

2 Labor Migration and the Potential for Industrial Renewal

Natasha Iskander

Michael Piore, in his book *Birds of Passage: Migrant Labor and Industrial Societies* (Piore 1979), lays out a theory of labor migration and of the integration of migrants into industrial workforces. His central project was to demonstrate that immigrants were not shirts. “Conventional theory treats the market for labor like the market for a shirt or any other commodity that is bought and sold freely and regularly,” notes Piore. “But,” he goes on to caution, “the phenomenon of migration cannot be understood by treating workers like shirts; . . . the critical factors governing the migration process are the social forces that that differentiate the market for men from the market for shirts, and it is those social forces that the analytical apparatus must bring to the fore” (Piore 1979, 8). His goal was to demonstrate that neat supply and demand curves for labor do not drive migration. Translated into “push” and “pull” factors, those economic functions dominated thinking about labor migration and, in many important respects, still do. In its purest articulation, the notion is that migrants are “pushed” out of their countries of origin by the low or nonexistent remuneration for their labor that they can command there, and are “pulled” across national borders to labor markets where they can earn higher wages. Piore concedes that the simple elegance of the “push-pull” model is seductive: migrants leave places where their lives are difficult and are drawn to lands of opportunity, however opportunity is defined. But he argues that this model is also wrong.

Piore’s main, and most controversial, contention is that to understand migration, you cannot start by examining migrants, but must instead first turn to the industries that use migrant workers, and then ask why migrants would let themselves be used in this way. He argues that migration is a process primarily generated by industrial demand. Firms in advanced economies actively draw migrants into their labor

force to fill their least desirable jobs. These jobs, typically unskilled, low-paying, arduous, and offering few opportunities for advancement, are firmly located in the secondary labor market on which firms rely to withstand market volatility. During moments of economic expansion, firms draw up workers from this pool to ramp up production and shed them when market contraction dictates that production be reduced.

Migrants, explains Piore, are ideal recruits for these positions because of their social interpretation of this kind of employment. They are willing to take these low-status, difficult jobs, because, at least at first, they view them as a temporary means toward earning a given sum. Moreover, posits Piore, because their social point of reference is their community of origin and not the host society, the stigma attached to these low-quality jobs is irrelevant. Over time, however, migrants settle in the places they work and live, and, as they do, they absorb the social norms of the host society, including the disdain for difficult, dirty, and repetitive work in the secondary sector. Employment in these dead-end jobs becomes untenable, for migrants and even more so for their children. Occasionally, migrants or their children join forces with organized labor to improve their employment conditions, but more often than not they move out of jobs in the secondary sector, and seek employment in the more stable primary sector, where jobs are protected from market volatility and opportunities to for skill development and occupational advancement exist. Industry, then, needing its cushion of disposable workers, is forced to look broader afield for new migrants and attract them into their secondary labor pools. Migrants, concludes Piore, are the ideal workers for these contingent, substandard jobs, until they are not.

The world has changed in the forty years since Piore published his book. The manufacturing base in which Piore grounded his theory has cratered, much of it having been transplanted to economies abroad that are speeding past the label of “developing country.” The protected lifetime employment of the primary sector is rapidly disappearing, and the churning labor market of service sector is progressively taking its place. In the United States, all but the very elite upper sliver of the workforce has lost ground.

Still, immigration has continued apace, and undocumented immigration has arguably accelerated. Moreover, immigrant workers’ participation in the changing U.S. economy has remained robust and, as numerous analysts have posited, even supportive of economic growth

to a degree (Durkin 1998; Zorlu and Hartog 2005). The theoretical and policy debates, however, which are about how to integrate immigrants into local and national economies, have grown strident and sharply polarized. The positions articulated in the 1970s and 1980s, even on those lobbied on the eve of the contentious passage of the Immigration Reform and Control Act that provided amnesty to close to two million undocumented immigrants, seem quaint today for their reasonableness and their lack of gratuitous theatrics. Today, the range of policy responses to immigration being discussed has narrowed dramatically. The focus has shifted from strategic economic integration of immigrant workers and the social inclusion of their families to the punitive enforcement of outdated immigration policies inconsonant with the size and profile of the current immigrant population.

