The Assimilation of Asians in Seattle

Susan Wierzbicki Center for Studies in Demography and Ecology University of Washington Box 353340 Seattle, WA 98195

swierz@u.washington.edu

The quick settlement in suburbs of many Asian newcomers to the United States has undermined traditional ecology theory that immigrants cluster first in older parts of central cities and only gradually disperse. This means that suburbanization may be losing some usefulness as a measurement of residential assimilation. This analysis compares suburbanization as a measure of assimilation to three other measures: homeownership, household density and homeownership combined with household density. The latter model shows that despite controls for immigration and English ability, socioeconomic status and household composition, strong ethnic effects remain.

Paper associated with a presentation at the annual meeting of the Population Association of America, Washington, D.C., March 27-29, 1997.

TABLE OF CONTENTS

Page List of Figures	e i
List of Tables iii	i
Introduction1	1
The Importance of Studying Asians	3
Social and Spatial Assimilation	5
Homeownership and Household Density10	C
Methodology14	4
Early Asian Immigration to Seattle 17	7
Asian Ethnic Groups in King County	2
Findings	7
Conclusion	В
References	1

LIST OF FIGURES

Numbe	er Pa	age
1.	Causal Diagram for Residential Assimilation	13
2.	King County Population of Asian Groups by Decade	22
3.	Percentage of Asians by Census Tract	25
4.	Percentage of Chinese by Census Tract	26
5.	Percentage of Filipinos by Census Tract	27
б.	Percentage of Japanese by Census Tract	28
7.	Percentage of Koreans by Census Tract	29
8.	Percentage of Indochinese by Census Tract	30

LIST OF TABLES

Number

Page

1.	Immigration and English by householder's ethnicity	23
2.	Index of Dissimilarity for King County	24
3.	Status by ethnicity	31
4.	Spearman's rho	32
5.	1989 household income by ethnicity	33
6.	Education by ethnicity	34
7.	Occupation by ethnicity	34
8.	Household composition by ethnicity	35
9.	Logistic regression for level of suburbanization	38
10.	Logistic regression for homeownership	41
11.	Logistic regression for level of crowding	43
12.	Logistic regression for low-density homeownership	45
13.	Low-density homeownership in the suburbs	47

INTRODUCTION

Traditional ecological theory for the residential assimilation of immigrants holds that they cluster first in aging parts of central cities and disperse only after they have grasped their new culture and found solid jobs. This traditional theory assumes that immigrants arrive nearly penniless, unfamiliar with American society and steeped in a very different ethnic identity. Immigrants then prosper in more or less linear fashion, and this prosperity promotes adoption of the culture of the new country. Of course, when this theory originated with the Chicago School in the 1920s, Southern and Eastern Europeans were the predominant group of new immigrants to the United States.

But now, in an era of global communication, when racial minorities constitute a plurality of U.S. immigrants, recent studies suggest that the assimilation framework no longer fits as well as it once did (Waldinger and Bozorgmehr, 1996). Immigrants are not necessarily poor or uneducated or even ignorant of American ways. But if the framework has changed, one question is how. The first task is to measure that change.

One way to address changes in the framework of assimilation theory is to examine the residential assimilation of Asians in the United States. The patterns nowadays suggest a paradox. On the one hand, some Asian immigrants are bypassing settlement in urban ethnic enclaves and moving immediately to suburbs (Alba and Logan, 1993; Tseng, 1995). On the other hand, some affluent Asians are choosing to remain in central-city ethnic neighborhoods even though they can afford wealthier areas (Logan et al., 1996). These seemingly contradictory patterns suggest that the residential assimilation of Asians may be partially independent of suburbanization. The patterns also suggest that Asian-Americans not be studied as a single entity. And both patterns, especially the first, appear to buck the traditional ecological explanation that the outward spread of immigrants from the central cities depends on their cultural understanding and employment.

This study will examine how well the ecological explanation of spatial and socioeconomic assimilation holds in Seattle, a relatively "young" Western city in which the differences between the central city and suburbs are less pronounced than in the East and Midwest. To do that, I will test these four indices of assimilation for Asians:

- The suburbanization of Asians in Seattle, according to household composition, socioeconomic status and immigration characteristics.
- Homeownership of Asians, with same independent variables.
- Household density.
- Homeownership combined with household density.

Data primarily come from the 1990 Public Use Microdata Samples for King County, Washington, which contains the city of Seattle and its major suburbs. From PUMS, I have broken down the data into households according to the ethnicity of the householder. The study covers these groups: Chinese, including Taiwanese; Japanese; Filipinos; Koreans and Indochinese (Vietnamese, Laotians, Cambodians and Hmong). The latter were combined because the individual ethnicities in the 5 percent sample for King County represented too few households for meaningful study. (Cambodian and Laotian households, for instance, had about 50 observations each.) While PUMS provides individual-level sample data, it lacks geographical specificity for units of fewer than 100,000

people. To derive an Index of Dissimilarity, based on census tracts, I also use Summary Tape File 1 from 1990.

THE IMPORTANCE OF STUDYING ASIANS

Asians represented 37.2 percent of immigrants to the United States for Fiscal Year 1995 (U.S. Immigration and Naturalization Service, 1997), yet widespread scholarship on their contemporary experiences as immigrants is relatively new. Asian immigration to the United States accelerated after Congress changed the immigration law in 1965. The new Immigration and Nationality Law abolished the old national-origins quotas and instead encouraged immigration of highly skilled professionals and the kin of current residents. Although legislators were expecting Americans of Southern and Eastern European descent to take advantage of the provisions for the migration of relatives, it was Asian students who did so initially (Takaki, 1989). As a result, the Asian population in the United States jumped from less than 1 million in 1960 to more than 7 million.

Also, these immigrants have settled into some metropolitan areas in unprecedented patterns. New Asian enclaves have been forming since the 1970s across the country (Massey and Denton, 1987) and not just in the rundown central-city neighborhoods where poor immigrants traditionally settled. In major ports of entry like Los Angeles, whole belts of largely white suburbia have attracted immigrant Asians of high socioeconomic status (Cheng and Yang, 1996). On the other hand, Asian segregation rose slightly in the 1980s. This phenomenon was driven by large numbers of Indochinese refugees (Frey and Farley, 1996). In Seattle, too, the census tracts with the most Asians in 1980 had become

more segregated by 1990 (Huyler, 1994), even as other Asians were settling more widely throughout the city and close-in suburbs.

Studies of past enclaves do not predict whether these new enclaves of refugees will give way to successive immigrants or become permanent. These enclaves may gradually lose their attraction, much as the traditional Southern and Eastern European neighborhoods did, if the immigrants meld into the general population. But that is not a given: Settlement was different in the heyday of these ethnic European neighborhoods. After the United States restricted immigration in 1924, newcomers stopped pouring into these older neighborhoods. Moreover, the European ethnic groups faced nowhere near so much discrimination as did racial minorities (Lieberson, 1980), so they had less trouble securing the jobs necessary to buy houses in newer neighborhoods. Alternatively, the enclaves could prove as permanent as the Chinatowns in cities like New York or San Francisco. There, early immigrants and their children were forced to rely on a self-sustaining enclave economy to survive discrimination or linguistic barriers to outside employment. Understanding the residential patterns of Asians now, when immigration levels are high but discrimination is less overt, will help explain the difficulty of analyzing all aspects of assimilation.

Why test this model in Seattle? Ecological research on Seattle's settlement patterns and major factors of growth date at least to the 1920s (McKenzie, 1928). Particularly important has been the work of Frank Miyamoto (1984) and Calvin F. Schmid (Schmid and McVey, 1964), who used city directories to locate specific Asian groups within Seattle before the census began disseminating tract data in 1940.

Moreover, the city's population includes several different Asian ethnicities. Traditionally, Seattle was a major port of entry for Japanese (Ong, Fujita and Chin, 1977), but throughout the early part of the century, it drew significant numbers of Chinese and Filipinos as well. Also, Seattle exemplifies the ecological pattern of a city with both moderately high Asian immigration *and* significant migration from other parts of the United States, a combination not found among what are now the biggest ports of entry for Asians (Frey, 1996). Thus, this study contributes to determining how Asians fare in a variety of types of metropolitan areas.

SOCIAL AND SPATIAL ASSIMILATION

Robert Park and Ernest W. Burgess of the Chicago School originated the study of the spatial location of ethnic groups. Park's statement that "physical distances so frequently are, or seem to be, indexes of social distances" (quoted in Guest, 1980) suggests the paramount importance that Park attached to residence in the process of assimilation. Burgess followed up with a model based on settlement expanding in concentric circles away from the city core (Burgess, 1967). He argued that incoming ethnic populations would settle in older, less desirable housing near the core and naturally disperse outward as they could afford to. Park and Burgess emphasized the socioeconomic basis of spatial differences but viewed spatial dispersion and assimilation as inevitable. Their definition of assimilation was primarily cultural: "a process of interpenetration and fusion in which persons and groups acquire the memories, sentiments, and attitudes of other persons or groups, and by sharing their

experience and history, are incorporated with them in a common cultural life" (Park and Burgess, 1969, p. 735).

Milton M. Gordon (1964) refined work of Park and Burgess by breaking down assimilation into seven different types, of which cultural (or acculturation) was simply the first to occur. These dimensions of assimilation were not necessarily linear but could proceed by degrees or change pattern (Hirschman, 1983).

Traditionally, the key factors predicting whether European immigrants would move out of central-city enclaves have included length of time in the United States, ability to speak English and socioeconomic status. But even with those indicators controlled, ethnic differences remain (Lieberson, 1963; Guest and Weed, 1976). To varying degrees, ethnic enclaves sustain segregation through the first and second generation. In particular, affluent children of immigrants are more likely to live near the city core if their parents were low status (Guest, 1980).

