Segregation of Asians in U.S. Metropolitan Areas: 1980-1990

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Abstract

Owing to a remarkable expansion of immigration since 1965, the Asian population of the United States has grown rapidly in recent years. By 1990, many U.S. metropolitan areas had come to house substantial Asian populations, raising interest in patterns and processes of spatial assimilation for diverse Asian groups. This analysis updates prior work by analyzing data from the 1990 U.S. Census. We describe trends in the degree of segregation and spatial isolation between 1980 and 1990 for Asians in general and for the Chinese and Japanese, the two groups with the longest history in the United States. We then consider levels of segregation for Filipinos, Indians, Koreans, and Vietnamese in 1990, and measure the degree to which Asians segregation varies with socioeconomic status. Results show that Asians experience low to moderate segregation as a whole. Moreover, even though some subgroups display moderate to high levels of residential dissimilarity, indicating an uneven settlement pattern, no group provided any indication of spatial isolation or "ghettoization" in the

manner of African Americans. In general, the prospects for Asian spatial assimilation seem good.

Over the past three decades, the Asian population of the United States has grown rapidly through immigration and Asians now constitute a sizeable community in many U.S. metropolitan areas, raising public and academic interest in their prospects for socioeconomic integration and assimilation. A key determinant of any group's assimilation is the degree of segregation it experiences in urban society. Opportunities and resources vary substantially from neighborhood to neighborhood, so where one lives has a profound effect on one's life chances. Neighborhood location determines everything from the quality of education to the risk of criminal victimization, and so an important component of socioeconomic mobility in the United States has involved residential mobility between neighborhoods.

Historically, immigrant groups have entered neighborhoods of modest status located near the urban core. Once immigrants from one national origin establish themselves in such neighborhoods, others are drawn to it through chain migration and other socioeconomic processes (Massey, 1985). During periods of rapid immigration, therefore, immigrant enclaves tend to form within cities, yielding rising levels of segregation. Over time, however, as immigrant groups accumulate time in the United States and give rise to a native-born generation, processes of residential mobility linked to broader processes of socioeconomic mobility promote spatial assimilation within society (Massey, 1985; Massey and Denton, 1985; Alba *et al.*, 1999). The overall level of segregation experienced by a group at any point in time depends on the relative number of people in each generation and their socioeconomic status (Massey, 1985).

Prior research on Asian segregation in U.S. cities has used data from the 1970 and 1980 U.S. Censuses of Population. Studies by Langberg and Farley (1985), Lam (1986), White (1986), and Massey and Denton (1992) suggest that the two oldest Asian subgroups—the Japanese and the Chinese—are relatively integrated within U.S. urban society and display low to moderate levels of segregation from whites. In contrast, the most recently arrived group, the Vietnamese, are relatively highly segregated, at times reaching the high levels characteristic of African Americans. Other Asian groups—Indians, Koreans, and Filipinos—generally fall between these two extremes.

