# Work Together, Live Apart? Geographies of Racial and Ethnic Segregation at Home and at Work

Mark Ellis\*, Richard Wright\*\*, and Virginia Parks\*\*\*

\*University of Washington \*\*Dartmouth College \*\*\*University of Chicago

When scholars map the urban geography of racial and ethnic segregation, they privilege the time when people are at home. When workers commute, however, the tract of residence of one group often becomes the tract of employment of others. It follows that an exclusive focus on the residential geographies of racial groups erases the presence of others who work in those neighborhoods. Not only does this analytical orientation create a false impression of a city's racialized spaces as fixed, but it also misleadingly characterizes neighborhoods as the domain of those who live, rather than work, in them. In addressing this oversight, the study compares levels of residential and work tract segregation for native-born and immigrant groups in a large U.S. metropolitan area, Los Angeles. The analysis reveals that segregation by work tract is considerably lower than by residential tract, suggesting more intergroup interaction takes place during working hours than at home. The difference in segregation between residence and work is very large in the case of native-born whites and Mexican immigrants. These two groups maintain substantially different residential geographies but are quite likely to work in the same tracts. Such work tract complementarities are gender sensitive; they are much more likely between native-born white and Mexican men than between women of these groups. This gendered difference holds across all groups, with men more likely to work in tracts with men from other groups than women with women from other groups. The study offers new perspective on diurnal shifts in urban racial segregation. We conclude by speculating that reduced segregation at workplaces factors into recent increases in rates of interracial partnering, which may, in turn, ultimately leverage change in residential segregation. Key Words: segregation, race, gender, home, work.

"You must face the tragic fact that when you stand at 11:00 on Sunday morning to sing 'All Hail the Power of Jesus Name' and 'Dear Lord and Father of all Mankind,' you stand in the most segregated hour of Christian America." —Martin Luther King, Jr.<sup>1</sup>

With these words Martin Luther King, Jr. famously condemned mid-20th-century America for the stark racial division in church attendance. King's purpose was to chide religious institutions for their segregation practices, but his observation also hinted at a broader idea: racial separation varies by the hour and day. Judging by the frequency with which scholars and journalists still reference King's remarks, quotidian variations in ethnic and racial segregation remains an important feature of urban life.<sup>2</sup> For example, the *New York Times* recently developed this theme in an article on the lives of two women, one black, one white, whose working days were spent together in an Atlanta office, but whose lives were otherwise largely separated along racial lines (Siegal 2000).

Observing that segregation fluxes between home, work, church, and other settings should come as no surprise to social scientists. The theorization and analysis of the diurnal patterns of social interactions and the time-space geographies of social networks has a long and distinguished history (e.g., Hägerstrand 1970; Pred 1977; Giddens 1984; Gregory 1989; D. Massey 1999; Schnell and Yoav 2001; Weber and Kwan 2002). The bulk of academic research on racial and ethnic segregation, however, continues to ignore daily variation in the spatial separation of groups, focusing instead on segregation by neighborhood of residence. Residential segregation captures the spotlight for it results, in large part, from discrimination in housing market institutions and attitudes to neighborhood diversity (e.g., D. S. Massey and Denton 1993; and compare, for example, Clark 2002 and Krysan and Farley 2002).

An exclusive focus on neighborhood residential geographies features only residents who sleep in those places, consequently erasing the presence of others who may work there. It thus creates false impressions of urban areas' ethnic and racialized spaces as fixed and misleadingly characterizes residential neighborhoods as the exclusive domain of those who live, rather than work, in them. Indeed the nonwhite gardeners, domestics, and health care aides who often work in and around the homes of prosperous whites are rendered invisible in these geographies. A racial/ethnic transformation of urban neighborhoods occurs through laboring activity. Some researchers have begun to explore such workrelated geographies (e.g., Ley 1999; Wyly 1999; Blumen and Zamir 2001; Rogers 2002), but the analysis in this article extends recent efforts by using previously unavailable U.S. census data on individuals recorded by both place of work and tract of residence. It takes stock of home-work geographies in an entirely new way. We theorize that racial and ethnic segregation in the tract of work stems from residential segregation in and around the home and explore this relationship in several different ways. Specifically, operating at the census tract scale and across all lines of work, we weigh the extent of tract-level residential and workplace segregation for native-born and immigrant groups by asking the following questions: How does the degree of segregation by tract of work compare to that by tract of residence? Are groups that are relatively more segregated by residence also relatively more segregated by tract of work? How does the relationship between residential and workplace segregation vary between men and women?

In addressing such issues, this study speaks to the consequences of segregated housing markets for the division of labor. Information about employment opportunities that flows in discrete channels patterned by ethnicity, gender, and race, in combination with residence in a segregated neighborhood, may increase the likelihood of employment in a segregated tract of work. In such circumstances, segregation in the vicinity of home is often mirrored in restricted intergroup contact in the locality of work. Much previous research on immigrant enclaves and the gendered division of labor must infer these linkages by assuming that employment concentration in particular lines of work coincides with ethnic or gender concentration in actual places of work. This inference has never been fully explored, however. For example, although many Korean immigrants in Los Angeles, the study area, live and work in Koreatown (immediately northwest of downtown), we have little information about the workplaces of the seven or eight clusters of Korean immigrants (by residence) elsewhere in the metropolitan area (Allen and Turner 1997, 134). Do they also commute to Koreatown? Are they as likely to work in the Korean retailing niche? And what about the Korean immigrants who do not live in co-ethnic residential clusters-are they as likely as their enclaved counterparts to work in co-ethnic workplaces? Answering these and related questions will both help provide better insight into the mapping of the geographies of work and will close some theoretical and empirical fissures between residential racial geographies and employment segregation.

Aside from exposing and theorizing alternative racial and ethnic urban geographies, an examination of segregation in the vicinity of work offers new understanding about trends in racial and ethnic contact. The tract of work may be an important arena for forging connections between groups who do not share the same residential neighborhoods. For many workers, the act of "going to work' actually connotes daily shifts in one's social milieu" (Blumen and Zamir 2001, 1779). Orlando Patterson (1997, 44-45) makes a similar point in claiming the workplace-not the residential neighborhood-as the fulcrum of contemporary racial contact, the locale where friendships and relationships are most likely to form across racial lines. Workplace power relations, rooted in a racial-ethnic division of labor, of course, can inhibit contact across group boundaries regardless of spatial proximity. Nevertheless, increases in racial interaction at places in and around work better account for the rapid growth in mixed-race dating and partnering than the minuscule reductions in residential segregation that have occurred over the last two decades.

# The Place of Residence in Segregation Research: A Brief History

Commentary on the racial and ethnic patterning of U.S. urban space first appeared in the 19th century in response to the arrival of new immigrants. "A map of the city, colored to designate nationalities, would show more stripes than on the skin of the zebra and more colors than the rainbow" wrote Jacob Riis (1890, 20) in How the Other Half Lives, referring to the desperate plight of New York's immigrants crowded into districts of Manhattan largely along the lines of national origin. Riis and others viewed these concentrations with alarm not only because of their appalling poverty but also because of their visible foreignness. The nativist reaction to enclaves distressed some Jewish immigrant advocates to the point that they encouraged the dispersal of new arrivals from Eastern Europe away from New York's ghettos (Glazier 1998).

Three decades later, Chicago sociologists took up the issue of immigrant settlement geography, devising ecological theories to explain the initial concentration and subsequent spatial assimilation of ethnic and racial groups. These ideas were coined in the antiimmigrant ferment of the 1920s, and their optimistic accounting of immigrant incorporation and eventual dispersal swam against the tide of restrictionist opinion. Robert Park (1926), the leading light of the Chicago School, openly challenged the scientific racists (who fronted anti-immigrant movements in the 1920s) with his idea of a "race relations cycle." He considered the cycle's "progressive and irreversible" phases of group contact, competition, accommodation, and eventual assimilation to be immune to "immigration restrictions and racial barriers." Chicago School sociologists saw cities as "mosaic(s) of segregated peoples . . . each seeking to preserve its peculiar cultural forms and to maintain its individual and unique conceptions of life," the resulting "ghettos" forming "natural areas of the city" (Park 1998 [1928], lxv). Recognizing the significance of this geography for debates about assimilation, Park (1998 [1928], lxv) noted that ghettos formed "the physical symbol for that sort of moral isolation which the 'assimilationists,' so called, are seeking to break down." Chicago School theorists expected the mosaic to fade eventually under assimilationist pressure, with first generation immigrants and their descendents relocating to racially and ethnically mixed suburban neighborhoods after achieving some measure of economic success (D. S. Massey 1985).

