

WORK TOGETHER, LIVE APART? GEOGRAPHIES OF RACIAL AND ETHNIC SEGREGATION AT HOME AND AT WORK IN LOS ANGELES

ABSTRACT

When scholars map the urban geography of racial and ethnic segregation they privilege the time when people are at home. In this paper we extend the assessment of racial and ethnic segregation to also consider group separation by tract of work. Specifically, we compare levels of residential and work tract segregation for native-born and immigrant groups in Los Angeles. In particular, we ask the following questions: How do levels of segregation by tract of work compare to those by tract of residence? Are groups that are relatively more segregated by residence also relatively more segregated by tract of work? And if this is the case, how does this relationship vary between men and women? Our analysis reveals a dynamic ethnic and racial geography of the city that fluxes daily between home and work. We find that segregation by work tract is considerably lower than by residential tract suggesting an urban area where more intergroup interaction takes place during working hours than at home. The most important pairing for which this opposition is the case is native-born whites and Mexicans. These two groups maintain substantially different residential geographies but are quite likely to work in the same places. Such work tract complementarities are gender sensitive: it is much more likely between native-born white and Mexican men than between women of these groups. This gender difference holds across all groups: men are more likely to work in tracts with non-coethnic men than women with non-coethnic women. This possibly results from women's shorter commute times that limit the possibility of contact with other groups of women at work. In general, we stress caution in interpreting low levels of work tract segregation as evidence of greater or more meaningful ethnic and racial interaction on the job than in neighborhoods. Nevertheless, we suggest that reduced segregation at workplaces factors into recent increases in the rates of mixed-race partnering.

Keywords: Race, Ethnicity, Employment, Residential Segregation.

"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 King¹

INTRODUCTION

With these words Martin Luther King famously condemned mid-twentieth century America for the stark racial division in church attendance. King's purpose was to chide religious institutions for their segregation practices, but his remarks hinted at a broader idea; racial separation varies by the hour and day, synchronized with the rhythms of social life. Judging by the frequency with which scholars and journalists still reference this

¹ Sermon delivered at Dexter Avenue Baptist Church, Montgomery, Alabama, on November 4, 1956.

commentary, quotidian variations in ethnic and racial segregation remains as important today as in King's time.² 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 home lives were largely separated along racial lines (Siegal 2000). And as in 1956, the social worlds of those Atlanta office workers appeared most removed from one another during their Sunday morning church services.

Observing that segregation fluxes between home, work, church, and other settings should come as no surprise to social scientists. The theorization and analysis of diurnal webs of social interaction and time-space geographies of social networks has a long and distinguished history (e.g., Hägerstrand 1970; Giddens 1984; Gregory 1989; Pred 1977; Weber and Kwan 2002). The bulk of academic research on racial segregation, however, continues to ignore daily variation in the spatial separation of groups, focusing instead on their segregation at the place of residence or by occupation/industry. Unquestionably, residential segregation should capture much of the spotlight for it results, in large part, from discrimination in housing market institutions and attitudes to neighborhood diversity. Massey and Denton's *American Apartheid* (1993), perhaps the most prominent publication on racial segregation in the last decade, justifiably excoriated US society and policy makers for failing to reduce significantly housing market discrimination.

Analysis of employment-based racial and ethnic segregation typically compares group distributions across types of jobs (measured by occupation, industry, or some combination of the two). In contrast to residential segregation, these studies report a steady decline in job segregation between racial and ethnic groups after controlling for gender (King 1992; Reskin 1993; Reskin and Cassirer 1996). While this type of research helps illuminate who has access to the best jobs and whose employment opportunities are inferior it does not

² A quick search of the web yielded numerous references to this quote 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.

necessarily tell us about where groups work or with whom they work. Complementary jobs held by members of different groups more often than not cluster in the same vicinity; managers and their support staffs, for example, may not perform the same tasks, but they work in the same building. Thus, analysis of segregation by job type provides but one of several perspectives on work-related racial and ethnic segregations, and is usually performed in isolation from other forms of social segregation.

In this paper we take analytical stock of racial separation at work in a new way. We conceive of workplace segregation as racial and ethnic division at the census tract of work for those in paid employment. Other researchers have begun to explore such work-related geographies (e.g., Ley 1999; Wyly 1999; Blumen and Zamir 2001; Rogers 2002) but the analysis in this paper extends recent efforts by using previously unavailable US census data on individuals recorded by both tract of work and tract of residence. We leverage this information to assess the relationship between residential neighborhood segregation and segregation in a similarly scaled area of work. Knowledge of employment opportunities flows in discrete channels and 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 will be mirrored in limited inter-group contact in the locality of work.

We recognize the limitations of tracts for measuring segregation at work; they conceal considerable group separation at the sub-tract level within factories, office, 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) analysis of gender interaction in financial offices). It is not clear *a priori*, however, that finer scales will reveal more – or better – information about intergroup contacts at work than the coarse-grained analysis of tracts. This surely depends on a number of factors, including the requirements of jobs and the size of the employers. 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. The point is that no single spatial scale exists which best captures the “workplace” for the purposes of assessing segregation at work. Admittedly, tracts are probably too large a unit 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. Thus an analysis based on tracts makes it possible to compare group segregation at home and work without worrying about differences in scale at each location.

Additionally, the census tract scale allows us to determine whether commuting transforms an area’s ethno-racial mix, as the tract of residence of one group becomes the tract of employment of others. Our key point here is that in the presence of such diurnal shifts, an exclusive focus on the residential geographies of racial groups erases the presence of others who work in those spaces. Not only does this create a false impression of a city’s racialized spaces as fixed, it also misleadingly characterizes neighborhoods as the exclusive domain of those who live in them rather than work in them. Such dichotomies are manifest within the homes of prosperous whites through the work performed by non-white immigrant gardeners, domestics, and home health care aides, among others. Our analysis aggregates up from homes to tracts to illustrate the racial and ethnic transformation of predominantly white neighborhoods through the laboring activity of predominantly non-white workers.

This research contributes to a larger project that explores the connections between the spatial, gender, and ethnic divisions of labor and the social patterning of residential space. We start here with the basic goal of weighing levels of tract-level residential and workplace segregation for native-born and immigrant groups in Los Angeles. In particular, we ask the following questions: How do levels of segregation by tract of work compare to

those by tract of residence? Are groups that are relatively more segregated by residence also relatively more segregated by tract of work? How does this relationship vary between men and women?

Aside from exposing an alternative and hitherto unexplored racial and ethnic geography of the city, the examination of segregation in the vicinity of work has a number of direct implications for understanding trends in racial and ethnic interaction. The tract of work may be an important arena for contact 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.

