THE GENDERED CONNECTION BETWEEN ETHNIC RESIDENTIAL AND LABOR-MARKET SEGREGATION IN LOS ANGELES[1]

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Abstract: By simultaneously controlling for the spatial and social characteristics of neighborhoods, this study sheds new empirical light on the relationship between ethnic-enclave residence and ethnic-niche employment. Considering women's commuting constraints and their theoretically more local social networks, this study explores whether residential segregation may be a more important determinant of labor-market segregation for immigrant women than for men. The study finds that residential segregation plays an important role in sustaining labor-market segregation among immigrants, and that gender emerges as a salient mediating factor. While living in an ethnic enclave tends to be associated with ethnic-niche employment for both men and women, women who live in enclave neighborhoods have a higher rate of ethnic-niche employment than men. However, greater geographic accessibility to niche jobs is associated with niche employment for both immigrant men and women in general, and place-based context seems as important to men as women. [Key words: immigrant labor-markets, labor-market segregation, residential segregation, gender, ethnic employment.]

Sociologists widely agree that social networks lie behind the emergence and maintenance of immigrant labor-market concentrations, or ethnic niches, and thus articulate a key sociological explanation for ethnic labor-market segregation (Light and Bonacich, 1988; Waldinger, 1996). Less attention, however, has been paid to the spatial and place-based contexts in which ethnic labor-market segregation occurs. While early proponents of the ethnic-enclave economy[3] hypothesis included space as a key element of their causal story (a spatial concentration of ethnic businesses), their empirical research utilized spatial relationships as proxies for the ethnic-enclave economy's theoretically central mechanism: the social relationship between co-ethnic workers and their co-ethnic bosses (Portes and Jensen, 1989).[4]

[1] This research was supported by a grant from the National Science Foundation (BCS-9986877), a dissertation fellowship from the University of California Institute of Labor and Employment, and dissertation support from the California Census Research Data Center (CCRDC). Thanks to the United States Bureau of Census for access to the confidential census files, to the CCRDC staff for their help, and to Chase Langford for his invaluable assistance in preparing the maps. Thanks also to Mark Ellis and four anonymous reviewers for their insightful comments.

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[3] I restrict my use of "ethnic enclave" to residential concentrations and my use of "ethnic niche" to labor-market concentrations.

[4] In tests of the ethnic-enclave economy hypothesis, spatial concentrations of ethnic businesses or workers proxy for a positive form of ethnic labor-market segregation wherein co-ethnic bosses hire co-ethnic employees, providing co-ethnic workers with hypothesized higher returns to skill than they would receive outside the ethnic-enclave economy. Even this proxy had its own proxy; place of residence was used in lieu of fine scale place-of-work data.

Urban Geography, 2004, **25**, 7, pp. 589–630.

Apart from this research, sociologists studying immigration generally have reserved their interest in space to the immigrant neighborhood and its social dynamics—a long-standing tradition dating back to the Chicago School urban sociologists (Thomas and Znaniecki, 1927; Park, [1928] 1998; Logan et al., 2002). Yet the sociospatial phenomenon of the concentrated immigrant neighborhood likely has consequences for other aspects of immigrant life and their sociospatial dynamics, such as labor-market outcomes. Geographers, especially Hanson and Pratt (1988, 1991, 1992, 1995), have highlighted the important sociospatial links between work and home, and from this perspective a key question emerges when observing the common pattern of immigrant concentration in the spheres of residence and employment: Does immigrant residential segregation contribute to immigrant labor-market segregation?

Two causal mechanisms may link residential segregation to labor-market segregation. First, immigrant neighborhoods may be located near immigrant employment sites, and the relationship between immigrant enclave residence and ethnic-niche employment may be partly a function of spatial accessibility given the ease of finding and commuting to nearby jobs. Second, this relationship may depend upon place-based social networks that tie information about one place (work) to another place (home). Immigrant employment sites may be located throughout the city, and immigrants may find employment in these jobs through social networks regardless of how near to or far from these jobs immigrants live. Geographic accessibility may matter little. Thus, the relationship between immigrant residential and labor-market segregation may depend upon social networks embedding in places, rather than upon the pull of geographic nearness.

This second mechanism, however, renders the embeddedness of ethnic employment networks as a socio*spatial* phenomenon by highlighting the place-based contexts in which ethnic labor-market segregation occurs. Hanson (1992) has argued that "the spatial bias of place-based social networks helps to create labor market segmentation in space" (p. 581). A key source of "spatial bias" for immigrants likely may be the ethnic enclave neighborhood. Examining the effect of ethnic residential segregation on ethnic labor-market segregation provides a window upon one dimension of the place-based relationship between work and home: are workers who live in ethnic neighborhoods more likely to be employed in ethnic-niche jobs?

Gender adds another dimension to the place-based relationship between work and home and may contribute its own spatial bias, particularly for immigrant women. Because women tend to work closer to home in order to accommodate their household responsibilities,[5] the area over which they search for work is smaller than men's (Hanson and Johnston, 1985). This gendered commuting constraint may not only lead immigrant women to find employment in nearby jobs, it may explain partly the emergence of immigrant-niche employment in proximity to immigrant neighborhoods. Conversely, McLafferty and Preston (1991) have found that African American and Hispanic women employed in the New York service sector commute as far as their male counterparts.

[5] At the most aggregate level, women's commutes are nearly universally longer than men's. This is also true for African American and Hispanic women; while they tend to have longer commutes than White women, they have shorter commutes than their male counterparts (McLafferty and Preston, 1992).

Commuting restraints and related phenomena may be similarly absent among some immigrant women, particularly with regard to their major sectors of employment.

Identifying another form of gendered spatial bias, feminist geographers have established that women's employment networks tend to be residentially-based (Hanson and Pratt, 1988, 1995). If immigrant women's ethnic networks are more rooted in immigrant neighborhoods than men's, then residential segregation may be a more important determinant of labor-market segregation (such as ethnic-niche employment) for women than for men.

Understanding the sociospatial relationship between residence and work is central to revealing patterns of urban growth and development (Burgess, [1925] 1967; Ward, 1968, 1971; Scott, 1988), but becomes even more critical when the relationship leads to and/or perpetuates inequality (Kain, 1968; Wilson, 1987; Massey and Denton, 1993). In the case of immigrant women, employment in an ethnic niche is associated with lower wages and a further depreciation of wages as the niche becomes increasingly dominated by co-ethnics (Zhou and Logan, 1989; Catanzarite, 2000, 2002). Elliott (1999) described wage penalties experienced by workers who find jobs through a non-White contact (often a co-ethnic) and the even greater penalty when this contact is a neighbor. He articulates this latter process as one of "labor market insulation": the use and development of "informal networks within and through locally constrained communities" (p. 213). In this way, place-based social isolation exacerbates labor market inequality.

Using confidential tract-level individual census data, I model the probability of working in an ethnic niche as a function of living in an immigrant enclave, spatial accessibility to niche employment, and household and individual characteristics. Key questions driving the analysis ask: To what extent do immigrants find employment in ethnic-niche jobs because of the type of neighborhood they live in (an immigrant enclave) or because of where that neighborhood is located in relationship to niche jobs (spatial job accessibility)? Is the effect of either ethnic enclave residence or spatial job accessibility more pronounced for either immigrant women or men? Answering these questions helps unpack the complex sociospatial interplay of immigrant residential and labor-market segregation and aids in identifying structural forces underpinning urban inequality. When labor-market segregation contributes to the weaker economic position of immigrants, we need to understand the multiple mechanisms that perpetuate labor-market segregation. If residential segregation is a factor, then we need to evaluate the beneficial functions of the immigrant neighborhood in light of its more limiting effects.

This study broadens the debate about the effects of residential segregation on labor-market outcomes by drawing on the insights from sociology and geography to contextualize ethnic and gender labor market segregation as a sociospatial process embedded in bodies and places. By simultaneously controlling for the spatial and social characteristics of neighborhoods, this study sheds new empirical light on the relationship between ethnic enclave residence and ethnic-niche employment. Lastly, this research contributes to a growing literature that acknowledges the gendered experience of immigration in the United States (Hondagneu-Sotello, 1994, 2003), particularly the gendered experience of immigrant women in the urban labor market and their gendered experience of place and space.

ETHNIC AND GENDER EMPLOYMENT NETWORKS

Research on immigrant labor markets highlights the role of social networks in connecting immigrants to jobs (Model, 1993; Waldinger, 1994). As networks channel immigrants to specific jobs, the increased concentration of co-ethnics gives rise to an ethnic niche. Sociologists argue that ethnic niches reflect a process of "occupational closure" resulting from informational networks "bounded by ethnic ties" (Waldinger, 1996). Immigrants in niche jobs recruit their friends, family, and neighbors into jobs, a process helpful and often welcomed by employers (Johnson-Webb, 2002). In this way, ethnic networks provide a key link between immigrants and jobs, and the ethnic niche emerges as the most visible manifestation of these networks.

Ethnic networks channel both men and women to ethnic-niche jobs. Once employed in these jobs, the ethnic niche functions similarly for men and women as well. Bailey and Waldinger (1991) argued that the ethnic niche is "characterized by an external, informal training system that shapes the employment relationship and increases the availability and quality of information for workers and employers" (p. 432). Both Hondagneu-Sotelo (1994) and Mattingly (1999) found evidence of just such a training system among immigrant women employed in domestic service (a classic immigrant niche). New immigrant domestic workers rely upon subcontracting from more experienced immigrants as a means of entry into work, providing, as Hondagneu-Sotelo (1994) pointed out, "an important apprenticeship and springboard into independent contracting" (p. 56).

In contrast to its gender-neutral *functions*, the ethnic niche takes a highly gendered *form*. Ethnic networks tend to be gender segregated, directing immigrant men and women into very different labor market positions and ethnic niches (Hiebert, 1999; Wright and Ellis, 2000). Hanson and Pratt (1991) found that gendered networks, in general, play a part in perpetuating occupational sex segregation. Because women tend to work in female-dominated jobs, employment information that circulates through women's networks will most likely be about jobs into which women are segregated. In a comparison of women employed in female-dominated occupations to women in male-dominated occupations, Hanson and Pratt (1991) found that the former relied upon job information from other women to a greater extent than women employed in male-dominated occupations. Drentea (1998) substantiated this finding. In her study, women who relied upon informal job search methods (i.e., networks) had jobs with higher female-to-male ratios than women who utilized formal job search methods. Similarly, Mattingly's (1999) study of female domestic workers (a highly female-dominated occupation) in San Diego found that most job referrals came from other female domestic workers who were relatives or friends.

Researchers also have identified the highly familiar and local context of women's social networks. Women's networks contain more friends and family, while men's contain more coworkers (Marsden, 1987; Moore, 1990). Hanson and Pratt (1991) found that women rely heavily upon job information not only from women who are close friends or family, but who also live nearby. In similar fashion, sociologists such as Sassen (1995) and Fernandez-Kelly (1995) described women's networks as a form of "place-based knowledge" and as "toponomical," respectively. In her study of inner-city young women in Baltimore, Fernandez-Kelly (1995) argued that neighborhood context centrally defines the social networks of individuals with few ties outside their residential environment.

Such findings raise critical questions about the *gendered* effect of residential segregation on job search and employment outcomes. If women's networks are locally circumscribed, then residential segregation may matter more for women's employment outcomes than for men's, especially among groups that experience relatively high levels of residential segregation such as immigrants. We have no empirical evidence as of yet to substantiate this claim. Although Mattingly (1999) argued that social networks are "easy for some immigrant women to access, particularly if they live in ethnic enclaves" (p. 66), she provides no evidence to support this claim.

THE ROLE OF THE IMMIGRANT ENCLAVE NEIGHBORHOOD

Viewed as an initial place of reception for new immigrants, the immigrant neighborhood serves as a cultural safe-haven that provides a wealth of resources. Sociologists argue that "concentrated immigrant settlement areas arise and are maintained because they meet newcomers' needs in such areas as affordable housing, family ties, familiar culture, and help in finding work" (Logan et al., 2002, p. 299). Immigrant neighborhoods also provide a delimited physical space within which ethnic networks concentrate and circulate. To the extent that ethnic employment networks are partially rooted in residential neighborhoods, we should expect to see a relationship between living in an immigrant enclave neighborhood and working in an immigrant-niche job.

To date, few quantitative analyses have demonstrated such a connection. Logan et al. (2002), an exception, showed an association between working in an ethnic-niche sector and living in an immigrant enclave using models that predict living in an immigrant enclave as a function of working in an ethnic niche. In their Los Angeles analysis, they find statistically significant positive associations for all the immigrant groups I study with the exception of Koreans. For this group, the association is statistically significant but negative—working in an ethnic niche is negatively associated with living in an immigrant enclave.

No research, to my knowledge, examines whether these associations are gendered. Residentially-based employment information may be more significant for immigrant women than men. The research discussed in the previous section points to the importance of residentially-based ties for women (Hanson and Pratt, 1991) and to the importance of family and community employment ties for immigrant women compared to men (Tienda and Glass, 1985; Fernandez-Kelly, 1995). Such gendered networks may have a greater effect on where immigrant women work and what they do, thus tightening the boundaries of their local labor-market opportunities. A first step toward examining these relationships proceeds by asking whether women who live in ethnic-enclave neighborhoods are more likely to work in ethnic-niche jobs than their male counterparts or women who live outside of the enclave. This examines one dimension of the place-based relationship between work and home—are workers who live in ethnic neighborhoods more closely tied to ethnic-niche jobs?