In this paper we update these results by describing trends and patterns of Asian segregation in U.S. cities through 1990, focusing on a subset of metropolitan areas that contain a disproportionate share of the country's Asian inhabitants. We begin tracing the recent growth of Asian populations in the United States, and then measure trends in residential segregation and spatial isolation from 1980 to 1990. We conclude by measuring the segregation of Asians by socioeconomic status in selected metropolitan areas.
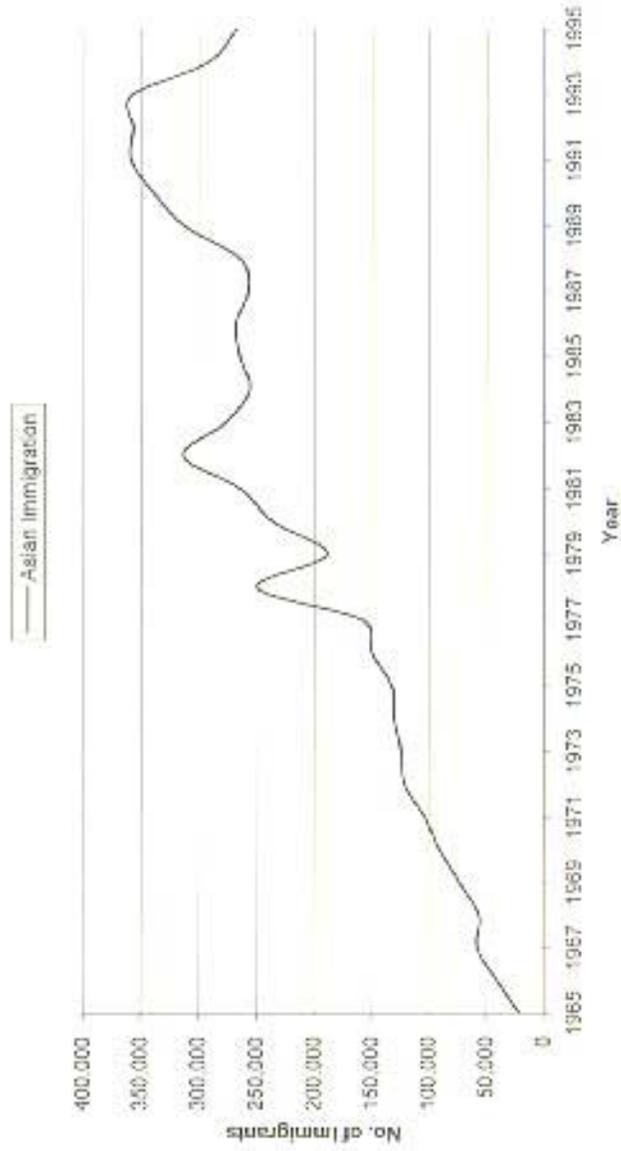
I. Asians in the United States

Prior to 1965, Asian immigrants were prevented from coming to the United States by a discriminatory immigration system dating back to the Chinese Exclusion Act of 1882. As late as 1952, when the U.S. Congress systematically codified immigration policy under the Immigration and Nationality Act, America reaffirmed its intent to prevent the entry of Asians by limiting immigration from the "Asia-Pacific Triangle" to a mere

2,000 people (Jasso and Rosenzweig, 1990). The door to Asian immigration was not really opened until 1965, when Congress passed amendments to the Immigration and Nationality Act that established an annual quota of 180,000 immigrants for the Eastern Hemisphere and limits of 20,000 per country. Spouses and young children of U.S. citizens were exempt from these limits, however. Parents, older children, and siblings of U.S. citizens were also given preferential treatment in qualifying for numerically limited visas. In 1978, the separate ceilings for the Eastern and Western Hemispheres were merged into a single worldwide ceiling of 290,000 persons, so that immigrants from Asian nations for the first time competed on an equal with those from other nations for the limited supply of permanent resident visas (Jasso and Rosenzweig, 1990).

After the repealing of the historical ban on Asian entry, immigration from that region grew dramatically in ways that were wholly unanticipated at the time. Testifying in support of what would become the 1965 Amendments, Attorney General Robert Kennedy told a house subcommittee in 1964 that "5,000 [Asian] immigrants could come in the first year, but we do not expect that there would be any great influx after that." Indeed, he told subcommittee members that after the initial influx, Asian immigration would "virtually disappear" (Glazer, 1985, p. 7).

But disappear it did not. On the contrary, Asian immigration rose to unprecedented levels and unleashed a transformation of the racial/ethnic composition of the United States. Figure 1 shows the total number of Asian immigrants entering the United States by year from 1965 to 1995. As can be seen, the number steadily rises from an annual figure of around 20,000 in 1965 to peak at over 350,000 in 1991, with dramatic surges in

Figure 1   Asian immigration to the United States: 1965-1995

1978 and 1982 that correspond to peaks in the flow of refugees from Southeast Asia.

Between 1965 and 1990, nearly 4.8 million Asian immigrants entered the United States. As is typical of immigrant movements, the new arrivals did not disperse themselves evenly throughout the country, but concentrated in handful of states and metropolitan areas. Naturally, Asian populations in west-coast cities that had long housed substantial Chinese and Japanese communities grew substantially in size. Thus, the Asian communities of San Francisco, Los Angeles, and Seattle continued to grow. In addition, however, urban areas that heretofore had never housed significant Asian communities came to contain large, growing, and quite diverse Asian populations, representing a variety of national origins. Anaheim, for example, traditionally viewed the heartland of protestant white republicanism, came to house the largest Vietnamese population in the United States. New York likewise came to house the largest Indian population and its Chinatown expanded to surpass all others Koreans established a presence not only in Los Angeles and Anaheim, but also in New York, Chicago, Philadelphia, and Washington.