Taken to an extreme, this ecological argument predicts that moving to the city periphery is crucial to spatial assimilation. Such an argument presumes that the Burgess hypothesis of concentric circles still holds; by that, higher-status persons uniformly move to the periphery because the housing stock and amenities there are uniformly more desirable than those at the center. But urban settlement is more formless than the concentric circles. In Seattle in particular, the highest-status ethnic groups tend to be relatively centralized (Guest and Nelson, 1978; Guest and Weed, 1976). Moreover, studies examining the suburbanization of immigrants show mixed results. Lieberson (1963)

б

finds that cheap rents in the suburbs can explain low concentrations of immigrants in central cities. Massey and Denton (1987) argue that suburbanization is a necessary mediating variable through which socioeconomic status and acculturation effect spatial assimilation. But their results, calculated with aggregate-level data, barely support their argument that SES and acculturation predict suburbanization (Zhou and Logan, 1991). Another study (Alba and Logan, 1991), using individual-level data, found that immigrant suburbanization generally held to the ecological model of residential dispersion. But Alba and Logan's study also found elements of a stratification model, which predicts that minorities move unequally to the suburbs because many suburbs are inherently exclusionary. Alba and Logan concluded, "If diversity exists in the process of attaining residence in the suburbs, there is also good reason to suspect diversity in the kinds of suburbs that different minorities are likely to enter" (p. 449). By that reasoning, the status variation among suburbs undermines the use of suburbanization alone as a determinant of spatial assimilation. Research on suburbanization would require, at the minimum, contextual variables for suburbs.

For Asians in particular, the traditional ecological model may not work well, at least according to several recent studies. This may be because Asians historically represented a "middleman minority" displaying both ample earnings and high kinship ties (Hirschman, 1983; Kitano, 1976). For European ethnic groups, those ties tended to unravel as income rose. But for middleman minorities, who faced unusually widespread discrimination because of their race or religion, greater

income did not necessarily bring greater social acceptance, so kinship ties remained strong. These ties bound to the ethnic enclave many immigrants who might otherwise have been expected to move because of their rising socioeconomic status. Neither discrimination against Asians nor their kinship ties precluded acculturation, particularly by the second generation, but they would have retarded spatial assimilation and other types of assimilation laid out by Gordon.

Other, often related, ecological factors are also at play. To summarize the findings:

First, some recent streams of immigrants, the Chinese in particular, are bypassing settlement in Chinatowns and moving to more peripheral parts of cities where other compatriots have already settled (Zhou and Logan, 1991; Tseng, 1995). This leads to enclave-building in neighborhoods that might be aging but are nonetheless not in the core.

Second, the overall number of Asian immigrants is still relatively small, so that any Asian neighborhood also contains large numbers of non-Asians. While those with poor English tend to live in more heavily Asian areas, they are still exposed to whites (Logan et al., 1996).

Third, many Asians may choose to live together. Members of Asian ethnic groups want to live either amid a heavy concentration of their group or in a very low concentration of Asians (Clark, 1992). One random stratified survey in San Francisco showed that 42 percent of Chinese-Americans in Chinatown eventually wanted to move out, a finding consistent with the history of other first-settlement areas (Loo and Mar, 1982). This means that 58 percent wanted to stay, despite heavy

crowding. An alternative explanation -- that segregation in Chinatown is involuntary -- seems implausible, given the modest overall segregation of Asians in the San Francisco metropolitan area (Massey and Fong, 1990) Research in other cities also supports the explanation that some Chinese choose to live in enclaves (Zhou and Logan, 1991).

Fourth, recent Asian immigrants who do not speak English at home are not disadvantaged in their ability to live near whites if they come from a high socioeconomic status (Alba and Logan, 1993); traditionally, immigrants have not been well-educated or wealthy.

Fifth, duration of residence does not strongly influence residential assimilation. Ethnic group membership is more important (White, Biddlecom and Guo, 1993). Once life-cycle, socioeconomic and immigration variables are controlled, the most established groups -the Chinese, Japanese and Filipinos -- are *less* likely to live near whites than newer immigrant groups from Asia. The finding from this study is unusual: Previous research without such controls has shown that both English ability *and* length of residence are inversely related to segregation (Massey, 1985). This new finding suggests that enclaves and ethnic identification may be particularly strong for these groups.

Sixth, the variable "Asian" assumes a pan-ethnicity that does not necessarily exist. The different Asian ethnic groups are often as segregated from one another as from non-Hispanic whites (Allen and Turner, 1996; Ko, 1992; C. White, 1986; Zhou and Logan, 1991). This variation in response suggests that any study of Asian residential assimilation actually look at the individual groups.

So if suburbanization is of only middling value as an indicator

of Asians' residential assimilation, what might augment its power? One possibility is contact with whites, a byproduct of the ability to settle in desirable neighborhoods. But Alba and Logan (1993) conclude that because Asians are skipping or quickly leaving settlement in ethnic enclaves, their "individual assimilation status has little bearing on residential proximity to whites." Another study (Massey and Denton, 1987) concludes that contact between whites and Asians stems not from acculturation or socioeconomic status but rather from contextual variables and the percentage of Chinese, who tend to have the most established enclaves.

HOMEOWNERSHIP AND HOUSEHOLD DENSITY

Another possible indicator of Asians' residential assimilation is homeownership. Homeownership is a life milestone for those with the income, rootedness and sophistication to convince a mortgage provider that they can handle a major responsibility (Henretta, 1979; Krivo, 1995). Homeownership provides a tax break and sure vehicle for savings; equity in owner-occupied housing accounts for nearly half the wealth of the lowest income groups (Kain and Quigley, 1972). Like higher education or a job promotion, homeownership also marks one step toward the assimilation of a minority group. It provides entree to neighborhoods of single-family housing. It indicates an investment in the community and symbolizes long-term commitment. For new immigrants, homeownership is generally out of reach, because they are at first dependent on sponsors, poor and ignorant of the language and housing market. But as their dependence fades and they mature, get jobs, learn more English and have families, they generally aspire to own their own

homes. In fact, immigrants from Europe had higher rates of homeownership than native-born whites, even though they still lived in ethnic enclaves (Lieberson, 1963).

Yet homeownership has only sporadically been studied as a measure of assimilation, even though studies (Alba and Logan, 1992; Krivo, 1995) have found that homeownership patterns supported the assimilation perspective. Alba and Logan found that together with age, income and household composition -- the standard measures of homeownership --English ability also strongly affected homeownership. Krivo found that for Hispanics, length of residency was significant in determining homeownership.

Even so, homeownership cannot be a measure of residential assimilation if the housing remains crowded by U.S. standards. If Asian professionals or other relatively well-heeled immigrants bought houses but brought over relatives -- and housed them, at least temporarily -they may have been willingly violating U.S. norms on minimum household density. Regardless of income, Asian-American households are more crowded than white or black households. Even among Asian-American households earning more than double their states' median income, overcrowding persists among 8 percent; in comparable white or black households, the instances of crowding are minuscule (Myers, Baer and Choi, 1996). To the extent that such overcrowding is voluntary -- the Asian households could afford more spacious quarters but choose to spend their money elsewhere -- this would indicate incomplete cultural assimilation (Myers and Lee, 1996).

Potential explanations abound for why so relatively many more

Asian households remain crowded. The cultural one is that Asians are used to densely populated places, like Hong Kong or South Korea. Many Asians hail from "close-contact" societies (Hall, 1966; Myers et al., 1996). However, other studies (Loo and Mar, 1982; Benson, 1990) find that Asians feel stress when they are crowded. They endure overcrowding for immigrants' traditional reasons: They cannot afford otherwise, prefer to save money by living with relatives or feel that their attachment to their ethnic neighborhood outweighs their discomfort. Studies of Hispanics, who also have high rates of crowding, have attributed their household density variously to segregation, relatively stagnant wages and a tendency to use rooms for multiple purposes, e.g., a family room by day becomes a bedroom at night (Krivo, 1995; Myers and Lee, 1996; Pader, 1994). Breakdown of family structure by ethnicity may yield some clues. For instance, unmarried adult Filipinos and Vietnamese are likely to live with their parents or relatives, while young Japanese tend more to live on their own (Kanjanapan, 1989). Overall, however, none of the findings is conclusive. In fact, the traditional studies of crowding in the United States have tended to focus more on the pathologies of crowding than on the causes (Wirth, 1938; Baldassare, 1988).

But even if the reasons for commonplace overcrowding among Asians remain unexplained, the phenomenon can be used to enrich the more traditional residential assimilation model. To do so, I am multiplying the dependent dichotomous variable for homeownership by a dichotomous variable for low household density. This allows me to marry Alba and Logan's work on homeownership to the work of Myers and his colleagues

on crowding. Both homeownership and crowding measure assimilation, but homeownership captures more of the socioeconomic elements of it, while crowding may capture cultural aspects as well. The combination should provide a fuller model overall. In light of previous work on crowding even among wealthy Asians (Myers and Wolch, 1995; Myers et al., 1996), I expect this combined measurement to find ethnic effects that are not explained by controls for household composition or socioeconomic status.

The question remains on why to choose a dichotomous variable for crowding when household density can be measured linearly. The reason is, as much as possible, to avoid arbitrariness, since households with children are denser than childless households. The contemporary Census Bureau indicator for overcrowding is more than one person per room. However, over this century, the social norms have influenced the indicator. For instance, the indicator for overcrowding stood at more than 2.0 persons per room in the 1940s (Myers et al., 1996). Nationwide, crowding rose in the 1980s, after decades of decline, because of immigration (Myers and Lee, 1996). If crowding keeps going up, the indicator may change again. Despite such inconsistencies, this study relies on the current census indicator as the most reasonable measure. Thus, I have coded as uncrowded those households with no more than one person per room (excluding bathrooms, hallways and porches); all other households are crowded. My model (Figure 1) works as follows:



FIGURE 1. Causal Diagram for Residential Assimilation

In summary, I propose to measure residential assimilation through a model that considers homeownership, household density and a combination of homeownership and household density. I expect this model to explain more dimensions of assimilation than suburban status. Suburbanization alone has become too broad a variable to be wholly predictive; its value depends on contextual variables.

