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Learning in Place: Immigrants' Spatial and Temporal Strategies for Occupational Advancement

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abstract

Studies of low-wage workers have long recognized the role of space in mediating access to employment. Significantly less attention has been paid to the ways in which space informs workers' ability to develop the attributes that would make them more employable. In this article, we address this gap through an examination of how immigrant workers use the relative spatial organization of residence and production to cultivate the skills that enable them to shift out of low-wage occupations. We also argue that workers' spatial job market strategies have an important, but often overlooked, temporal aspect: workers use space over time not only to shape their access to jobs but also to create breathing room for learning skills that enable them to improve their employment trajectories over the long term. Drawing on a multiyear ethnographic study of Mexican immigrants in downtown Philadelphia, we show that immigrant workers used the functional proximity among the restaurant industry, small-scale residential construction work pertaining to housing renovation, and the neighborhoods where they lived to develop skill sets that enabled them to shift into higher-wage construction jobs. In essence, these workers knitted together two seemingly separate industries, such that they could use their employment time in one for learning in and about the other. Our study suggests that interventions that curtail immigrants' mobility may have implications that are far more serious than limiting immediate access to jobs: these measures may undercut immigrants' strategies for developing the skills required for long-term occupational mobility and advancement.

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A central concern in economic geography has been the role of space in mediating workers' ability to obtain employment. Relevant analyses have focused more narrowly on workers' access to jobs at a single point in time, rather than the ways in which workers negotiate spatially organized labor markets over the long term (Parks 2004). Spatial mismatch theory, for example, is centrally concerned with the ways in which geographies of production and residence determine workers' ability to obtain employment. A subset of spatial mismatch studies have focused more specifically on immigrants, and there too the emphasis has been on access to jobs (Stoll and Raphael 2000; Painter, Liu, and Zhuang 2007; Pastor and Marcelli 2000; Ellis, Wright, and Parks 2007).

Although access to jobs is important to workers' welfare, sociologists and economists have cautioned that it is only part of the story. For workers in low-wage labor markets, immigrant and nonimmigrant alike, the surest path to higher-wage employment is occupational mobility—that is, the ability of workers to move out of low-wage jobs and into higher paid positions (Myers and Cranford 1998; Orrenius and Zavodny 2007; Anderson, Holzer, and Lane 2005). This transition occurs over time, frequently with workers moving through a series of jobs that are often only marginally better than their previous ones (Sanders, Nee, and Sernau 2002; Chiswick, Lee, and Miller 2005). In the process, workers acquire attributes that can make them more employable and that strengthen their prospects of landing better-quality jobs (Bailey and Waldinger 1991; Iskander 2007). Most salient among these attributes are skills and work-related experience, membership in social networks and access to information about job opportunities, and connections to labor market intermediaries. Workers develop these assets incrementally as they strategically navigate labor markets and use job transitions as a central approach to improving their employment standing (Anderson et al. 2005).

Both sets of explorations consider the ways in which workers negotiate spatially organized labor markets over time. Significantly less attention, however, has been paid to the ways in which space also informs workers' ability to develop desirable attributes. Existing frameworks offer little insight into how workers use the relative spatial organization of residence and production in different industries to cultivate the qualities that enable them to shift out of low-wage occupations into those that offer better

remuneration. In addition, they provide little indication of how those spatial strategies may have a temporal aspect, especially regarding how workers use spatial organization to create the time they need to develop the skills they need to shift from one occupation into another.

In this article, we address this lacuna by presenting a case study on Mexican immigrant workers in downtown Philadelphia. We examine how the relative spatial organization of work and residence allowed the Mexican immigrants to develop and hone the skills they needed to transition out of low-wage employment, primarily in the restaurant industry, and into higher-wage jobs in construction. The case we present is based on a multiyear ethnographic study of the strategies that Mexican immigrants developed to navigate Philadelphia's labor markets, conducted from late 2006 through early 2009, combined with an analysis of the spatial distribution of the industries in which immigrants worked and the neighborhoods in which they settled. We found that Mexican immigrants used the functional proximity among the restaurant industry, small-scale residential construction work pertaining to housing renovation, and the neighborhoods where they lived to develop skill sets that enabled them to shift into construction work. In the process, the workers knitted together two seemingly separate industries, such that they could use employment in one for learning in the other. On the basis of our findings, we advocate for a consideration of the ways in which workers use the spatial relationship between employment and residence to craft strategies for occupational mobility. We present this case as an illustration of the important, and often overlooked, role that workers play in structuring the economic geography of labor markets. We also draw attention to the temporal context in which these workers' strategies unfold, showing that workers use space over time not only to shape their access to jobs but also to develop attributes that improve their employment trajectories over the long term.

Space, Skill, and Process

Explorations of the impact of geography on low-wage labor markets have focused primarily on how space magnifies social inequality in employment outcomes. The explanatory vector is access to jobs. More specifically, these accounts have considered whether the spatial distribution of these jobs affects individuals' ability to connect to them (Fernandez and Su 2004; Massey and Eggers 1990; McLafferty and Preston 1996). Although the studies that have made use of this literature have not defined space in terms of geographic absolutes and have recognized that spatial arrangement affects labor market outcomes in complex ways, their central argument has been that space matters because of the particular ways in which it structures—and limits—access to employment opportunities at a specific moment: the time it takes for an employer to decide whether to hire a worker or the time it takes for a worker to decide whether a job is worth the time spent commuting from his or her residence.

Even longitudinal studies have displayed a similar focus on discrete moments of employment: while they may have reviewed the ways in which space constrains access to jobs over a given period, their analyses have considered access to employment as a series of one-off, separate events, each occurring at a distinct moment (Scott 2010). Aggregate trends have then been scrutinized to determine whether factors that are exogenous to workers' employment histories, such as the relocation of factories or changes in residence patterns, may affect employment outcomes (Zax and Kain 1996; Fernandez 1994; Popkin, Rosenbaum, and Meaden 1993). These analyses have not—and in point of fact, could not—speak to how space informs a worker's cumulative trajectory through a labor market over time; they have offered little insight into how the spatial organization of

labor markets shapes workers' strategies to create employment pathways for occupational advancement.

The limited attention given to occupational advancement has been reinforced by the ways in which previous studies of space and employment have portrayed workers' skills. For the most part, skills have received cursory treatment in spatial mismatch studies, but when they have been considered, they have been defined as fixed traits, a stock of human capital most often signified by indicators of formal education or training certification, that workers possess at the time of an employment decision (Mouw 2000; Pastor and Marcelli 2000; Wagmiller 2007; Dickerson 2007). This definition presumes that skills are acquired in discrete chunks, with certifications and credentials signifying the skills that workers hold at a particular moment. In addition, under this lens, skill building has been perceived to be separate from the work environment itself, and, as a result, it is a process that does not require employers to consider or engage with the evolution of learning processes.