By 1990 steady immigration had given rise to large Asian communities in urban areas throughout the United States. Table 1 presents the census enumeration of Asians in selected U.S. metropolitan areas as of this date. In 1990, the three most important Asian cities were obviously Los Angeles, New York, and San Francisco, but substantial populations also inhabited Chicago, Anaheim, Seattle, San Jose, San Diego, Seattle, Houston, and Washington. Together these 15 areas contain 50% of the entire Asian population of the United States.

Table 1 Asian origin populations (thousands) in selected U.S. metropolitan areas: 1990

Metropolitan Area	All Asians	Chinese	Japanese	Indians	Filipinos	Koreans	Vietnamese
Anaheim	249,433	41,942	30,317	16,208	28,615	37,421	70,560
Boston	93,771	43,521	6,378	12,506	4,074	7,242	9,070
Chicago	229,273	39,630	17,167	52,507	57,269	33,763	6,499
Dallas	65,955	12,777	3,269	12,609	5,824	8,786	11,129
Houston	124,665	30,316	3,654	24,256	14,741	6,833	31,567
Los Angeles	952,582	247,855	152,121	42,079	221,923	143,606	61,118
New York	553,165	248,832	27,433	99,079	51,032	75,977	9,217
Newark	52,223	13,974	2,266	15,069	10,769	5,654	1,382
Philadelphia	102,133	21,924	3,977	20,517	12,402	21,182	9,226
Sacramento	144,066	29,598	16,931	6,268	20,158	5,433	10,734
San Diego	195,371	18,803	18,038	5,007	94,658	6,552	20,479
San Francisco	327,161	167,282	23,521	7,634	85,298	10,228	11,616
San Jose	259,407	65,628	27,893	19,548	58,956	15,163	54,385
Seattle	134,945	27,600	23,224	5,637	29,326	16,369	12,129
Washington	199,633	39,989	9,671	35,685	25,252	39,322	23,401
Total	3,683,783	1,049,671	345,860	374,609	720,297	433,351	342,532
% Total U.S.	0.510	0.637	0.399	0.476	0.507	0.544	0.577

Obviously, there are strong differences in the regional distribution of the various Asian groups. Japanese continue to be concentrated in West Coast cities, notably Los Angeles, Anaheim, San Francisco, Seattle, and San Jose, with smaller populations in Sacramento, and San Diego. The only significant Japanese populations away from the West Coast are in New York and Chicago. Although the Chinese also display a strong concentration along the west coast—with very large communities in Los Angeles and San Francisco and sizeable concentrations in Anaheim, Sacramento, San Jose, and Seattle, they are more regionally dispersed than the Japanese. Indeed, the largest single urban Chinese community was in New York, and significant Chinese settlements had also come to characterize Boston, Chicago, Houston, Philadelphia, and Washington.

Filipinos represent the third Asian population with deep roots in the United States, and their mode of entry and status are unique. Whereas before 1965 Chinese and Japanese immigrants were recruited into the United States exclusively as laborers, between 1989 and 1935 Filipinos entered as U.S. citizens, being inhabitants of a U.S. colony. Even after independence, moreover, Filipinos continued to enjoy privileged access to the United States through a variety of post-colonial links: through service in the U.S. armed forces, by marriage to U.S. soldiers stationed in the Philippines, through transnational institutional links that connected training programs in the Philippines directly to U.S. labor markets. Like the Japanese, they are very much con-centrated on the West Coast of the United States, with the largest populations in Los Angeles, Anaheim, San Francisco, San Diego, San Jose, and Seattle. Away from the West Coast, only New York and Chicago house substantial Filipino populations.

The "new" Asian immigrants whose presence in the United States dates largely from 1965 include Indians, Koreans, and the Vietnamese. More than other Asian subgroups, Indians are concentrated on the East Coast of the United States. The largest Indian settlement is in New York, but large communities also exist in Boston, Newark, Philadelphia, and Washington, in addition to Chicago. On the West Coast, only Los Angeles and San Jose house large Indian communities. In contrast, the Vietnamese are concentrated more heavily on the West Coast, especially in Anaheim, Los Angeles, San Jose, and San Diego. There were, however, notable Vietnamese communities in Texas (Dallas and Houston) as well as Washington, D.C.; but unlike other Asian groups, the Vietnamese displayed no large concentration in New York. Although the largest Korean community is clearly in Los Angeles, in many ways they display the most even distribution across regions, with substantial communities in Chicago, New York, Philadelphia, and Washington, as well as in Anaheim, San Francisco, San Jose, and Seattle.