Using this model, I expect to find:

- Asian ethnic groups with longstanding ties to the central-city settlement to be more centralized than newer immigrant groups with no historic ties. This would be consistent with enclave theory and chain migration.
- Strong levels of homeownership among Asians with enough socioeconomic status to be able to buy. These homeowners will not necessarily live in the suburbs. The homeownership is consistent with assimilation theory. Strong differences among ethnicities in city/suburban location would reinforce the finding (Guest and Weed, 1976) that ethnic enclaves retain their magnetism for the first and second generations.
- More crowding among Asian households than among whites, even when income is controlled. This difference should diminish with English ability and length of residence, consistent with a pattern of cultural assimilation.

METHODOLOGY

Most of this study relies on the Census Bureau's Public Use Microdata Samples (a 5 percent sample) for King County, which surrounds the city of Seattle. King is the largest county within the Seattle metropolitan area and the only one with significant numbers of suburbs. The use of individual-level data allows me to determine the characteristics of households and householders and avoids the ecological fallacy. However, even individual-level data contain inherent limitations. PUMS does not distinguish among neighborhoods, only city or suburb, so no variables for neighborhood context are available. To determine the level of segregation for Asian groups, I had to use a separate data set, Summary Tape File 1, in which data are aggregated by census tract. I also used this data set to produce maps by census tract for King County.

Other limitations concern measurement of household characteristics used as controls. For instance, some controls (e.g. education and occupation) rely solely on the status of the householder. Also, race is determined by the householder, so a white householder whose spouse is Asian counts as a white household. The implicit assumption in this methodology is that the household acquires its status characteristics from the householder, who in the case of married couples traditionally was the male. While this assumption could introduce bias into the study, other research suggests the assumption generally may be warranted: The literature on class identification finds that despite growing female autonomy, husbands' characteristics still dominate wives' characteristics in forming class identification (Baxter, 1994). Other studies that needed to allocate SES to one person in a household have randomly selected between spouses (Alba and Logan, 1991), but this method in turn assumes that each spouse's characteristics contribute equally in determining socioeconomic status.

This study uses three sets of controls. First are two immigration traits. These consist of a dummy variable for poor or no ability to speak English and a categorical variable, immigration status. The latter is divided into U.S. born, immigrated before 1975, immigrated between 1975 and 1984, and immigrated between 1985 and April 1, 1990. The second set of controls consists of socioeconomic status, measured by the householder's education level and occupation and by household income. I operationalize both income and education as categorical variables instead of linear ones because both variables appear to contain non-linear, threshold effects. Occupation is categorized five ways: professional and managerial; technical, sales and administrative, including clerical; service; blue-collar, forestry, farming and military; and not working or not applicable. The latter category includes retirees. The third set of controls comprises life-cycle characteristics: householder's age and marital status and the presence of children. Models measuring crowding also include variables for the presence of an extended family.

EARLY ASIAN IMMIGRATION TO SEATTLE

Before World War II, Americans responded to Asian immigration with a predictable pattern of discrimination (Bonacich, 1984). Once even small numbers of any Asian group arrived, locals would begin harassment and a political campaign against them. Eventually, the federal government would intervene with treaties or laws to prevent further immigration. This restriction of one nationality would open the way for immigration of a different Asian group, and the pattern would repeat itself. Most of the agitation took place in California and Hawaii. But much of the same type of discrimination surfaced in Seattle, which by the early 20th century had the second-largest Japanese population and sixth-largest Chinese population of any mainland U.S. city.

Chinese were the first. They migrated to Washington in 1860s, less than a decade after fellow countrymen first arrived in the United States to work the gold fields of California. Some were prospectors; others concentrated in menial jobs, such as launderers, cooks, suppliers and servants. The completion of the transcontinental railroad freed about 10,000 Chinese to look for work as laborers and farmhands. By 1880, the Washington territory had attracted 3,186 Chinese (Ong et al., 1977), most of them young males.

As in California, the Chinese in Washington faced quick opposition from white laborers who felt their wage level threatened. As early as 1864, Washington territorial legislators levied an annual head tax of \$24 on Chinese, though they later reduced it to \$16. While the tax bill was informally known as the Chinese Police Tax, it was

formally called "An Act to Protect Free White Labor Against Competition with Chinese Coolie Labor, and to Discourage the Immigration of Chinese in the Territory." Washington legislators also denied Chinese the franchise and the ability to testify against whites. In 1885, a band of whites and Native Americans attacked a camp of Chinese outside Seattle and killed three. A few months later, a mob in Seattle forced about 350 Chinese onto steamers bound for San Francisco (Sale, 1976).

Despite a federal law banning further Chinese immigration, the Chinese population in Seattle grew slowly as unemployed Chinese miners drifted in from across the West to look for work. In Seattle, the Chinese settled in the back streets in an old commercial area. Their quarters were so crowded that in 1885, the Seattle City Council passed a "cubic air ordinance" requiring sleeping space of at least 8 feet by 8 feet by 8 feet (Chin and Chin, 1973).

The law restricting Chinese immigration offered the Japanese the chance to fill laborers' jobs. The first Japanese arrived in Seattle in 1883, and the Japanese population grew from 125 in 1870 to 2,990 in 1900. Regular boat runs directly from Japan made Seattle a major port of entry. In 1908, a U.S.-Japanese "Gentlemen's Agreement" limited Japanese immigrants to non-laborers. But because the agreement also allowed Japanese immigrants to bring over wives, a stream of "picture brides" followed. Thus unlike the Chinese immigrants, who were overwhelmingly male, the Japanese settlement in Seattle consisted more of families. However, the Immigration Act of 1924 barred aliens ineligible for citizenship (i.e. non-whites) and thus stopped further Japanese settlement.

Filipinos began arriving in Seattle about 1920. Because Filipinos were then U.S. nationals, the Immigration Act did not affect them. Not until 10 years later did Congress restrict their immigration through the Tydings-McDuffie Act, which promised the Philippines independence (Takaki, 1989; Bonacich, 1984). Unlike the Chinese and Japanese, who tended to form ethnic economies, the Filipinos found low-wage work in the secondary sector; moreover, their tendency toward manual labor appears to have persisted (Nee and Sanders, 1988). Most Filipinos on the mainland were young male farm workers who lived in farm shacks in the summer and city rooming houses in the winter (Burma, 1951).

In the Seattle area, Filipinos worked in the least desirable agricultural jobs and in salmon canneries (Ong et al., 1977). They lived in the city, with the biggest numbers clustered about a block south of the heart of Chinatown. As late as 1960 in Seattle, Filipino men were still showing the classic pattern of labor migration, with men outnumbering women two to one (Schmid and McVey, 1964). As a result, the Filipinos were slow to form families and move into residential areas.

In Seattle, as in other cities, early Asian immigrants settled in central-city enclaves, consistent with traditional assimilation theory. Shortly before World War I, the Japanese, led by small business owners, began to migrate outward along commercial arteries (Schmid and McVey, 1964). Restrictive covenants prevented Asians from moving into well-todo neighborhoods, so that any Japanese dispersion occurred among the lower middle classes (Chin and Chin, 1973). However, one study of Seattle's Japanese showed they were not trying to disperse.

"Residential and social segregation were at first as much self-imposed as they were externally imposed by majority group restrictions, but the barriers against movement into the white American society unquestionably tended over time to solidify the segregation pattern" (Miyamoto, 1984).

However, Asian immigrants did not live in homogeneous areas. In 1939, a property survey of the settlement pattern in the central residential district of the city showed that different ethnic groups might cluster over a few blocks, but with other groups in their midst or close by. The Japanese, for instance, often lived in proximity to blacks. Filipinos were scattered among these Japanese-black areas in apartment houses that catered to them. The Chinese maintained one concentration, in the old Chinatown, but had also fanned out nearby (Hatt, 1945).

During World War II, the Chinese dispersed further. The war provided them with better jobs, so they could afford better quarters. The internment of the much larger Japanese population left something of a vacuum in nearby neighborhoods. And the vilification of the Japanese, together with more influx of blacks to Seattle during the war, meant that the Chinese were beginning to overcome their status as a scapegoat minority. Gradual dispersion of Filipinos followed in the same neighborhoods.

The amendment of the Immigration and Nationality Act in 1965 caused a sea change in immigration, with streams that had been crossing the Atlantic gradually shifting to the Pacific. The legislation abolished the national-origin quotas that had kept Asian immigration to

a trickle. Instead, the new immigration law stressed the unification of families and gave priority to those with highly professional or technical skills. The result was that Asian immigration grew more than twelvefold between the early 1960s and the early 1980s, while European immigration sank (Hirschman and Wong, 1989). While the proportion of immigrants from Asia has slipped slightly in the 1990s, from about 42 percent in the 1980s to less than 40 percent, Asians remain the largest bloc of immigrants (U.S. Immigration and Naturalization Service, 1996). Most of the new immigrants come from the Philippines, South Korea, China (especially Hong Kong and Taiwan), India and Indochina. Although Seattle is no longer a major port of entry for Asians, it nevertheless attracted tens of thousands of these immigrants.

Following are some key dates in Asian-American history in the United States and in the state of Washington:

- 1860s -- Washington territorial legislators deny Chinese the franchise and the ability to provide evidence in court against whites.
- 1864 -- Washington territory passes the Chinese Police Tax of \$24 a head, reduced in 1866 to \$16.
- 1868 -- U.S. and China sign Burlingame Treaty allowing free migration; idea is to protect U.S. business interests in China.
- 1870 -- Congress allows Africans to naturalize as well as whites, but courts interpret this law as excluding Asians.
- 1882 -- Chinese Exclusion Act cuts working-class migration from China and bars Chinese from naturalizing.
- 1885 -- Band of whites and Native Americans attacks camp of 35 Chinese near Seattle. Three are killed.
- 1886 -- Mob in Seattle forces about 350 Chinese onto steamers for San Francisco.
- 1896 -- Regular boat runs begin from Japan to Seattle.
- 1898 -- Spain cedes the Philippines to the United States, making Filipinos U.S. nationals with unrestricted rights of entry.
- 1908 -- "Gentlemen's Agreement" with Japan limits migration to nonlaborers and wives.
- 1910 -- Japan annexes Korea. For the next 35 years, the Japanese allowed the emigration of only 1,100 Koreans, all "picture brides."
- 1921 -- Washington passes State Anti-Alien Law, making it illegal for foreign-born Asians, who are ineligible for citizenship, to lease or own land.