56 But as recent scholarship on learning and cognition has illustrated, skills are better understood as attributes that are developed over time and often through learning that occurs on the job (Scribner 1984). Furthermore, skills that are learned on the job are often made up of knowledge that cannot be easily articulated or codified but, rather, are folded so deeply into everyday work practices that even employers and workers at a job site can have difficulty pinpointing the precise contours of skills that are involved in certain production tasks (Gertler 2004; Lave and Wenger 1991; Rogoff and Lave 1999). Recasting skills in this light has implications for how we think about the relationship between skills and space and, more specifically, what this relationship implies for occupational mobility. For starters, it suggests greater challenges for workers in moving their skills from one environment to another, insofar as workers must demonstrate to their employers that prior on-the-job learning processes were robust enough to provide them with the skills for the job at hand (Appelbaum, Bernhardt, and Murnane 2003). By default, this ambiguity around acquired skills also creates challenges for employers in evaluating and interpreting the quality of skills of a potential hire (Anderson et al. 2005; Levy and Murnane 2005).

In recognition of these shared challenges, numerous industries, ranging from construction to hospitality to medical care, have established formal apprenticeship programs to enable workers to learn while they work (Palladino 2005; Collins, Seely Brown, and Newman 1989; Elbaum and Singh 1995). Apprenticeship programs provide workers not only with mentorship and supervision to guide the experiential learning process on the job, but also, more significantly, with the sheltered stretch of time required to master the skills that are necessary for consistent employment in an industry (Gertler 2004; Brown and Duguid 1991; Lave and Wenger 1991; Sennett 2008). By making these on-the-job skills visible to potential employers, apprenticeships help workers easily transfer skills from one employment environment to the next. But apprenticeship programs are rarely available to workers in low-wage labor markets, thus creating implications for how these workers develop and demonstrate skills over time. Low-wage workers often change jobs frequently to acquire additional skills, with each job change acting as a stepping-stone toward higher-level occupations (Anderson et al. 2005). Still, for these changes to result in occupational advancement, they must provide an opportunity for learning and expose workers to new sources of knowledge.

The repeated job changes required for occupational mobility arguably make low-wage workers more sensitive to the effect of space on employment decisions. Each job transition subjects the workers to the impact of geography on the ways in which their skills are interpreted and valued. Thus, spatial patterns of residence and employment may

matter most for low-wage workers with ambitions for occupational advancement or change. However, because their skills are often perceived as a set of fixed attributes, a stock of human capital, evaluated as a single moment in time, the ways in which spatial patterns influence the strategies these workers use to learn and harness new skills, including repeated transitions through jobs, are left largely unexamined.

Immigrants in Space and Time

A growing segment of the spatial mismatch literature has focused on immigrant workers in particular and the ways in which the relationship between spatial patterns of residence and the location of production have channeled these workers into a subset of industries (Ellis et al. 2007; Parks 2004; Wang 2010; Hiebert 1999). To explain why spatial patterns have funneled workers into certain industries, scholarship on immigration has often focused on the role of ethnic social networks that nuance the impact of space on access to jobs (Waldinger 1994). The most prevalent view in this stream is that immigrants' social networks are a source of information about jobs and skills that can counteract the exclusionary effect of space on access at the moment of hiring. These networks provide employers with a recruiting system through which they gather credible information about the skills that their potential hires possess (Light, Sabagh, Bozorgmehr, and Der-Martirosian 1994). They also provide immigrant workers with information about employers who are seeking workers with a certain skill profile (Waldinger 1994) and about how to present their skills so that they more closely match the employers' needs (Cornelius 1998). The sorting function that networks play reduces the cost of searching for employment, but, more significantly, it diminishes the risk at the moment of hire for both immigrants and employers and dampens any discounting effect that distance has on the value ascribed to immigrants' skill. Like spatial mismatch theories, however, this network-informed analysis of immigrants' employment has also adopted a limited temporal approach: it emphasizes access to jobs and depends on a similar view of skills as fixed attributes that are relevant primarily at the point of hire.

In contrast, the literature on ethnic enclaves—while also stressing the function of social networks in mediating employment opportunities—is based on a markedly different understanding of access to jobs and skills, and implicitly, a far broader temporal view. Ethnic enclaves, as originally conceptualized, are defined by the spatial concentration of immigrant-owned firms that primarily employ coethnic workers (Wilson and Portes 1980; Portes and Jensen 1989; Portes and Bach 1985; Light et al. 1994). In these accounts, the spatial clustering of ethnic firms, run by ethnic employers and staffed by coethnic workers, supports the emergence of new firms; business partnerships; and even new, often “ethnic,” products and services (Wilson and Martin 1982). The economic vibrancy associated with ethnic enclaves is attributed to the social networks that run through them. Rather than a simple vehicle for information, networks in ethnic enclaves act as institutions that structure economic behavior and social interactions as they unfold over time, governing repeated, continual, and evolving economic exchanges.

Perhaps what is most significant for questions of occupational mobility, social networks within enclaves also foster learning and the development of entrepreneurial initiatives. They provide workers with ambitions to set up businesses with entrepreneurial “know-how,” informal lines of credit, contacts, and even access to markets, and thus they also support the economic advancement that entrepreneurship often implies (Portes and Stepick 1985; Portes and Jensen 1989; Kim 1999; Logan, Alba, and McNulty 1994).

Heated debates have emerged about whether the social networks and spatial concentration of ethnic networks actually support workers' welfare, but the argument that ethnic enclaves support the development of skills over time has remained uncontested. Participants in ethnic enclaves, working in close quarters, cultivate skills, and particularly entrepreneurial ability, through face-to-face interactions during which information and entrepreneurial expertise are exchanged, augmented, and renewed. "Insofar as the ethnic economy trains entrepreneurs," observed Light et al. (1994, 72), "its significance rests on long-run possibilities for advancement and not on relative wages." Portes and Bach (1985, 47) were even more forthright about the development of skills in enclaves, noting that the significant advantage to workers is often reflected in the discount in wages that workers will accept: "While owners frequently employ paternalistic arrangement to extract more labor and pay lower wages, they also provide an apprenticeship opportunity for other [coethnic] immigrants."

58 Within this framework, the relevance of space is not in the access it affords workers to jobs but, rather, in the support that spatial agglomeration provides for learning over time—and, ultimately, for the occupational advancement that such acquisition of skills makes possible. In other words, whereas skills in the spatial mismatch literature are assets whose worth is informed by spatial patterns and whose value is determined at the specific moment they are assessed, the acquisition of skills in ethnic enclaves is a process that stretches over time and is nurtured by the spatial grouping of immigrant businesses and actors.

In recognizing that the development of skills is an ongoing temporal process, however, even the most laudatory accounts of ethnic enclaves leave undetermined the exact mechanisms through which the spatial organization of enclaves supports processes of skill development and how these processes unfold over time. Consequently, critics have argued that spatial concentration and learning have been erroneously conflated and that, in actuality, spatial location may be tangential to the question of skill development. Bailey and Waldinger (1991), for example, argued that the geographic concentration of businesses in ethnic enclaves is a distracting spatial artifact of social networks. What matters most is the role of ethnic enclaves as ongoing "structures that reduce the risks of investment in skills or training by increasing the probability that firms and/or workers will be able to make productive use of the skills in which they have invested" (1991, 433). Social networks that run through ethnic enclaves and through the firms that connect to them make it more likely, according to Bailey and Waldinger, that employers or more senior coworkers will provide new employees with on-the-job training. In their view, that social networks and the training systems they support are spatially concentrated is not relevant; what matters most is how they support the ongoing process of skill development.