Patterson's assessment of the workplace as an arena for nurturing intergroup contact is perhaps overly sanguine. While workplaces may bring together residentially segregated people it does not mean they work together on equal terms. Workplace power relationships rooted in the ethnic division of labor will likely inhibit substantive interaction across group boundaries regardless of spatial proximity. Nevertheless, workplace contact has the potential to increase levels of group interaction. For example, it is possible that increases in group interaction at places in and around work, rather than the modest reductions in residential segregation, may better account for the rapid growth in interracial dating and partnering of the last two decades. Relationships that cross racial lines are especially evident in Los Angeles, our study site, where one in five generation X-ers were intermarried as of the mid-1990s (Hayes-Bautista and Rodriguez 1996). Workplace contact may also be important for other social phenomena, such as health. We offer some speculations on the implications of our study for these phenomena in the conclusion.

Our study also speaks to the consequences of segregated housing markets for ethnic, racial, gender, and spatial divisions of labor. Previously, these linkages have been inferred from research on immigrant enclaves by assuming that niching – in which immigrants take similar jobs to their co-ethnics – coincides with ethnic or gender concentration in actual places of work. Our analysis differs from previous research by explicitly exploring the spatial, as opposed to sectoral, dimension of ethno-racial employment segregation as it relates to residential neighborhood segregation.

DAILY GEOGRAPHIES OF THE COLOR LINE: SEGREGATION AT HOME AND WORK

Commentary on the racial and ethnic patterning of US urban space first appeared in the nineteenth 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 in 1890 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 this issue systematically, devising ecological theories to explain the initial concentration and subsequent settlement geography of ethnic groups. With assimilation into the social and economic mainstream, they forecasted immigrants or their immediate descendents would suburbanize. It is important to remember that these ideas were born in the anti-immigrant ferment of the 1920s and their optimistic accounting of immigrant incorporation and eventual dispersal swam against the tide of restrictionist opinion. Robert Park (1926a), 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.”

The legacy of Chicago’s urban ecology group is deeply embedded in American social science (e.g., Sibley 1995; Harris and Lewis 1998). Perhaps nowhere is its impact still more apparent than in the emphasis in urban analysis on the investigation of ethnic and racial residential segregation. 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” (Park 1928). 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 suburbs after achieving some measure of economic success (Massey 1985).

Without question this 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. But the persistently high levels of residential segregation of African Americans were immune from assimilationist expectations -- racial barriers of the sort Park claimed would be overcome seemed impervious to change. In retrospect, the problems of the Chicago School framework are obvious: African Americans are not comparable to European immigrants who by and large slipped into the mainstream as their whiteness eventually trumped their ethnic distinctiveness (Lieberson 1980). African Americans have faced a unique legacy of

racial housing and employment discrimination rooted in the experience of slavery, social barriers far more stubborn than those faced by immigrants.

Another, less obvious, bequest of the Chicago School motivates this paper: i.e., the theorist's focus 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 neighborhood may have made less sense than it does today, at least when the focus was on the workplace. The limited commuting range of the era produced relatively restricted access to employment, linking the place of residence of workers to local employment possibilities more tightly than in the present. Burgess, of course, coined the idea of a "commuter zone", and by implication identified a region of the city where the home-work separation was greatest. He also noted specifically that this outer zone was, in terms of residence, "probably the most highly segregated of any in the entire metropolitan region" (1929: 117). Other instances of daily shifts in the geography of groups occurred as servants and low-level service workers from immigrant backgrounds left their homes in poor neighborhoods to work in the houses and environs 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. Nevertheless, theirs 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 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 the 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 the same sort of on-the-job mixing in Chicago steel mills of groups who lived in isolated ethnic and racial residential neighborhoods. In some cases this spilled over into contacts 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. Katznelson (1981) claimed this separation of neighborhood social and political identity from workplace activism as a unique tendency in American urban politics.

Eight decades have passed since the Chicago School's pioneering work and there is every reason to believe that the difference between segregation at home and work has increased because the commute has significantly increased (cf. Massey 1985). Metropolitan areas are much larger and the dispersion of jobs across metropolitan areas has meant that centrally located populations must commute beyond the boundaries of their community for employment more than they did 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". As a consequence, the social disjuncture between home and work is starker now than in the past. In addition, intergroup contact will be more prevalent today among workers who do similar jobs because of the success of affirmative action and other anti-discrimination policies that originated in the 1960s civil rights movement. The current backlash against such social change is, in part, a reflection of the success of these policies.

What are we to make of these trends? More specifically, what significance should we attach to the desegregation of workplaces (and their environs) in the presence of persistently high levels of residential neighborhood segregation? The relatively large decline in occupational segregation compared to residences suggests people tolerate greater diversity

at work - as boss, co-worker, or underling – than in their neighborhood or residence. Of course, occupational desegregation is not directly equivalent to workplace integration. Even though non-white workers have entered traditionally white-dominated occupations in greater numbers in recent decades, not all workplaces have shared equally in the desegregation effort. Two well-documented forces have prevented this: the job channeling effects of ethnic, gender, and class-based networks and the exclusionary effects of discrimination in white dominated workplaces (Wright and Ellis 2000; Reskin 1993). Nevertheless, occupational desegregation has undoubtedly translated into generally greater diversity in and around the workplace.

Residential neighborhoods have resisted desegregation efforts because these places convey and reproduce social status. They 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 (Massey and Denton 1993, Farley and Frey 1994; Farley et al. 1994; Yinger 1995). In some cases, workplace desegregation efforts elicit the same negative reaction. Workers, again mostly whites, have at times vigorously resisted the employment of other groups, as well-publicized disputes over the desegregation of fire stations, police forces, and law offices, to name just a few examples, illustrate. For the most part, however, the workplace response has not been as extreme as that in residential neighborhoods suggesting that workers think less is at stake there than at home.

How then should we interpret this greater acceptance of difference at work? The literature on this question is not sanguine. While some friendships and relationships may form across racial and ethnic lines, 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 extra-workplace 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 1999; 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 understanding and expand meaningful interaction. Whether in environments comprising racially and ethnically different workers or working directly with colleagues from different groups, it is possible – though by no means assured – that 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 understanding 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 we achieve 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 – our emphasis). Encountering difference at work, then, has the *potential* to instigate

improved mutual appreciation among racial and ethnic groups. In many instances, however, such contact will simply reflect uneasy copresence rather than generate substantive intergroup social interaction.