This question highlights the importance of approaching local labor markets as socially constructed activity spaces that center upon what Sassen (1995) termed the workplace-community/workplace-household nexus. This analytical approach requires consideration of race, ethnicity, gender, nativity, and household characteristics as endogeneous to labor market processes. As Sassen (1995) argued:

> Framing labor markets as activity spaces also allows us to detect or reconstruct how gender, race, and nationality can shape information channels in the labor market and thus shape individual expectations.… Local experience or place-based knowledge can be seen as central to the spatial segmentation of labor markets (pp. 115–116).

Unraveling the interplay of these constitutive influences on immigrant local labor markets requires an approach informed by an understanding of social networks gleaned from economic sociology and an understanding of sociospatial processes offered by economic geography. This study reflects a research perspective informed by both.

NEIGHBORHOOD PROXIMITY TO JOBS

The question posed in the previous section querying the place-based relationship between work and home ignores the role of geographic proximity as a component of the ethnic neighborhood/ethnic employment relationship. Immigrants may find employment in ethnic-niche jobs because these jobs are located nearby. Scott (1988) argued that the location of immigrant neighborhoods evolves as part of the reciprocating effect of workers moving near potential jobs and firms locating near potential labor pools. Both immigrants and their employers seek low-rent districts, placing low-skill workers and low-wage jobs near one another in the city. As Scott (1988) explained, "Typically, these ethnic groups form dense segregated neighborhoods close to centers of employment where unskilled low-wage jobs abound" (p. 226). An extensive historical literature documents this spatial relationship between ethnic, particularly immigrant, neighborhoods and industries employing these residents (Burgess, [1925] 1967; Hershberg, 1978; Ward, 1968, 1971).

This study analyzes the relationship between living in an immigrant-enclave neighborhood and working in an immigrant-employment niche while isolating the social and spatial effects of neighborhood. On the one hand, the enclave/niche relationship may depend little on spatial accessibility. Immigrant employment sites may be located throughout the city, and immigrants may find employment in these jobs through social networks regardless of how near to or far from them they live. Social networks may tie information about one place (work) to another place (home), obviating the effect of geographic accessibility. Logan et al. (2002) argued, "Today, the automobile and other systems of transportation and communication have weakened the connection of home to work and enlarged the geographic scale of people's active social networks" (p. 300). Thus, the relationship between immigrant residential and labor market segregation may depend solely upon social networks embedding in places, rather than upon the pull of geographic nearness. Few studies, however, have empirically established this (see Mier and Giloth, 1985, and Hanson and Pratt, 1995, for case studies of Mexican Americans in Chicago and Polish women in Worcester, MA, respectively, that do illustrate this phenomenon). Controlling for the location of an immigrant neighborhood relative to niche jobs is necessary to isolate the extent to which living in an immigrant neighborhood may tie an individual to niche jobs apart from the effects of the geographic location of that neighborhood (Parks, 2004).

On the other hand, immigrant neighborhoods may be located near immigrant employment sites, and the relationship between immigrant-enclave residence and ethnic-niche employment may be partly a function of spatial accessibility. Evidence of such a clustering pattern, or a positive effect of spatial accessibility on niche employment, would indicate that spatial nearness does play a role in connecting and channeling immigrants to jobs. The mechanisms underlying a relationship of spatial nearness are difficult to determine, as employers may locate near an available immigrant labor supply, immigrants may find residence near immigrant-employment sites, or immigrants may simply fill jobs close to home. Across these causal scenarios, however, geographic accessibility serves as a factor in producing and maintaining immigrant labor-market segregation.

The gendered nature of these effects is a primary interest of this study. Given the typical commuting constraints experienced by women, geographic accessibility to niche jobs may have a more pronounced effect on immigrant women's employment outcomes than men's. Similarly, neighborhood context, especially residence in an ethnic enclave, may have a greater influence on women's employment outcomes if women rely upon local social contacts to a greater extent than men. Investigation into these questions provides an important look at the relationship between neighborhood context, geographic accessibility to jobs, and ethnic and gender segregation in the labor market.

DATA AND METHODS

This study utilizes a unique 1990 United States Census of Housing and Population data set (the CENSAS data set) that contains tract-of-residence and tract-of-work information for individuals. Made available to researchers under controlled circumstances, this confidential data set contains the full sample of the 1990 Census long form data. The data allow specification of whether a foreign-born individual lives in an immigrant enclave neighborhood or not.

The study focuses on the Los Angeles consolidated statistical metropolitan area (CSMA)—the five counties of Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The analysis is carried out for six major immigrant groups in the Los Angeles region: Mexicans, Salvadorans, Guatemalans, Chinese, Koreans, and Vietnamese. These are the largest Latino immigrant groups existing in Los Angeles, and its largest low-skill Asian immigrant groups. Filipinos outnumber each of these Asian groups, but as accessibility matters most for low-skill groups (Simpson, 1987), I exclude the relatively highly educated Filipinos in lieu of this combination of three Asian groups.

MAPPING IMMIGRANT RESIDENCE AND EMPLOYMENT

The confidential 1-in-6 Census data allow fine-scale mapping of immigrant employment patterns for the first time ever. I use these data to generate the maps in the 18 figures accompanying this study. These maps depict the spatial distribution of immigrants by residence and by place of work and provide a first cut at examining the geographic relationships between residence and employment. The maps illustrating the segregated residential patterns of each of the six immigrant groups (Mexicans, Fig. 1; Salvadorans, Fig. 2; Guatemalans, Fig. 3; Chinese, Fig. 4; Koreans, Fig. 5; Vietnamese, Fig. 6) use a measure of relative concentration called a residential concentration quotient:

$$RCQ_j = (P_{ij}/P_j)/(P_{im}/P_m) \quad (1)$$

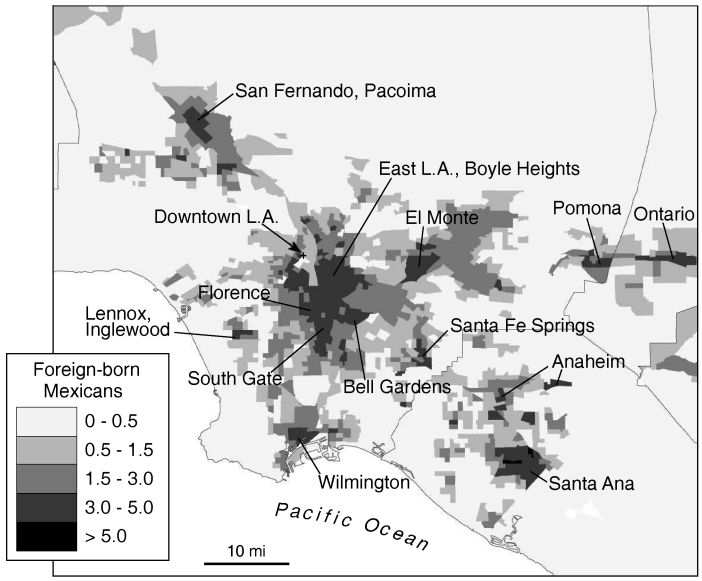

Fig. 1. Residential concentrations of foreign-born Mexicans in Los Angeles, 1990. Legend displays residential concentration quotient values. *Source*: U.S. Census of Housing and Population (1990b). Reprinted from *Economic Geography*. 2004, Vol. 80, No. 2, pp. 151–156, with permission of Clark University.

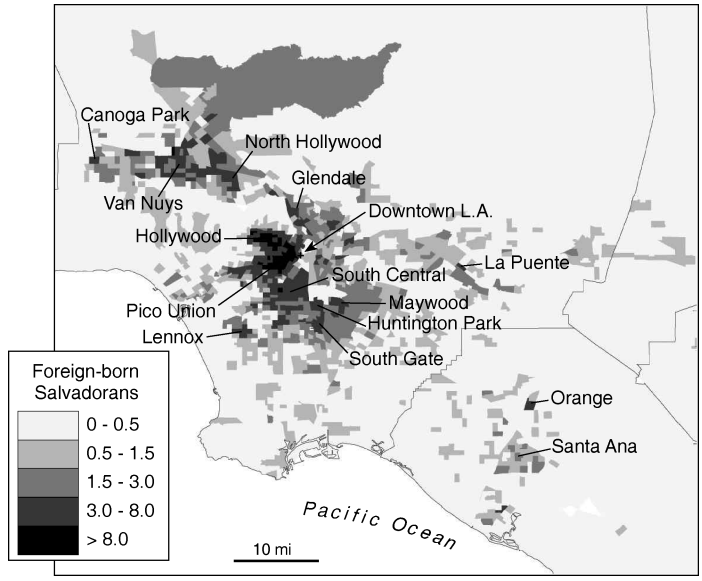

Fig. 2. Residential concentrations of foreign-born Salvadorans in Los Angeles, 1990. Legend displays residential concentration quotient values. *Source*: U.S. Census of Housing and Population (1990b). Reprinted from *Economic Geography*. 2004, Vol. 80, No. 2, pp. 151–156, with permission of Clark University.

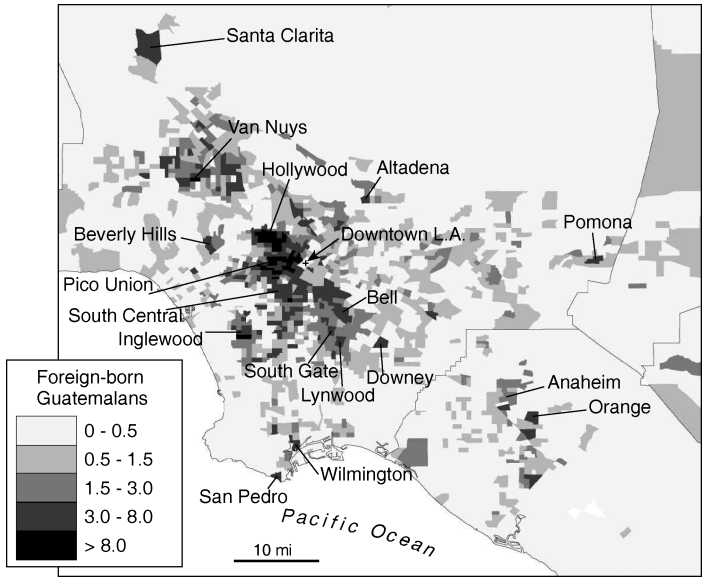

Fig. 3. Residential concentrations of foreign-born Guatemalans in Los Angeles, 1990. Legend displays residential concentration quotient values. *Source*: U.S. Census of Housing and Population (1990b). Reprinted from *Economic Geography.* 2004, Vol. 80, No. 2, pp. 151–156, with permission of Clark University.

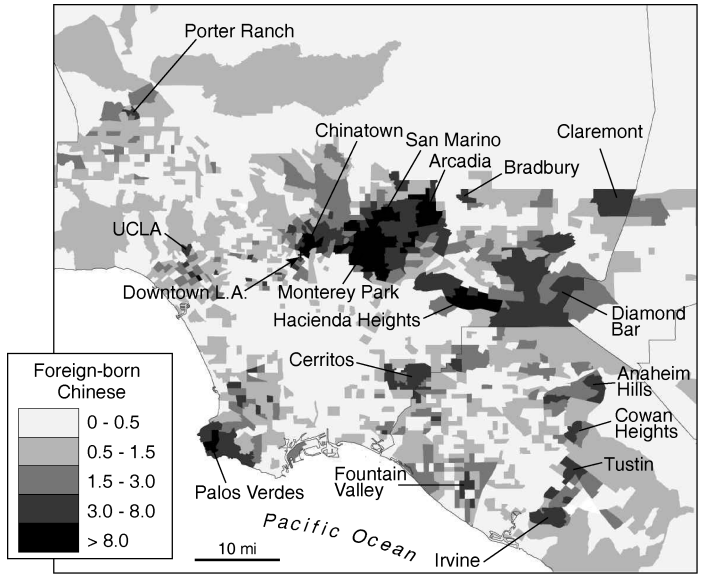

Fig. 4. Residential concentrations of foreign-born Chinese in Los Angeles, 1990. Legend displays residential concentration quotient values. *Source*: U.S. Census of Housing and Population (1990b). Reprinted from *Economic Geography.* 2004, Vol. 80, No. 2, pp. 151–156, with permission of Clark University.

