: the members of the host society — who come from a wide range of ethnic backgrounds and comprise approximately two-thirds of the metropolitan population — live in areas that they dominate, as in New York. Among the other four groups, only the Asians have any identifiable residential concentration — and then only at the lowest thresholds: some 30% of them live in areas where Asians form 20% of the population, but only 3% in areas where Asians are at least 40% of the total. Sydney does have well-defined Asian areas — see Dunn (1993; 1998) on the Vietnamese there — but these are neither exclusively Asian in composition nor home for a large percentage of the city’s Asians (Johnston et al., 2001).

The pattern of concentration in Auckland is intermediate between the other two cities (Figure 3). As with New York and Sydney, the great majority of members of the host society (the New Zealand Europeans) live in areas where they form between 20% and 40% of the total, but there is a rapid decline in the degree of ‘exclusiveness’ beyond the 40% threshold: less than 20% of New Zealand Europeans live in areas where they form 60% or more of the population, for example, and none live in areas where they form at least 70%. Among the other groups, Pacific Islanders are significantly concentrated at the lower thresholds. Just over half of them live in areas where they form 20% of the population (they form about 12% of Auckland’s total population); there is then a rapid decline to a pattern of concentration no different from either the host society or the other ethnic groups at the 70% and 80% thresholds — although about one-fifth of them live in areas where Pacific Islanders form a majority of the total population.

Figure 1 Residential concentration of ethnic groups in New York, 1990
The pattern of concentration for Auckland’s other three groups is very similar across the six threshold levels. Some 20–35% live in areas where their respective groups form at least 20% of the population, but this drops rapidly to less than 10% at the 30% threshold and zero at the 50% level: no Recent European Migrants, New Zealand Maori or Asians live in residential areas where members of their group predominate (at this spatial scale).

Intercity comparisons

The preceding discussion suggests considerable differences among the three cities — which may in part reflect the data employed, though probably only in the case of Sydney. Of the two South Pacific cities, Auckland’s host society is less concentrated住宅ly at the middle-level thresholds than Sydney’s, but its ‘migrant ethnic groups’ (including the indigenous Maori) are more concentrated. Compared with New York, however, there is much less residential concentration in Auckland (notably so when comparing African-Americans in the former with New Zealand Maori in the latter), while Sydney appears to be an archetypal ‘melting pot’ with very little residential concentration (especially so given the heterogeneity within the Australian-born population, a significant minority of whom normally speak a language other than English at home: Johnston et al., 2001). To explore these differences in more detail, this section focuses on comparing similar ethnic groups across cities (Figures 4–7), selected to illustrate the characteristic polarized migration streams identified above.

Although all three cities have established Asian populations and residential areas (New York more so than Sydney; Auckland’s Asian population was very small until the last two decades of the twentieth century), each has also experienced a substantial influx of Asian...
migrants in recent decades,\(^5\) with many of them bringing capital and expertise as ‘business migrants’ (as is also the case in Canada: Ley, 1999). They are characteristic of the ‘globalized professionals’, whose average relative wealth and income should allow them a wide range of choice of residential areas, resulting in relatively low levels of concentration unless they either choose a pluralist lifestyle or suffer disadvantage and/or discrimination in the housing market and other aspects of life, leading to their segmentation.

Each city has evidence of concentration at the low threshold levels — between 25% and 30% of Asians living in areas where they form at least 20% of the total population — but very little at the higher levels (Figure 4). Less than 10% of Asians in New York and Sydney live in areas where Asians form a majority of the local population, and none in Auckland. Thus, there are small Asian ethnic enclaves but in each city the majority of Asians live in relatively assimilated areas — as expected for high-income groups if there is little explicit housing market and cultural discrimination.

Figure 5 looks at two groups who characterize the other extreme of the polarized immigration flows — Hispanic-Americans in New York and Pacific Islanders in Auckland. (No comparable group could be identified for Sydney because of the absence of ethnic data; there was no evidence in Figure 2 of concentration of either New Zealanders or Europeans — some of whom, such as the Greek- and Italian-born, display more substantial separate cultural identity and residential concentration than do others: Forrest et al., 2001.) The majority of members of these two groups in New York and Auckland occupy the lower income strata of the labour force and we anticipated relatively high levels of

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5 Both Australia and New Zealand introduced relaxed immigration policies in the 1970s and 1980s respectively, which allowed Asians to enter the countries on the same terms as other migrants for the first time for over a century: their ‘business migration’ schemes encouraged Asians with capital to move to and invest in them.
residential concentration as a consequence — consistent with the early stages of the assimilation process. This proved the case, although the degree of concentration was somewhat higher in New York than in Auckland. In the former, some 70% of Hispanic-Americans lived in areas where they formed at least 20% of the population, just under 40% lived in areas where they formed a majority, and 16% where they were at least 70% of the total: the comparable figures for Pacific Islanders in Auckland were 56%, 18% and 0%. Substantial numbers of these relatively low-income migrants live in residential areas where their group is a large component of the total, therefore, and considerable numbers of them (many more than in the case of Asians) where they predominate.