All things considered, levels of spatial separation between groups in work tracts are probably not as indicative of social distance as Robert Park (1926b) claimed for spatial separation in neighborhoods of residence. Nevertheless, the shifting geography of groups between home and work does suggest that interpretations of racial and ethnic social space based solely on geographies of residence are incomplete. Mapping bodies by where they sleep falsely characterizes spaces as the exclusive domain of residents, expunging the presence of workers. An example from Los Angeles, the focus of our investigation, is illustrative here. The residents of Bel Air, Brentwood, and Beverly Hills are mostly white and wealthy, and many leave during the day to work elsewhere in the city. But these residential communities are places of employment for gardeners, domestics, and other service workers who labor in stores, houses, and offices. Most of these workers are unskilled and poorly paid Latina/os who commute daily from homes close to downtown Los Angeles or in the San Fernando Valley. Consequently, if we were to map Los Angeles during a workday, wealthy Westside communities would show up as much more the province of Latinos than residential maps portray. Conversely, downtown Los Angeles would whiten as executives and professionals from outlying suburbs converge on high-rise offices. Certainly, because of workplace power relations, poorly paid Latinos servicing wealthy white residential spaces lack social and political clout. Nevertheless, Latina/os enter these spaces to make them enjoyable for white elite residents. Mapping bodies only by where they claim residence camouflages this laboring effort.

Ending this erasure is perhaps the most important reason to investigate segregation in worker environments. But there are other reasons. We simply do not know enough about where people work, regardless of whether they live in segregated communities or not. For

example, although we recognize many Koreans in Los Angeles live and work in Koreatown (immediately Northwest of downtown) we have little knowledge of the workplaces of the seven or eight clusters of Koreans (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 Koreans 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 questions will help provide better insight into not only the mapping of the geographies of work but will also connect, theoretically and empirically, fissures in residential racial geographies to employment segregation.

On the whole, we expect less spatial segregation of ethnic employment than residence because most industry requires a technical division of labor bringing together workers of different skills in the workplace. Skills vary significantly by immigrant group; thus jobs suitable for different groups will exist at the same location. 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. Nevertheless, we expect to find an uneven geography of ethnic employment within cities because of immigrant niching in spatially clustered industries. Inadequate data on the geography of workplace location at scales below the metropolitan area have restricted empirical validation of this idea. Before we present the empirical analysis, the next section theorizes potential linkages between residential and workplace segregation by tapping the literatures on spatial job search, spatial mismatch, and the sociology of immigration.

THEORIZING LINKS BETWEEN RACIAL AND ETHNIC SEGREGATION AT HOME AND WORK

The connection between home and work is central to understanding local labor market dynamics. Workers have to live somewhere and be relatively stable in their residential

affiliation to facilitate the social reproduction necessary to sustain the workforce (Harvey 1989; Storper and Walker 1989; Peck 1996). Residential differentiation in the location of workers occurs by class, race and ethnicity, the outcome of the complex interweaving of the geography of production, the imperative to reproduce social relations, preferences and discrimination (Harvey 1989; Massey and Denton 1993; Scott 1989). Where people work depends on where they live, 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. The racialization of information flows and limits to commuting range give us ample reason to expect a positive connection between levels of 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 this relationship.

Geographers, along with urban economists, typically deploy some form of spatial job search model to explain the matching of workers to jobs. While there is considerable variation in the formulation of this model all versions derive from the same series of common sense 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 fall with distance from residence (Stigler 1961; 1962; McCall 1965; 1970; Simpson 1992; see also Alonso 1964; Muth 1969). 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 recognize the spatial constraints faced by workers and locate their operations to improve access to pools of suitable labor, especially if the wages they offer are not sufficient inducements to 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 assertions that employer clustering near particular groups is partly the result of such relocations.

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). 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 like "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. Boyd 1989; Gold 1994; Light and Bonacich 1988; Waldinger 1996). Historically, the clustering of extended families and other co-ethnics in particular neighborhoods was a crucial ingredient in this social connectivity. Immigrants also congregated in particular lines of work, partly because these jobs were geographically proximate to their places of residence and partly because of information flowing through neighborhood-based ethnic networks.

Thus ethnic residential segregation may 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. We conceive of the matching of workers to workplaces as contingent; occurring in a socio-spatial 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 ethnic queue (i.e. discrimination by employers) may make it difficult for certain ethnic 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 vs. 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 pre-existing social network connections from the immigrant origin. These same ethnic resources also provide access to jobs in niches (cf. Nee and Sanders 1987; Portes and Bach 1985; Portes and Jensen 1987; Portes and Manning 1986; Wilson and Portes 1980). 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 who are segregated largely because of discrimination do not have sufficiently vibrant social networks on which to build sustaining connections into ethnic niches (Marcuse 1997; Peach 1996). For them workplaces are more likely to derive from their spatial accessibility to jobs rather than social accessibility.

The need for a merger of 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 1989, 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 ethno-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 inter-group contact.

ANALYSIS

The remainder of the paper is an empirical analysis dedicated to answering the questions raised in the preceding sections: What are the levels 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 focus of the investigation is the Los Angeles CMSA, a five county region comprising almost 15 million people and a diverse population of native-born and immigrant groups.

To proceed requires 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 rich in 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 micro-geography 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 argues the importance of undertaking comparative work on ethnic employment specialization across groups (Ellis and Wright 1999; Wright and Ellis 1996; 1997; 2000). For these purposes, small, specialized data sets are inadequate no matter how geographically rich. 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; Wylie 1999; Mouw 2000). Unfortunately, these data are inadequate for our purposes 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, by recently making available large sample data on individual workers that record both their place of residence and place of work by census tract, now provides a solution to this data problem. 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 etc. But unlike the PUMS, they provide place of residence and work for each worker by census tract – units that contain approximately 4000 people. 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.

We focus our analysis on workers in greater Los Angeles--currently the nation's principal destination for immigrants. Much of our investigation centers on the employment and residential choices of the eight of the largest recent immigrant groups in Los Angeles (Mexicans, Salvadorans, Filipinos, Guatemalans, Koreans, Chinese, Vietnamese, and Iranians). We also include the four largest native-born groups: whites, Latinos, African Americans, and Asians. Separating men from women in these 12 groups yields 24 groups and 276 pairs for our analysis.

RESULTS

The best way to begin our analysis would be to compare tract-level maps of residence and employment by group. Unfortunately, we cannot publish maps of immigrant employment by tract because the Census Bureau considers them a significant disclosure risk.³ We can report that mapping places of work and residence show a city in flux from clearly demarcated ethno-racial residential spaces into mixed employment spaces. Dissimilarity indexes reveal this very clearly and these form the bulk of our publicly releasable results. We note that we repeated the analysis with exposure indexes. 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.