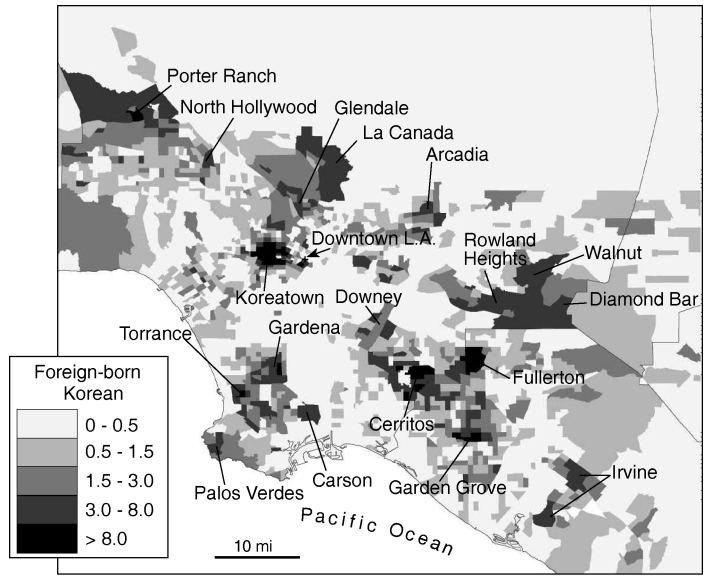

Fig. 5. Residential concentrations of foreign-born Koreans in Los Angeles, 1990. Legend displays residential concentration quotient values. *Source*: U.S. Census of Housing and Population (1990b). Reprinted from *Economic Geography.* 2004, Vol. 80, No. 2, pp. 151–156, with permission of Clark University.

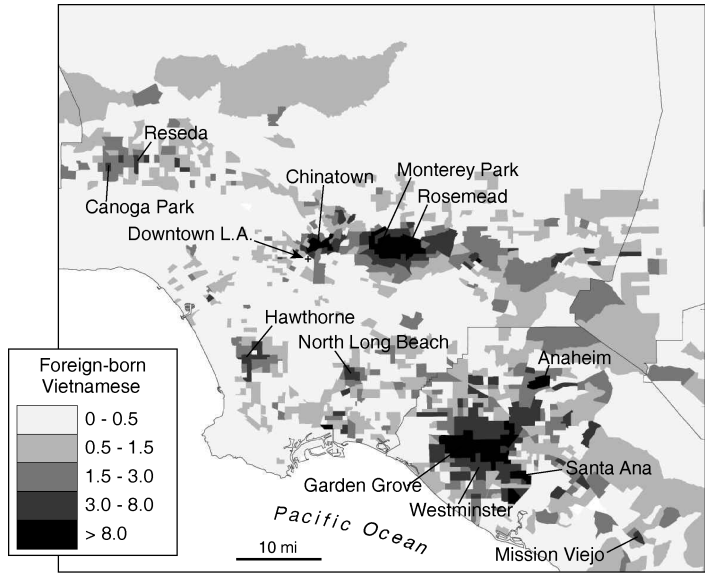

Fig. 6. Residential concentrations of foreign-born Vietnamese in Los Angeles, 1990. Legend displays residential concentration quotient values. *Source*: U.S. Census of Housing and Population (1990b). Reprinted from *Economic Geography.* 2004, Vol. 80, No. 2, pp. 151–156, with permission of Clark University.

where RCQ_j is the residential concentration quotient for residential tract j, P_{ij} is the population of group i in residential tract j, P_j is the total population of residential tract j, P_{im} is the population of group i in metro area m, and P_m is the total population of metro area m. The RCQ measures a group's share of a neighborhood's population relative to the group's share of total population in the Los Angeles region. A quotient equal to 1 represents parity in a tract; that is, the group's population share in the tract is equal to its share in the region as a whole. Anything above 1 reflects a disproportionate concentration of a group in a tract; below 1 represents an underrepresentation. For example, a group with a quotient value of 5 in a particular tract is represented at five times its expected share of the tract's population if the group were evenly distributed across the region.[6]

The work maps (Mexicans, Figs. 7 and 8; Salvadorans, Figs. 9 and 10; Guatemalans, Figs. 11 and 12; Chinese, Figs. 13 and 14; Koreans, Figs. 15 and 16; Vietnamese, Figs. 17 and 18) are generated using a similar measure of employment concentration:

$$ECQ_j = (P_{ij}/P_j)/(P_{im}/P_m) \tag{2}$$

where ECQ_j is the employment concentration quotient for employment tract j, P_{ij} is the total employment of group i in employment tract j, P_j is total employment in employment tract j, P_{im} is the total employment of group i in metro area m, and P_m is total employment in metro area m.[7]

While the three Latino groups share much overlap in neighborhood location, a sharp pattern of neighborhood segregation is evident when comparing these groups to the three Asian groups. Mexicans (Fig. 1), Salvadorans (Fig. 2), and Guatemalans (Fig. 3) are concentrated near Downtown Los Angeles, in East L.A., to the southeast in cities such as Bell Gardens and Huntington Park, in the San Fernando Valley communities of Pacoima and Van Nuys. The Central American groups share an important enclave in the Pico Union area, and Mexicans have a greater presence in Orange County communities such as Santa Ana.

The three Asian groups, in contrast, find their enclave neighborhoods in very different areas of the Los Angeles region. Further, they share much less overlap among themselves than do the three Latino groups. The Chinese (Fig. 4) are primarily located to the north and east of Downtown Los Angeles in Chinatown and the "Chinese suburbs" of Monterey Park and Hacienda Heights. Smaller concentrations are evident in Cerritos and such exclusive communities as Palos Verdes and Cowan Heights. Koreans (Fig. 5) are most heavily concentrated in and around Koreatown, but also reside in enclaves in south Los Angeles (Torrance, Gardena, Carson), Cerritos, and Orange County's Garden Grove. While the Vietnamese (Fig. 6) have established enclaves near the Chinese in places such as Chinatown and Monterey Park, their largest presence is found in Orange County, such as in the Little Saigon neighborhood of Westminster.

Moving from the maps of residence to the maps of employment, we see the relatively tight correspondence between home and work, as well as the gendered spatial segregation

[6] See Allen and Turner (1997) for similar maps, though generated using a different measure of concentration and not differentiated by nativity.

[7] Although these maps illustrate all immigrant employment, rather than ethnic-niche employment, they reveal important spatial relationships between immigrant residence and work places. Maps of niche employment are not allowed under U.S. Census Bureau confidentiality rules.

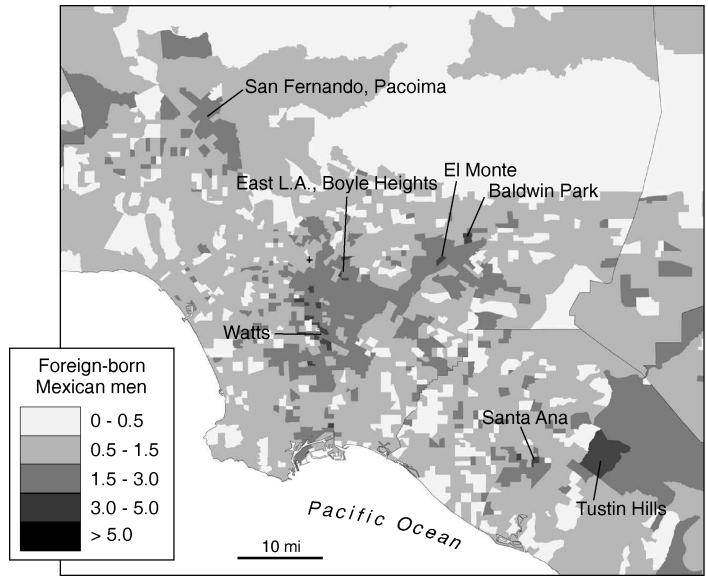

Fig. 7. Employment concentrations of foreign-born Mexican men in Los Angeles, 1990. Legend displays employment concentration quotient values. *Source*: U.S. Census of Housing and Population (1990b).

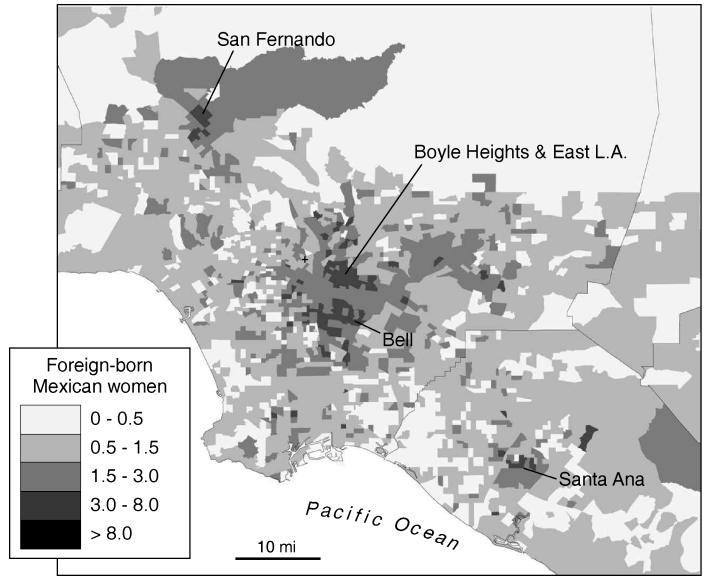

Fig. 8. Employment concentrations of foreign-born Mexican women in Los Angeles, 1990. Legend displays employment concentration quotient values. *Source*: U.S. Census of Housing and Population (1990b).

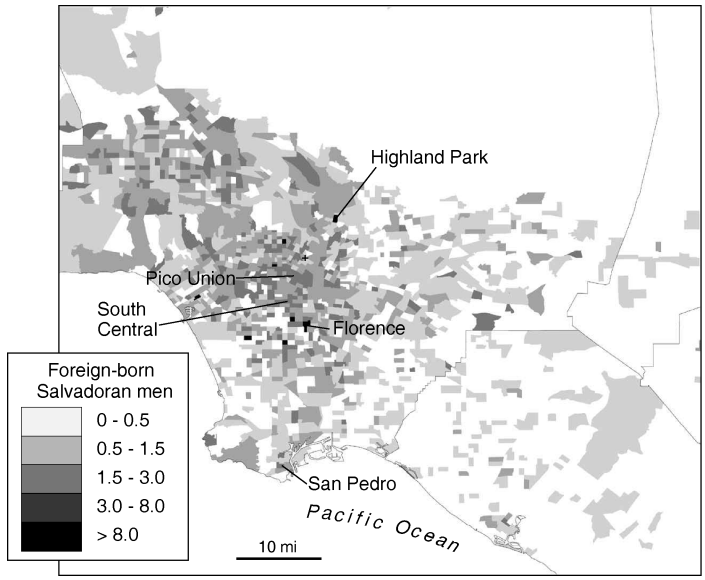

Fig. 9. Employment concentrations of foreign-born Salvadoran men in Los Angeles, 1990. Legend displays employment concentration quotient values. *Source*: U.S. Census of Housing and Population (1990b).

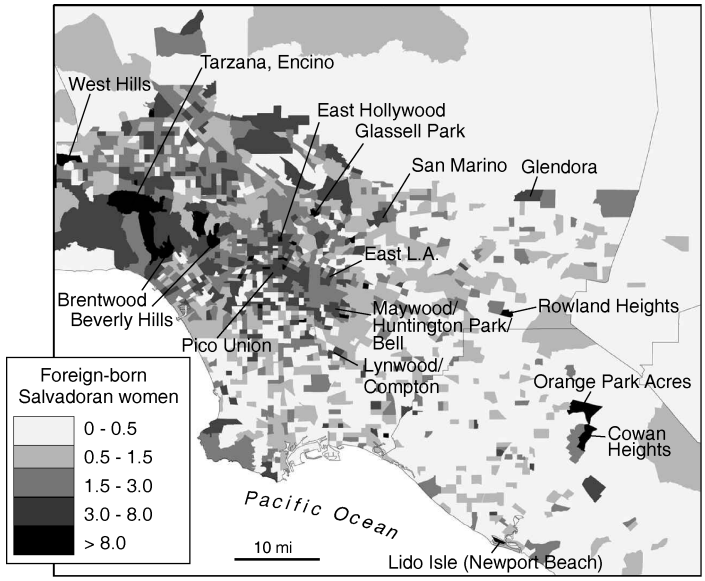

Fig. 10. Employment concentrations of foreign-born Salvadoran women in Los Angeles, 1990. Legend displays employment concentration quotient values. *Source*: U.S. Census of Housing and Population (1990b).

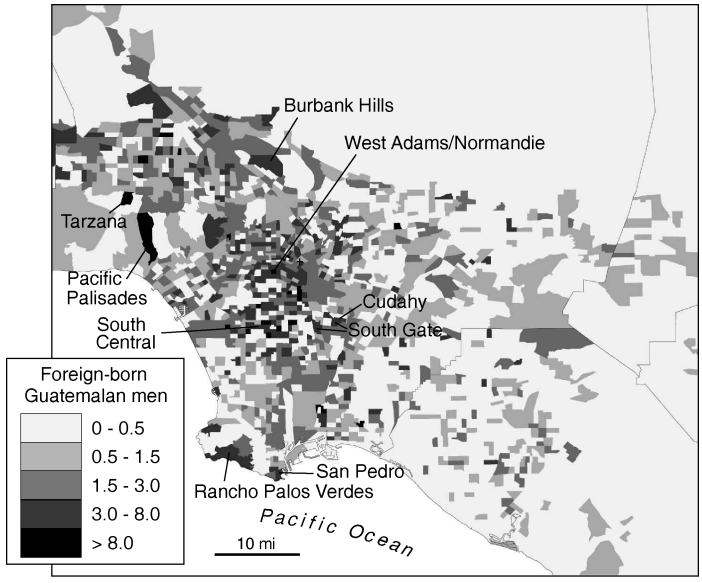

Fig. 11. Employment concentrations of foreign-born Guatemalan men in Los Angeles, 1990. Legend displays employment concentration quotient values. *Source*: U.S. Census of Housing and Population (1990b).