Without question, dispersion from ethnic neighborhoods is what happened to the descendents of the last great wave of European immigration who had largely left their inner-city enclaves by the 1960s. However, the deep and persistent residential segregation of African Americans and Puerto Ricans, for example, demonstrates that these groups are not comparable to European immigrants, who, by and large, slipped into the mainstream as their whiteness eventually trumped their ethnic distinctiveness (Lieberson 1980; Padilla 1985; Nagel 2002). In contrast, people of color, especially African Americans, have faced, and continue to face, a unique legacy of racial housing and employment discrimination rooted in the experience of slavery, social barriers far more stubborn than those confronted by immigrants. Unsurprisingly, many African Americans remain "hyper-segregated" (D. S. Massey and Denton 1993) by neighborhood of residence. Residents often resist desegregation efforts, in part because residential environs convey and reproduce social status. Neighborhoods also confer access to key resources like schools and parks. Residents, whites especially, tend to view the presence of racial or ethnic difference around their homes as a threat to these social and material assets (D. S. Massey and Denton 1993; Farley and Frey 1994; Farley et al. 1994; Yinger 1995).

The Chicago School theorists focused on residential segregation to the exclusion of other spaces of group separation or contact. A century ago, the idea of examining group separation beyond the residential neighborhood may have made less sense than it does today because the limited commuting range of the era produced relatively restricted access to employment, thereby tightly linking the place of residence of workers to local employment possibilities. These sociologists coined the idea of a "commuter zone," and by implication identified a region of the city where the most significant home-work separation occurred. They also noted specifically that this outer zone was, in terms of residence, "probably the most highly segregated of any in the entire metropolitan region" (Burgess 1929, 117). Other instances of daily shifts in the geography of groups occurred as servants and workers in unskilled service occupations from immigrant backgrounds left their homes in poor neighborhoods to work in the houses of the well-to-do. The city, then, was in daily flux, with intergroup contact increasing during the workday. Much of this workplace mingling happened between people who differed markedly in social status or occupation and who rarely, if ever, interacted as equals. Thus, the residential geography of the city, as Burgess and others mapped it, probably best captured Chicago's prevailing social space (see Harris and Lewis 1998).

Theirs, however, was not the only possible representation of the time; a map of race and ethnicity during a Chicago workday of the 1920s would not have been the same as at night. Black Metropolis, for example, Drake and Cayton's (1945) monumental study of the black population in Chicago up to the Second World War, contains several accounts of black-white contact at work that contrast with the highly segregated residences of these two groups. CIO workplace-organizing efforts of the 1930s were perhaps the most visible result of these diurnal variations in racial separation, as black and white workers combined their energies to win famous victories, such as in the bloody struggle at Republic Steel in South Chicago in 1937. Almost thirty years later, Kornblum (1974) observed in Chicago steel mills the same sort of on-the-job mixing of groups who lived in isolated ethnic and racial residential neighborhoods. In some cases, this contact spilled over into meetings or events after work, although much less so for blacks than others. Nevertheless, when these residentially segregated groups participated in unions they achieved some measure of success from their collaboration.

## Links between Segregation at Home and at Work: Theory and Implications

Eight decades have passed since the Chicago School's pioneering work. There is every reason to believe that the difference between segregation at home and work has increased; metropolitan areas have changed in many ways, and residential neighborhoods remain stubbornly segregated while some notable strides have occurred in workplace desegregation. The dispersion of jobs across metropolitan areas means that workers more likely commute beyond the boundaries of their community for employment than before. Zelinsky and Lee (1998, 288), for example, comment on the growing "spatial disjuncture between home and work" as a "distinct departure from the intra-metropolitan circulation patterns of earlier generations of immigrants." This section thinks through the implications for home-work relations in the face of persistent residential segregation by race and ethnicity. Where people work depends on where they live and is subject to restrictions on their access to information about job opportunities and constraints on their ability to engage in daily commutes, factors known to vary by gender and across racial and ethnic groups. Constrained information flows and limits to commuting range give us ample reason to expect a positive connection between group segregation at home and work. Two strands of theory, one spatial in emphasis and originating in geography, the other focused on social networks and based in sociology, provide insights into the relationship between residential and workplace segregation.

Geographers, along with urban economists, typically deploy some form of spatial job search theory to explain the matching of workers to jobs. While there is considerable variation in the formulation of these models, all versions derive from the same series of commonsense notions: jobs closer to home are easier to find, involve fewer search costs, and require less commuting. The net result is that the odds of finding a job decline with distance from residence (Stigler 1961, 1962; McCall 1970; Simpson 1992). By extension, segregated workplaces will arise as workers from residentially segregated neighborhoods search for work close to home. Moreover, these same spatial forces could account for group industrial niches if those types of jobs are found in close proximity to segregated neighborhoods. Industrial location decisions reinforce these relationships. Employers often acknowledge the spatial constraints faced by workers by locating their operations near pools of suitable labor, especially if the wages they offer are not sufficient inducements for long commutes. Nelson's (1986) work on back-office employment in San Francisco, and Scott's (1989) investigations of a variety of industries in Los Angeles both make such assertions.

The spatial cost model's main weakness is that it abstracts workers from their social context, ignoring the social capital that derives from membership in groups (Hanson and Pratt 1988, 1995). Information on work opportunity flows through networks bounded by kin, race, nativity, and gender. Women tend to hear about jobs from women, ethnics from co-ethnics, and so on. The sociology of immigration literature uses a variety of terms to describe the operation of these networks, including "ethnic facilitation" (Light and Bonacich 1988), "training systems" (Bailey and Waldinger 1991), and "bounded solidarity and enforceable trust" (Portes and Zhou 1992). In their own ways, each describes how social networks are central to understanding the maintenance of immigrant niches (e.g., Light and Bonacich 1988; Waldinger 1996). Historically, the clustering of extended families and other co-ethnics in particular residential neighborhoods was a crucial element in this social connectivity.

Residential segregation may thus lead to employment segregation through a group's spatial accessibility to specific clusters of industries and/or by its social accessibility to niche jobs through group networks. The matching of workers to workplaces is contingent, occurring in a sociospatial accessibility space where information on jobs flows through networks connecting members of certain groups to their niches and where, all things being equal, workers will prefer to work close to home. Competition from other groups who already occupy these sectors and the operation of the racial/ethnic queue (i.e., discrimination by employers) may make it difficult for certain groups to break into jobs close to where they live. Workers may make efforts to live closer to niche jobs, but house price constraints and discrimination in the housing market produce obstacles for poorer or racialized groups to adjust residential location.

Ultimately, the importance of spatial versus social accessibility in connecting segregation at home to the workplace will depend on the strength of a group's social networks. Ethnic neighborhoods that form voluntarily through immigrant networks and cultural affiliations are places in which residential concentration is partly reflective of preexisting social network connections from the immigrant origin. These same ethnic resources also provide access to jobs in employment niches (cf. Wilson and Portes 1980; Portes and Manning 1986; Nee and Sanders 1987). If strong enough, such networks may overcome spatial cost constraints and connect immigrant workers to their niches in locations far from ethnic neighborhoods. In contrast, groups like African Americans, whose segregation derives largely from structural discrimination, do not have sufficiently dense social networks on which to build sustaining connections into ethnic niches (Peach 1996; Marcuse 1997). For them, workplaces are more likely to derive from their spatial accessibility to jobs rather than social accessibility.

The need to merge social and spatial accessibility frameworks becomes even more evident when considering gender (Hanson and Pratt 1988, 1995). The social networks that provide job information to the men of an immigrant group are inaccessible to women of the same group (Wright and Ellis 2000). These gendered differences in network strength and orientation combine with discrimination, the gender typing of jobs, and employee preferences to render marked distinctions in the occupational and industrial distributions of men and women in the same ethnic group (King 1992; Reskin and Cassirer 1996; Wright and Ellis 2000). Space matters too. Women's disproportionate share of domestic obligations constrains their ability to search for work and commute over large areas as men do, thus restricting their job choices and earnings (cf. England 1993; Hanson and Pratt 1995). This "spatial entrapment" effect varies by ethnic and racial group, with some research suggesting its effect is weaker for minority women (e.g., Johnston-Anumonwo, McLafferty, and Preston 1995; McLafferty and Preston 1996). If the spatial entrapment theory has validity, then women should experience more work tract segregation than their male co-ethnics because restricted commutes will lower the odds of intergroup contact.