Figure 1 shows dissimilarity indexes by tract of residence and tract of work for four groups: native-born whites, native-born blacks, Mexicans and Chinese. These groups capture much of the variability in the data and save us from having to show charts for all 12 groups. In each of the charts the groups on the horizontal axis are ordered from highest levels of work tract segregation on the left to lowest levels on the right. Immediately, one can see that levels of workplace segregation are a good deal lower than those by residence although there are substantial differences by group. For native-born whites the average workplace segregation score (across 11 groups) is 38, which is 60 percent of the level of the average residential segregation score of 63. For blacks, the average workplace segregation score is also 38, but the average residential segregation score is unsurprisingly higher at 71. Thus levels of workplace segregation for black workers are at 54 percent of those for residence. Turning to Mexicans, their average workplace segregation score of 36 is the

³ Our effort to disclose tract-level workplace maps was rejected by the Census Bureau because of worries about the utility of such maps for INS workplace enforcement. The Census is bound by law to protect privacy and to not aid law enforcement agencies of the federal government, such as the IRS and INS. We are exploring other ways of releasing these maps, possibly by aggregating tracts into “super-tracts” to minimize their utility for law enforcement efforts and still maintain useful geographic detail.

lowest of any group; this compares to their average residential segregation score of 60. Thus workplace segregation is 58 percent of the level of residential segregation for Mexicans. Finally, the mean Chinese workplace segregation score is higher than for the other three groups at 42. This is 61 percent of their average residential segregation score of 68.

Of these four groups the results for Mexicans and native-born blacks are most interesting. Mexicans are least segregated by work tract – put another way they are more likely to encounter other groups at work than any other ethnic or racial group in Los Angeles. This is not surprising when one thinks of their employment specialization in low-level 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 – a relationship we turn to in greater detail later in the analysis. However, this relationship is not perfect and there are some interesting exceptions worth highlighting. For example, Mexicans and native-born whites are highly segregated by residence (Index of Dissimilarity=68) but not by work tract (Index of Dissimilarity=31). This difference between the residential and workplace segregation of native-born whites and Mexicans is larger than that between native-born whites and any other group. The same difference is the second largest involving Mexicans, only marginally exceeded by the gap between the residential and workplace segregation of Mexicans and Iranians. Native-born blacks also experience large gaps between their residential and workplace segregation from some groups. Native-born blacks are highly segregated by residence from Koreans (Index of Dissimilarity=78) but not by work (Index of Dissimilarity=39). Most striking perhaps is the low level of workplace segregation between native-born blacks and Filipinos (Index of Dissimilarity=29) compared to that by residence

(Index of Dissimilarity=69). All these 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 Filipinos and native-born blacks this may stem from a common employment specialization in health care and public sector work. For native-born whites and Mexicans, this 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.

To this point our comparison between residential and workplace segregation has not distinguished between the locations of employment of men and women. Differences in residential segregation between men and women of the same ethno-racial group are barely discernible. Thus we continue to use one residential segregation index for both men and women as in Figure 1 but now compare it to separate work tract segregation indexes by gender – comparing men (women) of one group to men (women) of another group. Figure 2 illustrates these for the same groups as Figure 1. The charts are ordered from left to right in decreasing levels of workplace segregation between men. These charts all show that levels of workplace segregation are always higher between women than between men of the same groups. Men, then, are more likely to work with members of other groups than are women. That said, there are some larger differences between men and women in some pairs of groups than in others. For example, the level of workplace segregation between native-born white and Mexican men is below 28 whereas between women of these groups it is 37.

Figure 3 charts work tract indexes of dissimilarity by tract of residence for all groups. The blue dots represent work tract segregation between men and the red dots represent the same for women. The trends evident from an inspection of Figure 2 are immediately apparent. At a given level of residential segregation, the blue dots are mostly lower than the red 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 a series of dummy variables to characterize gender mix and groups. More formally, the model is:

$$\begin{aligned}
 WS_{ij} = & \beta_0 + \beta_1 RS_{ij} + \beta_2 MM + \beta_3 FF + \beta_4 Mexican + \beta_5 Chinese + \beta_6 Korean + \beta_7 Filipino + \\
 & \beta_8 Salvadoran + \beta_9 Guatemalan + \beta_{10} Vietnamese + \beta_{11} Iranian + \beta_{12} NBBlack + \\
 & \beta_{13} NBAsian + \beta_{14} NBHispanic
 \end{aligned}
 \tag{1}$$

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

Two points about this model are worthy of some discussion. First, we considered specifications in which levels of intergroup industrial and occupational segregation were added to the right hand side.⁴ The thought motivating the inclusion of these additional variables 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

⁴ For this purpose, intergroup indexes of dissimilarity by occupation and industry were calculated using the full range of census industrial and occupational categories in the 1990 census.

distributions. Residential segregation accounts for over 40% of the variance in work tract segregation whereas industrial segregation accounts for barely 12 percent and occupational segregation just over six percent. This suggests an important result: 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 our treatment of residential segregation as exogenous. One could argue that the residential segregation of groups derives partly from their workplace geography.⁵ Many workers, however, choose workplaces from fixed residential locations. Second earners, for example, who are mostly women, do so (Hanson and Pratt 1995). Even in the case of primary earners, there is evidence that workplace choice decisions are 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 preference or housing market discrimination, non-white groups, especially African Americans, do not choose places to live from the full set of residential neighborhoods within a city. This is not a function of resource constraints; middle class minorities tend to live in own-group neighborhoods rather than in diverse settings. Some groups may be more likely to adjust their residential location in response to workplace changes, either because they possess the resources to move or lack the family and other constraints tying them down, or both: young, well-educated, single and childless whites fit this description best. Yet for the majority of workers we think that the causal structure in equation 1 makes sense.

⁵ In this circumstance, workplace segregation will be correlated with the error term in equation 1 and the OLS estimated coefficient, β_1 , would be biased upward.

Table 2 contains the results. The coefficients for residential segregation and the gender mix dummies are of the expected sign and highly significant statistically. A unit increase in the residential dissimilarity index increases the work tract dissimilarity index by 0.27 points. This 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 from 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. On first thought this is a little puzzling: should not workplace segregation be zero when groups have identical residential geography? The intercept actually measures the work tract index of dissimilarity for the omitted categories: native-born white men and women. That men and women of the same group have levels of work tract dissimilarity score of 22 suggests that levels of inter-group work tract dissimilarity scores of around 30, such as observed between native-blacks and Filipinos or native-whites and Mexicans, is relatively low.