Hiebert (1993) offered a more nuanced critique to the view that the spatial concentration of networks alone supports learning. He argued, in his rich case study of Jewish immigrants in Toronto's garment industry, that spatial concentration matters because it strengthens the social networks that support learning in ethnic enclaves. Jewish immigrants who arrived in Toronto at the turn of the twentieth century settled in a cluster of densely inhabited neighborhoods where the skilled tailors among them opened garment factories and hired other Jewish immigrants. New arrivals also established a wide array of community and religious organizations, which fostered ethnic solidarity and reinforced social networks—and assumptions of reciprocity—that supported coethnic hiring, skill development, and entrepreneurship in the cluster. While the spatial collocation of Jewish-owned garment firms and Jewish residents facilitated coethnic hiring, it was the social relationships that were forged in the neighborhood that supported the occupational mobility of many from workers to business owners (Hiebert 1993).

Although these critiques are helpful in that they highlight the social dimension of learning, they still emphasize ethnic networks rather than space itself. As a result, space becomes a facilitator for social networks, rather than a factor in its own right that informs the development of skills. But does space support the development of skills only through the social networks it strengthens? How may space affect the development of skills over time, and how is the spatial-temporal relationship explored and strengthened by immigrant workers?

In considering this question, it is also important to recognize that immigrant workers often move across industry lines, requiring us to consider, as Portes (1981) pointed out, the interplay between these industries. The literature on immigration more broadly has long recognized the ways in which immigrants piece together seemingly disparate jobs across industry lines but has typically presented these ways as a survivalist strategy driven by narrow concerns about gains in income (Dohan 2002; Raijman 2001). Furthermore, when examined in more detail, such employment patterns are frequently used to illustrate qualitative differences in these jobs, often by looking at the relative degree of formality of each job (Zolniski 1993, 2006; Tienda and Raijman 2000). This view overlooks the ways in which immigrant workers may themselves take advantage of the proximity of multiple jobs and, more specifically, the ways in which they actively fuse connections between them in an effort to build skills and enhance career opportunities over the long term. It has implications for the incorporation of immigrant labor markets and for understanding the role that ethnic networks may play in knitting together multiple industries.

Combining the attention to the spatial clustering of ethnic firms offered by the literature on ethnic enclaves with the attention paid by economic sociologists to temporal processes of immigrants' development of skills leaves several important questions unanswered about the advancement of immigrants in the labor market. For example, how does the spatial relationship between different industries, including industries in which immigrants are not the employers, enable workers to develop strategies to acquire the necessary skills to transition to better jobs? How does the spatial proximity of these industries allow workers to create the support they need, over an extended period, to cultivate skills that are deep enough to shift from a low-wage sector to an occupation that is more highly remunerated? What impact does immigrant workers' physical mobility across physical spaces in which different industries are located have on the workers' ability to create employment trajectories, especially those that involve crossing over from one industry to another? We argue that the answers to these questions reveal immigrants to be agents who use space over time to build skills, to move across occupations, and to structure labor markets.

Research Design and the Emergence of Spatial Patterns

To investigate the strategies through which immigrant workers with limited formal education or training navigate labor markets, we looked at Mexican immigrants who were working in the construction industry of Philadelphia, Pennsylvania. Although often represented as a low-skilled industry, particularly where immigrant workers are concerned, the construction industry is actually highly reliant on the skills of its workers for its performance, for completing outstanding contracts, and for achieving high-quality standards (Palladino 2005). So significant are the skills of workers—immigrants and nonimmigrants alike—that some analysts now classify construction as a “knowledge-intensive” industry and its laborers as “knowledge workers” (Pathirage, Amaratunga, and Haigh 2007; Grabelsky and Elrich 1999). The skills that are most salient are those

acquired on the job, and, as a result, the industry, with support from labor market intermediaries, such as unions and industry associations, has established apprenticeship programs that help workers develop job-related skills as they transition into the industry (Palladino 2005). While native-born workers have long benefited from these programs, immigrant workers have limited access to formal apprenticeships (Fine, Grabelsky, and Narro 2008; Theodore 2003) and find that they have to carve out informal strategies to acquire the necessary skills for secure consistent employment and even marginal occupational advancement (Milkman 2006).

60 Our selection of Philadelphia was deliberate: to discern how immigrants carved out new strategies for the demonstration and acquisition of skills, we chose to focus on a labor market where long-standing ethnic social and institutional supports were not yet well established for new immigrant arrivals. In the past decade, Philadelphia emerged as an immigrant gateway city; in particular, it saw a dramatic rise in its population of Mexican immigrants. In 2000, the city's Mexican population numbered just over 6,000; by 2006, it nearly doubled to almost 11,000. The Mexican population continued to grow apace, and, by 2010, the census indicated that its size had swelled to 14,000, almost tripling in only a decade (U.S. Census Bureau, 2000, 2006, 2010). We chose to limit our research focus to Mexican immigrants to capture the effect of intraethnic social networks on skill-development strategies.

To identify how Mexican immigrants navigated construction industry labor markets in Philadelphia, we conducted 95 in-depth interviews between late 2006 and early 2009 with Mexican immigrants who were employed or had been employed in construction. We used a variety of sampling methodologies to connect with immigrant workers: we approached immigrants in community locations in Center City and South Philadelphia, such as taquerías, corner stores, soccer games, and cultural fairs; we made announcements about our research in local Spanish-language Catholic masses and asked for volunteers to participate in the study; finally, we relied heavily on snowball sampling, asking the immigrants we interviewed to put us in contact with friends and colleagues who worked in the construction industry. The interviews were all conducted in Spanish and explored employment trajectories, skill-development practices, and working conditions on job sites. We complemented the individual interviews with three focus group conversations, each with 6 to 12 participants and lasting approximately 3 hours, during which we explored collective intraethnic strategies for gaining access to jobs and developing skills. While some of the interviews were conducted in community spaces, many of the interviews were conducted on job sites or in areas near job sites. Cognizant of the importance of context to the way in which skills were understood and constructed, we visited numerous construction sites where the immigrants we interviewed were employed and observed work practices as they unfolded. We bolstered our ethnographic engagement with immigrant workers by conducting approximately 40 supporting interviews with central institutional actors to investigate the organization of construction labor markets, the incorporation of Mexican immigrants within them, and the challenges that immigrants faced in obtaining employment and acquiring skills. Specifically, we interviewed local industry leaders, industry training bodies, and locals of building trade unions; we spoke with governmental officials, focusing especially on agencies that regulated construction trends and work processes on job sites; and we consulted with service providers for immigrants, including workers' centers, local Mexican consulates, and churches.

Our research revealed that Mexican immigrants working in construction in Philadelphia were overwhelmingly employed in nonunion jobs at small-scale residential rehabilitation projects in historic Center City neighborhoods. Most reported also working in

restaurants in the Center City even as they picked up jobs in construction. In addition, they explained that these double shifts were possible only because the neighborhoods where they had settled were within walking or biking distance from both the construction and restaurant jobs in downtown Philadelphia.