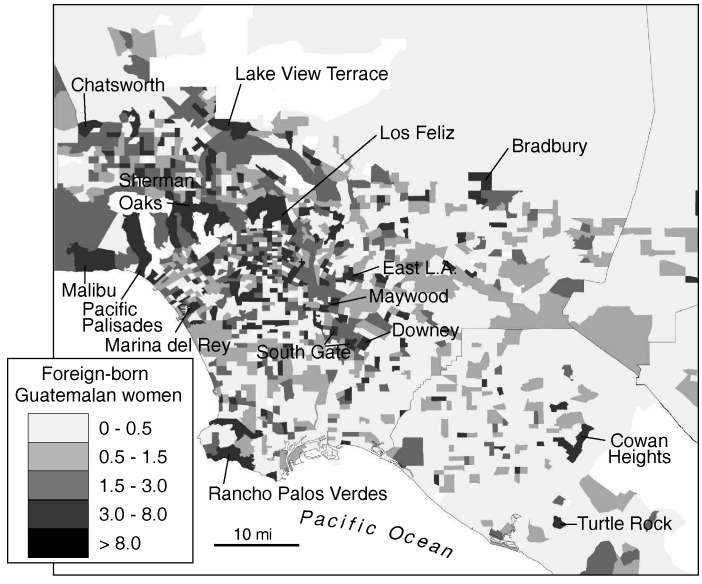

Fig. 12. Employment concentrations of foreign-born Guatemalan women in Los Angeles, 1990. Legend displays employment concentration quotient values. *Source*: U.S. Census of Housing and Population (1990b).

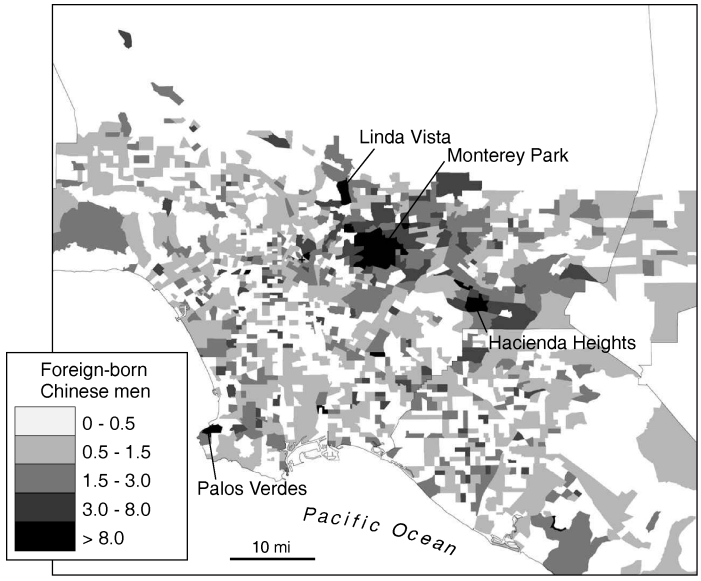

Fig. 13. Employment concentrations of foreign-born Chinese men in Los Angeles, 1990. Legend displays employment concentration quotient values. *Source*: U.S. Census of Housing and Population (1990b).

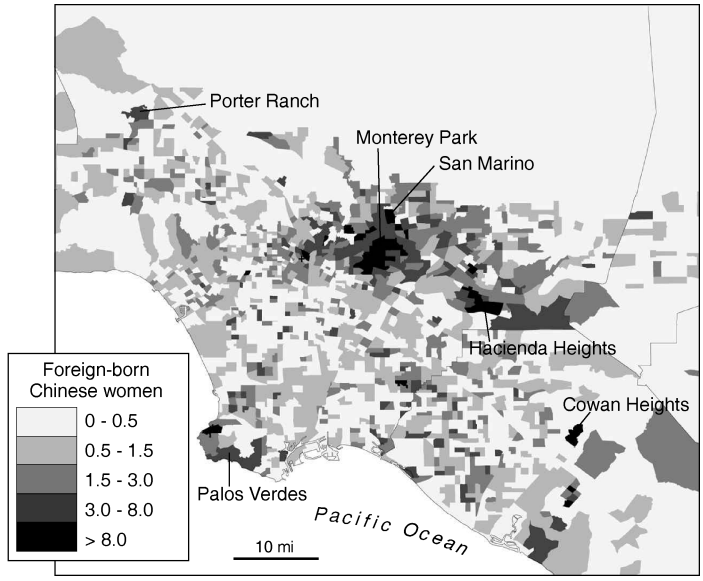

Fig. 14. Employment concentrations of foreign-born Chinese women in Los Angeles, 1990. Legend displays employment concentration quotient values. *Source*: U.S. Census of Housing and Population (1990b).

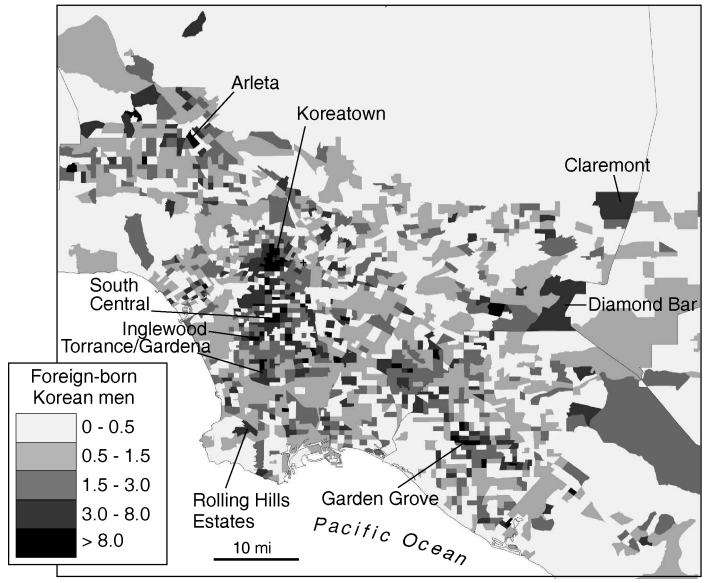

Fig. 15. Employment concentrations of foreign-born Korean men in Los Angeles, 1990. Legend displays employment concentration quotient values. *Source*: U.S. Census of Housing and Population (1990b).

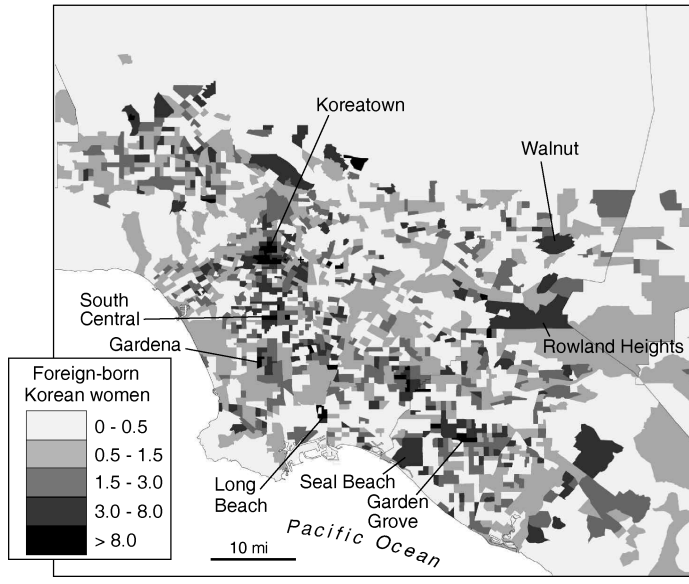

Fig. 16. Employment concentrations of foreign-born Korean women in Los Angeles, 1990. Legend displays employment concentration quotient values. *Source*: U.S. Census of Housing and Population (1990b).

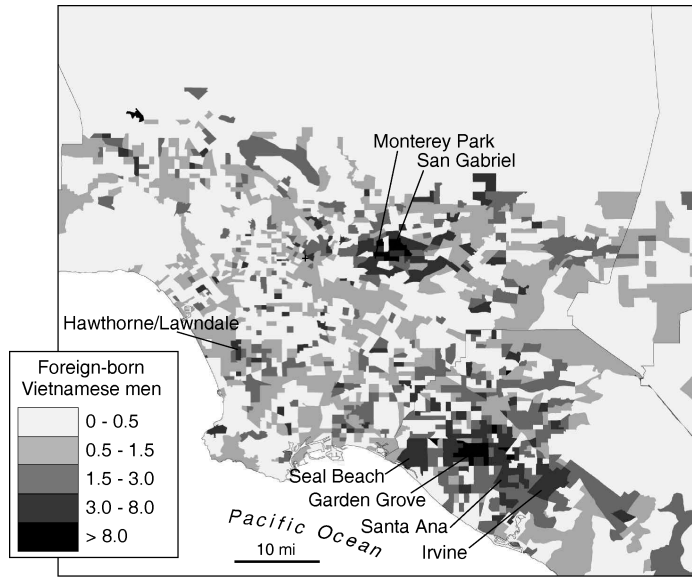

Fig. 17. Employment concentrations of foreign-born Vietnamese men in Los Angeles, 1990. Legend displays employment concentration quotient values. *Source*: U.S. Census of Housing and Population (1990b).

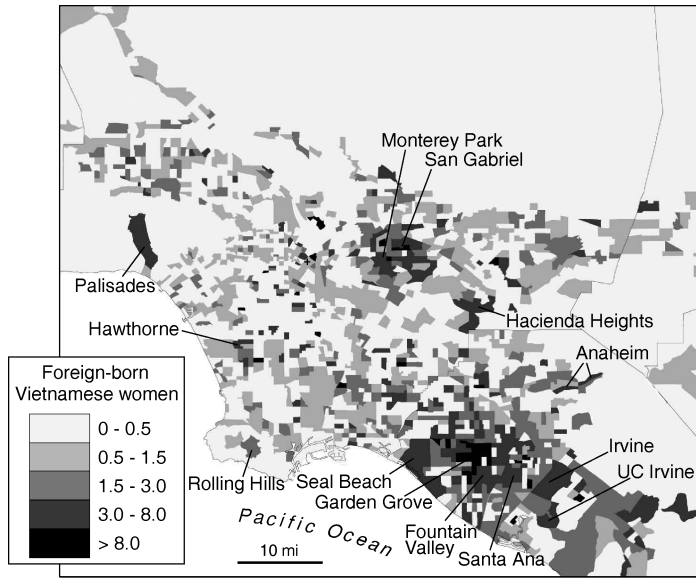

Fig. 18. Employment concentrations of foreign-born Vietnamese women in Los Angeles, 1990. Legend displays employment concentration quotient values. *Source*: U.S. Census of Housing and Population (1990b).

of work. The latter is strikingly revealed in the greater spatial concentration of women's employment among several groups, especially Mexicans (Figs. 7 and 8), Salvadorans (Figs. 9 and 10), and to a lesser extent, the Chinese (Figs. 13 and 14). Not only are immigrant women, such as Mexicans and Salvadorans, much more segregated by employment industrially than their male counterparts (explained further below), they are also much more segregated spatially. That is, immigrant men's employment tends to be more dispersed across the Los Angeles region while immigrant women's employment is concentrated into fewer areas.

A second, significant pattern is the relatively strong geographic correspondence between immigrant neighborhoods and immigrant places of work. While employment is always more dispersed than residence, the maps reveal that each group's immigrant enclave neighborhoods serve as anchor points in the maps of work for both men and women. The residential and employment maps of Mexicans (Figs. 1, 7, and 8), Chinese (Figs. 4, 13, and 14), and Vietnamese (Figs. 6, 17, and 18) reflect this pattern most strikingly, each group displaying the key spatial characteristic of the classic ethnic-enclave economy: the coterminous location of residence and employment.

A slight deviation from this pattern is found in the map of Salvadoran women's employment (Fig. 10). Many of the heaviest concentrations of Salvadoran women's employment are located apart from their residential concentrations. This is largely a result of Salvadoran women's high concentration in domestic services (one in five women are employed in this industry) and the location of this employment in upper-middle class, usually White, homes in areas such as Brentwood, Beverly Hills, and Encino or the newly gated communities of Orange Park Acres and Cowan Heights (though not majority White, decidedly upper-middle class). This map, however, must be interpreted cautiously. The relatively low-employment density of these hill community tracts can be deceiving; their relatively large size and dark shading make them appear more significant than they are. Plenty of Salvadoran women work in the geographically smaller, but much denser, tracts near Downtown and Salvadoran neighborhoods.

ENCLAVE NEIGHBORHOODS AND NICHE INDUSTRIES

In this section, I explore the relationship between enclave residence and ethnic-niche employment. I use the same residential concentration quotient defined earlier (Equation 1) to identify immigrant-enclave neighborhoods. A tract is identified as an ethnic-enclave neighborhood for a group if the residential concentration quotient is equal to or greater than 5 for that group. This is similar to Logan et al.'s (2002, p. 305) odds-ratio cut-off of 5 used to define an ethnic neighborhood.