The 11 ethno-racial coefficients identify group specific tendencies in workplace segregation independent of the level of residential segregation or gender mix (whites are the omitted category). We have graphed these coefficients in Figure 4 to ease interpretation. Prior to this modeling exercise, we had limited 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 do 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 bar 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 Iranians, whose work tract segregation score is 8 to 9 points higher than expected on the basis of their residential segregation from other groups. For Chinese, Koreans, Salvadorans, and Guatemalans the increase is about half as strong – on the magnitude of 3 to 4 points.

Native-born blacks have a significant negative group effect, which means they are less segregated than expected at work given their level of residential segregation. This is consistent with a couple of strands of existing knowledge. 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 niches. And, from what we know of networks, employment contacts between blacks are not as strong or focused on particular sectors as in immigrant groups; consequently, blacks are less likely to search for and hold jobs in niche sectors than are immigrants. 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 group workplace interactions that are more or less than expected net of residential segregation and group effects. Pairings with standardized residuals in excess of 1.645 (-1.645) – or $p < 0.1$ – are illustrated in Figure 5. 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 over-predicts the work tract segregation of native-born white women and native-born Hispanic women, native-born white men and Hispanic men, and native born white men and Mexican men. These pairings are significantly more likely to work in the same tracts than expected on the basis of their residential segregation and group effects. Deducing the reasons for this is beyond the scope our data, but it likely stems from complementarity in occupations and/or racial/ethnic preferences for working with each other. This is certainly a finding that needs further investigation.

CONCLUSION

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 paper reveals the extent to which the ethnic and racial geographies of the city are in daily flux between home and work. Work tract segregation levels in Los Angeles are half those 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 we have already cautioned, 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. Although group differences in work tract separation mirror those observed in residential neighborhoods, Martin Luther King's observations on fluctuations in the

experience of segregation applies to workers in contemporary Los Angeles. Thus residential segregation leaves its mark on the uneven distribution of workers sorted by race and ethnicity, across work tracts.

Our 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, we know of no work that demonstrates this directly. It is important evidence of the limiting effect of ethno-racial residential clustering 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. In the case of native-born blacks the opposite is the case; they cluster less by work tract than expected most likely 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 clustering 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 has important implications for our understanding of the role of residence in immigrant neighborhoods in generating employment outcomes. It suggests that ethnic neighborhoods play a substantial role in concentrating ethnic employment in particular parts of the city, but that immigrant occupational or industrial segregation has relatively little impact on group separation at

work. If ethnic and racial residential geography is 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. No doubt, a combination of discrimination and own-group preference account for the bulk of residential sorting across space (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 individual level 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 higher levels of work tract segregation our 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 paper is writ large in the magnitude of the contrast between levels of residential and work tract segregation in Los Angeles, at least for some groups. Native-born whites and Mexicans are especially illustrative of this process. These two groups maintain substantially different residential geographies but seem quite likely to work in the same places.

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-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 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; it also reduces the likelihood of their contact with other groups when they are employed.

Finally, we say a few words about the implications of our findings for the study of inter-group interaction and its consequences. Levels of residential segregation remain high and, inasmuch as they reflect discrimination in the housing market and mortgage lending, continue to be a cause for great concern. For these reasons, residential segregation should remain a key gauge of the level of intergroup tolerance and discrimination. Nevertheless, our data show that labor markets and the technical division of labor within firms and institutions pull workers from different groups to the same sites of employment. And 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 life partners or mates from other groups. There is a long tradition in Sociology of predicting the level 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 to spatial relations, the likelihood of intergroup contact – or lack of – has often been gauged by levels of intergroup residential separation. But the rise in intermarriage of late seems less likely the consequence of slowly decreasing levels of residential segregation than contact in other arenas of daily life, most notably at work (and also in schools and colleges). Our findings of especially low levels of workplace segregation between some groups, despite their high levels of residential segregation, suggest a re-specification of research on interracial relationships to consider the role of contact associated with the place of work.

Intergroup contact in the workplace has implications beyond rising intermarriage rates. Social epidemiologists and medical geographers, for example, have begun to uncover the role of neighborhoods in health, disentangling the effects of the environment

surrounding the home from household level and individual causative factors (e.g., Duncan et al. 1996; Macintyre and Ellaway 2000). Results of these inquiries show residential segregation plays a role in generating poor health outcomes by concentrating infectious diseases among residents of segregated neighborhoods (e.g. Acevedo-Garcia 2000). While neighborhood ethnic and racial segregation may serve to concentrate disease, workplace intergroup contact is likely to aid in its dispersal. Workplace interaction may be an important pathway by which disease enters and exits segregated neighborhoods. With controls for intergroup interaction in workplaces the measurement of the effects of residential segregation on poor health outcomes will become sharper.

In general, the interaction of groups in the workplace means that the theorizing and measurement of ecological effects on individual outcomes, whether it be intermarriage, health or some other measure, should not be restricted to residential neighborhoods. Of course, the workplace is not the only non-residential arena in which these effects operate; spaces of consumption and leisure are other important possibilities. Zelinsky and Lee (1998: 287), for example, speculate that the spatial disjuncture between home and work experienced by today's immigrants also exists between "home and places of worship, ethnic shopping areas, and sites of social activity." At the very least, then, our analysis of segregation by work tract will help displace the idea that residential segregation is the only metric by which to assess a city's racial and ethnic geography.