II. Measuring Segregation

The computation of any measure of segregation requires the choice of a spatial unit to approximate a "neighborhood." We selected census tracts as our neighborhood units and thus turned to the Census Bureau's Summary Tape File 3 (STF3)[1],

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[1] Our files are not corrected for boundary changes between the two years. Making these changes is both complex and time consuming. Analyses that have corrected for boundary change, such as Massey and Denton 1987, have yielded only slightly different segregation scores than analyses that lack these corrections.

which tabulates racial and ethnic data by selected socioeconomic factors at the census tract level. Massey and Denton identified five dimensions of segregation and use them to classify certain groups as "hypersegregated" in some urban areas (1988, 1989). Most research, however, has focused on the dimensions of evenness and exposure, using the dissimilarity and P* indices. These two dimensions paint a relatively clear picture of the segregation experienced by a group. The other three dimensions—centralization, clustering, and concentration—typically only show variation among groups that are very highly segregated (hypersegregated). Because Asians have never been identified as being "hypersegregated", we focus here on indices of evenness and exposure.

The measures we use are the most common measures used in the literature. Our measure of evenness is the index of dissimilarity, which is the most widely-accepted measure of residential segregation. This index computes the relative percentage of minority group members who would have to exchange their neighborhood with that of a majority group member in order to achieve an even residential distribution. Evenness is defined to occur when all neighborhoods replicate the racial composition of the metropolitan area as a whole (James and Taeuber, 1985; White, 1986). For our purposes, we define the "majority" as non-Hispanic whites and measure the evenness of Asian residential distribution to the evenness of their distribution.

We address the exposure dimension of segregation using the P* index popularized by Stanley Lieberson (1980, 1981). There are actually two kinds of P* indices: one that measures the probability of contact between minority and majority groups, and one that measures the likelihood of in-group contact within

neighborhoods. The latter is known as the isolation index and we rely on it to assess the degree to which Asians are isolated within neighborhoods inhabited primarily by other Asians. It states the percentage of Asians within the neighborhood of the average Asian. Like the index of dissimilarity, it varies from 0 to 100 and represents the probability that a typical Asian person has residential contact with other Asians.

III. Overall Trends in Asian Segregation

As noted above, demographic conditions in the United States favor substantial increases in Asian residential segregation and spatial isolation. In most metropolitan areas, immigration led to rapid growth from a very small population base. In some cases, the number of post—1965 immigrants exceeded the size of the original Asian community by several times. Only 25,000 Asians lived in the Anaheim metropolitan area in 1970, for example, but by 1990 their number had multiplied ten times to reach 249,000. Over the same period, the Asian community of Los Angeles quadrupled from 243,000 to 954,000 and Chicago's Asian population grew from 62,000 to 230,000. In such cases, where a sudden massive in-migration overwhelms a small established community, levels of segregation tend to rise through the chain migration of immigrants to growing enclaves.

Such a pattern of rising Asian segregation is the most common pattern of change observed among the metropolitan areas shown in Table 2. Asian segregation averaged 40.8 in 1980 and 42.7 in 1990, and nine of the 15 metropolitan areas displayed an increase. Despite these increases, however, overall segregation levels remained quite moderate for Asians in 1990.

Table 2 Indices of residential segregation (D) and isolation (P*xx)
for persons of Asian origin in selected U.S. metropolitan areas: 1980-1990