I slightly adjust this classification scheme for Mexicans. Because Mexicans comprise such a large portion of the Los Angeles population (12%), even neighborhoods with a *RCQ* equal to 1 have a high percentage of Mexican residents (12%). As a result of this scale effect, only 1.11% of all Mexicans live in neighborhoods with a *RCQ* greater than or equal to 5. I have adjusted the enclave cut-off for Mexicans to 3 ($RCQ \geq 3$); 35% of all Mexicans live in enclave neighborhoods by this definition.

I use an industry concentration quotient to identify an industry as an ethnic-niche industry. Because I am interested in the employment outcomes of job seekers, I focus on industries in which a group is overrepresented as workers, not as owners, and exclude the

TABLE 1. PERCENT MEN/WOMEN EMPLOYED IN NICHE INDUSTRIES

Gender	Mexicans	Salvadorans	Guatemalans	Chinese	Koreans	Vietnamese
Men	16.1*	12.0**	17.5*	9.8*	18.6	21.0**
Women	26.3	39.8	46.2	21.8	17.6	28.1

Source: U.S. Census of Housing and Population (1990b).
*$p < .05$, **$p < .01$.

self-employed (see Logan et al., 2000, for a distinction between an entrepreneurial and a labor niche). Residential segregation and geographic accessibility to jobs are not meaningful theoretically in determining an entrepreneur's *industry* of business in the same way they are in determining a worker's industry of employment (though ethnic networks are; see Light and Rosenstein, 1995).

An industry concentration quotient is determined for each civilian industry (identified using 3-digit census industry codes) with at least 1,000 workers in the Los Angeles region (235 total) as follows:

$$ICQ_j = (E_{ij}/E_j)/(E_{im}/E_m) \quad (3)$$

where ICQ_j is the industry concentration quotient for industry j, E_{ij} is the employment of group i in industry j, E_j is the total employment in industry j, E_{im} is the employment of group i in metro area m, and E_m is the total employment in metro area m. An industry is identified as an ethnic niche for a group if the industry concentration quotient is equal to or greater than 3 for that group.[8] For example, if a Mexican woman works in an industry where Mexican women comprise three times their expected share of the industry's total employment ($ICQ = 3$), then this woman is coded as working in an ethnic-niche industry.

As can be seen in Table 1, women across all immigrant groups, with the exception of Koreans, are more segregated in the labor market than men. This difference is greatest between Salvadoran and Guatemalan men and women. While only 12% of Salvadoran men find employment in a niche industry, nearly 40% of Salvadoran women do. Similarly, 17.5% of Guatemalan men are employed in niche industries compared to over 46% of Guatemalan women. Though not as extreme, this gender difference is significant for other groups as well. Slightly more than 26% of Mexican women are employed in a niche industry, compared to 16% of men. While fewer than 10% of Chinese men hold employment in niche industries, nearly 22% of Chinese women do.

Table 2 reflects the top industrial niches, ranked by number employed, for each group and the average hourly wage of group members in each industry. Women share more industrial niches across groups than men. Traditionally an immigrant employer, the apparel industry serves as a top industrial niche for five of the six female groups

[8] The threshold criterion for defining a niche is somewhat arbitrary. Waldinger (1996) used 1.5. I use 3 as I am interested in selecting industries in which ethnic networks are particularly strong, and my intent is to err on the side of a demanding definition of what is an ethnic niche. Further, for large immigrant groups such as Mexicans, a threshold value of 1.5 selects an extensive set of industries as niche industries.

TABLE 2. TOP FIVE INDUSTRIAL NICHES FOR EACH ETHNIC AND GENDER GROUP (RANKED BY NUMBER EMPLOYED)

Gender group and industries	CEQ	% Group in industry	Average wage	Gender group and industry	CEQ	% Group in industry	Average wage
Mexican men				Mexican women			
Landscaping	5.8	4.0	$6.79	Apparel	6.2	9.7	$5.80
Furniture	4.1	3.0	$8.83	Personal service in private households	5.3	5.6	$6.03
Agricultural, crops	5.1	3.0	$7.75	Agricultural, crops	3.3	1.9	$7.27
Automobile parking and carwashes	3.9	10.0	$5.90	Miscellaneous plastic products	3.7	1.8	$6.71
Yarn, thread, and fabric mills	3.2	5.5	$9.35	Laundry and garment services	3.8	1.5	$5.85
Total niches = 19				Total niches = 23			
Salvadoran men				Salvadoran women			
Automotive repair	4.6	4.0	$8.14	Personal service in private households	19.9	22.0	$5.58
Unspecified manufacturing	3.0	3.5	$6.43	Service to buildings	6.4	4.2	$5.65
Service to buildings	4.1	2.7	$6.03	Apparel	7.0	10.9	$5.83
Automobile parking and carwashes	8.1	2.1	$6.06	Laundry and garment services	3.1	1.2	$6.12
Bakery products	3.6	0.6	$6.78	Miscellaneous. fabricated textiles	4.0	0.7	$5.44
Total niches = 17				Total niches = 13			
Guatemalan men				Guatemalan women			
Apparel	3.9	6.0	$5.68	Personal service in private households	26.3	28.0	$4.71
Automotive repair	4.8	4.1	$10.64	Apparel	4.3	8.3	$5.44
Service to buildings	4.6	3.0	$6.34	Service to buildings	7.3	4.8	$8.15
Furniture	3.1	2.3	$7.68	Hotels and motels	3.2	3.4	$5.88
Automobile parking and carwashes	7.5	1.9	$6.78	Miscellaneous fabricated textiles	3.9	0.7	$4.50
Total niches = 14				Total niches = 11			

Chinese men				Chinese women			
Unspecified wholesale trade	5.2	2.4	$18.31	Apparel	5.9	9.2	$6.00
Engineering	3.5	2.4	$19.84	Banking	3.5	7.3	$11.57
Computer manufacturing	3.7	2.2	$19.87	Service incidental to transportation	3.3	2.1	$11.90
Service incidental to transportation	3.0	2.0	$14.72	Unspecified wholesale trade	5.0	2.3	$9.89
Radio, TV, computer stores	3.5	1.4	$12.37	Accounting and bookkeeping	3.1	1.8	$14.27
Total niches = 13				Total niches = 10			
Korean men				Korean women			
Automotive repair	3.4	2.9	$8.88	Apparel	5.5	8.5	$7.82
Liquor stores	20.5	2.6	$13.07	Apparel stores	4.6	3.6	$9.11
Unspecified wholesale trade	4.7	2.1	$14.66	Laundry and garment services	4.8	1.8	$5.49
Religious organizations	3.1	2.0	$11.58	Beauty shops	3.8	1.8	$7.72
Laundry and garment services	3.9	1.5	$14.61	Jewelry stores	4.8	0.7	$7.86
Total niches = 20				Total niches = 12			
Vietnamese men				Vietnamese women			
Computer manufacturing	3.4	5.1	$12.63	Beauty shops	12.0	5.6	$7.14
Electrical machinery n.e.c., manufacturing	4.6	5.1	$11.87	Electrical machinery n.e.c., manufacturing	4.9	5.4	$9.04
Machinery n.e.c., manufacturing	4.1	3.6	$11.20	Medical instruments, manufacturing	8.6	3.6	$8.13
Unspecified electrical machinery, manufacturing	5.9	3.3	$13.26	Unspecified electrical machinery, manufacturing	6.4	3.6	$8.16
Radio, TV equipment, manufacturing	3.4	1.7	$13.58	Computers, manufacturing	3.9	2.4	$13.75
Total niches = 9				Total niches = 16			

Source: U.S. Census of Housing and Population (1990a).

TABLE 3. MEAN HOURLY WAGE IN NICHE AND NON-NICHE INDUSTRIES

Gender and industry type	Mexicans	Salvadorans	Guatemalans	Chinese	Koreans	Vietnamese
Men						
Niche	$7.41***	$6.99***	$7.22	$17.45	$13.07*	$12.23
Non-niche	$8.93	$8.70	$7.88	$17.09	$15.67	$13.07
Women						
Niche	$6.19***	$7.12***	$5.31***	$9.43***	$7.91***	$8.58***
Non-niche	$8.01	$5.66	$7.66	$13.54	$14.23	$10.08

*$p < .10$, **$p < .05$, ***$p < .01$.
Source: U.S. Census of Housing and Population (1990a).

(Vietnamese women do not concentrate in apparel). Domestic employment (personal service in private households) provides niche employment for women in the three Latino groups—Mexicans, Salvadorans, and Guatemalans—and is a top niche for all three. Mexican, Salvadoran, and Korean women all share a top industrial niche in laundry and garment services, as do Korean and Vietnamese women in beauty shops (manicure shops being the specific niche of Vietnamese women). Unlike any other immigrant female group, Vietnamese women find most of their top niches in light manufacturing industries.

In total, Mexican, Salvadoran, and Guatemalan women share six niche industries. Of these, three are also shared with Koreans (yarn and fabric mills, apparel, dressmaking shops). Chinese women share two niche industries with Mexicans and Salvadorans (confectionary products and apparel), only apparel with Korean women, and only apparel wholesale trade with Vietnamese women. In addition to beauty shops, Korean and Vietnamese women share a niche in dressmaking shops. Dressmaking shops also serve as a niche industry for Mexicans, Salvadorans, and Guatemalans.

Table 3 reveals that niche employment offers all immigrant women significantly lower wages than non-niche employment. These descriptive data uphold the findings of Zhou and Logan (1989) that the ethnic-enclave economy tends to trap immigrant women in lower wage jobs with fewer returns to skill.

Immigrant men do not share as many industrial niches across groups as women. The Latino groups share the most: Mexican, Salvadoran, and Guatemalan men share niches in four industries (bakery products, yarn and fabric mills, miscellaneous furniture goods, and automobile parking and carwashes), Salvadorans and Guatemalans share four more between them (e.g., automotive repair and service to buildings), Mexicans and Salvadorans three more (e.g., dyeing and finishing textiles), and Mexicans and Guatemalans additionally share automotive repair.

Chinese men share no niches with any of the Latino groups, but do share three niches with Korean men (e.g., wholesale trade) and one with Vietnamese men (computer manufacturing). Koreans share two niches with the three Latino groups (both textile industries), two with both Salvadorans and Guatemalans (automotive repair and services to buildings), and one additional industry each with Salvadorans and Guatemalans. Koreans

TABLE 4. PERCENT MEN/WOMEN EMPLOYED IN NICHE INDUSTRIES BY ENCLAVE RESIDENCE

Gender and residence	Mexicans	Salvadorans	Guatemalans	Chinese	Koreans	Vietnamese
Men						
Inside enclave	18.6**	13.6**	22.3**	10.1	18.4	22.1
Outside enclave	14.9	11.1	14.5	9.6	18.7	20.1
Women						
Inside enclave	30.8**	48.3**	55.3**	28.4**	20.2*	30.7**
Outside enclave	24.0	34.9	41.4	16.9	16.6	26.3

*$p < .05$, **$p < .01$.
Source: U.S. Census of Housing and Population (1990b).

share one niche with Vietnamese men (not specified machinery). Vietnamese men share one niche with Salvadorans and Guatemalans (dressmaking shops) and two additional niches with Salvadorans (not specified machinery and retail bakeries). Given the total number of niches each group has, crossover niches are relatively few.

The negative wage consequences of niche employment are not as stark for immigrant men as for women (see Table 3). Wages are statistically lower in niche jobs for men in only three groups (Mexicans, Salvadorans, and Koreans), and the difference in niche and non-niche wages is smaller for men than for women.

Table 4 shows the relationship between enclave residence and niche employment. Across all groups, men and women who live in enclave neighborhoods have higher rates of niche employment than men and women who live outside of enclave neighborhoods (Korean men excluded). The difference, however, is not statistically significant for all men, while it is for all women. Further, the rates of niche employment for women who live in enclave neighborhoods are much higher than for men. The sharpest gender contrasts are found between Salvadoran and Guatemalan men and women. While approximately 14% of Salvadoran men who live in enclave neighborhoods hold employment in niche industries, over 48% of enclave-residing Salvadoran women do. The numbers are 22% and 55% for Guatemalan men and women, respectively.

The greatest difference in rates of niche employment between women of the same national origin who reside in enclave neighborhoods and those who do not are found among Mexican, Salvadoran, and Guatemalan women. The percentage of these women who are employed in niche industries is approximately 14 points higher for those who live in enclave neighborhoods than for those who do not.

CALCULATING SPATIAL JOB ACCESSIBILITY

Modeling the effect of spatial job accessibility on employment outcomes requires a single parameter measuring an individual's relative access to a set of job opportunities.