When our interviews with the Mexican construction workers began to indicate that their employment strategies depended on the spatial relationship between their jobs in the construction industry and in Philadelphia's restaurants and their homes, we conducted an analysis of the spatial organization of Mexican immigrants' employment and residence. We used detailed population data, derived from the 2005–9 American Community Survey, to map the residence of the foreign-born Mexican population by census block groups throughout Philadelphia, which revealed a concentration of Mexican immigrants in a specific area of the city (U.S. Census Bureau 2006, 2010). To analyze further the spatial proximity of residence relative to sources of employment, we also created descriptive maps representing restaurant and construction activity in the city during the period of our study. To tally and map food and drinking (restaurant) businesses in Philadelphia, we used locations by zip codes from 1999–2005 census data on businesses (U.S. Census Bureau 2005). For construction work, we drew on data published in 2005 by the Philadelphia City Planning Commission regarding major construction projects throughout the city (Philadelphia City Planning Commission 2005). Finally, we used data from Philadelphia's Board of Revision and Taxes, covering the years 1999–2007, regarding median residential sales prices and the number of sales themselves (Board of Revision of Taxes—Philadelphia 2008) to discern both the location and price of housing sales and the velocity of the market.

Spatial Organization

The spatial organization of central Philadelphia, and the manner in which it would ultimately support Mexican immigrants' strategies for occupational mobility, was the product of a successful redevelopment effort in Philadelphia's downtown, called Center City. Marked by decades of deterioration resulting from deindustrialization, Center City's transformation was launched under Governor Rendell in the late 1990s, including large-scale public-private projects and government-led improvements to the streetscape (Kostelni 2005; Center City District and Central Philadelphia Development Corporation 2008). Spurred by an aggressive program of tax abatements, dozens of large-scale residential and commercial projects were in progress throughout the downtown area by the early 2000s; the city's Planning Commission reported \$1.7 billion in major development projects in the core downtown area, as well as nearly \$2.0 billion in the pipeline, by 2004 (Philadelphia City Planning Commission 2005). A growing downtown population—increasing by 14 percent from 2000 to 2008 and making Center City the third-most populated downtown in the country (Adams, Bartelt, Elesh, and Goldstein 2008)—and shifting demographics that included young professionals and empty nesters with relatively high levels of disposable income (Center City District and Central Philadelphia Development Corporation 2005), augmented these changes.

This downtown residential boom produced two distinct housing construction markets, one in Center City and one immediately adjacent to the south. In Center City, the demand for high end housing flourished as the population became more affluent. More than 8,000 units were added to the area between 1997 and 2005, with more than 1,700 units added each year in 2004 and 2005 alone (Center City District and Central Philadelphia Development Corporation 2005). Units could not be sold fast enough: during the third quarter of 2005, they were on the market for an average of only 35 days (Guillen 2010). These

particular projects generated a substantial amount of high end construction work within Center City, most of which was completed by large construction firms that used unionized labor; an estimated 80 percent of the downtown construction market was affiliated with Philadelphia's building trade locals.

The demand from the growing residential population, however, also quickly pushed the boundaries of the housing market beyond Center City and into a secondary market that lined its southern edge. Faced with downtown's upscale development and expensive prices, waves of newcomers began settling in the city blocks of densely packed, more affordable row homes. Widespread rehabilitation work on this older housing stock accompanied rising sales; the average of all median sales prices for the 46 census block groups that compose the area of Center-South Philadelphia rose from \$70,904 in 1999 to \$218,235 (in 1999 dollars) in 2006, representing a 200 percent increase, and the average number of sales increased by over 50 percent (Board of Revision of Taxes—Philadelphia 2008). As an official at the Philadelphia City Planning Commission observed: "The big deal with construction is [that] all of these areas are experiencing skyrocketing prices in real estate and construction."

62 This spillover construction market was markedly distinct in its organization from the high-end downtown market. Characterized by relatively short-term and low-capital projects, renovations of the area's row homes were done by a large number of small, independent contractors who typically employed a handful of nonunionized workers. The contractors who completed these renovations were a diverse group: some were nonimmigrant union construction workers who renovated homes on the side; others were Italian or Portuguese immigrants who had arrived in the 1970s or earlier; and still others were professionals in related fields, like engineering or architecture, who were also new residents of the neighborhood taking advantage of increasing housing values to rehabilitate and resell their own houses or houses nearby. Rapid-fire sales, and the likelihood of a quick profit, led to a fair amount of "flipping"—the rapid purchase, rehabilitation, and selling of a building. This sector of residential work was overwhelmingly informal, and contractors almost uniformly skirted the city's permit and certification requirements. As an official at the city's Office of Licenses and Inspections bemoaned, "Contractors [on smaller jobs] often operate without licenses." He specified that the construction and rehabilitation of row homes without a license was ubiquitous, adding: "I don't think I could even guess how many are operating without permits or licenses."

The housing rehabilitation sector evinced a strong demand for labor; because the labor market was largely unregulated, with most workers hired off the books, calibrating the exact growth of the labor needs is impossible. Still, the rapid expansion and quick turnaround of renovation projects suggest a dramatic increase in the demand for labor. For employers, the new—and substantial—influx of Mexican immigrants was an attractive source to fill their manpower needs. With the vast majority undocumented, the Mexican immigrants represented a flexible and plentiful workforce that could be hired and fired at will, depending on the stage of a construction project. Moreover, many Mexican immigrants—about 60 percent of our sample—arrived in Philadelphia with some previous construction experience acquired in Mexico.

Center City's restaurants expanded with the same fervor as the downtown housing market, clustering near new, wealthier residents to whom they catered: between 1990 and 2006, the number of restaurants downtown increased by almost 200 percent. By the mid-2000s, more than 300 full-service restaurants were in operation in the district, and the sector as a whole accounted for a full third of retail outlets in Center City (Center City District and Central Philadelphia Development Corporation 2008; U.S. Census Bureau 2005).

Like construction contractors, restaurant owners required a labor force that would allow their establishments to meet the increasing demand, and Mexican workers quickly filled this need, most notably working as busboys, dishwashers, and line cooks in the back end of restaurants. Mexican immigrants also served as recruiters for restaurants, bringing in friends and family members and soliciting workers from their hometowns in Mexico (Kilpatrick 2006). Restaurants soon became the gateway industry for Mexicans coming to Philadelphia.