Metropolitan Area	Segregation			Isolation		
	1980	1990	Change	1980	1990	Change
Anaheim	0.274	0.335	0.061	0.069	0.162	0.093
Boston	0.509	0.439	-0.070	0.115	0.108	-0.007
Chicago	0.454	0.440	-0.014	0.086	0.123	0.037
Dallas	0.384	0.429	0.045	0.022	0.065	0.043
Houston	0.408	0.477	0.069	0.045	0.097	0.052
Los Angeles	0.465	0.464	-0.001	0.153	0.226	0.073
New York	0.489	0.492	0.003	0.150	0.207	0.057
Newark	0.347	0.317	-0.030	0.028	0.055	0.027
Philadelphia	0.463	0.457	-0.006	0.041	0.071	0.030
Sacramento	0.431	0.480	0.049	0.120	0.162	0.042
San Diego	0.450	0.485	0.035	0.108	0.181	0.073
San Francisco	0.465	0.502	0.037	0.233	0.360	0.127
San Jose	0.303	0.384	0.081	0.106	0.254	0.148
Seattle	0.389	0.367	-0.022	0.121	0.155	0.034
Washington	0.285	0.331	0.046	0.053	0.093	0.040
Average	0.408	0.427	1.800	0.097	0.155	0.058

In general, dissimilarity indices from 0 to 30 are considered "low", those from 30-60 "moderate", and those above 60 "high" (Massey and Denton, 1987). As of 1990, Asian dissimilarity indices ranged from scores in the low 30s (in Anaheim, Newark, and Washington) to a maximum value of 50 in San Francisco. Taken as a whole, therefore, Asians were not highly segregated in any metropolitan area.

Rapid Asian immigration into moderately segregated communities produced sharper increases in the extent of Asian spatial isolation, consistent with a process of enclave formation. Isolation indices rose in 14 of the 15 metropolitan areas. Particularly sharp increases occurred in areas where southeast Asian refugees settled in large numbers: Anaheim, where the isolation index rose from 0.079 in 1980 to 0.162 in 1990; San Diego, where the increase was from 0.108 to 0.181; San Jose, which rose from 0.106 to 0.254; and Houston, where isolation went from 0.045 to 0.097. Despite these increases, however, Asians sill are not very isolated anywhere, including San Francisco, where they constitute a higher percentage of the population (21%) than in any other area. The isolation index of 0.36 means that Asians there are considerably more likely to share a neighborhood with non-Asians than with each other. In Los Angeles, which received the largest number of post-1965 Asian immigrants of any metropolitan area, the isolation index rose only to 0.226. Thus the largest and most segregated Asian communities in the United States are considerably less isolated than even the most integrated black communities (cf. Massey and Denton, 1993).

IV. Trends for Chinese and Japanese

The Chinese and the Japanese are the two Asian subgroups with the longest history of settlement in the United States, now more than 100 years. Table 3 presents trends in Chinese segregation from 1980 to 1990. One property of the dissimilarity index is that its values tend to inflate as the number of group members decreases (see Massey, 1978; White, 1986; Massey and Denton, 1988). Since the 15 metropolitan areas contain 3.7 million Asians but only one million Chinese, the dissimilarity indices generally increase by around 10 points, moving averages from values around 0.40-0.43 to values in the range of 0.50-0.54.

Nonetheless, we find little evidence that the Chinese are highly segregated in U.S. metropolitan areas. As with Asians in general, the dissimilarity indices generally fell within the moderate range, going from a low value of 0.38 in Anaheim to a high of 0.63 in Los Angeles. As of 1990, only four metropolitan areas displayed segregation that could be characterized as "high", and these barely exceeded the threshold value of 0.60. The overall pattern suggested by these data is one of moderate segregation and relatively stability between 1980 and 1990, despite the substantial increases in population size in many cities.

Our view about the relative lack of Chinese segregation is reaffirmed by the isolation indices shown in Table 3. As of 1990, the average Chinese American lived in a neighborhood that was only 9.6% Chinese, up from just 7.7% a decade before. By far the largest Chinese communities are in New York, Los Angeles, and San Francisco, yet even under demographic conditions that

Table 3 Indices of residential segregation (D) and isolation (P*xx)
for persons of Chinese origin in selected U.S. metropolitan areas: 1980-1990