Following Raphael (1998), Cervero et al. (1999), and Mouw (2000), I calculate a gravity-like measure of accessibility as follows (Parks, 2004):

$$A_i = \sum_{j=1}^{N} E_j \times \exp(-\hat{\gamma} d_{ij}) \tag{4}$$

where A_i is the accessibility index for residential tract i, E_j is the number of workers in tract j, N is the total number of tracts, $\hat{\gamma}$ is an empirically-derived distance-decay coefficient (a weight of jobs at different distances from tract i), and d_{ij} is the highway network distance (in minutes) between tract centroids, for all i-j pairs.[9]

This accessibility index can be tailored to particular groups, thus capturing segregation in the labor market. If women and men work different jobs, accessibility should be constrained to reflect this fact. Accessibility can also be measured to particular kinds of jobs, such as jobs in ethnic-niche industries for immigrants. I calculate a separate accessibility measure to niche employment for men and women in the following manner:

$$A_{Gi} = \sum_{j=1}^{N} (E_{Gj}) \times \exp(-\hat{\gamma} d_{ij}) \tag{5}$$

where A_{Gi} is the accessibility index for group G in residential tract i to niche jobs, and E_{Gj} is the number of workers in group G employed in a niche industry in employment tract j.

Measuring accessibility to jobs that are (1) jobs in ethnic-niche industries, and (2) held by group members, captures the locally specific nature of niche employment. Narrowing the accessibility index in this way captures the fact that ethnic concentrations evolve at both the neighborhood/tract and industry level. These highly localized labor markets emerge as employers locate in close proximity to desirable labor pools, engage in local recruiting strategies, and make use of employee recruitment networks. Employees, likewise, have preferences for short commutes and make use of personal contacts and ethnic networks to find jobs (Hanson and Pratt, 1992). The final hiring decisions of employers solidify the match between worker and job, ultimately putting the ethnic niche in place (Waldinger, 1994).

As a result, ethnic concentrations can evolve within one neighborhood or firm but not another (though the niche becomes identifiable at the industry level as workers with industry-specific training move to other firms, bringing the social impetus for niche

[9] I empirically derive the distance-decay parameter to be directly input into the above equation by estimating the gravity model

$$T_{ij} = \kappa L_i^{a} E_j^{\beta} \exp(-\gamma d_{ij}) \tag{7}$$

where i indexes all residence tracts (origins), j indexes all employment tracts (destinations), T_{ij} is the count of workers that live in tract i and work in tract j, L_i is the count of workers living in tract i, E_j is the count of workers (jobs) employed in tract i, d_{ij} is the distance between tracts i and j measured in minutes by private commute time in the SCAG data, and α, β, γ, and κ are parameters to be estimated. Using a negative binomial count model, I estimate $\hat{\gamma} = -0.058$. This weights jobs at d distance from tract i by: 0 minutes = 1, 5 minutes = .75, 10 minutes =.56 , 20 minutes = .31.

TABLE 5. MEAN ACCESSIBILITY TO NICHE JOBS BY ENCLAVE RESIDENCE BY GENDER[a]

Gender and residence	Mexicans	Salvadorans	Guatemalans	Chinese	Koreans	Vietnamese
Men						
Outside enclave	0.0889	0.1236	0.1285	0.1083	0.1068	0.1037
Inside enclave	0.1002	0.1197	0.1163	0.1200	0.1091	0.1053
Women						
Outside enclave	0.1319	0.2599	0.2866	0.1902	0.1708	0.1749
Inside enclave	0.1598	0.2736	0.2489	0.2417	0.1834	0.1749

[a]Higher values indicate higher levels of accessibility.
Source: U.S. Census of Housing and Population (1990b).

formation with them). These *niche jobs* are specific jobs most available to group members as a result of employee referral networks and employer hiring practices that reproduce gender and ethnically homogeneous workforces.

Because an accessibility index is nondimensional, I normalize it by dividing E_{Gj} by the total number of all niche jobs in the metropolitan region held by workers in group G. In this way, accessibility measures are comparable; otherwise, women would always have lower accessibility measures as they hold a smaller absolute number of jobs. This also allows comparisons across immigrant groups.

Table 5 shows that across all groups women have higher levels of accessibility to niche jobs than men; that is, women's niche jobs are located closer to women's tracts of residence. Among men, niche jobs are located closer to enclave neighborhoods than non-niche jobs, except for Salvadorans and Guatemalans. Women who live in enclave neighborhoods also have higher levels of accessibility to niche jobs than women who live outside enclave neighborhoods, except among Vietnamese and Guatemalans. No difference exists between Vietnamese enclave and non-enclave residents, while Guatemalan women who live outside of enclave neighborhoods have higher accessibility to niche employment. This is likely due to the fact that Guatemalan women are so highly concentrated in domestic service jobs, many of which are located in the wealthier hill communities of Los Angeles far from Guatemalan enclave neighborhoods. In effect, the spatial relationship between work and home for these Guatemalan women is based upon the spatial dynamics of ethnic residential segregation: White neighborhoods are the workplaces of these Guatemalan women.

MODELING THE ENCLAVE/NICHE RELATIONSHIP

To analyze relationships between labor-market and residential segregation, I model the effects of immigrant enclave residence and geographic accessibility on ethnic-niche employment using logistic regression. The model takes the following form:

$$\text{logit}(P) = b_0 + b_1 Enclave + b_2 Access + b_i H + b_j I \quad (7)$$

where P is the probability of employment in a gender-specific ethnic-niche industry (female niche industry for women, male niche industry for men), *enclave* is a categorical variable indicating whether an individual lives in a residential enclave or not, *access* is a logged continuous measure of accessibility to respective gender-specific ethnic jobs (women's jobs for women, men's jobs for men) for the individual's tract of residence, H is a vector of household characteristics, and I is a vector of individual characteristics. To account for differing effects of enclave residence within a group by sex, *enclave* is interacted with *sex*. All other interactions are tested, but dropped if insignificant. See Table 6 for a list and description of variables used in the models. Table 7 presents means and standard deviations of the model regressors.

The model is run separately on the six immigrant groups (Mexicans, Salvadorans, Guatemalans, Chinese, Koreans, Vietnamese) to account for interaction effects between ethnic group and all other explanatory variables. The sample includes employed respondents between the ages of 18 and 64 and excludes the disabled, those living in group quarters, and the self-employed.

Ethnic-niche employment proxies social access to an ethnic network, as ethnic-employment niches are created by, and therefore point to, the operation of ethnic-employment networks. An individual is coded as working in an ethnic-niche industry if the employment concentration quotient of that individual's industry of employment is equal to or greater than 3 for the individual's sex and national-origin group (see Equation 2). For example, if a Chinese woman is employed in the apparel industry, then she is coded as working in a niche industry as the concentration quotient for Chinese women in the apparel industry equals 5.5. Niche industries are identified separately for men and women to capture the dual effects of the ethnic and gender division of labor.

Testing for an ethnic neighborhood effect on ethnic-niche employment provides a means by which to evaluate one dimension of the connection between ethnic residential segregation and ethnic labor-market segregation. Such a connection may reveal place-based characteristics of ethnic-employment networks. If the probability of niche employment increases with residence in an immigrant enclave, this may be because ethnic networks exhibit a place-based nature.

Testing for interaction effects allows investigation into the gendered nature of such place effects. If the interaction term between enclave residence and gender is significant and positive, then women's employment networks may be more spatially local than men's networks. Immigrant women's employment outcomes, then, may depend upon residential context to a greater extent than immigrant men's. Additional interaction effects, such as cohort-of-arrival by enclave, may reveal the strong influence the enclave has on all immigrants or whether this influence is limited to certain immigrants, such as recent arrivals.

Including a measure of geographic job accessibility allows us to differentiate between the locational and social effects of a particular neighborhood on employment outcomes. A Salvadoran woman may find employment in a niche industry simply because she lives in a neighborhood that is readily accessible, spatially, to niche employment (these jobs may be located across the street, for example) rather than because her neighborhood provides ready access to ethnic-employment networks. Because geographers have hypothe-

TABLE 6. MODEL REGRESSORS[a]

Variable	Definition
Dependent	
NICHE	Probability of ethnic-niche employment (1 = yes)
Neighborhood-level independents	
ACCESS	Spatial accessibility to niche jobs
ENCLAVE	Residence in ethnic enclave (1 = yes)
Household-level independents	
COUPLE	Living with spouse or partner (1 = yes)
HH_MIX	Spouse or partner is different ethnicity (1 = mixed household)
LNADULTS	Number of adults in household (logged)
LNKIDS	Total number of children age 18 or younger (logged)
Individual-level controls	
SEX	0 = male, 1 = female
ED	Years of education
ENG	English language ability (0 = not at all, not well; 1 = well, very well)
WKEXP	Potential work experience (age-educ-6)
WKEXP2	Quadratic term for WKEXP
COH2	Cohort-of-arrival, 1980–1985 (1 = yes)
COH3	Cohort-of-arrival, 1975–1980 (1 = yes)
COH4	Cohort-of-arrival, 1970–1975 (1 = yes)
COH5	Cohort-of-arrival, pre-1970 (1 = yes)
CAR	Drive alone to work (1 = yes)
CARPOOL	Carpool to work (1 = yes)
BUS	Bus to work (1 = yes)
WALK	Walk to work (1 = yes)
OTHERMODE	Other mode to work—bicycle, etc. (1 = yes)
HOME	Work at home

[a]Comparison group for cohort-of-arrival is 1985–1990.

sized the geographic co-location of immigrant neighborhoods and immigrant employment, this locational factor is important to control for if we are interested also in testing for the social effects of neighborhood, such as access to ethnic networks.

A set of household variables are included and interacted with gender to reveal the gendered nature of these effects. Being married may increase one's set of "strong ties"—close friends, neighbors, and family members—thus increasing one's probability

TABLE 7. MEANS (*SD*) OF MODEL REGRESSORS

Variable	Mexicans	Salvadorans	Guatemalans	Chinese	Koreans	Vietnamese
sex	.3157	.4268	.3966	.4782	.4876	.4319
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
enclave	.3346	.3705	.3650	.4230	.3173	.4051
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
access	0.1144	0.2036	0.2009	0.1702	0.1438	0.1487
	(0.05427)	(0.0888)	(0.1010)	(0.1008)	(0.0786)	(0.0767)
english	0.4967	0.5016	.5005	0.7896	.6920	0.7718
	(0.4999)	(.5)	(.5000)	(0.4076)	(.4617)	(0.4197)
ed	8.3017	8.7597	8.6719	14.0239	13.6207	12.3563
	(4.3579)	(4.3725)	(4.4323)	(3.9344)	(2.9749)	(3.5999)
wkexp	17.4652	17.5584	17.4754	18.2626	16.7334	15.1051
	(11.7073)	(10.8878)	(10.8499)	(11.869)	(11.5201)	(10.8498)
wkexp2	442.0917	426.8333	423.0949	474.3825	412.6977	345.8688
	(535.0006)	(488.9693)	(484.3739)	(551.297)	(485.5463)	(448.4852)
couple	0.3943	0.3816	0.3618	0.5917	0.5725	0.3894
	(0.4887)	(0.4858)	(0.4805)	(0.4915)	(0.4948)	(0.4876)
hh_mix	0.1179	0.1757	0.1983	0.2402	0.1052	0.0897
	(0.3225)	(0.3806)	(0.3987)	(0.4272)	(0.3069)	(0.2857)
adults	3.9787	3.5522	3.727	4.2785	3.7084	4.7347
	(5.0736)	(1.9709)	(2.2323)	(24.5351)	(17.6532)	(19.0349)
kids	2.2376	1.7340	1.6123	1.6574	1.3639	1.9067
	(2.7746)	(1.5086)	(1.5046)	(13.2816)	(9.114)	(9.9316)
coh1	0.2768	0.2763	0.3787	0.2294	0.2446	0.1565
	(0.4474)	(0.4472)	(0.4851)	(0.4205)	(0.4299)	(0.3633)

coh2	0.2019	0.4163	0.3071	0.2789	0.2838	0.3832
	(0.4014)	(0.493)	(0.4613)	(0.4485)	(0.4509)	(0.4862)
coh3	0.2007	0.1914	0.1578	0.1848	0.2363	0.4603
	(0.4006)	(0.3934)	(0.3646)	(0.3882)	(0.4249)	(0.4985)
coh4	0.1671	0.0768	0.0893	0.1268	0.1664	–[b]
	(0.373)	(0.2662)	(0.2852)	(0.3328)	(0.3724)	
coh5	0.1536	0.0393	0.067	0.1799	0.0689	–[b]
	(0.3605)	(0.1942)	(0.25)	(0.3842)	(0.2533)	
car	0.4836	0.4554	0.4245	0.7233	0.7214	0.7585
	(0.4997)	(0.498)	(0.4943)	(0.4474)	(0.4483)	(0.428)
carpool	0.2967	0.2261	0.2179	0.1601	0.2053	0.1688
	(0.4568)	(0.4183)	(0.4129)	(0.3667)	(0.404)	(0.3746)
bus	0.1172	0.2366	0.2525	0.0554	0.0298	0.0381
	(0.3216)	(0.425)	(0.4345)	(0.2287)	(0.17)	(0.1914)
walk	0.0566	0.0385	–[a]	0.03422	–[a]	0.0155
	(0.2311)	(0.1924)	–	(0.1818)	–	(0.1235)
othermode	0.0359	0.0242	0.0297	0.0123	–[a]	0.0134
	(0.1861)	(0.1536)	(0.1699)	(0.1101)		(0.1151)
home	0.0099	0.0192	–[a]	0.0147	0.0129	0.0058
	(0.0991)	(0.1373)		(0.1205)	(0.1128)	(0.076)
[N]	[103855]	[14058]	[7433]	[8884]	[6444]	[7751]

[a]Suppressed by the Census Bureau.
[b]Cohort 3 for Vietnamese includes all migrants who arrived before 1980.
Source: U.S. Census of Housing and Population (1990b).

of finding employment in an ethnic-niche job (Granovetter, 1973, 1974). This effect may depend upon gender; married women may be more likely to find employment through their husbands—a strong tie—as Mattingly (1999) found in her study of female domestic workers. Because many people are involved in significant relationships without being officially married, I classify individuals as members of a couple or not rather than as married or not. I do this by searching through household records and categorizing individuals with a spouse or partner present as a member of a couple.