Generally, we expect to find less spatial segregation of employment than residence because most industry requires a technical division of labor that brings together workers with different skills in the workplace. Some groups have strenuously resisted both residential and workplace desegregation efforts. Workers, again mostly whites, have at times vigorously resisted the employment of other groups, as well-publicized disputes over the desegregation, for example, of fire stations, police forces, and law offices illustrate. For the most part, though, the workplace response has not been as extreme as that in residential neighborhoods. Complex forces undergird this differential response, including some small victories for affirmative action in employment, compared to the lack of "political will" to end racial segregation in housing markets (D. S. Massey and Denton 1993, 234). Thus, while occupational segregation along racial lines has declined considerably in the last fifty years (e.g., Albeda 1986), segregation in residential neighborhoods has not. In addition, the structuring of urban space through commercial and industrial zoning reinforces the tendency for residentially segregated workers to share sites of employment by forcing production into limited areas of the city. Furthermore, we anticipate finding an uneven geography of group employment because of niching by race and nativity in spatially clustered industries.

What significance should be attached to the desegregation of workplaces (and their environs) in the presence of persistently high rates of residential neighborhood segregation? The relatively large decline in occupational segregation compared to that of residence suggests people tolerate greater diversity at work-as boss, co-worker, or employee-than in their neighborhood or residence. While some friendships and relationships may form across racial and ethnic lines, however, minority worker alienation and exclusion in mixed workplaces occurs all too frequently. According to Steinhorn and Diggs-Brown (1999, 52), "we confuse racial intersection with racial integration" when we see diversity at work. "Blacks and whites," they continue, "might work in the same hospital, hotel, office building, law firm, or airport, and they might say hello to each other every day, but rarely do they work together as equals. They simply inhabit two workplace worlds" (55). Even among occupational equals the presence of difference is no guarantee of substantive workplace or extraworkplace social interaction across racial and ethnic lines. Black professionals frequently confess to being peripheralized or made to feel that do not belong in workplaces dominated by whites (Cose 1993; Anderson 2001; Bell and Nkomo 2001). So, the fact of spatial proximity, even among those doing the same job, is no guarantee of the development of substantive racial or ethnic contact or understanding.

That said, one could reasonably argue that the presence of members of other groups in the workplace at least has the potential to improve intergroup empathy and expand meaningful interaction. Whether in environments consisting of racially and ethnically different workers or working directly with colleagues from different groups, it is possible-though by no means assuredthat contact will open up avenues of constructive communication that may later lead to more consequential relationships. These sorts of habitual contacts are what Amin (2002) identifies as crucial to nurturing compassion between the antagonistic communities of young whites and South Asians in northern English cities following the street protests of 2001. He adds, quoting Back, that it is from the "compulsory prosaic negotiations" that occur at work (but also in other spaces such as nightclubs and colleges), that society achieves the cultural openings necessary for coming to terms with difference (2002, 969). These words echo Kornblum's (1974) observations on workplace diversity in South Chicago's steel mills three decades ago. He identified the workplace and its institutions as the prospective means to dismantle the well-entrenched social barriers in that city's neighborhood geography. It is vital, however, that such workplace interactions are "inculcated as a habit of practice (not just copresence) in mixed sites of everyday contact" for progress to occur in intergroup understanding (Amin 2002, 976, emphasis added). The present study makes no claim to detail such precise daily practices; instead, we seek merely to observe that encountering difference at work has the potential to instigate improved mutual appreciation among racial and ethnic groups.

### The Study

The remainder of the article is an empirical inquiry dedicated to answering the questions raised in the preceding sections: What is the extent of work tract segregation relative to residence? How does work tract segregation vary by group and gender? And what is the relationship between segregation at home and work? The investigation focuses on workers in the greater Los Angeles area, a five-county region comprising almost 15 million people and a diverse population of native-born and immigrant groups. The investigation centers on the employment and residential patterns of the eight largest recent immigrant groups (defined by country of birth) in Los Angeles (Mexicans, Salvadorans, Filipinos, Guatemalans, Koreans, Chinese, Vietnamese, and Iranians). The study also analyzes the residential and work-place geographies of the four largest native-born racialized groups: whites, Latinos, African Americans, and Asians. Separating men from women in these 12 groups yields 24 groups and 276 pairs for analysis.

Over the last couple of decades, increasing analytical and theoretical attention has centered on Los Angeles. In a useful summary, Michael Dear (2002) goes to some length to justify his contention that Los Angeles is not exceptional but rather indicative of our urban futures. Along these lines, the Southern California region contains a large immigrant population (it is currently the nation's principal destination for immigrants) and significant racial and ethnic diversity. Although distinctive from other large metropolitan regions that have received large numbers of immigrants recently or in the past (Waldinger and Bozorgmehr 1996), this multiethnic metropolis provides us with the population diversity needed to make inferences beyond binary comparisons such as black-white, native born-foreign born, and malefemale. Los Angeles thus provides a necessary complexity of links between race, ethnicity, gender, home, and work. In addition, the metropolitan areas (e.g., Los Angeles-Long Beach and Riverside-San Bernardino) within the larger region are not known for either exceptionally high or low rates of residential segregation (Lewis Mumford Center 2001). This is important because residential segregation by race and ethnicity are key explanatory variables in our study. Consequently, the findings we report can be read as both specific to Los Angeles as well as the basis of generalization beyond the metropolitan area. It complements, for example, the benchmark Los Angeles studies of ethnic and racial diversity (Waldinger and Bozorgmehr 1996; Allen and Turner 1997) and urban inequality (Bobo et al. 2000), which are largely based on place of residence.

The questions posed require large samples of data measuring the characteristics of workers, including their place of residence and work, at detailed geographical scales. The best currently available data—the Public Use Micro Samples (PUMS)-are loaded with information about workers but have poor geographic detail. For example, the smallest spatial unit in the PUMS, the Public Use Micro-data Area (PUMA), has a minimum population of 100,000-too large for the purposes of exposing the microgeographies of residence and work for individual workers. Some scholars make up for the crude geography in official data by collecting their own information, but the resulting samples are necessarily small and restricted (e.g., Light and Bonacich 1988; Scott 1989; Hanson and Pratt 1995). Our previous work advocates comparative work on ethnic employment specialization across groups (Ellis and Wright 1999; Wright and Ellis 1996, 1997, 2000) without foregrounding space. For this present study, small, specialized data sets are inadequate, no matter how geographically rich, and we require tract-scale information on individuals. Another possible data source is the 1990 Census Transportation Planning Package (or 1980 Urban Transportation Planning Package), which contains summary tables of labor force and demographic variables either by census tracts or traffic analysis zones (roughly half the size of a census tract) (Cohn and Fossett 1998; Wyly 1999; Mouw 2000). Unfortunately, these data are inadequate for the questions we ask in this article as they only identify major racial groups, not individual immigrant groups. Further, as they are tabular in format, they do not include individual characteristics of workers (such as their age, education, English language ability, year of entry, fertility, etc).

The Census Bureau has now provided a solution to this information problem by recently making available large sample data on individual workers that record both their place of residence and place of work by census tract. These data derive from the long form of the 1990 Census of Population and Housing. Because of their geographic detail, these data are confidential and subject to rigorous disclosure requirements; their use requires prior approval by the Census Bureau, and they can only be accessed in secure facilities. In essence, these data resemble the well-known Public Use Micro Samples (PUMS) and include the salient characteristics of individual workers, such as their place of birth, "race," industry, occupation, and so on. Unlike the PUMS, however, they also provide place of residence and work for each worker by census tract—units that contain approximately 4,000 residents. Further, these data are available in a much larger sample of one in six households (compared to the one in twenty sample of PUMS), making more detailed analysis feasible through increased numbers of observations.

Although new, and offering exciting new avenues of inquiry, a tract measure of segregation at work has limitations. Tracts conceal considerable group separation at the subtract level within factories, offices, and other places of work. Examination of group interaction at finer scales would no doubt expose other and different microgeographies of racial and ethnic separation at work (e.g., Linda McDowell's [1997] study of gender interactions in financial offices). It is not clear a priori, however, that finer scales will reveal more-or betterinformation about intergroup contacts at work than the coarse-grained analysis of tracts. The scale at which such contact occurs will depend on a number of factors, including the requirements of jobs and the size of the employer. Electricians, for example, constantly move from job to job, such that the spatial extent of their daily "workplace" can easily exceed the area of a census tract. Most nurses, in contrast, perform their work in a narrowly defined area, often as large as a building, but sometimes as small as part of a floor. Thus, just as no single scale easily captures the "residential neighborhood" (Grannis 1998), no single spatial scale completely portrays the "workplace" for the purposes of assessing segregation at work (cf. Peck 1996). And just as tracts are probably too large a unit to capture salient interactions with neighbors, they are also too large to describe the workplace for most jobs. Tracts, however, have a key advantage: for better or worse, they are the usual scale at which scholars measure the extent of group separation in residential neighborhoods. An investigation based on tracts makes it possible to compare group segregation at home and work without worrying about differences in scale at each location.