- 1922 -- The U.S. Supreme Court rules against Japanese man trying to naturalize, citing law from 1790 that grants citizenship only to white immigrants.
- 1924 -- Immigration Act bars entry of aliens ineligible for citizenship. Among Asians, Japanese are most heavily affected. While Filipinos are not aliens, Congress nonetheless deems them ineligible for citizenship because of their race.
- 1934 -- Tydings-McDuffie Act restricts Filipino immigration to 50 persons a year, as Philippines are promised independence.
- 1942 -- Gen. John L. DeWitt designates the West Coast a military area from which all persons of Japanese ancestry were to be removed.
- 1943 -- Magnuson Act repeals Chinese Exclusion Act. Chinese aliens granted the right to become citizens. Annual quota of 105 Chinese is set.
- 1946 -- Philippines gain independence; quota raised to 100 persons a year. Chinese wives admitted outside Chinese quota.
- 1952 -- McCarran-Walter Act grants the right of citizenship to all Asians. Immigration restrictions are eased to allow immigration of war brides and refugees.
- 1965 -- Immigration and Nationality Law amended to abolish national quota system. New law emphasizes unification of families and needed occupational skills.

ASIAN ETHNIC GROUPS IN KING COUNTY

By 1990, Asians represented 7.6 percent of the population of King County. Heavy immigration by Filipinos and Chinese after 1965 led them both to surpass the Japanese in numbers (see Figure 2); in fact, for each decade since 1960, the immigration rates of Chinese and Filipinos to King County have been nearly identical.



FIGURE 2. King County Population of Asian Groups by Decade

In the 1970s, other Asians joined these traditional immigrant groups. Koreans and Vietnamese began to immigrate to King County in substantial numbers. In the 1980s, a flow of refugees began from Laos and Cambodia. As a result of this heavy immigration, the majority of Asians in King County are foreign-born. Japanese are the only Asian group for whom most householders are at least second-generation (see Table 1). For the Filipinos and Chinese, only one in five householders is native-born. For the Koreans, it's one in 13. For Indochinese, it's one in 250.

(in percentages)							
Race/	Percent	Immigrated	Immigrated	Immigrated	Poor or		
Ethnicity	U.S.	pre-1975	1975-1984	1985-1990	no		
	born				English		
White	93.3	5.3	0.8	0.6	0.4		
Black	95.1	1.6	2.2	1.1	0.4		
Chinese	21.8	30.6	29.1	18.5	20.0		
Filipino	20.4	41.7	32.0	5.8	3.9		
Japanese	72.7	12.8	3.6	10.9	8.6		
Korean	7.6	7.6	48.5	18.2	27.3		
Indochinese	0.4	1.3	77.2	21.0	37.1		
Total	89.6	6.3	2.7	1.4	1.3		

TABLE 1. Immigration and English by householder's ethnicity (in percentages)

PUMS, 1990, for King County

Despite this heavy immigration to King County, Asians' overall Index of Dissimilarity of .37 (see Table 2) shows only light-tomoderate segregation from the white population (Kantrowitz, 1973). Because the Japanese had a larger base of natives and relatively little recent immigration, they are the most integrated. The Chinese and Filipinos, with a much larger immigrant population, are more segregated, consistent with assimilation theory. However, these three long-established Asian groups are not much separated from one another. The last Index of Dissimilarity column in Table 2 shows the level of segregation of each Asian group from all other Asians in King County. Here, Chinese, Filipinos and Japanese show low levels of segregation, suggesting that their residential patterns are highly intermingled, at least at the level of the census tract. The Koreans, as relative newcomers, are more segregated from other Asians than they are from whites.

The different Asian groups have settled in spatially diverse ways (see Figures 3-8). Outside the city, Chinese and Japanese have spread widely to the east, while Filipinos have filtered toward the southern end of King County. Koreans are clustered at the far southern and northern ends of the county.

Race/	1990 Pop. in	Pct. Of	I.D.	I.D.	I.D.
Ethnicity	King County	Total	with	with	with
		Pop.	whites	blacks	Asians
White	1,278,532	84.8			
Black	76,289	5.1	.56		
Chinese	25,710	1.7	.47	.51	.28
Filipino	24,558	1.6	.45	.32	.27
Japanese	20,757	1.4	.34	.44	.28
Korean	12,524	0.8	.37	.45	.44
Vietnamese	11,030	0.7	.50	.46	.37
Total Asian	114,267	7.6	.37	.38	
d	H ¹] - 1 1000				

TABLE	2.	Index	of	Dissimilarit	y for	King	County
-------	----	-------	----	--------------	-------	------	--------

Summary Tape File 1, 1990

Nearly all the Asian groups maintain a significant presence in the area spreading south of the traditional Asian enclave, now known as the International District. The Chinese are the most concentrated in this area, with upwards of a quarter of some tracts being Chinese. The Filipinos and Indochinese represent less than a fifth of any tract in the central city. However, they have also spread westward and southward past the city line. There is one outlier, however, in an area called White Center, which has significant amounts of public housing. This tract, heavily populated by Vietnamese and Cambodians, straddles the city border. Nearly 37 percent of the population there is Indochinese.



Census Tract



FIGURE 4. Percentage of Chinese by Census Tract



FIGURE 5. Percentage of Filipinos by Census Tract



FIGURE 6. Percentage of Japanese by Census Tract



FIGURE 7. Percentage of Koreans by Census Tract



FIGURE 8. Percentage of Indochinese by Census Tract

Overall, nearly half of the Indochinese live in the suburbs. Filipinos tend to live more in the central city.

The Koreans are even more suburbanized than the Indochinese. They have virtually no presence near the International District. Moreover, in other metropolitan areas they are repeating this pattern of moving outside the city. In the Los Angeles area, for instance, Koreans are flocking instead to the suburbs, especially in the San Fernando Valley (Huhr and Kim, 1984; Cheng and Yang, 1996).

But while Korean households are nearly as likely as white householders to live in the suburbs, they are unlike whites on other measures of assimilation. Koreans are far less likely to be homeowners (41.8 percent to 61.5 percent for whites). Nearly 32 percent of their households are crowded; the median level of household density is one person per room (see Table 3). One cannot assert that because Koreans are highly suburbanized, they are also highly assimilated.

Race/	Pct.	Pct.	Pct.	Median
Ethnicity	Suburban	Homeowner	Crowded	persons
				per room
White	65.1	61.5	1.7	.40
Black	30.4	36.6	7.3	.50
Chinese	38.8	65.7	13.9	.50
Filipino	36.6	57.8	25.2	.67
Japanese	48.0	60.5	2.2	.40
Korean	59.6	41.8	31.8	1.00
Indochinese	48.9	35.4	35.3	1.00
Total Pop.	62.4	59.7	3.1	.40

TABLE	з.	Status	by	ethn	icit	y
-------	----	--------	----	------	------	---

In fact, a rank-order correlation among the Asian groups, whites and blacks in King County shows that suburbanization is not significantly related to any measures of immigration status, socioeconomic status or life cycle (see Table 4). Homeownership is related to low household density (though given the crudeness of the ranking, the relationship is not significant). Rather, household density and homeownership are more telling indicators of status. Being an immigrant and speaking poor English are strongly linked to high household densities, as are the presence of children and relatives. Homeownership is linked to higher education and professional or managerial occupations.

TABLE 4	. Spear	man's rho	(rank-or	der co	orrelation)
Suburba	nization	, househo	ld densit	y and	homeownership
for eac	h race a	nd ethnic:	ity		

Variable	Suburbanization	(Low)	Homeownership
		Density	
Suburbanization	1.000	.036	.143
Household density	.036	1.000	.607
Homeownership	.143	.607	1.000
U.S. born	286	.893	.357
Poor English	.288	793	.288
Income	.179	.714	.750
Education	.214	.607	.857
Professnl/manager	.071	.643	.893
Married	.286	607	.179
With kids	.071	964	571
With relatives	286	786	685
With others	450	378	286

Bold-faced coefficients significant at p<.05

In terms of homeownership, Chinese are the most likely to own their own homes (65.7 percent); whites, Japanese, and Filipinos have rates nearly as high (see Table 3). Moreover, the average value of houses owned by Chinese is more than \$10,000 more than that of whites. But the Chinese do not have incomes to match their housing preferences, so they have to budget more, too: 24 percent of Chinese households pay more than 35 percent of their income for housing costs; only 11 percent of whites do. The Chinese also are slightly less spaciously housed. The median household density is .5 persons per room for Chinese, compared with .4 for whites and Japanese. Nearly 14 percent of Chinese households are crowded.

Crowding is the greatest among the newest immigrants, the Koreans and Indochinese, both of whom have median household densities of one person per room. About a third of their households are crowded. Nearly as crowded are the Filipinos, for whom a fourth of households have more than one person per room. Whites, blacks and Japanese, the majority of whom were born in the United States, are the least crowded.

In terms of socioeconomic status, about a third of households headed by whites, Japanese, Chinese and Filipinos have incomes above \$50,000 (see Table 5). Blacks, Koreans and Indochinese have much lower incomes overall. More than half of black and Indochinese households have incomes below \$25,000.

Race/	<\$25,000	\$25,000-	\$50,000-	\$75 , 000+	Median
Ethnicity		\$49 , 999	\$74 , 999		income
White	29.7	36.2	20.0	14.1	\$36 , 056
Black	52.1	31.4	12.2	4.3	21,072
Chinese	34.8	34.5	16.1	14.5	32,490
Filipino	29.1	37.2	21.7	12.0	35,663
Japanese	32.6	32.6	22.0	12.8	35,000
Korean	44.7	37.1	9.8	8.3	25,300
Indochinese	54.9	30.8	10.7	3.6	20,035
Total Pop.	31.3	35.8	19.5	13.4	35,000

TABLE 5. 1989 household income by ethnicity (in percentages)

Educationally, the Chinese and Japanese have outpaced all other

groups, with nearly half of householders having college degrees (see Table 6). About a third of white, Korean and Filipino householders graduated from college. However, at the other end, nearly one in five Chinese and Filipinos and two in five Indochinese failed to complete high school. The Koreans are unusual here, with relatively low dropout rates compared with other Asian groups that have experienced high immigration.