Individuals involved in a relationship with a member of their own national-origin group have a potentially stronger set of ethnic ties than an individual whose partner is a member of a different ethnic group. I identify same- and mixed-ethnic couples and include this information with the variable *hh_mix* (0 = couple of same national-origin group, 1 = mixed couple). Immigrants living in households with other adults present have more individuals within their immediate social network and more contacts to employment. This is particularly true of multigenerational or extended family households common among immigrants. Because these family contacts are strong ties, increasing numbers of other adults present in the household will likely increase one's probability of finding niche employment.

A set of individual characteristics is used to control for variations among workers. Women may be more likely to find employment in niche industries if their employment networks are characterized by strong ties to a greater extent than men's (Marsden, 1987; Moore, 1990; Hanson and Pratt, 1991). New arrivals may rely more heavily upon ethnic networks in their search for work, tying them more tightly to employment in ethnic niches (*cohort*). Workers with more work experience may be less likely to rely upon ethnic networks in their employment search as they work more jobs and compile their own set of employment networks that extend beyond the bounds of ethnicity. On the other hand, workers with more work experience may remain in jobs that they originally found through ethnic networks if employment in such jobs isolates them from other sources of nonredundant job information.

Individual efforts to improve one's employment prospects, such as education, most likely decrease the likelihood of niche employment. Additionally, network characteristics vary by education. Less-educated workers are more likely to have networks characterized by strong ties (Burt, 1990). As immigrants make use of ethnic networks to overcome barriers to employment such as language ability, poor English will likely increase the likelihood of working in a niche. Again, these individual controls may vary by gender, as a long line of feminist research has shown (see Blau et al., 2002, for an extensive review of gender effects in the labor market). Interactions with gender are tested accordingly.

Mode of transportation used to travel to work may influence whether workers find niche employment or not. Of particular interest is the effect of carpooling. Are immigrants who need to rely upon others for transportation more likely to find employment where other co-ethnics work? Further, mode of transportation introduces an important control as access to a car may increase one's employment opportunities, as it potentially extends one's geographic search area. Lastly, we can identify workers who work at home with this variable. Given that many niche industries for immigrants include production practices such as piecework (apparel being the most notable), we would expect to see an association between home-based work and ethnic-niche employment, especially among immigrant women.

RESULTS

Table 8 presents results as log odds for models run separately on each immigrant group. Robust standard errors are reported to correct for the effects of clustered data (by census tract). The most consistent predictor of ethnic-niche employment across all groups is time-of-arrival. Recently-arrived immigrants are more likely than earlier arrivals to find employment within a niche industry. This effect is more pronounced for women than for men among Mexicans, Salvadorans, and Guatemalans. For Koreans and Guatemalans, enclave residence dampens the assimilating effect of increased tenure in the United States.

Women are more likely to be employed in ethnic-niche industries than men. The effect is statistically significant for all groups except Koreans and is most pronounced among Chinese and Mexicans (odds of niche employment for women are fifteen times greater than for men). Salvadoran women are seven times more likely than Salvadoran men to be employed in a niche industry, and Guatemalan women four times more likely than Guatemalan men.

The effect of living in an immigrant enclave varies by group, by gender, and by cohort, but is statistically significant in some way for all groups. For both Mexican men and women, residence in an enclave is positively associated with niche employment, though the effect is less pronounced for women than for men. The association is also positive for Salvadoran women, but negative for Salvadoran men.

As mentioned above, enclave residence slows the assimilative effect of time in the United States on the probability of niche employment for Koreans (except those who arrived before 1970) and Guatemalans. For example, Koreans who arrived between 1970 and 1980 and who live in enclave neighborhoods are more likely than their non-enclave residing counterparts to find employment in an ethnic niche. Enclave residence has no dampening effect on the strongly negative effect of U.S. tenure on niche employment for the earliest-arrived Koreans (before 1970).

Guatemalans differ from Koreans in that enclave residence and niche employment are positively related for the earliest Guatemalan arrivals (before 1970). This may represent an inertia effect among this early group of migrants; they were the first to settle the enclave and establish a presence within their now-niche industries, and there they have remained. While the reach and expansion of the Guatemalan community's social networks have been built upon these early migrants' initial stock of social capital, they perhaps have not benefitted from this expansion or have chosen to remain within the relatively isolated social and spatial confines of the ethnic enclaves and niches they pioneered.

Among the Chinese and Vietnamese, the effect of enclave residence is statistically significant only for select female cohorts. For Chinese women who arrived before 1970, living in an enclave neighborhood doubles the odds of niche employment. Enclave residence also doubles the odds of niche employment for Vietnamese women who arrived between 1980 and 1985.

In order to more easily assess the effects of enclave residence by cohort for Chinese and Vietnamese women, Table 9 shows predicted probabilities for women from different cohorts who live inside and outside of enclave neighborhoods, but who otherwise share

TABLE 8. MODEL PARAMETERS (*SD*) PREDICTING NICHE EMPLOYMENT

Variable	Mexicans	Chinese	Koreans	Salvadorans	Guatemalans	Vietnamese
sex	2.72***	2.7259***	–0.0137	1.8979***	1.4235***	0.4531*
	(.1062)	(.3116)	(.1118)	(.1149)	(.1753)	(.262)
access	–0.4431***	–0.0998*	0.0539	0.2034***	0.3673***	0.4269***
	(.0767)	(.0595)	(.0468)	(.0355)	(.0748)	(.0669)
acc_sex	0.4872***	0.5608***	–[a]	–[a]	–0.2385***	–0.3168***
	(.0261)	(.0805)			(.09)	(.0912)
enclave	0.3052***	0.198	–0.4071***	–0.0096	0.1012	0.0364
	(.0836)	(.1413)	(.1213)	(.0874)	(.0988)	(.105)
enc_sex	–0.1643***	–0.0875	–[a]	0.2169**	–[a]	–0.1919
	(.0547)	(.166)		(.1038)		(.1586)
english	–0.3726***	0.7273***	–0.2237**	0.0559	–0.0226	0.3888***
	(.0328)	(.1912)	(.11)	(.0758)	(.1155)	(.105)
eng_sex	–0.3333***	–1.4073***	–0.5366***	–0.5452***	–0.4172***	–1.1499***
	(.0423)	(.2048)	(.1447)	(.0953)	(.1340)	(.1344)
ed	–0.0453***	–0.0219**	–0.0142	–0.0218***	–0.0212**	–0.0045
	(.0029)	(.0105)	(.0116)	(.0064)	(.0097)	(.0092)
wkexp	0.0227***	–0.0034	0.0327***	0.0632***	0.0412***	0.0854***
	(.0028)	(.0098)	(.0114)	(.0077)	(.0094)	(.0099)
wkexp2	–0.0002***	0.0001	–0.0005***	–0.0009***	–0.0005**	–0.0017***
	(.0001)	(.0002)	(.0002)	(.0002)	(.0002)	(.0002)
couple	0.1791***	0.1541**	–0.1326	–0.0589	–0.0428	0.0892
	(.0268)	(.0768)	(.0816)	(.051)	(.078)	(.0692)
couple_sex	–0.1887***	–[a]	–[a]	–[a]	–[a]	–[a]
	(.0416)					
hh_mix	–0.244***	0.0205	–0.1396	–0.1284*	–0.1371	–0.4002***
	(.0358)	(.0783)	(.1289)	(.0683)	(.0905)	(.1226)
lnadults	0.249***	–0.3573***	0.2214	0.0367	0.1686**	0.1296**
	(.0338)	(.1002)	(.0683)	(.0524)	(.0726)	(.0631)
lnadults_sex	–0.2099***	0.3446***	–[a]	–[a]	–[a]	–[a]
	(.0432)	(.1173)				

lnkids	0.0203	–0.0061	0.0473	–0.0503	0.0303	–0.1254**
	(.0229)	(.065)	(.0649)	(.0432)	(.0642)	(.0605)
lnkids_sex	–[a]	–[a]	–[a]	–[a]	–[a]	0.2672***
						(.0833)
coh2	0.0406	0.0208	–0.1139	–0.116	–0.2324***	0.1144
	(.0323)	(.0923)	(.1324)	(.0906)	(.0819)	(.1298)
coh3	–0.0115	–0.0532	–0.2889**	–0.095	–0.4655***	–0.377***
	(.0393)	(.105)	(.1304)	(.1133)	(.1131)	(.0894)
coh4	–0.1014**	–0.1996*	–0.4705***	–0.4749***	–0.3956**	–[b]
	(.0412)	(.1124)	(.1729)	(.0992)	(.2051)	
coh5	–0.1596***	–0.3421*	–1.1948***	–0.3112	–0.7188**	–[b]
	(.049)	(.1871)	(.3055)	(.2386)	(.2813)	
coh2_sex	–0.1681***	–[a]	0.3325**	–0.3064***	–[a]	–0.1247
	(.0528)		(.1519)	(.1146)		(.1568)
coh3_sex	–0.323***	–[a]	–[a]	–0.322*	–[a]	–[a]
	(.0573)			(.1379)		
coh4_sex	–0.2825***	–[a]	0.3001	–0.6459**	–0.5492**	–[b]
	(.0597)		(.2039)	(.2709)	(.2313)	
coh5_sex	–0.5506***	–0.0845	0.8065**	–[a]	–0.6577**	–[b]
	(.0643)	(.2233)	(.378)		(.2831)	
coh2_enclave	–[a]	–[a]	0.3845**	–[a]	–[a]	–0.405***
			(.1719)			(.1464)
coh3_enclave	–[a]	–[a]	0.489**	–[a]	0.3586*	–[a]
				(.1975)	(.1498)	
coh4_enclave	–[a]	–[a]	0.5241**	–[a]	–[a]	–[b]
			(.243)			
coh5_enclave	–[a]	–0.5532*	–[a]	–[a]	0.8022***	–[b]
		(.2994)		(.2636)		
coh2_enc_sex					0.6816***	
						(.2263)
coh5_enc_sex	–[a]	0.7495**	–[a]	–[a]	–[a]	–[b]
			(.3711)			

Table continues

TABLE 8. *Continued*

Variable	Mexicans	Chinese	Koreans	Salvadorans	Guatemalans	Vietnamese
carpool	0.543***	0.2027**	0.3327***	0.1671*	0.4599***	0.1166
	(.0287)	(.0874)	(.0795)	(.0921)	(.1103)	(.0757)
bus	0.2565***	0.4183***	0.6694***	0.3284***	0.3991***	–0.4149*
	(.0361)	(.1201)	(.169)	(.0603)	(.0884)	(.1564)
walk	0.0756	0.091	–0.3555	0.0368	0.7195***	–1.011***
	(.0482)	(.1768)	(.2648)	(.2226)	(.2223)	(.3006)
othermode	0.4077***	–0.6067*	–0.541	–0.0964	0.337	–1.2188**
	(.0495)	(.3207)	(.4294)	(.1666)	(.2276)	(.6028)
home	1.5111***	–0.2029	–0.3293	1.829***	1.8107***	–0.8651**
	(.0766)	(.2695)	(.3357)	(.1571)	(.187)	(.3833)
carpool_sex	–0.3373***	–[a]	–[a]	–0.3534***	–0.4298***	–[a]
	(.0449)			(.1157)	(.1455)	
othermode_sex	–[a]	–[a]	–[a]	–[a]	–[a]	1.5261**
						(.6981)
walk_sex	–[a]	–[a]	–[a]	–0.5111**	–0.7748***	–[a]
					(.2552)	(.2637)
constant	–3.2478***	–2.4708***	–1.3275***	–2.1889***	–1.5952***	–1.3088***
	(.1992)	(.2988)	(.2388)	(.1741)	(.2452)	(.2491)
[N]	[103855]	[8884]	[6444]	[14058]	[7433]	[7751]
Correctly classified (%)	81.1	85.2	82.0	79.6	76.2	75.9

[a]Not statistically significant and dropped.
[b]Cohort 3 for Vietnamese includes all migrants who arrived before 1980.
*$p < .10$, **$p < .05$, ***p < .01.
Source: U.S. Census of Housing and Population (1990b).