Over the past forty years, the framework Piore outlined in *Birds of Passage* has also undergone a series of interpretations and reinterpretations. When first published, his treatise was received as “unorthodox,” “a conceptual breakthrough,” and a “provocative addition,” even by some of its harshest critics, and it went on to influence a generation of migration scholarship. His argument has been marshaled to explain the chronically poor working conditions to which immigrants are disproportionately subject (Valenzuela 2003; Massey, Durand, and Malone 2002; Theodore 2003; Pierrette Hondagneu-Sotelo 1994; Bernhardt et al. 2008); it has underpinned monographs on drives by immigrant workers to organize for better wages and working conditions (Milkman and Wong 2004). Scholars intrigued by why immigrant workers tend to be more strongly represented in some industries and in some geographical areas more than others have also used Piore’s theories as a touchstone, exploring why immigrants, such as those in ethnic enclaves and ethnic economies, have been able to find jobs that display the qualities of employment in the primary sector, complete with adequate remuneration and opportunities for occupational advancement (Waldinger and Lichter 2003; Portes and Stepick 1985). Studies of how the children of migrants have fared and why have also used Piore’s description of migrant social assimilation, and its distinction from economic advancement, as a point of departure (Suarez-Orozco and Suarez-Orozco 2001; Portes and Rumbault 2001).

Yet, even as Piore’s arguments seeded analytic projects that have yielded rich insights into how immigrants participate in receiving economies and societies, Piore’s challenge to the field—to consider first why industry relies on immigrant workers—has somewhat receded

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from view. At a time when the reform of immigration policy seems imminent, but also when the range of policy options seems to have been reduced to a question of “how many do we let in,” generating creative ideas for understanding and managing immigration is more urgent than at any time in recent memory. Taking up Piore’s opening gambit—examining how industries use immigrant workers and why immigrants let themselves be used in this fashion—has the potential to indicate helpful policy directions, ones that focus less on restraining immigration and more on cultivating the potential for economic development that migration can offer.

Carrying Piore’s challenge a step further, however, and examining the participation of migrants in specific industries, can demonstrate that migration is a powerful but undervalued vector for economic integration and innovation. An industry approach to studying immigrant labor market participation can reveal the important impact and legacy that immigrant workers can have on the organization of production. Moreover, it can highlight the way that migration is making industry labor markets transnational: as migrants move across borders, their experiences in the industry in the place they left is shaping the industry—and their experiences—in the place they join. Investigating how migration shapes practices in specific sectors suggests that skillful policy intervention has the potential to improve not just industrial productivity but also working conditions and opportunities for occupational advancement for immigrant and nonimmigrant workers alike.

This claim grows out of a multiyear study of Mexican immigrants in the U.S. construction industry.¹ In a study spanning 2006 through 2009, Nichola Lowe and I have analyzed patterns of immigrant incorporation in the construction industries of two U.S. cities: Philadelphia, Pennsylvania, and Raleigh-Durham, North Carolina. Mindful that labor market environment differ considerably across the United States, we chose these two urban areas because radically different institutions govern their construction industries and mediate immigrant participation. Building trades unions remain strong in Philadelphia and closed to new immigrants, and have relegated Mexican immigrants to low-end housing construction and rehabilitation. In Raleigh-Durham, at the heart of a right-to-work state with low union density and relatively weaker worker protections, Mexican immigrants have been integrated into the mainstream of the local construction industry. We conducted interviews with a range of industry actors, from representatives of industry associations to officials from government regulatory agencies,

with employers, and with over one hundred immigrant workers at each of our research sites. We complemented these interviews with ethnographic observation at construction sites of the ways that immigrants engage in work processes. Additionally, we examined the labor market integration of immigrant workers in Mexico, before they migrated and, in a growing number of cases, after they returned. To that end, we completed supplementary interviews with over sixty workers and institutional actors in the Mexican construction industry and conducted site visits of construction projects in Monterrey and Puebla.

We find that Mexican immigrant workers have been a boon to the construction industries of both cities we examined as well as to the construction industry in Mexico. However, they have represented an advantage for this industry, in all its diverse local expressions, for reasons rarely contemplated in both popular and academic representations of Latino workers in construction: they support innovation in building techniques and in the institutions that structure construction practices. Specifically, we find that although Mexican immigrants have held jobs that display characteristics associated with secondary sector employment, including low status, relatively poor remuneration, little job security, and an absence of formal training opportunities, they bring significant, though often unacknowledged, skill to their jobs and make process improvements critical to their employer's business performance. We also observe that Mexican immigrant workers have made the most consequential contributions in the construction industry where the organization of production and the institutions governing it are the most malleable. Here, we note a distinction between malleable and inclusive: often, the most inclusive production practices are also the most rigid, whereas those that appear most exclusionary are surprisingly receptive to new construction approaches.

In our focus on this industry, we find that the participation of Mexican workers in U.S. construction makes it much less bounded than it would otherwise be, and certainly significantly less than it appears. The U.S. construction industry's reliance on Mexican immigrants connects it in meaningful ways to building practices and training approaches widespread in Mexico and turns it into an arena where those processes are developed and refined. Moreover, Mexican immigrants transfer the construction processes they reinvent in the United States back to settings in their country of origin. The extent to which the local Mexican industry is able to take advantage of their

contribution, however, is informed by the same factors that shape the U.S. industry's ability to benefit from the practices that immigrants enact: the flexibility of construction practices and the receptiveness of the institutions that govern production and labor markets make all the difference in determining how well the industry is able to use the skill and innovations Mexican immigrants develop during their work history. Not only does our study, anchored in specific locales, reveal that immigrant workers, toiling in low-wage and low-status jobs, support translocal and indeed transnational processes of innovation and industry reform. It also raises important questions about how to integrate the processes of innovation sparked by migration into economic development strategies that are industry-specific as well as those that are designed to promote economic growth more broadly. It suggests that the effectiveness of interventions designed to support industry growth depends on how well those same interventions support immigrant workers in the industry.