#### Geographies of the Color Line in Los Angeles

The best way to begin is to compare tract-scale maps of residence and employment by group. Mapping places of work and residence shows a city fluxing from clearly demarcated residential spaces by race and ethnicity to mixed employment spaces. The extent of this shift is greater for some groups than for others, however (Figures 1a, 1b, 1c). Native-born whites residentially concentrate on the edges of the metropolitan area, but disperse during work hours to almost all parts of the region, with the exception of South Central Los Angeles. To no surprise, African Americans are residentially segregated in a number of communities, most notably South Central, but also areas around Altadena/Pasadena and Pomona. While their employment locations disperse considerably from these neighborhoods, there remains heavy African American neighborhoods, an outcome supportive of the idea that limited employment opportunities in nearby African American neighborhoods have negative consequences for African American employment outcomes.

Much like African Americans, Mexican and Salvadoran immigrants show marked residential clusters. Mexican neighborhoods, especially, concentrate east and south of downtown in communities such as Huntington Park. Mexican neighborhoods are also evident in the south (Wilmington, Santa Ana), the San Fernando Valley, and northeast Ventura County. The location of Mexican immigrants is dramatically transformed during the workday as they labor in virtually all parts of the metropolitan area. Heavier work tract concentrations do appear in East Los Angeles, Santa Ana, the San Fernando Valley, and Ventura County, but the overall impression is of dispersion. No doubt this pattern derives from Mexican immigrant employment in a range of service-oriented jobs that are spread throughout the region. The Salvadoran immigrant community clusters just to the west of downtown in communities like Pico-Union, but, like Mexican immigrants, there are also concentrations in the San Fernando Valley. Their employment geography is scattered mostly to the west of their residential settlements, including concentrations in the wealthy communities of Beverly Hills, Brentwood, and Bel Air. Salvadorans, especially women, are heavily concentrated in personalservice employment in these locations.

The final quartet of maps features two foreign-born groups from Asia: Chinese and Korean. The residential maps for these two groups highlight their well-known neighborhood clusters. For Chinese immigrants, these neighborhoods most clearly include Chinatown and the communities of the San Gabriel Valley (Monterrey Park, Arcadia) that Li (1998) has named the Chinese ethnoburb. Other clusters are evident in Palos Verdes and to the southeast in Orange County. Korean immigrant residences most obviously cluster in Koreatown, and to the southeast in places like Cerritos. The employment distributions of both groups are considerably more dispersed than their neighborhoods, but there is evidence

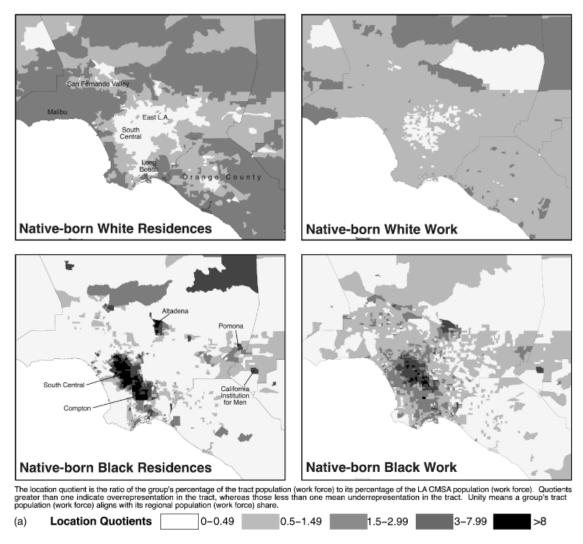


Figure 1a. Residence and work tract concentrations in Los Angeles, 1990: Native-born whites and blacks.

of clustering in and around residences as well as in some other sites of job concentration. Chinese immigrant job concentrations are most apparent close to the Chinatown/San Gabriel Valley residential cluster; other residential clusters, however, do not generate nearby work tract concentrations and act more like bedroom communities rather than sites of ethnic economies (e.g., Palos Verdes). Korean immigrant work concentrations are evident in Koreatown, where many retail and other small businesses serve the Korean resident community, and to the south, in south-central Los Angeles. This map is prior to the civil disturbances of 1992 that, among other things, resulted in the destruction of many Korean immigrant-owned retail operations in South Central. In general, Korean immigrant employment clusters appear scattered throughout much of the region, consistent with the group's tendency to work as self-employed retailers and small business entrepreneurs.

Dissimilarity indexes illustrate the flux between residential and employment geographies very clearly.<sup>3</sup> Figure 2 shows dissimilarity indexes by tract of residence and tract of work for four of the groups: native-born whites, native-born blacks, Mexican immigrants, and Chinese immigrants. These groups capture much of the variability in the data and save us from having to show charts for all twelve groups. In each of the charts the groups on the horizontal axis are ordered from highest degrees of work tract segregation on the left to lowest on the right. Immediately, one can see that segregation by workplace is a good deal lower than by residence, although there are substantial differences by group. For native-born whites, the average workplace segregation score (across eleven groups) is thirty eight, which is 60 percent of the average residential segregation score of 63. For blacks, the average workplace segregation score is also 38, but their average residential segregation score is, unsurprisingly,

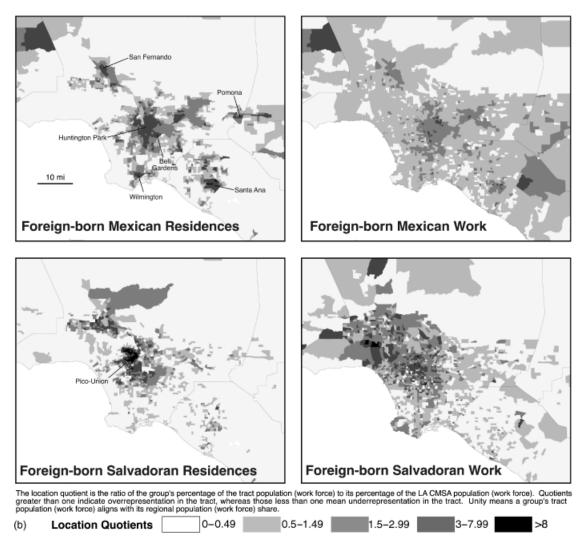


Figure 1b. Residence and work tract concentrations in Los Angeles, 1990: Foreign-born Mexicans and Salvadorans.

much higher at seventy one. Thus, levels of workplace segregation for black workers are 54 percent of those for residence. Turning to Mexican immigrants, their average workplace segregation score is thirty six, the lowest of any group, and only 58 percent of their average residential segregation score of sixty. Finally, the mean Chinese immigrant workplace segregation score is quite a bit higher than for the other three groups at forty two. As such, their average workplace score is 61 percent of their average residential segregation score of sixty eight.

Of these four groups, the results for Mexican immigrants and native-born blacks are perhaps the most interesting. Mexican immigrants are least segregated by work tract on the whole. In other words, they are more likely to mix at work than other ethnic or racial groups in Los Angeles. This result is not surprising when one thinks of their employment specialization in low-status service work that is distributed across the metropolitan area. Native-born blacks experience the greatest flux between home and work in terms of segregation. In the aggregate, they are the group most likely to experience the phenomenon of living apart from, but working together with, other groups.

The charts suggest a tendency for groups that are most residentially segregated from each other to be also most segregated by work tract. However, this relationship is not perfect, and there are some exceptions worth highlighting. For example, Mexican immigrants and native-born whites are highly segregated by residence (Index of Dissimilarity = 68) but not by work tract (Index of Dissimilarity = 31). In fact, this difference (between the residential and workplace segregation of native-born whites and Mexican immigrants) is larger than that between native-born whites and any other group; it is only marginally exceeded by the gap between the residential and workplace segregation of Mexican and Iranian immigrants, which is the largest such gap between any two groups. Native-born blacks also experience large

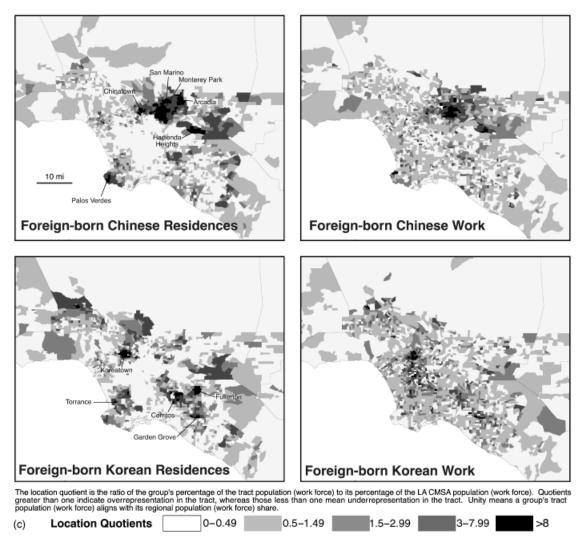


Figure 1c. Residence and work tract concentrations in Los Angeles, 1990: Foreign-born Chinese and Koreans.