TABLE 9. PREDICTED PROBABILITY OF NICHE EMPLOYMENT BY ENCLAVE RESIDENCE[a]

Gender and cohort	Inside enclave		Outside enclave	
	Predicted probability	95% confidence interval	Predicted probability	95% confidence interval
Chinese women				
1985–1990	0.3107	(.2550, .3724)	0.2875	(.2417, .3381)
1980–1985	0.3152	(.2639, .3714)	0.2918	(.2469, .3412)
1975–1980	0.2994	(.2453, .3597)	0.2768	(.2279, .3315)
1970–1975	0.2696	(.2136, .3341)	0.2484	(.2008, .3031)
Pre-1970	0.3836	(.2388, .5525)	0.2085	(.1582, .2697)
Vietnamese women				
1985–1990	0.4362	(.3659, .5091)	0.4747	(.4081, .5422)
1980–1985	0.5024	(.4325, .5722)	0.4722	(.4067, .5386)
Pre-1980	0.3467	(.2865, .4121)	0.3827	(.3249, .4440)

[a]Probabilities estimated for women who speak poor English, live with a spouse or partner of the same national origin, and commute by car. All other means are group centered.

the same statistical traits (speak poor English, live with a spouse or partner of the same national-origin, commute by car; all other means are group centered).

While the probability of niche employment tends to decline with time in the United States, Chinese women who are the earliest arrivals (pre-1970) and live in an ethnic-enclave neighborhood are more likely than all other Chinese women to be employed in an ethnic niche (pr = .38). Similarly, Vietnamese women who arrived between 1980 and 1985 (the peak years of Vietnamese migration) and who live in an enclave neighborhood are most likely among Vietnamese women to be employed in a niche industry. These women likely rely heavily upon residentially-based ethnic-employment networks that connect them to ethnic-niche jobs. This strong connection between enclave residence and niche employment may indicate a historic residential and labor-market isolation that has solidified over time, especially for women facing a highly differentiated ethnic and gender division of labor whose social networks have not pushed them beyond the confines of the ethnic enclave or niche.

Geographic accessibility to niche jobs exerts some kind of significant effect on niche employment for all groups except Koreans. Among Salvadorans, a higher level of geographic accessibility to niche jobs is associated with a greater likelihood of niche employment for both men and women. Among the remaining groups, accessibility depends upon gender. For Mexican women, greater geographic accessibility to niche jobs is associated with a slightly higher probability of niche employment. The effect is opposite for Mexican men. Chinese men and women experience a similar pattern. Among Guatemalans and the Vietnamese, both men and women share a positive accessibility effect, though a negative accessibility and gender interaction somewhat mitigates the effect for women.

To better understand the effects of increased accessibility on niche employment, I compare predicted probabilities of niche employment at the 25th percentile of accessibility

TABLE 10. PREDICTED PROBABILITY OF NICHE EMPLOYMENT BY ACCESSIBILITY LEVEL[a]

Group	Low accessibility		High accessibility	
	Predicted probability	95% confidence interval	Predicted probability	95% confidence interval
Mexican men	0.1964	(.1736, .2213)	0.1557	(.1441, .1681)
Mexican women	0.3727	(.3340, .4131)	0.3792	(.3517, .4076)
Salvadoran men	0.1068	(.0882, .1289)	0.1202	(.0996, .1443)
Salvadoran women	0.5182	(.4723, .5638)	0.5511	(.5055, .5961)
Guatemalan men	0.1308	(.1056, .1609)	0.1679	(.1362, .2053)
Guatemalan women	0.5051	(.4478, .5623)	0.5308	(.4681, .5926)
Chinese men	0.0720	(.0486, .1053)	0.0660	(.0453, .0951)
Chinese women	0.2867	(.2324, .3481)	0.3819	(.3203, .4475)
Vietnamese men	0.1781	(.1423, .2205)	0.2438	(.2013, .2921)
Vietnamese women	0.3217	(.2044, .4668)	0.3445	(.2343, .4744)

[a]Probabilities estimated for immigrants who speak poor English, live with a spouse or partner of the same national-origin, commute by car; all other means are group centered.
Source: U.S. Census of Housing and Population (1990b).

(relatively low geographic accessibility to niche jobs) and the 75th percentile of accessibility (relatively high geographic accessibility to niche jobs). Presented in Table 10, these probabilities are calculated for recently arrived immigrants (Koreans, for whom accessibility is not statistically significant, are excluded) who live in an enclave neighborhood who speak poor English, live with a spouse or partner of the same national-origin, and commute by car. All other means are group centered.

The difference between the probabilities of niche employment at low and high levels of accessibility is substantive for all groups, except Mexican women. Most striking are the effects of increased accessibility among Chinese women and Vietnamese men. Increasing accessibility from the 25th percentile to the 75th percentile raises the probability of niche employment by nine points for Chinese women (pr = .29 to pr = .38) and by six points for Vietnamese men (pr = .18 to pr = .24).

These findings indicate that geographic accessibility matters for immigrant employment outcomes. For some groups (Chinese and Mexicans), geographic accessibility is a more important determinant of niche employment for women than for men, possibly revealing evidence of "spatial entrapment" among these immigrant women (Hanson and Pratt, 1988; England, 1993).

Increasing levels of education enable immigrants to expand their employment prospects beyond immigrant-niche employment, reflected in a significant and negative education effect for four of the six groups. The nonsignificant education effect among Koreans and the Vietnamese may likely reflect the high level of entrepreneurial activity among

Koreans and the Vietnamese. Though the self-employed are excluded from this sample, workers with relatively high levels of education may find employment in these entrepreneurial endeavors. This overlap of an entrepreneurial and labor niche was described by Wilson and Portes (1980) as the "ethnic-enclave economy."

English language proficiency is significantly associated with niche employment for all groups, though the effect depends upon gender. Among all immigrant women, speaking English well decreases the likelihood of ethnic-niche employment to a greater extent than for men. For Chinese and Vietnamese men, better English is positively associated with ethnic-niche employment. This may be due to niche employment among these men that requires greater interaction with the public or the wider business community.[10]

All groups, with the exception of the Chinese, share the expected and significant effect of potential work experience. At lower levels of potential work experience, the likelihood of niche employment is positive. At a certain point, the likelihood of niche employment decreases with increasing levels of potential work experience (captured in the quadratic term). Immigrants accumulate employment contacts and labor-market knowledge as they gain experience in the labor market, thereby expanding their employment opportunities beyond the constraints of the ethnic niche.

Household characteristics exert varying influences by group and by gender. Involvement in a couple-relationship (a broader definition than "married") has a statistically significant effect for Mexicans and the Chinese. Chinese immigrants in a couple-relationship are more likely to be employed in an ethnic niche, as are Mexican men. The effect is essentially zero for Mexican women. The effect of being in a mixed-couple-relationship (not of the same national-origin group) reduces one's likelihood of ethnic-niche employment for Mexicans and the Vietnamese. This likely reveals the contact to non-redundant job information obtained through one's partner of a different ethnicity—though a strong tie, this person is connected to a different set of ethnic networks and, thus, to jobs beyond the individual's group's niche industries.

For all groups except Salvadorans, the number of adults in the household exerts a significant effect on niche employment. For Guatemalans, Koreans, and the Vietnamese, each additional person in the household increases an individual's likelihood of niche employment. This reflects the effect of strong ties in channeling co-ethnics to similar jobs. For Mexican and Chinese workers, the effect depends upon gender. For both Mexican men and women, the likelihood of niche employment increases with each additional adult in the household, though the effect is less pronounced for women. For Chinese workers, the effect is positive for women but negative for men. This may reflect Chinese women's greater dependence upon family employment.

Carpooling is positively associated with niche employment for all groups except the Vietnamese. While this finding makes intuitive sense—immigrant workers in niche jobs work at the same job sites, facilitating carpooling—the direction of the causal arrow cannot be determined. Do workers choose employment because a carpool is available to them? Does the carpool reflect a set of ethnic employment networks that tie an immigrant to niche employment? Or do workers find employment first and then establish a carpool?

[10]As I have dropped the self-employed from the sample, the greater need of business owners to speak English does not explain this positive association.

Of particular interest is the finding that home-based work is strongly associated with niche employment for the three Latin American groups. For example, 65% of all Mexican women who work at home are employed in a niche industry. Though causality cannot be determined, this finding raises important questions about the characteristics of work into which immigrants are segregated. These workers are not "telecommuting" from home. Home-based Mexican, Salvadoran, and Guatemalan workers are primarily engaged in low-wage, exploitative work such as garment piecework.

DISCUSSION AND CONCLUSION

In a comparison of local labor markets in Worcester, Massachusetts, to those of unskilled male workers in mid-Victorian London described by Jones (1971), Hanson and Pratt (1992) found striking similarities: labor markets in both places were highly localized and rooted in particular neighborhoods, a result of workers' short commutes and use of social networks to find work. Hanson and Pratt (1992) concluded, "We have seen in this study of contemporary Worcester that the situation Jones depicted is neither a historical relict [sic] nor a description limited to male working-class life" (p. 403). In late 20th century Los Angeles, a city that differs dramatically from Worcester and mid-Victorian London in many ways, I too have found evidence that immigrants circulate within highly localized labor markets that are rooted in ethnic-enclave neighborhoods.

Hanson and Pratt (1992) also found that "[s]tructured housing and labor markets are mutually reinforcing" (p. 403). Even in diverse polyglot Los Angeles, my study similarly points to a structured association between residential segregation and labor-market segregation. This relationship is fashioned from what are typically understood as social and spatial processes, though both are best understood as *sociospatial* processes. My finding that living in an ethnic enclave is generally associated with ethnic-niche employment reveals the embeddedness of ethnic-employment networks in particular places (such as immigrant enclave neighborhoods), thus highlighting the sociospatial context in which labor market segregation occurs. Immigrants living in ethnic-enclave neighborhoods have ready access to immigrant social networks and the information they carry, such as information about jobs. These are the social networks that give rise to and maintain the ethnic niche.

I also find that geographic accessibility to jobs plays an important role in sustaining labor-market segregation among immigrants. Excepting Koreans and Chinese and Mexican men, immigrant men and women who live closer to immigrant-niche jobs are more likely to be employed in these jobs. In addition, the maps of immigrant employment reveal a close geographic correspondence between immigrant neighborhoods and places of work, reinforcing an earlier finding that immigrants who live in enclave neighborhoods have the shortest commutes (Parks, 2002).

The localized nature of immigrant labor markets in Los Angeles points to sociospatial processes that are likely at work in generating ethnic niches, in contradiction to the sociologist's claim that ethnic niches are purely a function of social processes. Jobs may become and remain ethnic-niche jobs because of the supply of immigrant workers living nearby, and ("voluntary") residential segregation may persist because of this locally available supply of jobs. Alternatively, immigrants may remain "stuck" in these niche

jobs when moving is difficult as a result of ("involuntary") residential segregation.[11] In either case, research has shown that employers also play a part in creating these socio-spatial linkages by (re)locating their establishments so as to more readily tap certain ethnic labor pools (Hanson and Pratt, 1992).

While many scholars have argued for the importance of gender in dividing the labor market, fewer have linked gender to spatially localized processes that divide the labor market (the most important exceptions, again, being Hanson and Pratt, 1988, 1991, 1995; and McClafferty and Preston, 1991, 1992). Because the distinctive characteristics of ethnic networks theoretically could exempt immigrant women from the constraints of geography, I aimed to empirically establish the interplay of networks and space for immigrant women's employment outcomes.

One of my most significant findings is the gendered difference in the severity of labor market segregation. With the exception of Koreans, immigrant women are more likely (for many groups, *much* more likely) than their male counterparts to find employment in ethnic-niche industries. This dual ethnic and gender segregation may be explained partly by women's greater use of ethnic networks when finding employment. This provides an important caveat to the wider literature on ethnic networks, ethnic-niche employment, and immigrant-labor markets. While ethnic networks and their connection to ethnic-niche employment is a salient fact of immigrant life, it seems women are more likely to participate in this aspect of the immigrant experience and are possibly more dependent upon it.

Though gender emerges as an important mediator of the effects of space and place on immigrant employment outcomes, I find that these effects do not exhibit sharply gendered contrasts across all immigrant groups. Geographic accessibility generally has a positive effect on niche employment for both immigrant men and women, with the exception of Mexican and Chinese men. Place-based context appears as important to many immigrant men as immigrant women for their employment outcomes, as living in an ethnic enclave generally tends to be associated with ethnic-niche employment for both men and women. In general, however, women who live in ethnic-enclave neighborhoods have a higher rate of niche employment than men who also reside in these neighborhoods.

Finally, while I find immigrant labor markets rooted in immigrant neighborhoods, they are also rooted in households. Immigrants who live in households with other immigrants are more likely to find employment in niche industries, revealing the additional operation of very strong ties on employment outcomes. This household effect is most pronounced for women among many immigrant groups, likely illustrating that immigrant women's employment networks are characterized by highly specific and hyper-local forms of place-based knowledge.

These findings highlight the importance of approaching local labor markets as socially constructed activity spaces that center upon what Sassen (1995) terms the workplace-community/workplace-household nexus. Fundamental to this nexus is the role that residential segregation plays in perpetuating labor-market isolation and its deleterious effects among immigrant workers, especially women. The role of the ethnic enclave revealed here is particularly interesting in helping us to understand the dynamics of

[11]See Logan et al. (2002) for a discussion of the difference between immigrant enclaves and ethnic communities and the difference between voluntary and involuntary residential segregation.

place-based inequality. Though the benefits of the ethnic enclave are numerous, it is also tied into a set of sociospatial labor market practices that abet inequality.

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