Occupationally, the Japanese and Chinese householders are most likely to be professionals or managers and least likely to be bluecollar workers (see Table 7). The Indochinese have the opposite pattern: the greatest proportion of blue-collar and the smallest of white-collar workers. Koreans and Filipinos are in between -- less likely than whites to be professionals or managers but more likely to be blue-collar or service workers.

D/	Det	-	d a m a		Death marked
Race/	PCt.	HS	some	Bachelor's	Postgrad
Ethnicity	<hs< td=""><td>grad</td><td>college</td><td>degree</td><td>degree</td></hs<>	grad	college	degree	degree
White	10.3	21.3	32.2	24.3	11.9
Black	20.3	25.7	38.0	12.2	3.9
Chinese	19.1	10.0	21.8	24.5	24.5
Filipino	18.1	17.8	31.4	26.2	6.5
Japanese	8.4	17.3	25.1	35.4	13.9
Korean	11.4	28.8	25.0	22.0	12.9
Indochinese	40.2	14.3	30.8	13.4	1.3
Total Pop.	11.4	21.3	32.1	23.7	11.6

TABLE 6. Education by ethnicity (in percentages)

TABLE	7.	Occupation	by	ethnicity	/ (i	in 1	percentages	3)
-------	----	------------	----	-----------	------	------	-------------	----

Race/ ethnicity of householder	Pct. Prof/mgr	Tech/ Sales/ admin.	Service	Blue collar	Not working /NA
White	32.5	25.8	6.2	20.8	14.7
Black	18.1	25.2	17.6	23.2	15.9

Chinese	39.1	20.9	14.5	11.8	13.6
Filipino	23.3	23.3	12.6	26.2	14.6
Japanese	40.7	20.9	6.7	15.0	16.7
Korean	22.0	28.8	18.9	22.7	7.6
Indochinese	15.2	13.8	17.4	33.0	20.5
Total	31.6	25.4	7.2	21.2	14.6

Ethnicity of householder	Now married	With children	Households with	Households with non-
			relatives	relatives
White	53.9	36.8	4.6	11.8
Black	33.1	49.8	12.7	15.4
Chinese	66.4	50.3	15.7	8.2
Filipino	65.0	59.9	22.3	12.6
Japanese	51.5	33.1	3.3	8.1
Korean	74.2	64.4	15.2	12.1
Indochinese	60.3	67.9	18.3	12.1
Total	53.4	38.4	5.6	12.0

TABLE 8. Household composition by ethnicity (in percentages)

As for household composition, all Asian groups except the Japanese are far more likely than blacks or whites to be married and less likely to be divorced or separated (see Table 8). By contrast, the Japanese are most likely to remain single. The newest immigrants, the Indochinese and Koreans, are the most likely to have households with children. The Indochinese, moreover, have far more children than other groups. Seventeen percent of their households have four or more children, compared with 2 percent of white households. The Indochinese and Filipinos are also most likely to live in extended families.

From these descriptions, several points emerge. First, while most of the aggregate description fits with traditional assimilation theory, the theory has limits. The Koreans and the Indochinese are more suburbanized than the three longstanding Asian groups. This is inconsistent with the Chicago School theory of settlement heading out in concentric circles from the urban core.

Second, the high educational levels of the Chinese and Koreans overall suggest that they are entering the country with more socioeconomic status than traditional theory would predict. (They may also be entering with accumulated wealth, but the census data measure only income. A measurement of wealth or the availability of money from other relatives might help explain the high homeownership rates among the Chinese.) That the Koreans' income fails to match their education seems consistent with studies showing the difficulty that educated Korean immigrants have had obtaining jobs commensurate with their training, though Koreans are hardly the only immigrant group facing a dual labor market (Takaki, 1989; Huhr and Kim, 1984).

Third, the groups have different family structures and likelihood of living with other relatives. The Filipinos in particular seem to live in extended families. Other studies have also found high rates of extended families among Filipinos and Vietnamese, especially among recent immigrants.

"There are ethnic differences in living arrangements among Asian immigrants. The data are consistent with cultural preferences ... that reflect a complex set of family values and kinship norms tied to the cohesiveness of ethnic communities. These values are related to the adjustment process of Asian immigrants in American society, and appear to converge as length of residence increases" (Kanjanapan, 1989).

That the various Asian groups in King County differ widely is clear. The problem then becomes trying to adjudicate among all these different variables to determine which measurement of residential assimilation best explains those differences in ethnicity and immigration status. A simple rank- order correlation suggests that

crowding and homeownership explain the level of residential assimilation better than suburbanization does. However, logistic regression provides a more sophisticated tool for analysis of the assimilation measurements.

FINDINGS

Suburbanization. In a regression of suburbanization on ethnicity (see Table 9), variables for socioeconomic status and life cycle/household composition explain more than ethnicity or immigration traits. Life cycle explains the most overall. The suburbs draw people who are married and have children. Singles' odds of living in the suburbs are almost half that of married couples'.

SES explains nearly as much, but some of that finding is counterintuitive. While higher incomes predict suburbanization, education does not. In fact, when income is controlled, those with college degrees are more likely to live in the central city. While this finding is curious, it is not unique to Seattle (Alba and Logan, 1991). As for occupation, blue-collar workers are the most likely of all to live in the suburbs. Those in service jobs or those not working are the least likely. These findings suggest that while the poor indeed live in the central city, the city also has enough attractions to retain a core of highly educated people – and the Asian groups tend to be unusually well-educated. Thus rising socioeconomic status does not necessarily predict suburbanization.

Immigration traits add very little to the ability to explain who lives in the suburbs. Though the overall improvement of BIC', a statistic assessing the model (Raftery, 1995), changes rather little, the coefficients at least run in the direction expected by the traditional ecological theory. Both immigration since 1980 and poor English are associated with living in the central city, with English being the slightly stronger factor. Nevertheless, one can conclude that

immigration status scarcely affects who lives in suburbs.

Variable	Ethnicity alone	Immigrant traits	SES	Life cycle	Full model	Exp(b) full
Page (ethnigity						moder
(referent: white)						
Plack (N-1.083)	- 7818	- 9586	- 8044	- 6749	- 9573	3030
$\frac{\text{Diack}}{(N-330)}$	- 3337	- 2257	- 2369	- 4029	- 1688	8447
(N=300)	- 4876	- 4558	- 6300	- 6182	- 6682	5126
Japapese (N=359)	0382	- 0264	0785	2756	2000	1 2214
Korean $(N=132)$	5811	7468	6677	4028	6756	1 9652
Indochinese	0215	2205	0438	-1570	1358	1 1455
(N=224)	.0215	. 2205	.0450	.1570	.1550	1.1433
All others (N=591) (Total N=26 964)	.2629	.1801	.2110	.2854	.1314	1.1404
Termigrant traits						
Poor English		- 3095			3529	7026
Tmmigrant status		. 50 55				.7020
(referent: native)						
Dre-1975		- 0345			0371	1 0378
Immigrated 1975-84		0569			- 0870	9167
Immigrated 1985-90		- 2758			- 2207	8019
innigraced 1905 90		•2/50			.2207	.0019
Socioeconomic status						
Household Income						
(referent: < \$25K)						
\$25,000-\$49,999			0516		.0010	1.0010
\$50,000-\$74,999			.2827		.1241	1.1322
\$75,000 +			.4015		.1866	1.2052
Education (ref: <hs)< td=""><td></td><td></td><td></td><td></td><td></td><td>1.2002</td></hs)<>						1.2002
High school grad			.3619		.3273	1.3872
Some college			.1804		.1729	1.1888
Bachelor's degree			2325		1817	.8338
Postgraduate			6266		6019	.5477
Occupation (ref:						
prof./mgr.)						
Tech/sales			.0981		.1071	1.1131
Service			1425		1464	.8638
Blue collar			.3275		.2357	1.2658
Not working/NA			3739		2662	.7663
2.						
Life-cycle traits						
Householder's age				0125	0083	.9918
Marital status						
(referent: married)						
Widowed				.1125	.1583	1.1716
Separated/Divorced				.0527	.0338	1.0344
Never married				6930	6252	.5352
Presence of children				.5484	.5155	1.6745
Constant	0215	.0440	.0466	.0597	1324	
Model Chi-Square	764.56	823.37	2284.68	2949.78	3656.99	
BIC'	-693.14	-711.15	-2101.04	-2827.35	-3381.53	
Bold-faced						
coefficients						
significant at p<.01						

TABLE 9. Logistic regression for level of suburbanization

Ethnic effects are significant. The strongest are for blacks,

consistent with a long tradition in both the stratification and assimilationist models showing the barriers faced by blacks in moving to the suburbs (Massey and Denton, 1993, Alba and Logan, 1991). If suburbanization were the sole measurement of residential assimilation, blacks (most of whom were born in the United States) would be the least assimilated of all.

Among groups with large numbers of immigrants, two with large traditional enclaves, the Chinese and Filipinos, have remained centralized, suggesting that the enclave maintains its pull on them through migration chains. Once controls are in place for household composition and socioeconomic status, however, similarities between the Filipinos and Chinese end. The Chinese settlement patterns are not significantly different from those of whites. By contrast, the SES and life-cycle controls strengthen the predisposition of Filipinos toward living in the city; the odds of Filipinos living in the suburbs become half those of whites.

Groups without traditional enclaves, like the Koreans, are settling more in the suburbs than the city. While this is consistent with patterns in other cities, neither length of time in the country nor English ability significantly affects whether Koreans move to the suburbs. A separate regression for Koreans shows mainly that the presence of children affects where the household lives. While Alba and Logan (1993) found that some newly immigrating Asians minorities can bypass the traditional pattern of settlement in an urban core because of their higher socioeconomic status, their finding fits poorly with the Koreans in the Seattle metro area. The Koreans' aggregate status is

lower than all the other Asians' except that of the Indochinese, though it may be high enough to allow the Koreans to choose their place of residence.