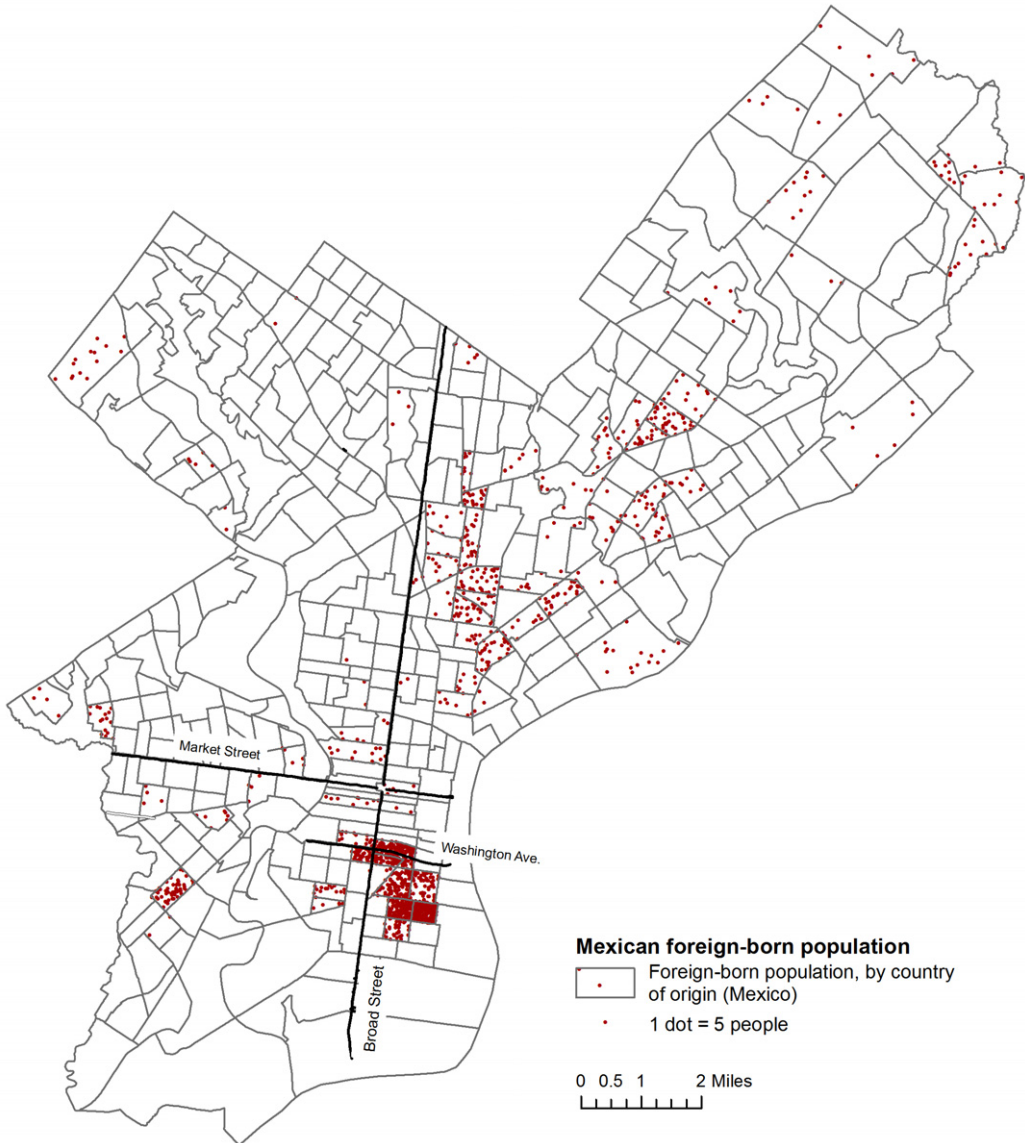
Mexican immigrants' entry into Center City restaurants was supported by a strong supply of affordable rental housing units in South Philadelphia, a neighborhood about a mile from downtown where older row homes and apartments carried low rental prices reinforced by prior years of decline. In 2000, the median monthly rent for apartments in South Philadelphia was \$534, whereas for the city as a whole, it was \$569 (U.S. Census Bureau 2000). Social networks also magnified settlement patterns of Mexican immigrants. In the early 2000s, most of the new arrivals to Philadelphia came from a handful of towns in the northwestern corner of the Mexican state of Puebla, most prominently from San Mateo de Ozolco. By the late 2000s, the overwhelming majority of Mexican immigrants were concentrated in a 10-block area at the northern end of the neighborhood, pressing up against Washington Street, which marked the informal border of South Philadelphia. Map 1 shows this highly concentrated residence pattern.

Thus, for the Mexican immigrants, the dense city fabric of Philadelphia was divided into three spatially adjacent areas, as depicted in Map 2: their area of residence, an emerging Mexican neighborhood at the northern frontier of South Philadelphia; the labor market associated with housing renovation, located just north in the swathe of city sandwiched between Washington Street to the south and South Street to the north; and the labor market for the restaurant industry, supplying the establishments concentrated between South and Vine streets, just north of the renovated row homes and right near the city's newer luxury housing units. Although these three strips were underserved by public transportation, their total area comprised approximately 30 blocks, and moving between them was easy for Mexican immigrants, who reported that travel times from their homes in South Philadelphia to restaurants located in the northern most segment of this configuration were no more than 20–30 minutes by foot and about 10–15 minutes by bicycle. This geographic concentration facilitated spatial access to jobs, but it is the way in which the Mexican immigrants used this spatial proximity to develop skills that allowed them to transform space into a vehicle for occupational mobility.

Building Skills

In Philadelphia in the mid-2000s, jobs in the restaurant industry were relatively easy to obtain for Mexican immigrants, and backroom restaurant work became the equivalent of a Mexican niche subeconomy. However, for Mexican workers, construction work was clearly their employment of choice, primarily because of the wages. In our sample, the Mexican immigrants who were working in restaurants earned an average self-reported \$300 per week, slightly more than the minimum wage of \$290 for a 40-hour week, and the possibilities of earning additional income through overtime or tips were sporadic. The workers were mostly confined to backroom restaurant jobs, and prospects for advancement to jobs as chefs or waitstaff were exceedingly rare. In housing renovation, by contrast, the starting wage for a new worker who began as a helper—or *ayudante*—averaged \$80 per day, while workers with more experience were able to earn about \$100 a day—or \$120 during the peak summer months. These wages were lower than the average earnings of construction workers in Philadelphia in the mid-2000s at a mean

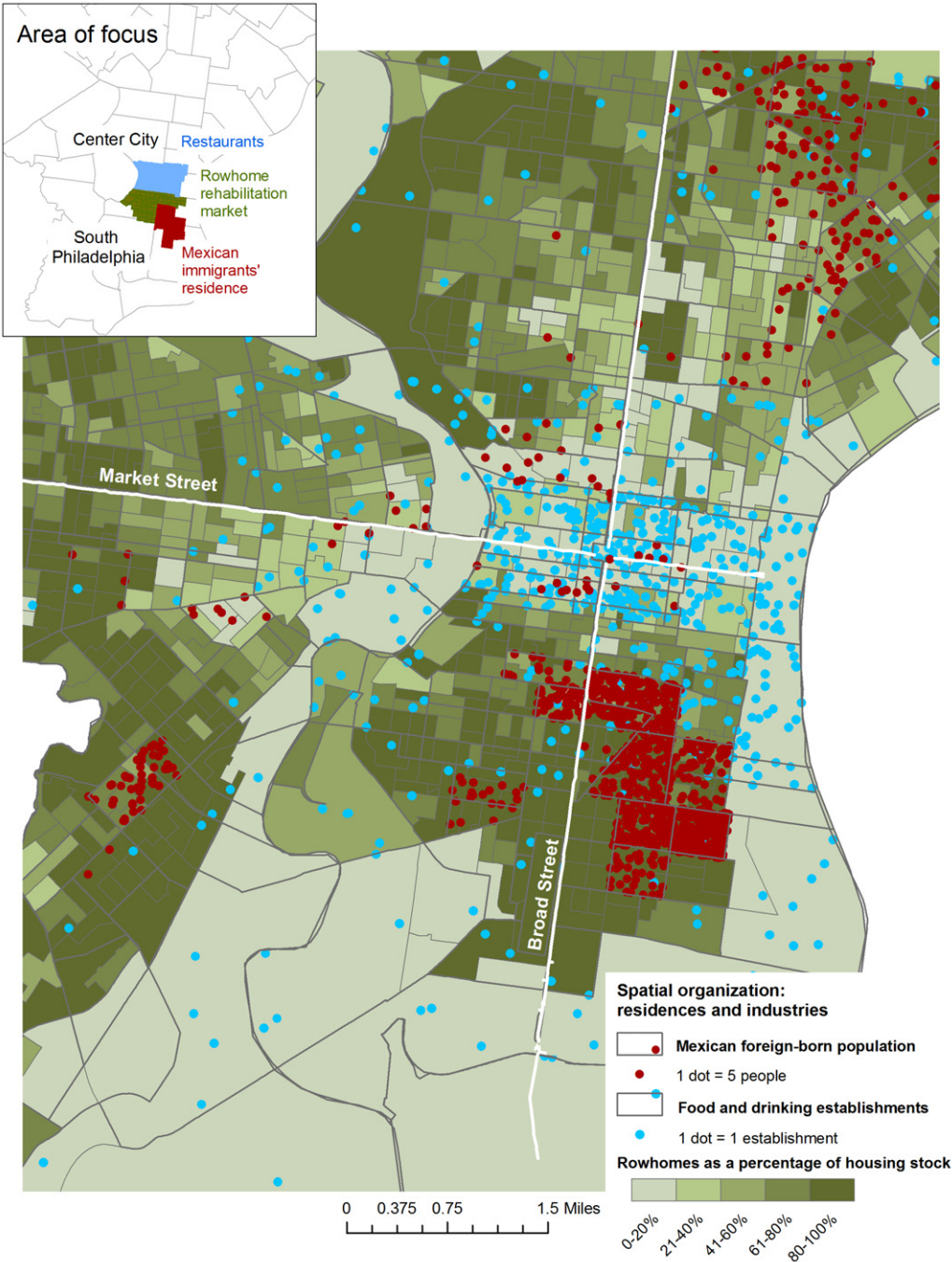
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Map I. Mexican immigrants increasingly settled in a concentrated area of South Philadelphia, only about a mile away from Philadelphia's downtown.
Source: U.S. Census Bureau (2005–2009).