gaps between their levels of residential and workplace segregation from some groups. Native-born blacks are highly segregated by residence from Korean immigrants (Index of Dissimilarity = 78) but not by work (Index of Dissimilarity = 39). The maps in Figure 1a and 1c vividly illustrate this daily transformation as Korean immigrants commute into African American residential and work tract concentrations. Most striking perhaps is the small amount of workplace segregation between native-born blacks and Filipino immigrants (Index of Dissimilarity = 29) compared to that by residence (Index of Dissimilarity = 69). Such large swings suggest similarities or complementarities in terms of employment specialization that bring these groups to the same tracts for work despite their residential separation. For Filipino immigrants and native-born blacks this low level of workplace segregation may stem from common employment in health care and public sector work. The low levels of workplace segregation between native-born whites and Mexican

immigrants almost certainly has something to do with the provision of personal and other services by the latter in the homes and places of employment of the former.

When women and men are considered separately, few differences emerge in residential segregation within each ethnic or racial group by gender. Consequently, the analysis that follows uses a nongendered residential segregation index (as in Figure 2), but now juxtaposed with separate work tract segregation indexes by gender-comparing men (women) of one group to men (women) of another group. Figure 3 illustrates these for the same groups selected in Figure 2. The bars are ordered from left to right by decreasing level of workplace segregation between men. These charts reveal that workplace segregation is always higher between pairings of women than between pairings of men of the same groups. Men, then, are more likely than women to work with members of other groups. For example, the extent of workplace segregation between native-born white and

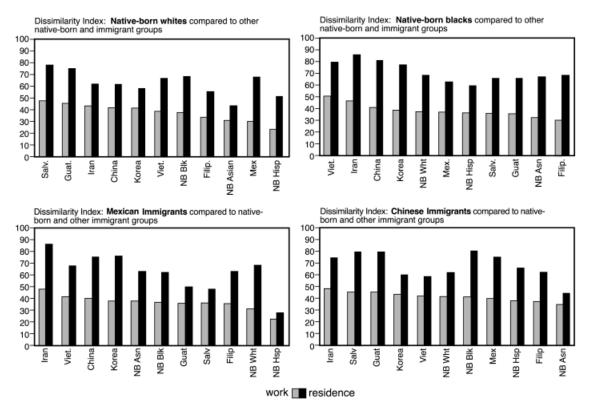


Figure 2. Workplace and residential segregation for four groups.

Mexican men is less than 28, whereas between women of these groups it is 37.

Figure 4 charts work tract indexes of dissimilarity by tract of residence for all groups. The diamond-shaped dots represent work tract segregation between men and the solid-square dots represent the same for women. At a given amount of residential segregation, the diamondshaped dots are mostly lower than the solid-square dots, suggesting that men are less segregated at work than women. This chart also suggests a positive linear relationship between residential and work tract segregation for both men and women, with the slopes differing only by a constant.

To explore this linear relationship further we estimated a regression of work tract segregation on residential tract segregation plus two sets of dummy variables that characterize gender mix effects and racial/ ethnic group effects. The model took the following form:

 $WS_{ij} = \beta_0 + \beta_1 RS_{ij} + \beta_2 MM + \beta_3 FF$ 

- $+ \beta_4$ Mexican  $+ \beta_5$ Chinese $+ \beta_6$ Korean
- $+ \beta_7$ Filipino $+\beta_8$ Salvadoran  $+ \beta_9$ Guatemalan
- $+ \beta_{10}$ Vietnamese  $+ \beta_{11}$ Iranian  $+ \beta_{12}$ NBBlack

(1)

 $+ \beta_{13}$ NBAsian  $+ \beta_{14}$ NBHispanic

where *i* and *j* index the 24 groups (men and women of 12 ethnic/racial groups), WS is the work tract index of dissimilarity (scored from 0 to 100), RS is the same for tract of residence (also scored from 0 to 100); MM is 1 if WS is between men of group *i* and *j* (0 otherwise); FF is 1 if WS is between women of group *i* and *j* (0 otherwise); and the remaining variables are dummy coded to reflect whether *i* or *j* is one of the listed native-born or immigrant groups. Segregation between men and women (MF) is the omitted gender mix category, and native-born whites are the omitted group category.

Before discussing the estimations, two points about this model require further discussion. First, we considered specifications in which levels of intergroup industrial and occupational segregation were added to the right hand side.<sup>4</sup> The motivation behind these alternative formulations was the idea that patterns of work tract segregation may derive, at least in part, from the combination of ethnic job concentration and the spatial division of labor. A glance at the coefficients of determination in Table 1 reveals why these additional indexes of segregation had relatively little impact on the racial and ethnic unevenness in work tract distributions. Residential segregation accounts for over 40 percent of the variance in work tract segregation whereas industrial segregation accounts for barely 12 percent and occupational segregation just over 6 percent. This finding

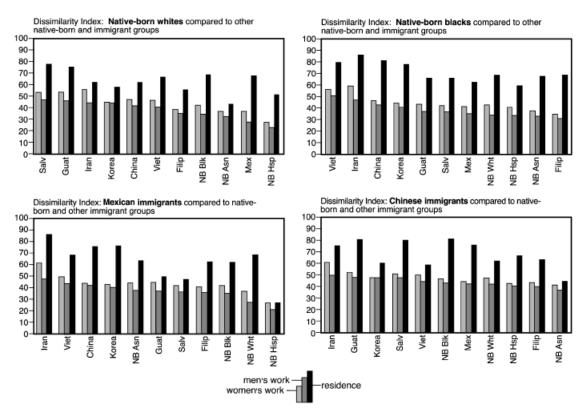


Figure 3. Workplace and residential segregation by gender for four groups.

suggests an important conclusion: the geography of racial and ethnic groups at work, at least at the census tract scale, is much more closely allied to the residential distributions of these groups than to the gender or ethnic division of labor.

The second issue is the treatment of residential segregation as exogenous. One could argue that the residential segregation of groups derives partly from their

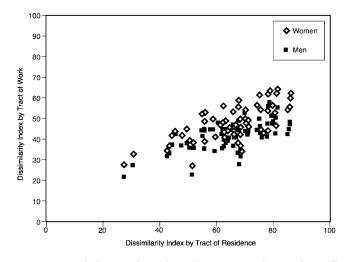


Figure 4. Workplace and residential segregation by gender: All groups.

workplace geography.<sup>5</sup> Many workers, however, particularly second earners, choose workplaces from fixed residential locations. Women predominate in this category (Hanson and Pratt 1995). Even in the case of primary earners, workplace choice tends to be subordinate to residential location decisions. For example, rates of job turnover are far higher than changes in residential location, which suggests that workers tend to search from existing residential locations rather than move (Simpson 1992). This residential fixity is more pronounced among homeowners, given the costs, financial and emotional, of selling and purchasing a house (Hughes and McCormick 1981). Racial and ethnic considerations strengthen the argument further. Whether it is because of own-group

 
 Table 1. Coefficient of Determination between Four Indexes of Dissimilarity

	Work Tract	Residential Tract	Industry	Occupation
Work Tract	1			
Resid Tract	0.4087339	1		
Industry	0.1232302	0.1555342	1	
Occupation	0.0680533	0.1727812	0.835514	1

These indexes were calculated between all pairs of groups, for tract of residence, tract of work, industry (all census industry categories), and occupation (all census occupation categories). The coefficients report the variance shared between each index series.

preference or housing market discrimination, nonwhite groups, especially African Americans, do not have access to or choose from the full set of residential options within a city. Groups that are more likely to adjust their residential location in response to workplace changes are those that possess the resources to move or lack the family and other constraints to tie them down, or both; young, well-educated, single, and childless whites fit this description best. Yet, for the majority of workers, the causal structure in Equation 1 makes sense.