Figure 6 switches attention to two groups — African-Americans and the New Zealand Maori — which became increasingly urbanized during the twentieth century and are also dominantly in the low-income segments of their relevant labour markets; many have been in the cities for several decades. Again, relatively high levels of residential concentration were anticipated from the history of the two cities: poor race relations in New York, and low socio-economic status (but very much less racial discrimination) among the NZ Maori. High levels of encapsulation are certainly the case for African-Americans in New York, but much less so for Maori in Auckland, especially at the higher thresholds. (The comparable group for Sydney — the Australian Aborigines — is very small, with only 25,500 members; Figure 2 shows no evidence of any concentration at the smallest sub-area unit available from the Australian Census.) Thus, whereas the majority of New York’s African-Americans live in areas where they form the majority of the population, none of Auckland’s Maori do. Levels of concentration suggesting the presence of ghettos occur in the former case, but not the latter.

Finally, Figure 7 shows the concentration profiles for each city’s ‘host society’. In all three, the majority live in areas where they form the majority of the population — though
the figure is some 20% lower for Auckland than the other two. Beyond the 50% threshold, however, the cities diverge. Whereas the great majority of Whites live in parts of New York where they predominate in the local population (again, in line with Clark’s [1992] findings on residential preferences), in Sydney and, especially in Auckland, very few members of the ‘host society’ live in such extreme exclusion and isolation from members of their respective city’s ethnic groups.

**Conclusions**

The social and economic fragmentation of major world cities in recent decades has been accompanied, according to some commentators, by residential patterns which not only create a complex ethnic mosaic (as in Los Angeles: Allen and Turner, 1997) but also contribute to various forms of social and economic malaise — as in citizenship (Young, 1999) and poverty (Massey and Fischer, 2000; Massey, 2001; Pastor, 2001). But how extensive is the residential concentration of ethnic groups in such cities? A great deal of the discussion is based on the US experience, and yet such few detailed comparative studies as have been undertaken suggest that the American model should not be applied more widely without careful prior study of other situations (as in Peach, 1996).

This comparative study of three large plural cities has aimed at determining the relative nature of segregation in New Zealand and Australia’s main cities with regard to the dominantly American-based theory; each of the three cities has a mixed ethnic population as a result of very substantial migration flows over much of the twentieth century. Results both confirm and extend our cautionary note. We have shown that the degree of concentration of both the host society — the Whites — and one of the major ethnic groups — African-
Americans — was much greater in New York in 1990 (despite a coarser set of areal units for measuring that concentration) than was the case in either Auckland or, especially, Sydney in 1996. Furthermore, Sydney had no ethnic group with a pattern of concentration comparable with New York’s African-Americans (a conclusion that is partly dependent on the birthplace data used; data on ethnic identity in Australia — if they were available — might show greater concentration of particular groups, but it is extremely doubtful that it would be comparable to that for New York — Poulsen and Johnston, 2000). And in Auckland, although the pattern of concentration for Pacific Islanders was quite similar to that for Hispanic-Americans in New York, residential concentration for the group most akin to the African-Americans — the Maori — was very much less.

Migration streams to world cities bring together peoples of very different backgrounds and skills, with unequal chances in the labour market and consequences for their participation in the housing market (for Sydney’s labour market and links to the housing market, see Forrest and Johnston, 1999; 2000). These groups should not only have different patterns of residential concentration because of their economic status, but also similar patterns in different cities if the general hypotheses regarding fragmented plural world cities holds. Our analyses have generally confirmed this for the three cities, although, in general, concentration was highest in New York and lowest in Sydney. Thus, Asians generally, many of whom occupy relatively high-income jobs in their new homes, are much less concentrated residentially — certainly at the higher threshold levels — than are other groups of recent migrants who generally occupy the lower levels of the occupational hierarchy — such as Hispanic-Americans in New York and Pacific Islanders in Auckland.

In a first attempt to test some of the hypotheses regarding ethnic fragmentation in world cities, this introductory comparative study has suggested — albeit on the basis of comparing only one US city with two on the southern Pacific Rim, but using absolute

Figure 6 Residential concentration of ethnic in-migrant groups in New York and Auckland
measures of residential concentration which are preferable to the generally-used relative indices — that the literature on ethnically plural cities is dominated by a degree of ‘American exceptionalism’. Some aspects of residential concentration are common to all three countries (notably that regarding Asians, though even for this group the Canadian experience suggests that the observed patterns are far from general: Hiebert, 1988; Ley, 1999). But for other groups there is much more extreme fragmentation in the United States than elsewhere: the vast majority of Whites in New York live in areas where Whites predominate, a situation that is not replicated in either Auckland or Sydney with regard to their European-rooted ‘host societies’. Similarly, African-Americans in New York are much more segregated than their counterparts in the Pacific Rim cities. While New York has all three social processes characteristic of assimilation, pluralism and segmentation, Sydney and Auckland have assimilation and pluralism, but little segmentation.

Comparative studies such as the one reported here are necessary for understanding contemporary urbanization: they are fundamental to the development of information on differences between places. However, such comparative studies face considerable difficulties, because of varying national conventions in the collection of data about ethnic groups and the spatial scale at which their residential geography can be analysed. That aside, they also need a rigorous methodology which allows viable conclusions to be drawn. The index of residential concentration employed here enables that to be done, and offers a basis for extending the tentative general conclusions arrived at here — especially with the wealth of data the next round of national censuses is likely to provide.

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References

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Washington, DC.