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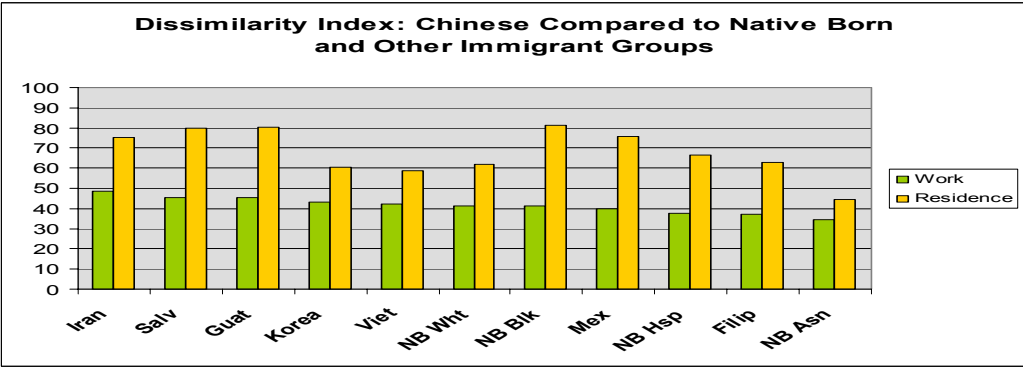
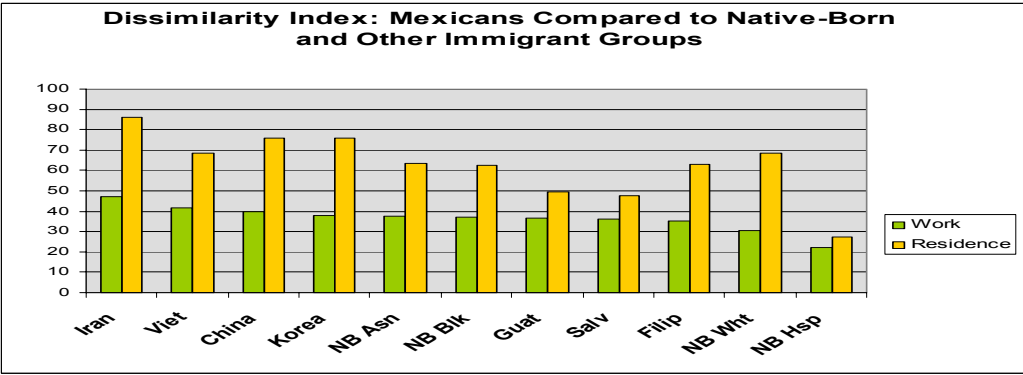
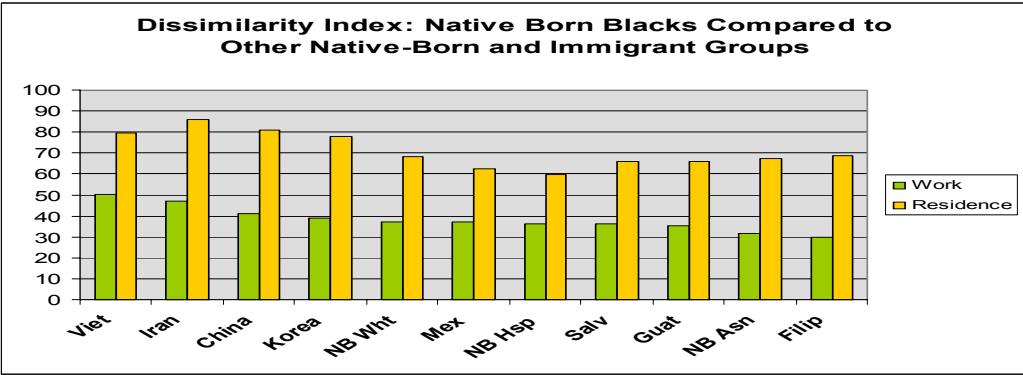
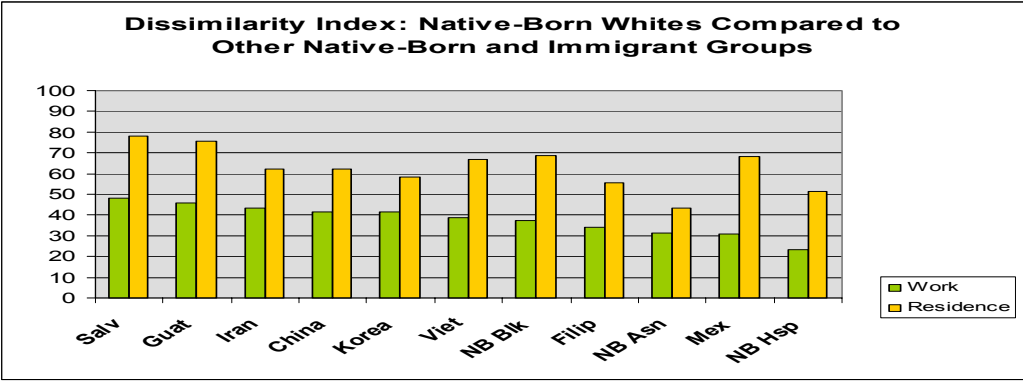