The U.S. Construction's Reliance on Mexican Immigrants

During the 2000s, the U.S. construction industry began to rely heavily on Latino construction workers. Already in 2000, Latinos, the vast majority of them immigrants and a significant portion of them new immigrants, represented 15 percent of all workers in construction, tallied at 1.5 million. By 2007, they represented over 25 percent of workers employed in this industry and numbered almost 2.3 million. After the housing crash of late 2007, those numbers dipped somewhat, dropping by 300,000 to 2.7 million, but even in the wake of a construction downturn, Latino workers remained a mainstay of the construction industry's labor force, just a few tenths of a percentage points shy of a quarter of all construction workers. Indeed, in 2008, only agriculture employed a greater share of Latinos. Throughout the 2000s, Mexican immigrants represented the lion's share of Latino workers in construction and continue to do so. In 2007, over 60 percent of the 2.3 million foreign-born Latinos in the industry were from Mexico, and throughout the decade they represented the majority of new entrants into the industry (Kochhar, Suro, and Tafoya 2007; Center for Construction Research and Training 2009).

At first blush, Mexican immigrants seemed to fit the profile of low-skilled workers that provided a secondary labor market buffer against labor market volatility. The majority of Mexican immigrants

who worked in construction during the 2000s had less than a high-school education. In the early and mid- 2000s, when construction was booming, they entered into the industry in large numbers to add capacity to firms, from international construction companies to informal small-scale contractors, striving to meet project demand. When the housing market collapsed in 2007 and construction slowed dramatically, the industry shed Mexican immigrants: 150,000 Mexican immigrants lost their jobs that year, representing over 60 percent of the foreign-born Latinos laid off (Kochhar 2008).

An examination of the way that Mexican immigrants participated in the construction industries of Philadelphia and Raleigh-Durham, and of how they fared during the downturn, reveals a more nuanced picture. Mexican immigrants were more than just a disposable bottom tier of the workforce, relegated to the lowest-skilled jobs because they were unskilled. Instead, they brought strong skills to their jobs—skills their employers used to significant effect. In both sites, approximately 60 percent of the Mexican immigrant workers we interviewed had acquired construction experience before migrating to the United States. Moreover, we found, by and large, the construction experience Mexican workers had developed before migrating was extended and sophisticated. While virtually all of the immigrants who had worked in construction in Mexico had helped build family homes, including their own, in their hometowns, more than half had also worked on high-end residential, commercial, or infrastructure in large metropolitan centers.² Their tenure in Mexican construction varied from several months to several years, with many of the immigrants we interviewed working in the industry in order to earn the capital necessary to cover the costs of migrating to the United States.

In contrast to the more generalized and uniform characterization of the secondary labor market offered by Piore, the way that Mexican immigrants were integrated into the construction industry differed markedly by city. In Philadelphia, where building trade unions still commanded a sizable share of the construction market and dominated luxury residential and commercial construction projects in the city center, Mexican immigrants, shut out of unionized job sites, were relegated to largely informal labor markets for housing construction and renovation. The greatest concentration of informal and semiformal housing construction and renovation in Philadelphia occurred south of the downtown area. The small-scale contractors and freelance “flippers” that predominated in this segment of the industry leaned heavily

on Mexican immigrants, who overwhelmingly settled in adjacent neighborhood just to the south of downtown, as a source of capable labor. In Raleigh-Durham, a right-to-work state with few institutional barriers to the use of immigrant labor, construction contractors, both commercial and residential, were enthusiastic employers of Mexican immigrants. They integrated Mexican workers into projects ranging from large-scale housing developments to commercial and industrial projects. Recent estimates generated by immigrant advocacy groups claim Latino immigrants made up around 75 percent of the state's urban construction workforce during the period covered by our study, and that Mexican immigrants comprised a significant portion of that group (Iskander and Lowe 2010).