Metropolitan Area	Segregation			Isolation		
	1980	1990	Change	1980	1990	Change
Anaheim	0.394	0.379	-0.015	0.016	0.037	0.021
Boston	0.626	0.557	-0.069	0.161	0.124	-0.037
Chicago	0.595	0.614	0.019	0.144	0.153	0.009
Dallas	0.578	0.597	0.019	0.012	0.024	0.012
Houston	0.479	0.572	0.093	0.014	0.039	0.025
Los Angeles	0.569	0.616	0.047	0.086	0.158	0.072
New York	0.622	0.596	-0.026	0.204	0.205	0.001
Newark	0.495	0.460	-0.035	0.013	0.025	0.012
Philadelphia	0.666	0.615	-0.051	0.056	0.054	-0.002
Sacramento	0.582	0.632	0.050	0.089	0.114	0.025
San Diego	0.461	0.505	0.044	0.013	0.024	0.011
San Francisco	0.566	0.579	0.013	0.229	0.289	0.060
San Jose	0.299	0.371	0.072	0.028	0.080	0.052
Seattle	0.550	0.528	-0.022	0.063	0.081	0.018
Washington	0.446	0.453	0.007	0.028	0.038	0.010
Average	0.529	0.538	1.800	0.077	0.096	0.019

Table 4 Indices of residential segregation (D) and isolation (P*xx) for persons of Japanese origin in selected U.S. metropolitan areas: 1980-1990

Metropolitan Area	Segregation			Isolation		
	1980	1990	Change	1980	1990	Change
Anaheim	0.296	0.322	0.026	0.019	0.024	0.005
Boston	0.697	0.678	-0.019	0.006	0.016	0.011
Chicago	0.589	0.590	0.001	0.013	0.014	0.001
Dallas	0.535	0.621	0.086	0.003	0.010	0.007
Houston	0.572	0.691	0.119	0.008	0.017	0.009
Los Angeles	0.555	0.509	-0.046	0.089	0.079	-0.010
New York	0.665	0.654	-0.011	0.023	0.029	0.006
Newark	0.708	0.670	-0.038	0.005	0.009	0.004
Philadelphia	0.732	0.761	0.029	0.004	0.009	0.005
Sacramento	0.452	0.437	-0.015	0.006	0.034	0.028
San Diego	0.376	0.343	-0.033	0.012	0.014	0.002
San Francisco	0.403	0.357	0.046	0.032	0.030	-0.002
San Jose	0.239	0.251	0.012	0.025	0.029	0.004
Seattle	0.454	0.410	-0.044	0.040	0.028	-0.012
Washington	0.447	0.525	0.078	0.009	0.017	0.008
Average	0.515	0.521	0.017	0.020	0.024	0.004

maximize the potential for the existence of Chinese enclaves, the respective isolation indices were only 0.205, 0.158, and 0.289. Although identifiable Chinatowns may exist in each of these metropolitan areas, such low isolation indices mean that most Chinese do not live in them. Indeed, the average Chinese resident of these urban areas is more likely to share a neighborhood with someone who is not Chinese than with someone who is Chinese.

We derive similar conclusions from our analysis of Japanese segregation. Dissimilarity indices generally range from 0.30 to 0.60, and where indices exceed the upper threshold to enter the "high range" it is generally because a small number of Japanese yields a high sensitivity to random departures from an even settlement pattern. Although Philadelphia, Houston, and Newark evince high dissimilarity scores of 0.76, 0.69 and 0.67, they only contain 3,977, 3,654, and 2,266 Japanese inhabitants, respectively. The largest Japanese settlement (132,121) is in Los Angeles, and here the dissimilarity indices was only 0.509, having fallen from 0.555 in 1980. In the next largest Japanese community (Anaheim), the 1990 dissimilarity index was only 0.322. Moreover, the average isolation index of 0.024 in 1990 means that Japanese enclaves were virtually non-existent. Even in Los Angeles, the average Japanese resident lived in a neighborhood that was only about 8% Japanese.

V. Segregation of Other Asian Subgroups

As the number of most other Asian groups was relatively small in most U.S. metropolitan areas in 1980, we focus on patterns in 1990. Table 5 shows dissimilarity indices for

Filipinos, Indians, Koreans, and Vietnamese in this year. In general, segregation levels for Filipinos, Indians, and Koreans fall within the moderate range, and where a dissimilarity index strays into the high range, it is generally because of a very small population size. Filipinos, for example, display an average dissimilarity score of 0.562, with a range from 0.402 to 0.687; but in what is by far the largest Filipino community, Los Angeles, the index was only 0.523. Likewise, Koreans displayed an average dissimilarity index of 0.548 and a range from 0.391 to 0.644, but in the very largest Korean Community, Los Angeles, the value was only 0.563. Among the Asian subgroups considered in Table 5, only Vietnamese displayed a tendency toward higher segregation, with an average value of 0.686 overall and a maximum value of .878. In Anaheim, the nation's largest Vietnamese community, the dissimilarity index was just below the high range at 0.584, and it is well above 0.60 in Los Angeles and San Diego.