FIGURE 1: WORKPLACE AND RESIDENTIAL SEGREGATION FOR FOUR GROUPS

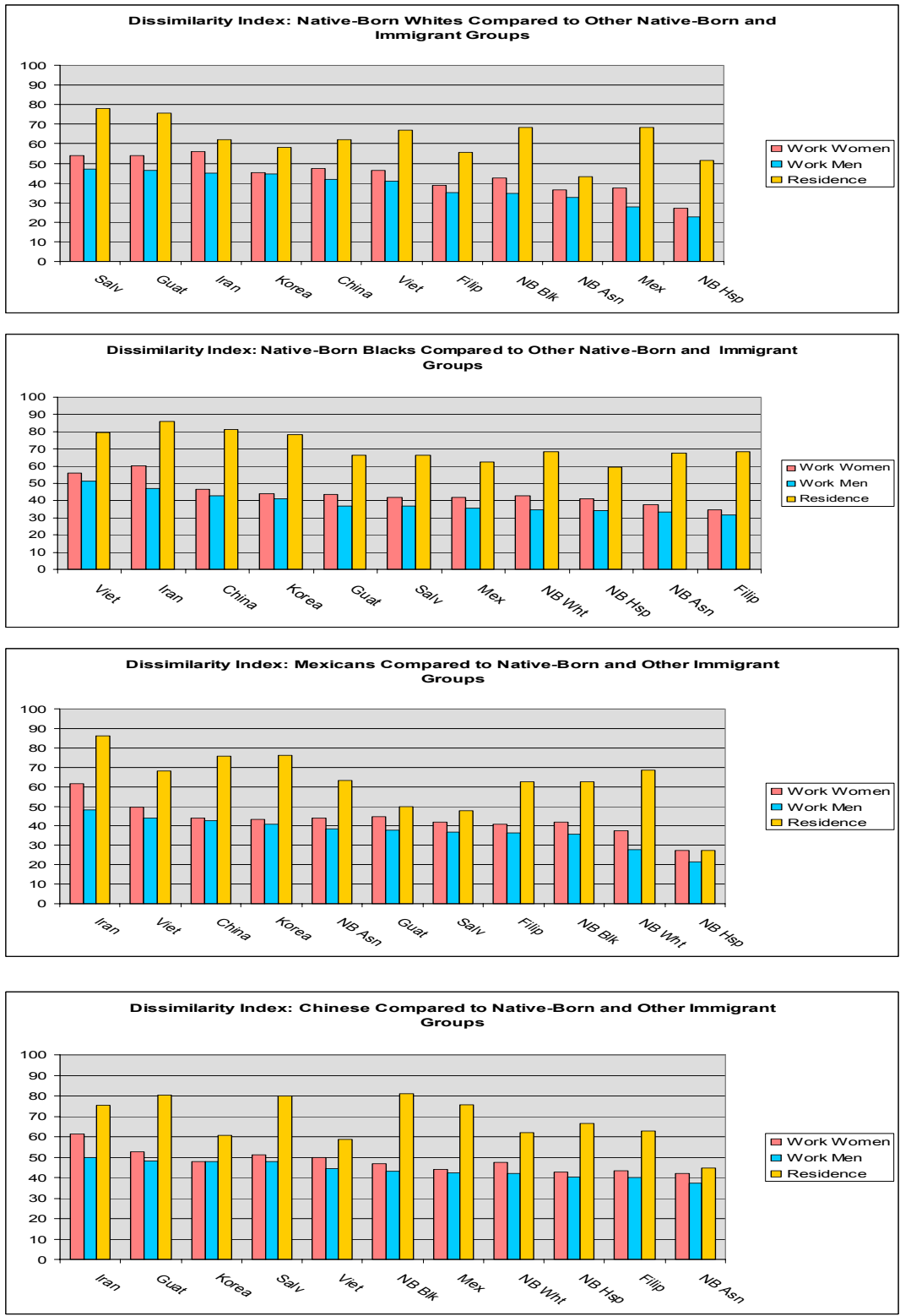


FIGURE 2: WORKPLACE AND RESIDENTIAL SEGREGATION BY GENDER FOR FOUR GROUPS

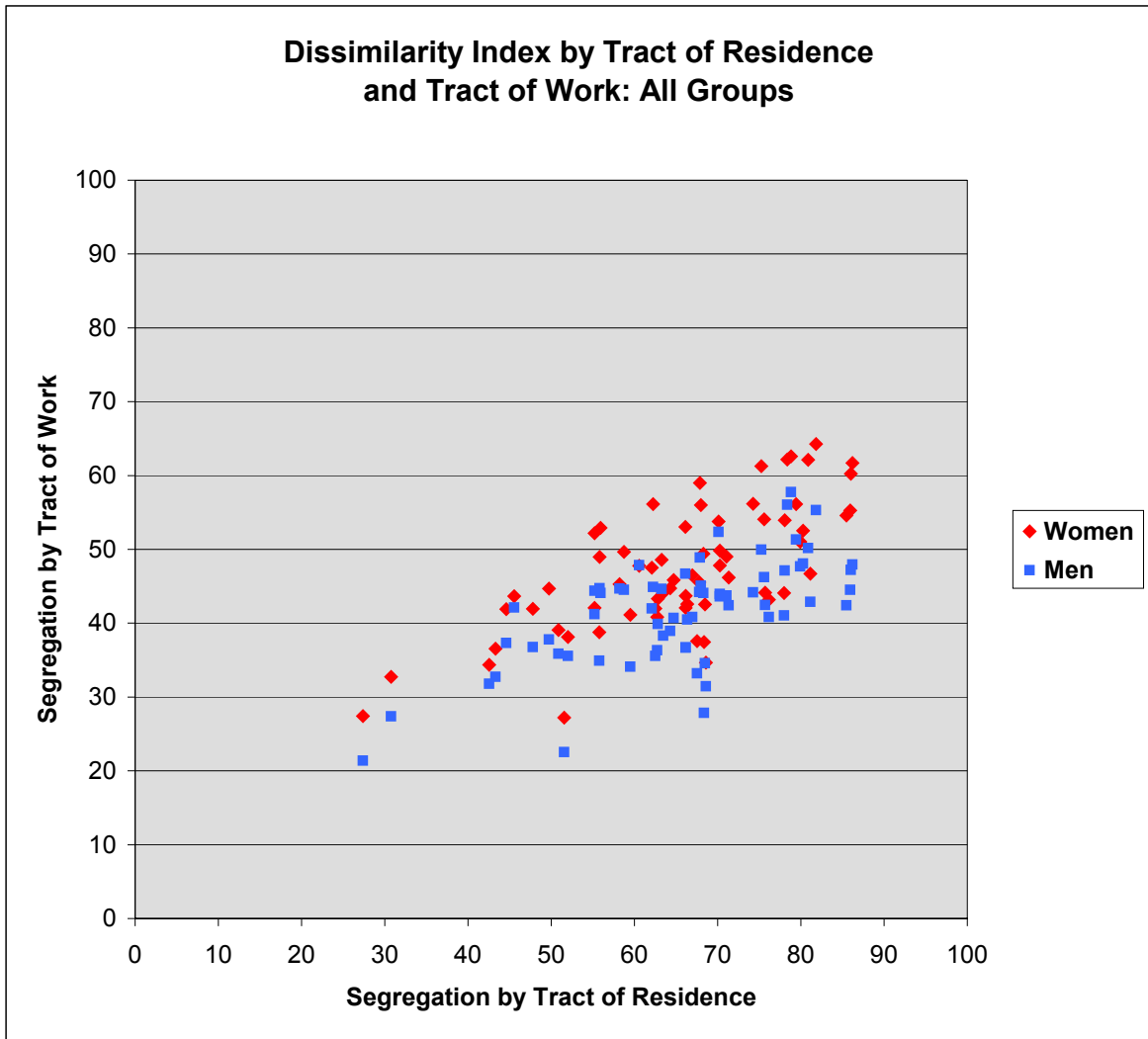


FIGURE 3. WORKPLACE AND RESIDENTIAL SEGREGATION BY GENDER: ALL GROUPS

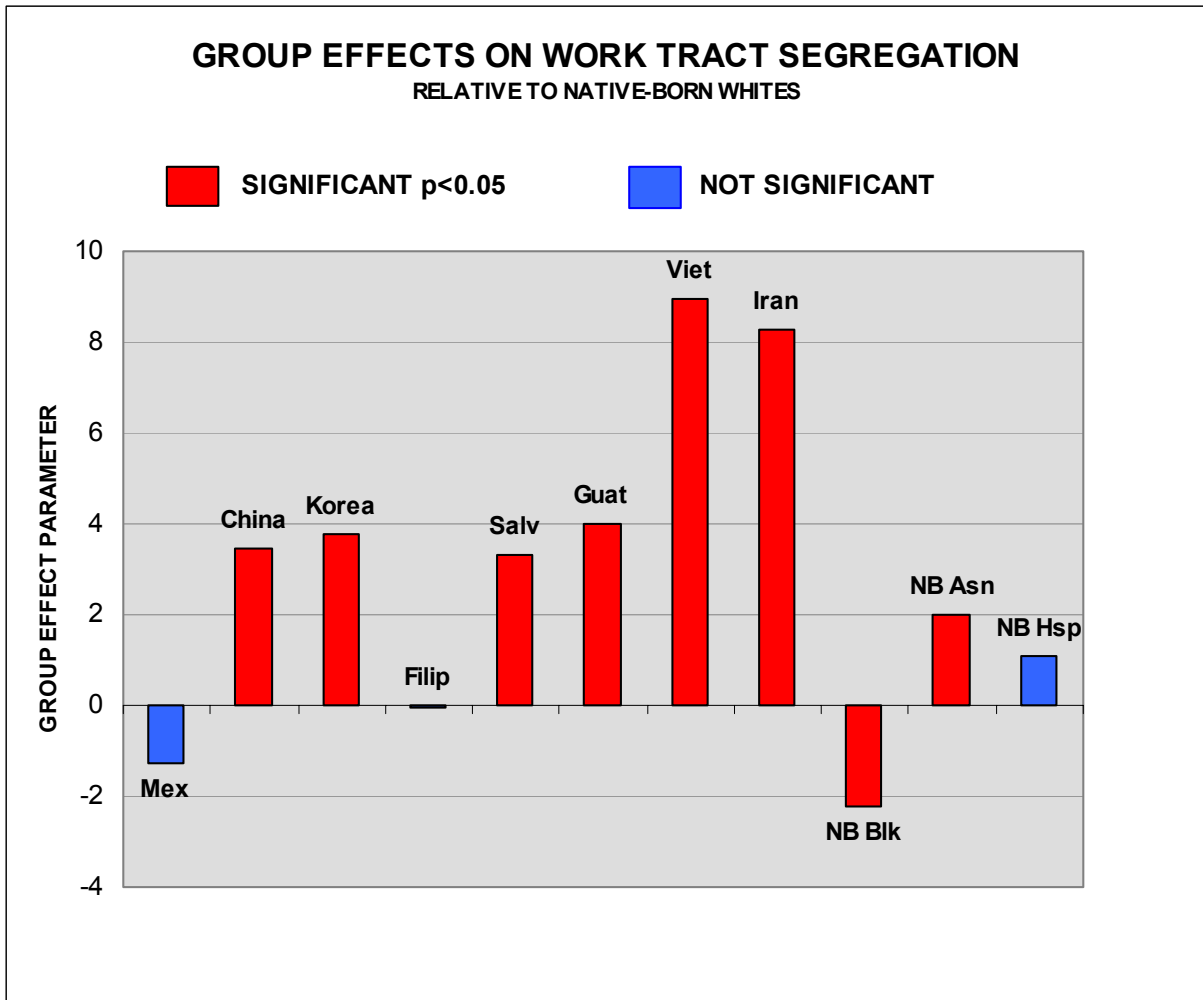


FIGURE 4. GROUP EFFECTS ON WORK TRACT SEGREGATION.

STANDARDIZED REGRESSION RESIDUALS

■ UNDERPREDICTED ■ OVERPREDICTED

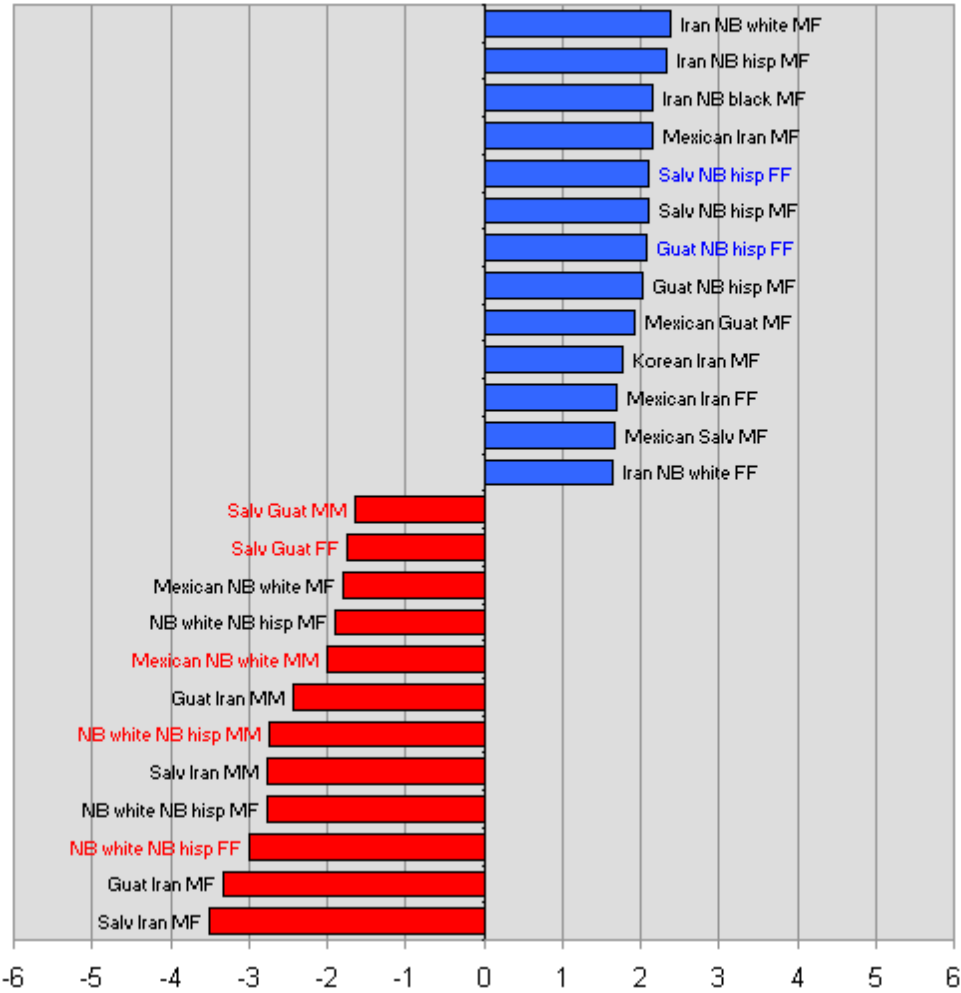


FIGURE 5. STANDARDIZED REGRESSION RESIDUALS

	<i>Work Tract</i>	<i>Resid Tract</i>	<i>Industry</i>	<i>Occupation</i>
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.

TABLE 1. COEFFICIENT OF DETERMINATION BETWEEN FOUR INDEXES OF DISSIMILARITY

<i>Variable</i>	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Statistic</i>
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

<i>Regression Statistics</i>	
Multiple R	0.865
R Square	0.748
Adjusted R Square	0.734
Observations	264

TABLE 2. REGRESSION RESULTS: DEPENDENT VARIABLE IS WORK TRACT INDEX OF DISSIMILARITY

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