daily wage for all private-sector construction workers in 2007, for example, at \$246 per day (Bureau of Labor Statistics 2007). Nevertheless, the subpar construction jobs that were available to Mexican immigrants still meant that if they worked consistently in construction without significant breaks between jobs, they could earn about double the wages of restaurant work.

In addition to wages, the immigrants also ascribed greater professional value to jobs in the construction sector. They strongly emphasized receiving more respect at construction jobs than in restaurant employment. The sentiments expressed by Abel were widespread: “At first, I worked in restaurants . . . but I hated that work. They [the



Map 2. The clustering of Center City's restaurant industry, the burgeoning small-scale rehabilitation market adjacent to downtown, and Mexican immigrants' settlement in South Philadelphia created a spatial construct through which immigrants could build skill.

Sources: U.S. Census Bureau (2005), U.S. Census Bureau (2005–2009), Board of Revision of Taxes (2007).

employers] don't treat you with respect. They think that because you are washing dishes, that you are an idiot and you are good for nothing else." The interviewees also reported that it was easier to earn respect on construction jobs because they could demonstrate the skills they possessed or had developed. "What you have to do is find a job where you can show what you know. And then your employer will respect you," commented Mario.

Securing steady employment in housing renovation, however, required an array of construction skills that were particular to the rehabilitation of Philadelphia's nineteenth century row homes, covering everything from heavy structural work like reinforcing foundations to tasks like laying tile, framing rooms, and hanging drywall and to detailed finish work like repairing wall moldings and brick facades. Often included in this array of skills were tasks that required specialized licensing, like laying down electrical wiring or configuring plumbing lines. The Mexican immigrants described this skill profile as being "*mil usos*"—a jack of all trades—"It is the ability to do everything on a job, from start to finish"; "It means you can do a lot of different things on the job"; and "It means exactly what it sounds like: being able to be useful on a lot of different aspects of construction—painting, cleaning, drywall, woodwork, and ceramics—doing everything."

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This skill profile was valued in housing rehabilitation because of this segment's particular low-capital, small-scale, and informal organization. Small-scale contractors, as well as the professionals who "flipped" homes as investments, typically hired a team of four to six workers for the duration of a project, which could last anywhere from several weeks to several months. This core group worked on the project from start to finish, and additional workers were brought on for short periods, lasting no more than a few days, for more labor-intensive stages of the construction process. The main team, however, was expected to complete the full array of tasks involved in housing rehabilitation and needed the skills to do so effectively; the workers in the core group, in other words, had to be *mil usos*. Miguel, a Mexican immigrant who worked in construction in Mexico City before coming to Philadelphia, reflected on how the character of housing rehabilitation projects informed the skill profile that was required: "You can't really specialize in anything because the projects are small, and you have to be able to do some of everything." At the end of each project, the teams of *mil usos* would either disband and join another semipermanent team on another renovation project or move on to the next house their employer was refurbishing. In this setting, in which employment was always contingent, becoming a *mil usos* was critical to securing reliable work.

Developing the skills to become a *mil usos*, however, involved an intensive learning process and took time. The workers estimated that they needed between eight months to a year to acquire the array of skills that are generally included in the understanding of *mil usos*. In the interim, their role on the job site was basically that of an *ayudante*, or helper, which consisted of short term jobs that lasted from a few days to no more than a week or two. The immigrants described this position as very arduous ("*muy pesado*"); it generally involved doing most of the preparatory work required for varied construction tasks, such as moving materials, mixing sand based cement mixtures, and cleaning tools and the worksite. Nevertheless, positions as *ayudantes* were valued because they provided workers with the opportunity to learn by observation and through informal mentorship from the *mil usos* at the job site. Even immigrants who reported substantial construction experience in Mexico prized these positions because they were seen as opportunities to translate expertise in Mexican construction methods to the different building styles found in Philadelphia. Benacio, an immigrant from Puebla who had landed in Philadelphia in 2004, explained: "I had worked in construction for many years before migrating,

and I already knew how to do a lot of things. But it took me a long time—a couple of years, and a lot of that time as an *ayudante*, which was hard for me—to be able to use everything I knew on sites in the U.S.”

Busing Restaurant Tables for Occupational Advancement in the Construction Industry

In the process of developing the skills to become a *mil usos* and secure steady employment in housing renovation, employment in Center City’s restaurant industry was critical. These were not simply jobs in an inferior and less desirable labor market, nor were they solely a stepping-stone toward better jobs in construction. Rather, they were central to the strategy that the Mexican immigrants devised to support their occupational mobility out of restaurants and into construction—a strategy they crafted using the spatial proximity of their residence and employment in these colocated sectors.

In our sample, we found that approximately half the immigrants we interviewed entered the construction industry by first obtaining jobs in the restaurant industry. This estimate is likely conservative because our interviews focused on immigrants who were already working in construction, and our sampling strategies as a result were less likely to capture immigrants who were still actively transiting from restaurant work to construction. Moreover, the directionality of employment was clear: immigrants strove toward jobs in the construction industry, and those who had construction jobs rarely returned to full-time restaurant work unless this option was dictated by financial necessity, such as a lull between projects.