The relative unevenness of settlement in these metropolitan areas does not necessarily mean, however, that the Vietnamese are confined to ghetto-like neighborhoods composed primarily of other Vietnamese. It simply means that they tend to gravitate toward a definable subset of southern California's neighborhoods. Within these places, however, they tend to live with a diversity of other groups. As Table 6 indicates, even in Anaheim, the average Vietnamese lived in a neighborhood that was just 11% inhabited by other persons of the same origin. Unlike the case of African Americans, therefore, the uneven distribution of Vietnamese throughout the metropolitan area does not translate into a high degree of spatial isolation. Compared with the Vietnamese dissimilarity score of 0.67 and

Table 5   Indices of residential segregation (D) for selected post-1965 Asian subgroups: 1990

Metropolitan Area	Filipinos	Indians	Koreans	Vietnamese
Anaheim	0.402	0.441	0.484	0.584
Boston	0.687	0.552	0.608	0.758
Chicago	0.518	0.554	0.619	0.854
Dallas	0.598	0.587	0.644	0.627
Honolulu	0.540	0.773	0.394	0.583
Houston	0.606	0.586	0.625	0.637
Los Angeles	0.540	0.523	0.563	0.666
New York	0.615	0.630	0.647	0.878
Newark	0.524	0.469	0.571	0.794
Philadelphia	0.653	0.612	0.617	0.815
Sacramento	0.487	0.597	0.557	0.677
San Diego	0.634	0.659	0.539	0.658
San Francisco	0.628	0.542	0.554	0.679
San Jose	0.605	0.444	0.391	0.612
Seattle	0.482	0.606	0.469	0.568
Washington	0.478	0.449	0.486	0.592
Average	0.562	0.564	0.548	0.686

Table 6 Indices of spatial isolation (P*xx) for selected post-1965 Asian subgroups: 1990

Metropolitan Area	Filipinos	Indians	Koreans	Vietnamese
Anaheim	0.022	0.017	0.057	0.111
Boston	0.008	0.016	0.015	0.031
Chicago	0.034	0.039	0.039	0.027
Dallas	0.011	0.022	0.023	0.023
Honolulu	0.323	0.009	0.057	0.027
Houston	0.022	0.031	0.013	0.038
Los Angeles	0.082	0.018	0.088	0.032
New York	0.034	0.051	0.084	0.018
Newark	0.020	0.030	0.015	0.007
Philadelphia	0.013	0.022	0.032	0.028
Sacramento	0.037	0.013	0.016	0.037
San Diego	0.173	0.009	0.009	0.049
San Francisco	0.179	0.014	0.022	0.029
San Jose	0.108	0.026	0.022	0.103
Seattle	0.052	0.010	0.021	0.025
Washington	0.026	0.024	0.031	0.029
Average	0.072	0.022	0.034	0.038

the Vietnamese isolation index of 0.03 in Los Angeles, for example, the respective figures for blacks were 0.73 and 0.69 (Massey, 2000).

None of the other Asian subgroups display any proclivity toward ghettoization either. The maximum isolation indices observed for Filipinos were only 0.173 and 0.179, in San Diego and San Francisco. In the largest of all Filipino communities, Los Angeles, the isolation index was only 0.082. Similarly, the highest isolation index for Koreans was only 0.088, in Los Angeles, the largest Korean community; and among Vietnamese, the maximum observed isolation was just 0.111 in its largest settlement (Anaheim). Thus, although rapid immigration may have led in some cases to the concentration of Filipinos, Indians, Koreans, and Vietnamese in particular neighborhoods, these neighborhoods tended to be rather diverse in racial and ethnic terms. In 1990, the vast majority of members of these Asian subgroups lived in neighborhoods where they were a small minority.