Because two-thirds of Korean householders in King County have immigrated since 1975, traditional models of residential assimilation would predict that the Koreans would have relatively low overall SES and at least moderate segregation from the rest of the population. What traditional models would not predict is where they are settling: outside the central core. The traditional models hold that after immigrants have learned the culture, they move outward and mix spatially with native population, particularly whites. Therefore the models could use suburbanization as a measure of assimilation. The example of the Koreans, and to a lesser extent the Indochinese, suggest that this suburbanization measure may not necessarily hold.

Homeownership. Life-cycle/household traits also are strongest in predicting homeownership (see Table 10), with householder's age and the presence of children being the most important. Socioeconomic status also strongly predicts ownership, and in this model, unlike that for suburbanization, the significant education coefficients run in the expected direction.

While immigration traits have nothing like the explanatory power of SES or the life cycle, they are nonetheless significant. Recent immigration and poor English inhibit homeownership; this is also expected, since immigrants seldom know the real-estate market or have the credit history and jobs necessary for getting a mortgage. However, less expected is the finding that immigrants who arrived before 1975

are significantly more likely than natives to own their own homes. Lieberson (1963) had noted the same pattern among European immigrants.

Ethnic effects are also pronounced. Blacks are significantly less likely than whites to own houses, even with controls in place. This is expected; a whole body of literature suggests that discrimination and difficulty in accumulating wealth have made home-buying far more difficult for blacks than for whites (Yinger, 1979).

TABLE 10. Logistic Regression for homeownership.

Variable	Ethnicity	Immigrant	SES	Life	Full	Exp (b)
	alone	traits		cycle	model	full
		-	-			model
Race/ethnicity (white)		_	-	_	_	
Black	5526	7419	3941	3224	5442	.5803
Chinese	.7237	.9661	.7317	.7618	1.0379	2.8234
Filipino	.2769	.0610	.0816	.0521	2582	.7724
Japanese	.4309	.4306	.2646	.6162	.2381	1.2688
Korean	3361	1866	1706	7527	3106	.7330
Indochinese	6916	3272	5517	7666	.0930	1.0974
All others	3167	4586	2475	1679	2898	.7484
Immigrant traits						
Poor English		5826			7195	.4870
Immigrant status						
(native)						
Immigrated pre-1975		.8103			.5247	1.6900
Immigrated 1975-1984		.2344			.2181	1.2437
Immigrated 1985-1990		-1.4088			-1.1741	.3091
Socioeconomic status						
Household Income						
(<\$25K)						
\$25,000-\$49,999			4159		2779	.7574
\$50,000-\$74,999			.6658		.5222	1.6858
\$75,000 +			1.3561		.9853	2.6787
Education (<hs)< td=""><td></td><td></td><td></td><td></td><td></td><td></td></hs)<>						
High school grad			.0471		0337	.9669
Some college			0827		.0342	1.0348
Bach. Degree			1148		.1442	1.1551
Postgraduate			.1106		.2131	1.2375
Occupation						
(prof./mgr.)						
Tech/sales			2638		.1092	1.1154
Service			4394		1598	.8523
Blue collar			0894		.1849	1.2031
Not working/NA			.9033		3429	.7097
<i>Life-cycle traits</i>						
Householder's age				.0458	.0595	1.0613
Marital status						
(married)						
Widowed				4287	0223	.9779
Separated/divorced				3064	3039	.7379
Never married				4442	4217	.6559

Presence of children Constant	.1232	0409	.7900	.5319 -2.6407	.4939 -2.7479	1.6386
Model Chi-Square BIC'	431.78 -360.36	767.28 -655.06	5489.70 -5306.06	7120.39 -6997.96	10,092.27 -9816.81	
Bold-faced coefficients significant at p<.01						

Among Asian groups, however, the homeownership patterns are much different. Chinese households are far more likely than whites to buy houses, and, on average, more valuable houses. With other characteristics controlled, being Chinese increases the odds of homeownership by nearly threefold. Homeownership rates are especially pronounced for those who immigrated before 1975. This may indicate a cultural preference among the Chinese for owning property, as well as the financial wherewithal to afford a house. The Chinese may also greater family support for home buying or savings that the income variable cannot capture. The mean housing value for Chinese throughout King County was nearly \$13,000 greater than that of whites, even though their median income was less. In the city, however, housing values for Chinese drop, whereas those of whites rise.

With controls in place, the homeownership rates for Indochinese, Koreans, Filipinos and Japanese are not significantly different from those of whites.

Crowding. Not surprisingly, both socioeconomic status and the composition of the household affect the levels of crowding. Greater education and white-collar work both reduce the likelihood of crowding. The presence of children or other relatives strongly increase the risk of crowding. As the householder ages, the odds of crowding drop. Recent immigrants also are more likely to be crowded, though poor English does

not significantly change the odds of crowding.

However, the data take a curious twist: Those who never married are significantly more likely than the currently married to be crowded. Households headed by single mothers do not appear to affect this finding much, since a separate regression controlling for the gender of the householder barely budges the coefficients downward. These crowded singles may be disproportionately young people just starting out.

TABLE 11. Logistic Regression for level of crowding (persons per room>1)

Variable	Ethnicity	Immigrant	SES	Life	Full	Exp(b)
	atone	LIAILS		cycre	TIOGET	model
Bace/ethnicity (white)			-	-	-	
Black	- 4848	.1125	6597	5340	- 2376	.7885
Chinese	2371	- 1076	4057	2286	0092	1 0092
Filipipo	.9718	1.0078	1.0689	.9248	1.0414	2 8332
Japanese	-1.7239	-1.5595	-1.4669	-1.3387	- 8236	4389
Korean	1 2953	7926	1 2787	1 2157	8317	2 2972
Indochinese	1 4502	5806	1 2126	1 1462	1535	1 1659
All others	.2317	.5200	0017	.0615	.0864	1.0902
Turni ann a basaita						
		666F			4200	1 5 2 0 7
Poor English		.0005			.4309	1.538/
Immigrant status						
(native)		(1.2.0			1500	05.07
Immigrated pre-1975		6132			1582	.8537
Immigrated 1975-1984		.5263			.2941	1.3419
Immigrated 1985-1990		.8033			.4466	1.5630
Socioeconomic status						
Household Income						
(<\$25K)						
\$25,000-\$49,999			.2408		.2551	1.2905
\$50,000-\$74,999			0628		1678	.8455
\$75,000 +			4977		6938	.4997
Education (<hs)< td=""><td></td><td></td><td></td><td></td><td></td><td></td></hs)<>						
High school grad			.1806		.1192	1.1266
Some college			0769		1280	.8798
Bachelor's degree			3320		2952	.7444
Postgraduate			3335		2799	.7558
Occupation						
(prof./mgr.)						
Tech/sales			- 0669		- 2856	7516
Service			6543		3272	1 3870
Blue collar			5659		2480	1 2815
Not working/NA			- 7415		2100	1 2266
NOU WOIKING/NA			/115		.2027	1.3200
Life cycle traits						
Householder age				0499	0482	.9529
Marital status						
(married)						
Widowed				2722	6371	.5288
Separated/divorced				1741	1171	.8895
Never married				.2605	.3027	1.3535

Presence of children Presence of relatives Constant	-2.0575	-2.0227	-2.3801	1.6077 1.4813 -1.4943	1.5862 1.4708 -1.9052	4.8850 4.3528
Model Chi-Square BIC'	1025.97 -954.55	1168.30 -1056.07	1368.50 -1184.86	1861.97 -1729.34	2281.37 -1995.70	
Bold-faced coefficients significant at p<.01						

More surprising are the widely differing and strong ethnic effects. Among the Chinese, a group with many new immigrants, the crowding level does not significantly differ from that of whites. The Indochinese are the most crowded overall, but controls for length of immigration, SES and life cycle explain their crowding.

However, controls do not explain the crowding among the Koreans and Filipinos. For instance, the odds of a Filipino household being crowded are near three times higher than whites', even with all controls in place, including those for children and other relatives. The reason why is not obvious. These groups may not feel a need to buy extra space because they are acculturated to close contact. Alternatively, they may be saving money for other purposes. The effect of recent immigration may be particularly strong for them - a separate regression suggests that this is the case for the Koreans. For the Filipinos, the large proportion of households with children seems to be a stronger factor.

Low-density homeownership. This model, combining homeownership and crowding, shows that socioeconomic status and life cycle are the strongest predictors. As in the homeownership model, the householder's age and marital status are major determinants, as are household income and educational level.

In this model, as in the homeownership model, both recent

immigration and poor English are significant negative predictors of low-density homeownership (see Table 12). But immigrants who came to the United States before 1975 show just the opposite pattern. They are more likely than the native-born to live in uncrowded, owner-occupied housing, even when SES, age and household composition are controlled.