Employment in the restaurant industry provided the Mexican immigrants with an income buffer that enabled them to take concurrent jobs as *ayudantes* whenever the opportunity arose. Because of the tight spatial concentration of their residences and jobs, the immigrants were able to pick up a construction shift during the daytime, return home to shower, and still be available to work at their restaurant jobs in the evenings. As Jaime, a construction worker from Mexico City, explained, “Many people work additional jobs; . . . you might get off [a construction job] at 5:00 in the evening, go home, rest for an hour, and then go to work in a restaurant at night.” Samuel, a recent arrival from Puebla, used this tactic to acquire construction skills through temporary work as an *ayudante* while working at a bistro downtown. “I work in construction during the day, and I try out everything that they allow me to do. I work from 7am to 3pm, and by 4pm, I am at the restaurant washing dishes until midnight or two in the morning. Sometimes I sleep only four hours, . . . but I am here to work, and I am hoping the job in construction will become more permanent.” Jobs as *ayudantes* were too irregular to provide workers with a livable wage on their own; with several weeks often lapsing between stints in construction, restaurant work provided indispensable financial support while the workers developed their skills. In this sense, the immigrants used restaurant wages as a temporal resource—a way to create time to develop the skills they needed to obtain steady employment in construction and make a more lasting transition to that industry.

Through employment in the restaurant industry, the Mexican immigrants developed the social networks to access construction jobs. The backrooms of restaurants served as de facto hiring halls for housing renovation projects: the immigrants who were already working double shifts, straddling construction and restaurant work, frequently brought coworkers from restaurants onto their current housing renovation job if an extra man was needed. In fact, the immigrants in our sample reported relying far more heavily on social networks forged through restaurant work than through family or community activities for employment. “You could work in a restaurant as a dishwasher and know nothing about

construction, and a friend of yours [at the restaurant] who also works for a contractor can help you get on the job if the contractor needs help,” one worker explained.

68 Although the social networks in restaurants provided the immigrants with important information and access to opportunities in construction, the quality of the relationship that the immigrants forged—especially the bonds of friendship and trust—seemed to matter more both for employment and for the development of skills. The immigrants with steady employment in construction constantly drew on their networks from previous restaurant jobs for coworkers on whom they felt they could depend. Remedios, an immigrant from Mexico City, recounted that when his contractor asked him to bring two more men onto the crew, “I called my friends from the restaurant I used to work at. I know them; they are good workers, people you can trust—*de confianza*. For a while, like me, they worked two jobs, but then when the construction work was enough, they left the restaurant just like I did. I felt a little guilty—my boss at the restaurant is a good man, and I took two good workers from him.” Remedios’s comments also allude to the importance of the quality of the relationship between workers, first cultivated in restaurants, to the process of acquiring skills in construction. Gilberto, from Puebla, clarified why these relationships were important: “The most important skill on a construction job site? How to work in a team—but this is something that I first learned working in restaurants.” Ramón, from Puebla, underscored this point in a response to a question about the development of skills at the job site: “Knowing the people you work with and trusting them—having *confianza*—is very important for getting jobs done and learning. A person who doesn’t know anyone on the job site might be afraid to ask questions and would have a hard time picking up skills, but it’s easier when you know your coworkers to get past this.” The immigrants also reported that having a *compadre* on the site with whom one had already worked increased one’s chances of being kept on as an *ayudante* for a longer time, thus expanding learning opportunities and increasing skill sets across a range of tasks.

The Mexican immigrants also used restaurants as an interactive space for making sense of the kinds of skills required in Philadelphia’s home renovations. Through casual, ongoing interactions in restaurant kitchens, the workers discussed the minimal repertoire of abilities that constituted becoming a *mil usos* and tried to identify the most strategic way of sequencing learning to achieve this status as quickly as possible. Significantly, these sense-making exchanges were spatially grounded and referenced construction elements that immigrants had observed on their commute from home to work or had witnessed during their last stint as an *ayudante*. “Sometime you see something on your ride to work,” explained Victor, who worked occasionally as an *ayudante*, “like how they are fixing the bricks [in the outer wall of a row home], and when you get to the restaurant, you can ask your friend who works construction if he knows what they were doing, why they were doing it that way.” More experienced workers referenced projects they were working on or that offered particular lessons in response to such questions. During the period of this study, for example, a row home not far from the restaurant district collapsed suddenly while being renovated and took down half an adjacent row home when it fell. This incident became the subject of conversation in restaurant exchanges about construction; it was used as an example to illustrate how the foundations of historical row homes had become dependent on the bearing walls of neighboring buildings for structural support. “The homes here—they are like a community—they lean on one another to stand, and you have to know this when you are doing demolition,” said Abel, a construction worker and dishwasher at a local restaurant, when describing how he explained the lessons this incident yielded. In this discussion, a robust understanding of row home building structures was identified as a central skill in the compendium of

those included under the title of *mil usos* and was accordingly marked as a priority to master.

The immigrants used these sense-making conversations in restaurant backrooms to be proactive and strategic in choosing skills they sought to develop best to support their advancement and used the spatial proximity of restaurants and their residences to engage in an instrumental search for opportunities to learn these skills. They described actively scouting the area between Washington and South Streets, where most of the housing rehabilitation occurred, for jobs that would allow them to broaden their skill base. “Sometimes, I just walk my bike to work, and I stop at houses they are fixing up. If it looks interesting, I just ask: what are you guys working on? Do you need an extra man? But I don’t just take any job. I don’t want to be stuck always doing all the heavy, dirty work and getting no respect. I want to be sure that I can learn something,” explained Carlos. Viviano recounted one instance in which he agreed to lay tile in his employer’s home without pay because he knew, based on the sense-making conversations described earlier, that he could not move beyond what he termed “heavy” construction work (e.g., demolition and cement mixing) and become a *mil usos* unless he acquired skills in finishing tasks.

For many, the end goal of this spatially defined learning process, however, was not to get steady employment in the construction industry. Rather, the majority of the immigrants we interviewed had entrepreneurial aspirations and viewed their employment as a stepping-stone toward starting their own construction companies. Thus, the immigrants also sought side jobs strategically to cultivate their entrepreneurial and managerial abilities. Side jobs were informal and included small-scale home improvement projects for private homeowners—projects like paving a walkway, building a closet or a deck, or painting the exterior of a house. The immigrants reported identifying potential side jobs by walking through the area of row home rehabilitation, observing what tasks might need completing, and approaching the owner directly. As Juan Carlos explained, “I have been doing some work on the side—*por mi cuenta*—and I have started buying my own tools. It all started with this lady I knew in the area who needed a wall in her kitchen fixed. She liked my work and asked me to remodel the kitchen. Pretty soon, I had to bring an *ayudante* to help me. . . . Soon, I will have enough work that I can leave my job now and be my own boss.” Feliciano concurred, “I am learning all I can with my current boss and buying tools, so I can open my own contracting company full time. I already have a couple of regular clients. It started out with small things—first, I fixed the porch, and now I am redoing a kitchen and a living room. I already have a regular *ayudante*. Sometimes I bring two guys. Now, I am saving up for a truck.”