Table 2 contains the results. The coefficients for residential segregation and the gender mix dummies are of the expected sign and are highly significant, statistically. A unit increase in the residential dissimilarity index raises the work tract dissimilarity index by 0.27 points. This result is concrete evidence of the impact of residential segregation on the likelihood of working alongside co-ethnics. The gender mix dummies are also significant, although these must be interpreted relative to the omitted category MF, or work tract segregation between men and women. The work tract dissimilarity index between women of different groups is 1.8 points higher than the omitted category. It is much lower between men of different groups—down by 3.9 points from the omitted category. Thus, on average, the work tract index of dissimilarity between women of different groups is 5.7 points higher than between men of different groups. These results make sense in light of the frequently documented tendency of women to engage in shorter commutes. It stands to reason that a shorter journey to work is less likely to result in contact with members of other groups at work, especially if the journey originates in a segregated neighborhood.

The intercept is significantly different from zero, which, on first thought, is a little puzzling: Should not workplace segregation be zero when groups have identical residential geographies? The intercept actually measures the work tract index of dissimilarity between the omitted categories, native-born white men and women. It estimates that men and women of this group have a work tract dissimilarity score of 22. To put this score in perspective, recall that the work tract dissimilarity scores between native-born blacks and Filipinos and between native-born whites and Mexicans (see Figure 3) are only about eight points higher. So, the work tract segregation score between some groups is not much higher than intragroup work tract segregation by gender.

Eleven coefficients identify the ethnic and racial group-specific tendencies in workplace segregation after controlling for residential segregation and gender (whites are the omitted category). Figure 5 graphs these coefficients. Prior to this modeling exercise, we had limited

 Table 2. Regression Results: Dependent Variable Is Work

 Tract Index of Dissimilarity

		,	
Variable	Coefficients	Standard Error	t Statistic
Intercept	21.9913044	2.0607493	10.67150905
RS	0.2790795	2.6694907	10.45440994
MM	- 3.9029155	0.6259957	- 6.234732519
FF	1.8441165	0.6259957	2.94589336
Mexican	-1.2935555	0.9285215	- 1.393134642
Chinese	3.4330927	0.9407952	3.649139207
Korean	3.7742885	0.9320546	4.049428274
Filipino	- 0.0519453	0.930282	- 0.055838225
Salvadoran	3.3115979	0.9340986	3.545233556
Guatemalan	4.0219841	0.9338308	4.306972909
Vietnamese	8.9617222	0.9510794	9.422685427
Iran	8.2829619	1.0257823	8.074775236
NB Black	- 2.2151309	0.9610557	- 2.304893358
NB Asian	2.0140474	0.9458791	2.129286365
NB Hispanic	1.0847009	0.9421857	1.15126021
Regression Sta	atistics		
Multiple R			0.865
R Square	0.748		
Adjusted R Sc	luare		0.734
Observations			264

Note: Segregation between men and women (MF) is the omitted gender mix category, and native-born whites are the omitted group category.

expectations regarding the sign and magnitude of group coefficients beyond a simple division between immigrant and native-born groups. There are good reasons to expect that immigrant groups cluster more at work than the native-born because of the well-documented strength of immigrant networks. These networks are more likely to produce and subsequently sustain enclave employment than is the case for natives. However, it is unlikely that these effects will be uniform across groups because of variability in the strength and quality of these networks. In fact, all immigrant groups, except Mexicans and Filipinos, have a greater tendency to segregate by work tract-to spatially cluster in employment environments-than native-born groups. This tendency is especially strong for Vietnamese and Iranian immigrants, whose work tract segregation score is eight to nine points higher than expected on the basis of their residential segregation from other groups. For Chinese, Korean, Salvadoran, and Guatemalan immigrants the increase is about half as strong-on the magnitude of three to four points.

Native-born blacks have a significant negative group effect, which means they are less segregated than expected at work, given their degree of residential

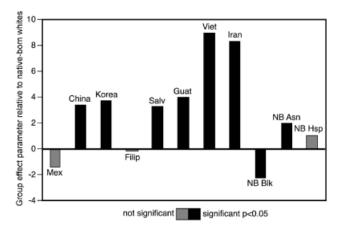
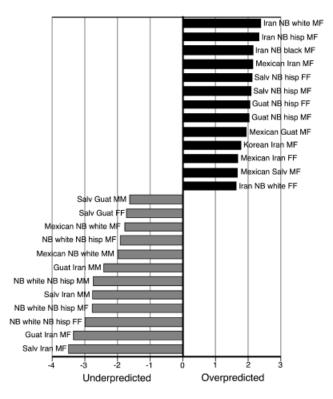


Figure 5. Group effects on work tract segregation.

segregation. Blacks are more segregated by residence than other groups and thus are more likely to experience greater contact with other groups if they seek job opportunities beyond the neighborhood. From what is known about networks, employment contacts between blacks are not as strong or focused on particular sectors as in immigrant groups; consequently, blacks are less likely than immigrants to search for and hold jobs in niche sectors (with some types of public employment being a notable exception) or enclaves. The effect for native-born Asians is the reverse. They are more segregated at work than expected, which suggests a persistence of ethnic networks and employment niching beyond the first generation.

Finally, a brief examination of residuals from the model identifies those group workplace interactions, net of residential segregation and group effects, that are relatively poorly predicted by the model. Pairings with standardized residuals in excess of 1.645 (-1.645)—or p < 0.1—are illustrated in Figure 6. The most obvious result is that the majority of the significant residuals are male/female pairings. Thus, male/female group pairings at work are hardest to predict on the basis of residential segregation and group effects, especially for immigrant groups with relatively small populations. Nevertheless, the pairing of large within-gender (MM or FF) groups produces some significant residuals. Of particular note, the model significantly overpredicts the work tract segregation scores of native-born white women and nativeborn Hispanic women, native-born white men and Hispanic men, and native-born white men and Mexican immigrant men. These pairings are significantly more likely to work in the same tracts than predicted on the basis of their residential segregation and group effects. Determining the reasons for this result is beyond the scope of this study, but it likely stems from comple-



**Figure 6.** Standardized residuals greater (less) than 1.645 (-1.645) or p < 0.1.

mentarity in occupations and/or possibly racial/ethnic preferences for working with each other. This is certainly a finding that needs further investigation.

#### Conclusions

Prejudice produces unequal and unfair access to resources, one result of which is racial segregation, frequently assessed in analyses of housing markets. Discrimination in residential markets deserves to be exposed and condemned, but racial prejudice, of course, does not end at home. The research reported in this article reveals the extent to which the ethnic and racial geographies of the city are in daily flux between home and work. The extent of work tract segregation in Los Angeles is half that of residential segregation, suggesting a city in which a great deal more intergroup contact occurs during the work day than in the environs of home. This result is not unequivocal evidence of a more racially and ethnically tolerant Los Angeles than previously thought. As already noted, working alongside members of another group is not the same as living next door to them. It is, however, illustrative of the existence of an alternate racial and ethnic geography of the city that parallels in pattern, if not in extent, the segregation observed in residential neighborhoods. Nevertheless, the

gap between residential and work tract geographies is sufficient to conclude that Martin Luther King's observations on daily fluctuations in the experiences of segregation apply to workers in contemporary Los Angeles.

The finding of a strong positive and linear effect of residential segregation on work tract segregation is new. Although such a connection has been argued for some time by researchers investigating the spatial-mismatch hypothesis or by scholars interested in immigrant employment, no previous work demonstrates this directly. It is important evidence of the limiting effect of ethnic and racial residential mixing on opportunities for contact with others at work. That most immigrant groups cluster more at work than expected on the basis of their level of residential segregation suggests they possess a strong web of networks linking home and work. For native-born blacks, the opposite is the case. They cluster together less by work tract than expected, probably because their segregated neighborhoods are less the consequence of networks linking group members to housing and jobs and more the result of housing market discrimination. Regardless of group effects, the estimate of residential segregation's impact on work tract segregation suggests a considerable role for residential homogeneity in producing spatial ethnic employment concentration.

The ethnic division of labor, by way of contrast, has relatively little impact on work tract segregation: occupational and industrial segregation are only weakly related to racial and ethnic separation by tract of work. The spatial clustering of employment by racial and ethnic groups derives from their residential segregation much more than it reflects specialization in particular forms of employment. This result begins to throw into relief the role of residence in immigrant neighborhoods in generating employment outcomes. Ethnic neighborhoods may play a substantial role in concentrating ethnic employment in particular parts of the city, but immigrant occupational or industrial segregation has relatively little impact on group separation by work tract. If ethnic and racial residential geography is the key to understanding the geography of group employment, this begs the following question: What causes the residential segregation of ethnic groups in the first place? The contemporary literature on segregation suggests a combination of discrimination and own-group preference account for the bulk of residential sorting across space (D. S. Massey and Denton 1993; Yinger 1995; Clark 2002). Following Duncan and Duncan (1955), however, there may be some stratification effect derived from the division of labor, too. That is, occupational segregation may be more strongly reflected in the social organization of residential space than employment space. Table 1 supports this idea; over 17 percent of variation in residential segregation is accounted for by occupational segregation, whereas only 6 percent of work tract segregation is so explained (cf. Marchand 1986; Scott 1989). Needless to say, this is a topic deserving of future investigation. More definitive answers to these questions require individuallevel analysis of employment and residential location with models controlling for human capital, neighborhood conditions, immigration, and ethnicity.