TABLE	E 12.	Log	jistic	reg	grea	ssid	on for	low-	dens	sity h	omeowr	nership
(low	densi	Lty	consis	sts	of	no	more	than	one	perso	n per	room)

Variable (reference	Ethnicity	Immigrant	SES	Life	Full	Exp(b)
category in	alone	traits		cycle	model	full
parentneses)						model
Race/ethnicity						
(white)						= - 4
Black	3442	5747	1434	0707	3090	.7342
Chinese	.6744	.9072	.6578	.6606	.9249	2.5217
Filipino	0212	2458	2701	3382	6417	.5264
Japanese	.6581	.6286	.5236	.8791	.4660	1.5937
Korean	4977	3134	3757	8998	4287	.6513
Indochinese	9450	4575	8217	-1.0344	0929	.9112
All others	2173	3854	1237	0431	1815	.8340
Immigrant traits						
Poor English		6991			8150	.4426
Immigrant status						
(native)						
Immigrated pre-1975		.8691			.5761	1.7791
Immigrated 1975-84		.0861			.0242	1.0245
Immigrated 1985-90		-1.3727			-1.0843	.3381
Socioeconomic status						
Household Income						
(<\$25K)						
\$25,000-\$49,999			4087		2725	.7615
\$50,000-\$74,999			.6363		.4985	1.6463
\$75,000 +			1.3356		.9779	2.6587
Education (<hs)< td=""><td></td><td></td><td></td><td></td><td></td><td></td></hs)<>						
High school grad			.0374		0394	.9613
Some college			0759		.0427	1.0436
Bach. Degree			1035		.1485	1.1600
Postgraduate			.1290		.2264	1.2541
Occupation						
(prof./mgr.)						
Tech/sales			2468		.1240	1.1320
Service			4757		1913	.8259
Blue collar			1315		.1417	1.1522
Not working/NA			.9337		3152	.7296
Life cycle traits						
Householder age				.0453	.0586	1.0604
Marital status						
(married)						
Widowed				4135	.0101	.9900
Separated/divorced				2889	2862	.7511
Never married				4490	4286	.6514
Presence of children				.4319	.3848	1.4693
Presence of relatives				0767	0907	.9133

Constant	1279	3002	.4739	-2.8772	-2.9881	
Model Chi-Square BIC'	572.37 -500.95	920.20 -807.97	5527.98 -5344.34	6964.03 -6831.41	9952.69 -9667.03	
Bold-faced coefficients significant at p<.01						

This model, like the homeownership and crowding models, shows some striking ethnic effects. Chinese and Japanese households are more likely than whites to have achieved low-density homeownership. The Filipinos are much less likely. So are the Koreans or Indochinese, but for these two groups, the mitigating controls of immigration and SES keep the results from being significant. For the Filipinos, the high level of crowding appears to be the driving factor in this model. This model also combines the best features of the homeownership and crowding models. The crowding model seems strongly affected by immigration and ethnicity and thus empirically provides a good measure of assimilation to the norms of U.S. housing density. The homeownership model has strong overall explanatory power. The combined model has both strong points. The only variable on which the combined model would lose predictive power is the presence of children. That variable works at cross purposes. Children predict homeownership, but they negatively predict low household density.

Low-density homeownership in the suburbs. A model combining all three dependent variables reduces the effects of a number of variables. The Japanese are no longer significantly different from whites. The difference between the Chinese and whites attenuates but remains significant. The negative effect of poor English and recent immigration also remains significant but is nonetheless reduced. The effect of

income goes down.

But the model also accentuates some ethnic differences, such as the negative effect for the Filipinos. The biggest difference, however, is with blacks. Combination of the three variables emphasizes blackwhite differences more than Asian-white differences. In many other cities, too, blacks are less likely than Asians to live in the suburbs (Massey and Denton, 1987).

Variable (reference	Ethnicity	Immigrant	SES	Life	Full	Exp(b)
category in	alone	traits		cycle	model	full
parentheses)						model
Race/ethnicity		-	-	_		
(white)						
Black	9417	-1.1460	8526	7238	-1.0080	.3649
Chinese	.2771	.4149	.2729	.1617	.3446	1.4114
Filipino	2866	3851	5050	5215	6627	.5155
Japanese	.3829	.3284	.2771	.5663	.2791	1.3219
Korean	.0168	.2246	.1624	2507	.1691	1.1842
Indochinese	3831	0426	2279	4693	.1711	1.1866
All others	.0990	0207	.1454	.2286	.1130	1.1196
Immigrant traits						
Poor English		7558			7503	.4722
Immigrant status						
(native)						
Immigrated pre-1975		.4027			.2306	1.2593
Immigrated 1975-84		.2074			.1042	1.1098
Immigrated 1985-90		9861			7177	.4979
5						
Socioeconomic status						
Household Income						
(<\$25K)						
\$25,000-\$49,999			2143		1321	.8763
\$50,000-\$74,999			.5532		.3801	1.4624
\$75,000 +			.8592		.5140	1.6720
Education (<hs)< td=""><td></td><td></td><td></td><td></td><td></td><td></td></hs)<>						
High school grad			.1742		.1159	1.1229
Some college			.0954		.1527	1.1650
Bachelor's degree			0869		.0339	1.0345
Postgraduate			2879		2660	.7664
Occupation						
(prof./mgr.)						
Tech/sales			0313		.1576	1.1707
Service			4195		1700	.8437
Blue collar			.0975		.1862	1 2047
Not working/NA			.3069		3442	7088
Not working/nk						.7000
Life-cycle traits						
Householder age				.0152	.0250	1.0253
Marital status						
(married)						
Widowed				0837	.1499	1.1617
Separated/divorced				1071	1070	.8985

TABLE 13. Low-density homeownership in the suburbs

Never married Presence of children Presence of relatives Constant	9976	-1.1557	7661	7961 .4786 1064 -2.4814	7276 .4045 0326 -2.3941	.4831 1.4985 .9679
Model Chi-Square BIC'	761.45 -690.03	900.69 -788.45	3681.62 -3497.98	4911.07 -4778.44	6309.03 -6023.36	
Bold-faced coefficients significant at p<.01						

Overall, the low-density homeownership model that *excludes* suburbanization appears to have greater overall explanatory power for Asians. The most recent immigrants, the Indochinese and Koreans, have heavily settled in the suburbs, yet like most new immigrant groups have relatively low SES. To make suburbanization a criterion for their assimilation is to disregard their initial location. In fact, the model with suburbanization still counterintuitively shows a postgraduate degree as a negative predictor of assimilation.

CONCLUSIONS

The newest Asian groups, those lacking SES and having no recourse to traditional enclaves, are the most likely to live in the suburbs of King County. While their socioeconomic difficulties are expected according to traditional ecological theory, their choice of location for settlement is a relatively new phenomenon. They appear to be forming their own enclaves in the suburbs, or in areas straddling the city and the suburbs, but not in the traditional locale of immigrants, the city core. This finding confirms my hypothesis that newer immigrant groups will be less centralized than the Asian groups with longstanding enclaves.

Because of this new settlement pattern, suburbanization must be used cautiously as a measurement of assimilation. This study has shown

that suburbanization works only moderately as a predictor of assimilation. Overall, many -- but not all -- of the coefficients run in the expected directions. Immigrant characteristics have little explanatory power. The predictive power of ethnicity pertains more to blacks than to Asians. Moreover, the Koreans, a relatively new immigrant group whose overall SES is below that of whites, have 2:1 odds of living in suburbs as compared to whites. Even Indochinese, many of them refugees in the 1980s, do not significantly differ from whites in their ability to live in suburbs.

Homeownership, however, has remained a predictor of assimilation. Both poor English and recent immigration status keep households from buying houses. Once controls for life cycle and SES are in place, however, only blacks and Chinese remain significantly different from whites. The Chinese are more likely to buy houses than whites, though the reasons remain unclear. This finding generally bears out my hypothesis that Asians with sufficient SES will be buying houses, but not necessarily in the suburbs. With controls in place, no Asian group except the Chinese is significantly different from whites in homeownership patterns.

Crowding has seldom been used as a predictor of assimilation, though it is largely a phenomenon of new immigrants. However, crowding affects some groups more than others. Among Asians, Filipinos, Indochinese and Koreans have the greatest household densities and Japanese the smallest. With immigration status, SES and life cycle controlled, Koreans and Filipinos remain significantly more crowded than whites. This finding only partially bears out my hypothesis that

regardless of income, Asians would be more crowded than whites, and that the differences should diminish with length of residence and English ability. In fact, though English ability is not significant, recent immigrant status is the single biggest factor in reducing the ethnic differences. SES has hardly any effect.

A model combining homeownership and crowding thus takes into account two measures of assimilation. Strong ethnic effects emerge. By this combined measure, Chinese and Japanese in King County have achieved significantly greater assimilation than whites in that they are more likely to buy their own housing and live in it uncrowded. By contrast, the Filipinos are significantly less likely to have assimilated, even though their migration streams parallel those of the Chinese. The reasons why are unclear. The Chinese may be able to tap into more wealth, which is not picked up in the census data for income. They may have more family support for homeownership. The Filipinos may be getting fewer returns to their education -- other studies show evidence of this (Nee and Sanders, 1988) -- and choosing to live in extended families so that more adults can contribute to maintain the household income. They also have more children to support. Further research is necessary here.

This combined model also appears to be more effective at describing the effects of immigration than a model that also incorporates suburbanization. The last again picks up black-white dichotomies and odd statistical artifacts.

Thus, the combined homeownership-crowding model offers a new means of measuring residential assimilation. It eliminates an often

unwarranted distinction between city and suburb. Nor does it stumble over the difficulty of measuring the integration of a minority whose overall small numbers have meant that it is seldom completely segregated from the native population. Longitudinal studies and studies with more cities could give more support to the model's efficacy.