As these excerpts from the interviews indicate, the employment trajectory that Mexican immigrants drew for themselves began with employment in restaurants to support their transition into construction work, which would, in turn, enable them, as they acquired building and entrepreneurial skill, to become employers in their own right. Their ultimate goal was a livelihood that would allow them to move, as building contractors, beyond the spatial confines of the cluster of row home rehabilitation projects near downtown and into the broader metropolitan area and beyond. “I have my sights set on New Jersey and Atlantic City—I hear there is a lot going on there,” added Feliciano. The process of moving from restaurant busboy to *ayudante* to full-time construction worker and finally to contractor depended on the spatial proximity of restaurants and residences that enabled the workers initially to step onto this career ladder as apprentices. But it was also a process that took the time that learning required—several years in most cases. Unfortunately, with the crash of the housing market in late 2007, the time that the Mexican immigrant workers needed to move up this occupational chain would be abruptly cut short.

Epilogue

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In late 2007, the market demand for row home housing in Philadelphia dropped precipitously, and the dizzying rise in prices that fueled housing renovation stopped. After a brief lag during which ongoing projects were completed, employment on renovation sites slowed dramatically. In the greater Center City area, the development of residential units came to a near halt within a dramatically short period: by 2009, a mere 493 units were developed—an astonishing 75 percent decline from the market's peak three years earlier, when nearly 2,000 units were developed (Center City District & Center City Development Corporation 2011). Likewise, the volume, speed, and value of housing sales also began to fall. By the end of 2010, the median housing prices throughout the city had dropped to 2003 levels, and parts of the Center City sales market had fallen just as steeply (Guillen 2011). Significantly, sales in Center City declined by almost a third from 2006 to 2009; in the row home neighborhood adjacent to downtown, residential sales dropped by 34 percent. The rapid “flipping” that characterized this particular market also subsided: by 2010, the number of days that units in Center City remained on the market increased by 24 percent from 2006, and units in Center-South Philadelphia took about 100 days to sell (Center City District & Center City Development Corporation 2011).

By late 2008, the immigrants who had graduated to the status of *mil usos* were returning to restaurants to look for work, and within a few months, as business in that industry began to slow, employment in the backrooms of Philadelphia's restaurants became much harder to obtain. “I worked in restaurants just to earn money while I was trying to get work in construction,” commented Adelardo in an interview in late 2008. “I used to work in a nice restaurant. Now, I am happy if I can get a few shifts a week in any pizzeria in town.” The immigrants who had steady work in restaurants reported that their shifts were cut, and as our interviews extended into 2009, many reported that they had been laid off from jobs in the hospitality industry. Some were contemplating returning to Mexico, but most adopted economic strategies to remain, such as living in more densely occupied apartments, receiving financial support from their families in Mexico, and drastic cuts to their personal spending including skipping meals.

Whether the economy would rebound was unclear at the time, but the learning system that the immigrants had created out of the spatial colocation of restaurants and construction jobs had been decimated. Construction jobs were exceedingly scarce in Center-South Philadelphia, and the few immigrants who held on to construction jobs did so by completing small detail work on properties that, for the most part, had been completely renovated. And although the social relationships between immigrants who still had jobs in restaurants and construction remained strong, the link between the two industries weakened substantially as many turned to pooling resources for survival.

The immigrants who had graduated to owners of firms found themselves likewise undermined. In mid-2009, Philadelphia enrolled in the federal Secure Communities program, which enjoined it to share any information about the immigration status of immigrants who were detained for any reason—such as minor traffic violations—with Immigration and Customs Enforcement, thus subjecting them to potential deportation. This new program compounded the difficulty that the immigrants faced in Philadelphia in obtaining a valid driver's license; in 2002, the state of Pennsylvania began requiring proof of valid immigration documents for a license. For the Mexican entrepreneurs in our study, many of whom resorted to driving without a license, this change meant that commuting to construction jobs elsewhere carried with it an untenable risk—indeed, Philadelphia ranked fifth out of close to 200 municipalities in noncriminal stops that led

to deportation (Phillips 2011). Even for immigrants who were just looking to pick up construction jobs outside downtown, the weakness of the local and regional public transportation systems meant that there were few alternatives to driving (Tomer, Kneebone, Puentes, and Berube 2011). As a result, Mexican immigrants, even the very skilled, found themselves largely confined to an area in which there were no jobs to be had. The only exceptions to this general trend were a small group of early arrivals who had participated in the construction market since the early 2000s and had graduated to running their own firms by the mid-2000s, when the enforcement of immigration controls over mobility was less stringent. By the time the housing market collapsed, this group had already forged durable subcontracting relationships with large construction businesses, and former contractors hired these workers, valued for their skills, on large construction projects outside Philadelphia, providing them with transportation at their own expense to their projects.

Implications and Conclusions

Analyses of the ways in which space affects the job prospects of immigrants have often emphasized the nuancing effect of immigrants' social networks on access to jobs, suggesting that networks provide employers and immigrants with information about skills and workers with the social relationships to support the learning process. In Philadelphia, space played a more central role than this literature allows: the physical proximity between restaurants and construction work enabled the immigrants to use jobs as busboys and kitchen help to subsidize and otherwise support their apprenticeship at nearby construction projects. A related point is that the experience of Mexican immigrants in Philadelphia challenges conventional views of skill as an attribute that is salient only at the point of hire. Instead, it illustrates that skill depends on a process of learning that unfolds over time and that is itself highly sensitive to spatial features.

In demonstrating the contribution of space and time to the employment prospects of low-wage, immigrant workers, this case also illustrates that the workers determine how this relationship evolves and why it matters. The workers construct strategies for long-term occupational mobility and advancement by using spatial patterns to create temporal support for the development of skills. While the immigrants in our study did not create the spatial proximity of neighborhoods, the restaurant industry, and job sites for row home renovations, they used this fortuitous spatial arrangement in a deliberate and purposeful way to create the *time* to learn the skills that would support their occupational transition and advancement. This consideration reveals immigrants' resourcefulness and creativity and features their agency as they deliberately navigate labor markets.

However, a consideration of the ways in which immigrant workers use space to create employment pathways over time also reveals areas of vulnerability that may not be immediately apparent. In Philadelphia, the occupational trajectory that the immigrants carved out for themselves depended on two important elements: their use of the spatial concentration of these industries to create time in which to develop skills fully and their ability to move beyond the saturated nucleus of downtown to secure projects as independent contractors. The combination of the market collapse in housing and the legal constraints on immigrants' mobility had a significant impact on Mexican immigrants' livelihoods, destroying the temporal pathways for learning and occupational advancement that the immigrants had created.

The impact of these events on the spatial strategies for occupational advancement underscores the importance of paying special attention to their temporal component. It suggests that it is not enough to evaluate the effect of economic changes and policy

interventions for their consequences on workers' livelihoods at a single moment in time. Instead, economic shifts and policy measures must both be considered with an eye to the temporal trajectories for the acquisition of skills that they foreclose (Iskander 2007; Fernandez 2001). In Philadelphia, the application of measures that restricted immigrants' spatial mobility in the context of a housing downturn certainly affected immigrants' employment in an immediate sense, and it did have important longer-term consequences for the immigrants' ability to search for jobs outside the city. However, these restrictions did not just prevent immigrants from moving around and beyond the city; they also prevented the immigrants from learning. As municipalities and states adopt measures that increasingly constrain the spatial mobility of immigrants, the penalties they impose may lead to far more serious consequences than was initially assumed. Any evaluation of these policies is incomplete without a consideration of the occupational mobility they impair and the long-term consequences they have on immigrants' occupational trajectories.

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