Although increases in residential segregation are associated with greater work tract segregation, the results also provide ample evidence that groups "work together and live apart." In this sense, the experience of the Atlanta office workers recounted at the start of this article is writ large in the magnitude of the contrast between amount of residential and work tract segregation in Los Angeles, at least for some groups. Native-born whites and Mexicans are especially illustrative of this phenomenon. These two groups maintain substantially different residential geographies but seem quite likely to work in the same tracts. Occupational complementarities lie at the root of this residential-workplace flux; Mexicans likely perform low-level service and manufacturing work in locations in which native-born whites hold positions of management or professional responsibility. But this complementarity is gender sensitive; it is much more likely between native-born white and Mexican-immigrant men than between women of these groups. In fact, this gender difference in work tract segregation holds across all groups: men are more likely to work in tracts with men from other groups than women with other women. Thus, the restriction in women's ability to commute not only has effects in terms of limited spatial job search, but it also reduces the likelihood of their contact with other groups when they are employed.

In addition to providing a new way to see racial geographies at work, the findings may also produce innovations in the study of intergroup relationships. Residential segregation remains high, and, inasmuch as this reflects discrimination in the housing market and mortgage lending, it continues to be a cause for great concern. For these reasons, residential segregation should remain a key benchmark of the level of intergroup tolerance and discrimination. Nevertheless, labor markets and the technical division of labor within firms and institutions pull workers from different groups to the same sites of employment. While power relations among groups may be unequal at work, this contact is likely to have numerous consequences for attitudes toward difference. Concretely, desegregation in and around work increases the odds of the selection of partners from other groups. There is a long tradition in sociology of predicting the extent of intermarriage between groups as a function of the social space between them. Following Robert Park's often-quoted phrase of social relations mapping directly onto spatial relations, the likelihood of intergroup contact-or lack of it-has often been measured by intergroup residential separation. To wit, black-white residential segregation over the last few decades remained stuck at high levels, while a six-fold increase in the rate of black-white marriages between 1960 and 2000 occurred (Kennedy 2003, 126). The rapid rise in the general rate of mixed-race partnering seems less the consequence of slow declines in residential segregation and more the result of contact in other arenas of daily life. The findings of relatively small amounts of workplace segregation between some groups, despite their extensive residential segregation, suggest a reorientation of mixed-race partnership research toward a consideration of the role of contact at the place of work. Given that relationships that cross racial lines are especially evident in Los Angeles, the study site, where one in five generation X-ers were intermarried as of the mid-1990s (Hayes-Bautista and Rodriguez 1996), future research should explore where these relationships form in much more detail.

If, as we suspect, interracial contact at work, and in other spaces outside segregated neighborhoods, has helped stimulate the recent surge in rates of interracial partnering, it may also lay the foundation for the eventual desegregation of residential space. For interracial families must live somewhere, and as their numbers grow, they will become a substantial force in desegregating neighborhoods because of mixing *within* families. In effect, exploring the geographies of race outside the neighborhood, whether at work or elsewhere, may be necessary for a thorough understanding of future changes in the racial geography of neighborhoods.

#### Acknowledgments

The National Science Foundation, under grant BCS-9986928, funded this research.

Versions of this article were presented at the Association of American Geographers Annual Meetings in Los Angeles, March 2002, the First Biennial International Population Geography Conference, St. Andrews, Scotland, July, 2002, the Center for Studies in Demography and Ecology at the University of Washington, February 2003, and the California Center for Population Research, UCLA, November 2003. We thank attendees at these sessions for helpful comments and suggestions. We are also very grateful to Audrey Kobayashi and the referees for their suggestions, to Serin Houston for her valuable editorial advice, and to Chase Langford for the maps and charts. Responsibility for the contents rests with the authors.

#### Notes

- 1. Sermon delivered at Dexter Avenue Baptist Church, Montgomery, Alabama, on 4 November 1956.
- 2. A quick search of the Web yielded numerous references to this quotation in newspapers and religious magazines. Interestingly, the quote is frequently edited so as to exclude the word "Christian," thereby generalizing it beyond the specific religion King targeted with his remarks.
- 3. The analysis was repeated with exposure indexes (see Massey and Denton [1988] for an explanation of the exposure index and a description of its properties relative to other segregation measures, including the dissimilarity index). As they generate the same results with respect to the pattern of differences between residential and work tract segregation, we do not report them here.
- For this purpose, intergroup indexes of dissimilarity by occupation and industry were calculated using the full range of 1990 census industrial and occupational categories.
- 5. In this circumstance, workplace segregation will be correlated with the error term in Equation 1, and the OLS estimated coefficient,  $\beta_1$ , would be biased upward.

## References

- Albelda, R. P. 1986. Occupational segregation by race and gender, 1958–81. Industrial and Labor Relations Review 39:404–11.
- Allen, J. P., and E. Turner. 1997. The ethnic quilt: Population diversity in Southern California, California State University, Northridge: Center for Geographical Studies.
- Amin, A. 2002. Ethnicity and the multicultural city: Living with diversity. *Environment and Planning* A 34:959–80.
- Anderson, E. 2001. The social situation of the black executive: Black and white identities in the corporate world. In *Problem of the Century*, ed. E. Anderson and D. S. Massey, 405–36. New York: Russell Sage.
- Bailey, T., and R. Waldinger. 1991. Primary, secondary, and enclave markets: A training systems approach. *American Sociological Review* 56:432–55.
- Bell, E., and S. M. Nkomo. 2001. Our separate ways: Black and white women and the struggle for professional identity. Boston: Harvard Business School Press.
- Blumen, O., and I. Zamir. 2001. Two social environments in a working day: Occupation and spatial segregation in metropolitan Tel Aviv. Environment and Planning A 33:1765–84.
- Bobo, L., M. Oliver, J. Johnson, and A. Valenzuela, eds. 2000. *Prismatic metropolis: Inequality in Los Angeles*. New York: Russell Sage Foundation.
- Burgess, E. W. 1929. Urban areas. In Chicago: An experiment in social science research, ed. T. V. Smith and L. D. White, 113–38. Chicago: University of Chicago Press.
- Clark, W. A. V. 2002. Ethnic preferences and ethnic perceptions in multi-ethnic settings. *Urban Geography* 23:237–56.
- Cohn, S., and M. Fossett. 1998. The other reason job surburbanization hurts blacks: The relationship between the

location and racial composition of employment in Detroit and Atlanta. *Urban Affairs Review* 34:94–125.

- Cose, E. 1993. The rage of a privileged class. New York: HarperCollins.
- Dear, M. 2002. Los Angeles and the Chicago School: Invitation to debate. *City and Community* 1 (1): 5–32.
- Duncan, O. D., and B. Duncan. 1955. Residential distribution and occupational stratification. American Journal of Sociology 60:493–503.
- Drake, S., and H. R. Cayton. 1945. Black metropolis: A study of Negro life in a northern city. New York: Harcourt Brace and Company.
- Ellis, M., and R. Wright. 1999. The industrial division of labor among immigrants and migrants to the Los Angeles economy. *International Migration Review* 33 (1): 26–54.
- England, K. 1993. Suburban pink-collar ghettos: The spatial entrapment of women? Annals of the Association of American Geographers 83 (2): 225–42.
- Farley, R., and W. H. Frey. 1994. Changes in the segregation of whites from blacks during the 1980s—Small steps toward a more integrated society. *American Sociological Review* 59 (1): 23–45.
- Farley, R., C. Steeh, M. Krysan, T. Jackson, and K. Reeves. 1994. Stereotypes and segregation: Neighborhoods in the Detroit area. American Journal of Sociology 100 (3): 750–80.
- Giddens, A. 1984. The constitution of society: Outline of the theory of structuration. Cambridge, U.K.: Polity Press.
- Glazier, J. 1998. Dispersing the ghetto. Ithaca, NY: Cornell University Press.
- Grannis, R. 1998. The importance of trivial streets: Residential streets and residential segregation. American Journal of Sociology 103 (6): 1530–64.
- Gregory, D. 1989. Presences and absences: Time-space relations and structuration theory. In Social theory of modern societies: Anthony Giddens and his critics, ed. D. Held and J. B. Thompson, 185–214. Cambridge, U.K.: Cambridge University Press.
- Hägerstrand, T. 1970. What about people in regional science? Papers of the Regional Science Association 24:7–21.
- Hanson, S., and G. Pratt. 1988. Reconceptualizing the links between home and work in urban-geography. *Economic Geography* 64 (4): 299–321.
- Hanson, S., and G. Pratt. 1995. Gender, work, and space. London: Routledge.
- Harris, R., and R. Lewis. 1998. Constructing a fault(y) zone: Misrepresentations of American cities and suburbs, 1900– 1950. Annals of the Association of American Geographers 88 (4): 622–39.
- Hayes-Bautista, D. E., and G. Rodriguez. 1996. L.A. County's answer for racial tensions: Intermarriage. *Los Angeles Times*, May 5: M6.
- Hughes, G., and B. McCormick. 1981. Do council housing policies reduce migration between regions? *Economic Journal* 91:919–37.
- Johnston-Anumonwo, I., S. McLafferty, and V. Preston. 1995. Gender, race, and the spatial context of women's employment. In *Gender in urban research*, ed. J. A. Garber and R. S. Turner, 236–55. Thousand Oaks, CA: Sage Publications.
- Kennedy, R. 2003. Interracial intimacies: Sex, marriage, identity, and adoption. New York: Pantheon.
- King, M. C. 1992. Occupational segregation by race and gender, 1940–1980. Monthly Labor Review 115:30–37.