REFERENCES

- Alba, Richard D., and John R. Logan, 1993. "Minority Proximity to Whites in Suburbs: An Individual-Level Analysis of Segregation." American Journal of Sociology 98: 1388-1427.
- ----, 1992. "Assimilation and Stratification in the Homeownership Patterns of Racial and Ethnic Groups." International Migration Review 26: 1314-1341.
- ----, 1991. "Variations on Two Themes: Racial and Ethnic Patterns in the Attainment of of Suburban Residence." *Demography* 28: 431-453.
- Allen, James P., and Eugene Turner, 1996. Ethnic Diversity and Segregation in the New Los Angeles, in <u>EthniCity: Geographic</u> <u>Perspectives on Ethnic Change in Modern Cities</u>, ed. Curtis C. Roseman, Hans Dieter Laux, and GÜnter Thieme. Lanham, Md.: Rowman & Littlefield Publishers Inc.
- Baldassare, Mark, 1988. Residential Crowding in the United States: A Review of Research. In <u>Handbook of Housing and the Built</u> <u>Environment</u>, eds. Elizabeth Huttman and Willem van Vliet. Westport, Conn.: Greenwood Press.
- Baxter, Janeen, 1994. "Is Husband's Class Enough? Class Location and Class Identity in the United States, Sweden, Norway, and Australia." American Sociological Review 59: 220-235.
- Benson, Janet A., 1990. "Households, Migration, and Community Context." Urban Anthropology 19: 9-29.
- Bonacich, Edna, 1984. Some Basic Facts: Patterns of Asian Immigration and Exclusion. <u>In Labor Immigration Under Capitalism: Asian</u> <u>Workers in the United States Before World War II</u>, eds. Lucie Cheng and Edna Bonacich. Berkeley, Calif.: University of California Press.
- Burgess, Ernest W., 1967. The Growth of the City: An Introduction to a Research Project. In <u>The City</u>, eds. R.E. Park, E.W. Burgess and R.D. McKenzie. Chicago: University of Chicago Press.
- Burma, John H., 1951. "The Background of the Current Situation of Filipino-Americans." Social Forces 30: 42-48.
- Cheng, Lucie and Philip Q. Yang, 1996. Asians: The "Model Minority" Deconstructed, in <u>Ethnic Los Angeles</u>, eds. Roger Waldinger and Mehdi Bozorgmehr. New York: Russell Sage Foundation.
- Chin, Doug and Art, 1973. "Up Hill: The Settlement and Diffusion of the Chinese in Seattle, Washington." Not published.
- Clark, William A. V., 1992. "Residential Preferences and Residential Choices in a Multiethnic Context." *Demography* 29: 451-466.

- Cortese, Charles F., R. Frank Falk and Jack K. Cohen, 1976. "Further Considerations on the Methodological Analysis of Segregation Indices." American Sociological Review 41: 630-637.
- Frey, William H., 1996. "Immigration, Domestic Migration, and Demographic Balkanization in America: New Evidence for the 1990s." Population and Development Review 22: 741-763.
- Frey, William H. and Reynolds Farley, 1996. "Latino, Asian, and Black Segregation in U.S. Metropolitan Areas: Are Multiethnic Metros Different?" Demography 33: 35-50.
- Gordon, Milton M., 1964. Assimilation in American Life. New York: Oxford University Press.
- Guest, Avery M., 1980. "The Suburbanization of Ethnic Groups." Sociology and Social Research 64: 497-513.
- Guest, Avery M., and James A. Weed, 1976. "Ethnic Residential Segregation: Patterns of Change." American Journal of Sociology 81: 1088-1111.
- Guest, Avery M., and George H. Nelson, 1978. "Central City/Suburban Status Differences: Fifty Years of Change." The Sociological Quarterly 19: 7-23.
- Hall, Edward T., 1966. The Hidden Dimension. New York: Random House.
- Hatt, Paul, 1945. "Spatial Patterns in a Polyethnic Area." American Sociological Review 10: 352-356.
- Henretta, John C., 1979. "Race Differences in Middle Class Lifestyle: The Role of Home Ownership." *Social Science Research* 8: 63-78.
- Hirschman, Charles, 1983. "America's Melting Pot Reconsidered." Annual Review of Sociology 9: 397-423.
- Hirschman, Charles and Morrison G. Wong, 1989. "Asian Immigration to the United States: Recent Trends in Historical Perspective." Revised version of paper presented at the 1989 meeting of the American Sociological Association.
- Huhr, Won Moo, and Kwang Chung Kim, 1984. <u>Korean Immigrants in America:</u> <u>A Structural Analysis of Ethnic Confinement and Adhesive</u> Adaptation. Cranbury, N.J.: Associated University Presses, Inc.
- Huyler, Mark, 1994. "Who Are The Neighbors and Why Does It Matter? Changes In Local Levels of Residential Diversity, Seattle, WA 1980-1990." Master's thesis, unpublished, University of Washington.

Kain, John F., and John M. Quigley, 1972. "Housing Market

Discrimination, Homeownership, and Savings Behavior." The American Economic Review 62: 263-277.

- Kanjanapan, Wilawan, 1989. The Asian-American Traditional Household. In <u>Ethnicity and the New Family Economy</u>, eds. Frances K. Goldscheider and Calvin Goldscheider. Boulder, Colo.: Westview Press.
- Kantrowitz, Nathan, 1973. Ethnic and Racial Segregation in the New York Metropolis. New York: Praeger.
- Kitano, Harry H.L., 1976. Japanese Americans: The Development of a Middleman Minority, in <u>The Asian American</u>, ed. Norris Hundley, Jr. Santa Barbara, Calif.: Clio Books.
- Ko, Chyong-Fang,1992. "Less Ethnic Segregation and More Variation: Los Angeles County, 1980-1990." Sociology and Social Research 76: 127-132.
- Krivo, Lauren J., 1995. "Immigrant Characteristics and Hispanic-Anglo Housing Inequality." Demography 32: 599-615.
- Langberg, Mark and Reynolds Farley, 1985. "Residential Segregation of Asian Americans in 1980." Sociology and Social Research 70: 71-75.
- Lieberson, Stanley, 1980. <u>A Piece of the Pie: Blacks and White</u> Immigrants since 1880. Berkeley: University of California Press.
- -----, 1963. <u>Ethnic Patterns in American Cities</u>. New York: The Free Press of Glencoe.
- Loo, Chalsa, and Don Mar, 1982. "Desired Residential Mobility in a Low-Income Ethnic Community: A Case Study of Chinatown." Journal of Social Issues 38: 95-106.
- Logan, John R., Richard D. Alba, Tom McNulty, and Brian Fisher, 1996. "Making a Place in the Metropolis: Locational Attainment in Cities and Suburbs." *Demography* 33: 443-453.
- Massey, Douglas S. and Nancy A. Denton, 1993. <u>American Apartheid</u>. Cambridge: Harvard University Press.
- -----, 1992. "Residential Segregation of Asian-Origin Groups in U.S. Metropolitan Areas." Sociology and Social Research 76: 170-177.
- -----, 1988. "The Dimensions of Residential Segregation." Social Forces 67: 281-315.
- -----, 1987. "Trends in the Residential Segregation of Blacks, Hispanics, and Asians: 1970-1980." American Sociological Review 52: 802-825.

-----, 1985. "Spatial Assimilation as a Socioeconomic Outcome." American Sociological Review 50: 94-106.

- Massey, Douglas S., and Eric Fong, 1990. "Segregation and Neighborhood Quality: Blacks, Hispanics, and Asians in the San Francisco Metropolitan Area." Social Forces 69: 15-32.
- McKenzie, R.D., 1928. <u>Oriental Exclusion.</u> Chicago: University of Chicago Press.
- Miyamoto, S. Frank, 1984. <u>Social Solidarity among the Japanese in</u> Seattle. Seattle: University of Washington Press.
- Myers, Dowell, William C. Baer and Seong-Youn Choi, 1996. "The Changing Problem of Overcrowded Housing." *Journal of the American Planning Association* 62: 66-84.
- Myers, Dowell, and Seong Woo Lee, 1996. "Immigration Cohorts and Residential Overcrowding in Southern California." *Demography* 33: 51-65.
- Myers, Dowell, and Jennifer R. Wolch, 1995. The Polarization of Housing Status. In <u>The State of the Union</u>, Vol. 1., ed. Reynolds Farley. New York: Russell Sage Foundation.
- Nee, Victor and Jimy Sanders, 1988. The road to parity: determinants of the socioeconomic achievements of Asian Americans, in <u>Ethnicity</u> and <u>Race in the U.S.A.</u>: Toward the <u>Twenty-First Century</u>, ed. Richard D. Alba. New York: Routledge.
- Ong, Paul M., Joanne T. Fujita and Sam Chin, 1977. <u>Asians in</u> <u>Washington: A Statistical Profile</u>. Olympia: Washington State Commission on Asian American Affairs.
- Park, Robert E. and Ernest W. Burgess, 1969. <u>Introduction to the</u> Science of Sociology. Chicago: University of Chicago Press.
- Raftery, Adrian E., 1995. Bayesian Model Selection in Social Research. In <u>Sociological Methodology</u>, ed. Peter V. Marsden. Cambridge, Mass.: Blackwells, pp. 111-195.
- Sale, Roger, 1976. <u>Seattle: Past to Present</u>. Seattle: University of Washington Press.
- Schmid, Calvin F., and Wayne W. McVey Jr., 1964. <u>Growth and</u> <u>Distribution of Minority Races in Seattle, Washington</u>. Seattle: Seattle Public Schools.

Takaki, Ronald, 1989. Strangers

from a Different Shore: A History 59 of Asian Americans. Boston: Little, Brown and Company.

- Tseng, Yen-Fen, 1995. "Beyond 'Little Taipei': The Development of Taiwanese Immigrant Businesses in Los Angeles." International Migration Review 19: 33-58.
- U.S. Immigration and Naturalization Service, 1997. <u>Statistical Yearbook</u> of the Immigration and Naturalization Service, 1995. Washington, D.C.: U.S. Government Printing Office.
- Waldinger, Roger and Mehdi Bozorgmehr, 1996. <u>Ethnic Los Angeles</u>. New York: Russell Sage Foundation.
- White, Clay, 1986. "Residential Segregation Among Asians in Long Beach: Japanese, Chinese, Filipino, Korean, Indian, Vietnamese, Hawaiian, Guamanian and Samoan." Sociology and Social Research 70: 266-267.
- White, Michael J., Ann E. Biddlecom and Shenyang Guo, 1993. "Immigration, Naturalization, and Residential Assimilation Among Asian Americans in 1980." *Social Forces* 70: 387-407.
- Wirth, Louis, 1938. "Urbanism as a Way of Life." American Journal of Sociology 44: 1-24.
- Yinger, John, 1979. Prejudice and Discrimination in the Urban Housing Market, in <u>Current Issues in Urban Economics</u>, eds. Peter Mieszkowski and Mahlon Straszheim. Baltimore: The Johns Hopkins University Press.
- Zhou, Min, and John R. Logan, 1991. "In and Out of Chinatown: Residential Mobility and Segregation of New York City's Chinese." Social Forces 70: 387-407.





Percentage of Chinese by Census Tract





Percentage of Indochinese by Census Tract King County, 1990



Percentage of Japanese by Census Tract