VI. Segregation by Socioeconomic Status

One strong indicator of an ongoing process of spatial assimilation is the existence of a clear differential in the degree of segregation by socioeconomic status. In the absence of discriminatory mechanisms, increasing socioeconomic status should bring progressive integration into society and falling levels of segregation. Table 7 thus computes the degree of residential dissimilarity by income level between Asian and non-Hispanic white households in the six U.S. metropolitan areas housing the largest Asian populations. Following Massey and

Tabel 7   Indices of residential segregation (D) by incom for households of Asian origin in key Metropolitan Areas: 1990

| Metropolitan Area | Income Category | | | |
| | Lower | | Upper | |
	Poor	Middle	Middle	Affluent
Chicago	0.675	0.542	0.497	0.470
Honolulu	0.441	0.349	0.299	0.376
Los Angeles	0.547	0.452	0.438	0.440
New York	0.568	0.522	0.516	0.441
San Francisco	0.554	0.446	0.459	0.466
Seattle	0.584	0.424	0.432	0.409
Average	0.562	0.456	0.440	0.434

Eggers (1990), we consider four basic income categories. The poor are those whose household income falls below the poverty level for a family of four; the affluent are those whose incomes exceed four times this level; and the upper and lower middle classes are created by dividing at the midpoint between these two extremes.

As can be seen, the degree of Asian segregation generally falls as socioeconomic status rises, and in most cases the decline is monotonic as one moves across categories from the poor to the affluent. Only in Honolulu, which has the lowest overall levels of segregation to begin with, does segregation not follow a monotonic curve. A good example of the Asian pattern of declining segregation with rising SES occurs in Chicago. Among poor Asians, the degree of segregation from non-Hispanic whites is quite high at 0.675. As income rises, however, this level drops precipitously, to 0.542 among those in the lower middle class, to 0.497 among those in the upper middle class, to 0.470 among those who are affluent. On average, the degree of

segregation fell from 0.562 to 0.434 as one moves from poor to affluent households across the six metropolitan areas.

VII. The Prospects for Asian Spatial Assimilation

In a sense, the rapid growth of Asian populations through immigration to specific U.S. urban areas maximizes the conditions for high and rising segregation, due to the tendency of recent immigrants to move into areas where co-ethnics reside. Despite this potential, Asians remain only moderately segregated in urban American; and while Asian enclaves may have formed in certain cities, most members of the relevant Asian subgroups do not live in them, suggesting little tendency toward ghettoization in the manner of African Americans. In fact, residential patterns of Asians contrast strongly with those of African Americans. Although some of the more recently-arrived Asian subgroups tend to be distributed unevenly across the urban landscape, as evidenced by moderate to high dissimilarity indices, these groups have very low levels of spatial isolation, contrary to the pattern observed for African Americans, who experience both high levels of residential dissimilarity and spatial isolation. Moreover, the segregation that is observed among Asians tends to drop substantially with rising socio-economic status, which is not the case for African Americans (Alba, Logan, and Bellair, 1994; Massey, Condran, and Denton, 1987; South and Crowder, 1997; South and Deane, 1993).

The two Asian subgroups with the longest history of U.S. settlement—the Chinese and the Japanese—continue to display moderate levels of segregation and relatively little spatial isolation, and despite rapid population growth during the 1980s,

especially among the Chinese, the overall pattern was one of great stability over the decade, with relatively minor shifts in indices of residential dissimilarity or racial isolation. As of 1990, Koreans and Filipinos also displayed moderate levels of segregation and isolation, even in their largest urban settlements. Although in their largest settlement (New York), Indians did display a clear tendency toward uneven settlement, as indicated by a dissimilarity index of 0.63, there was no accompanying process of spatial isolation: Indians continued to live in neighborhoods dominated by other groups.

Although as the most recently arrived immigrant group the Vietnamese display the highest overall levels of segregation, as indicated by an average segregation score of 0.686, we find little evidence of ghettoization. Although Vietnamese enclaves may be readily identifiable in places like Anaheim and Los Angeles, the two largest Vietnamese communities, and whereas the dis-   similarity values may be rather high (0.584 and 0.666, respectively), the vast majority do not live in Vietnamese enclaves, but in neighborhoods where they are a distinct minority.

The final confirmation of a rather fluid process of Asian spatial assimilation was our documentation of a pattern of falling Asian-white segregation with rising income. As income rose, the degree of spatial separation from non-Hispanic whites steadily fell into the low or moderate ranges. In general, therefore, the prospects for Asian spatial assimilation in the U.S. cities seem very good, and to the extent that spatial integration brings access to other socioeconomic benefits and resources, our analysis suggests rather bright prospects for a broader structural assimilation in U.S. society.

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