- Kornblum, W. 1974. *Blue collar community*. Chicago: University of Chicago Press.
- Krysan, M., and R. Farley. 2002. The residential preferences of blacks: Do they explain persistent segregation? Social Forces 80 (3): 937–80.
- Lewis Mumford Center. 2001. Ethnic diversity grows, neighborhood integration lags behind. Lewis Mumford Center, University at Albany. http://mumford1.dyndns.org/cen2000/ WholePop/WPreport/MumfordReport.pdf
- Ley, D. 1999. Myths and meanings of immigration and the metropolis. *Canadian Geographer* 43:2–19.
- Li, W. 1998. Anatomy of a new ethnic settlement: The Chinese ethnoburb in Los Angeles. Urban Studies 35 (3): 479–501.
- Lieberson, S. 1980. A *piece of the pie*. Berkeley: University of California Press.
- Light, I., and E. Bonacich. 1988. Immigrant entrepreneurs: Koreans in Los Angeles, 1965–83. Berkeley: University of California Press.
- Marchand, B. 1986. The emergence of Los Angeles: Population and housing in the city of dreams. London: Pion.
- Marcuse, P. 1997. The ghetto of exclusion and the fortified enclave. American Behavioral Scientist 41:311–26.
- Massey, D. S. 1985. Ethnic residential segregation: A theoretical synthesis and empirical review. Sociology and Social Research 69 (3): 315–50.
- Massey, D. 1999. Imagining globalization: Power-geometries of time-space. In *Global futures: Migration, environment* and globalization, ed. A. Brah et al., 27–44. Basingstoke: Macmillan.
- Massey, D. S., and N. A. Denton. 1988. The dimensions of residential segregation. *Social Forces* 67:281–315.
- Massey, D. S., and N. A. Denton. 1993. American apartheid. Cambridge, MA: Harvard University Press.
- McCall, J. 1970. Economics of information and job search. Quarterly Journal of Economics 84:113–26.
- McDowell, L. 1997. Capital culture. Oxford: Blackwell.
- McLafferty, S., and V. Preston. 1996. Spatial mismatch and employment in a decade of restructuring. *The Professional Geographer* 48:420–31.
- Mouw, T. 2000. Job relocation and the racial gap in unemployment in Detroit and Chicago, 1980–1990. American Sociological Review 65:730–53.
- Nagel, C. 2002. Constructing difference and sameness: The politics of assimilation in London's Arab communities. *Ethnic and Racial Studies* 25 (2): 258–87.
- Nee, V., and J. Sanders. 1987. On testing the enclave-economy hypothesis. *American Sociological Review* 52:771–73.
- Nelson, K. 1986. Labor demand, labor supply, and the suburbanization of low wage office work. In *Production, work, territory*, ed. A. J. Scott and M. Storper, 149–71. Boston: Allen and Unwin.
- Padilla, F. 1985. Latino ethnic concsiousness. Notre Dame, IN: University of Notre Dame Press.
- Park, R. E. 1926. Our racial frontier on the Pacific. Survey Graphic 9:192–96.
- ———. 1998 [1928]. Foreword. In The ghetto, by L. Wirth, lxv– lxvii. Chicago: University of Chicago Press.
- Patterson, O. 1997. The ordeal of integration. Washington, DC: Civitas/Counterpoint.
- Peach, C. 1996. Good segregation, bad segregation. Planning Perspectives 11:379–98.
- Peck, J. 1996. Work-Place: The social regulation of labor markets. New York: Guilford.

- Portes, A., and R. Manning. 1986. The immigrant enclave: Theory and empirical examples. In *Comparative ethnic relations*, ed. S. Olzak and J. Nagel, 47–68. New York: Academic Press.
- Portes, A., and M. Zhou. 1992. Gaining the upper hand: Economic mobility among immigrant and domestic minorities. *Ethnic and Racial Studies* 15:491–522.
- Pred, A. 1977. The choreography of existence: Comments on Hägerstrand's time-geography and its usefulness. *Economic Geography* 53 (2): 207–21.
- Reskin, B., and N. Cassirer. 1996. Occupational segregation by gender, race and ethnicity. *Sociological Focus* 29:231–43.

Riis, J. 1890. How the other half lives. New York: Scribners.

- Rogers, A. 2002. The ethnic division of labor in Greater London: A spatial analysis of workplace-residence relations. In *Globalization and the new city*, ed. M. Cross and R. Moore, 228–46. Basingstoke, Hants, UK: Palgrave.
- Schnell, I., and B. Yoav. 2001. The sociospatial isolation of agents in everyday life: Spaces as an aspect of segregation. Annals of the Association of American Geographers 91 (4): 622–36.
- Scott, A. J. 1989. Metropolis: From the division of labor to urban form. Berkeley: University of California Press.
- Siegal, N. 2000. Work together, live apart. New York Times Magazine, July 16, sec. 6, 82.
- Simpson, W. 1992. Urban structure and the labor market. Oxford: Clarendon Press.
- Steinhorn, L., and B. Diggs-Brown. 1999. By the color of our skin. New York: Dutton.
- Stigler, G. 1961. The economics of information. Journal of Political Economy 69:213–25.
  - 1962. Information in the labor market. Journal of Political Economy 70:S94–S105.

- Waldinger, R. 1996. Still the promised city? African Americans and new immigrants in postindustrial New York. Cambridge, MA: Harvard University Press.
- Waldinger, R., and M. Bozorgmehr. 1996. *Ethnic L.A.* New York: Russell Sage Foundation.
- Weber, J., and M. -P. Kwan. 2002. Bringing time back in: A study on the influence of travel time variations and facility opening hours on individual accessibility. *The Professional Geographer* 54 (2): 226–40.
- Wilson, F., and A. Portes. 1980. Immigrant enclaves: An analysis of the labor market experiences of Cubans in Miami. *American Journal of Sociology* 88:295–319.
- Wright, R., and M. Ellis. 1996. Immigrants and the changing racial/ethnic division of labor in New York City, 1970– 1990. Urban Geography 17:317–53.
- Wright, R., and M. Ellis. 1997. Nativity, ethnicity, and the evolution of the intra-urban division of labor in metropolitan Los Angeles, 1970–90. Urban Geography 18: 243–63.
- Wright, R., and M. Ellis. 2000. The ethnic and gender division of labor compared among immigrants to Los Angeles. International Journal of Urban and Regional Research 24: 583–601.
- Wyly, E. 1999. Local labor markets and occupational sex segregation in an American metropolis. *Journal of Urban Affairs* 21:1–33.
- Yinger, J. 1995. Closed doors, opportunities lost: The continuing costs of housing discrimination. New York: Russell Sage Foundation.
- Zelinsky, W., and B. Lee. 1998. Heterolocalism: An alternative model of the sociospatial behavior of immigrant ethnic communities. *International Journal of Population Geography* 4:281–98.

Correspondence: Department of Geography, Box 353550, University of Washington, Seattle, WA 98195, e-mail: ellism@u.washington.edu (Ellis); Department of Geography, Dartmouth College, Hanover, NH 03755, e-mail: richard.a.wright@dartmouth.edu (Wright); School of Social Service Administration, University of Chicago, Chicago, IL 60637, e-mail: vparks@uchicago.edu (Parks).

Copyright of Annals of the Association of American Geographers is the property of Blackwell Publishing Limited and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.