Despite the different institutions and use of immigrant labor, employers in both cities benefited significantly from the skill base Mexican immigrants brought with them. It offered employers two distinct advantages. First, the construction experience most Mexicans already had before migrating made them quick learners. Mexican immigrants were able to absorb new construction techniques rapidly by referencing their previous building experience. This was true whether the new techniques involved the use of certain precision tools and prefabricated materials, uncommon in Mexico and thus unfamiliar to the immigrant workers, or whether the techniques involved U.S.-specific approaches to materials with which Mexican workers were already familiar because of their widespread use in Mexican construction projects, like concrete. The reflections of Rigoberto, a Mexican immigrant to Philadelphia who had worked on large-scale projects in Mexico City, were typical of those we heard: "Most everything I know, I learned in Mexico. You just have to watch the process once or twice, and then you understand how they do things here. Even the tools, once you figure them out, make your life easier."

Second, immigrants with Mexican construction experience tended to have a much wider repertoire of skills than their U.S. colleagues, who were more likely to have specialized abilities in a single task area. This attribute stemmed from the value placed in the Mexican construction industry on the conceptual and practical understanding of the relationship between the elements of a building—how the foundation related to the pitch of roof, for example—and the capacity to perform the range of tasks needed to protect and reinforce those connections. In Mexico, being what is called a "*todologo*"—a specialist in everything—is critical to occupational advancement: in order to become a

construction supervisor, a worker is expected to develop mastery in several different task areas, such as carpentry, masonry, or plumbing (Castellanos 1994). For employers in the United States, the broad skill base of many Mexican immigrants made them an especially flexible part of the labor force. How employers availed themselves of the adaptability of Mexican workers depended on the industry context. In Philadelphia, this characteristic enabled employers to use a single small work team of two to six immigrants to complete the various tasks involved in housing construction and renovation, including everything from hanging drywall to finishing basements to laying down new flooring to installing new plumbing. Moreover, immigrant workers on the site actively cross-trained one another, in order to foster or strengthen their abilities in multiple task areas; in our interviews, workers consistently cited the importance of being “*mil usos*”—a jack of all trades—to their employability in Philadelphia’s housing renovation market (Iskander, Lowe, and Riordan 2010). In Raleigh-Durham, the breadth of skill with which most Mexican immigrants entered the construction labor market enabled them to join any number of the highly specialized task areas on the city’s projects. Immigrant workers typically began at the bottom rung of a narrowly defined skill and occupational ladder and gradually developed their ability in specific tasks. The gamut of skill they brought with them allowed to jump from one job to another (Hagan, Lowe, and Quingla 2009), and one skill area to another, in search of a position where they would receive the mentorship and support to develop their abilities and advance professionally in a finely cut skill area (Lowe, Hagan, and Iskander 2010).

Although the industry in both cities benefited from the absorptive ability and flexibility of Mexican immigrants, rarely were these attributes explicitly recognized or adequately remunerated. In Philadelphia, wages for immigrant workers in the housing market hovered at around half the hourly wages for all construction workers in the city (union and nonunion alike) (Bureau of Labor Statistics 2008) and remained within a fairly narrow band of \$80–\$120 per day regardless of the complexity of the tasks carried out or the quality delivered. In Raleigh-Durham, the task specialization on the worksite combined with the adaptability of Mexican immigrant workers has limited the need for training investments and essentially allowed contractors to treat their immigrant workers as virtually interchangeable and easily replaceable. It is not surprising, therefore, that many immigrant construction workers in Raleigh Durham are relegated to low-status,

high- turnover positions, despite having skill sets that far exceed their job requirements.

How Immigrants Change Industry Structure and Processes

Despite the emphasis in Piore's treatise on the way that industries use immigrants, the theory he lays out assumes that employers and industries dictate the terms under which immigrant workers participate in production. The notion that the structure of production determines how employers use immigrant workers is, in a sense, the cornerstone of his theory: firms in the economy organize production deliberately in order to protect their investment in capital, including human capital, and thus divide their labor pool in two, with workers in the primary sector benefiting from training and employment security on one side of the divide, and immigrant workers hired temporarily to complete unskilled tasks on the other. Scholars who have drawn on Piore's framework to interpret more contemporary manifestations of immigrant labor market participation in the labor market have also shared this tendency to view employers as the dominant actors in structuring the employment relationship and organization of production. However, an industry-based examination of immigrants' participation in production reveals that there is more to the story.

Honing in the way immigrants participated in a single industry—construction—and its manifestation as specific sites, as opposed to an analysis of the integration into economy as a whole, highlights the ways immigrants were able to amend production practices. In both Philadelphia and Raleigh-Durham, Mexican immigrants have altered the structure of production and have innovated new construction techniques. Here again, however, the sway they have exercised over the industry depended on context: Mexican immigrants exerted the greatest influence and made the greatest contribution in areas where the institutional structures that governed production were malleable and work routines were fluid (Iskander and Lowe 2012).

In Philadelphia, Mexican immigrants were confined to a small segment of the construction labor market, primarily low-end housing construction and renovation, and had very little labor market mobility. In this sense, they were excluded from large portions of the construction industry. However, within the narrow slice of the construction industry they dominated and on the job sites where they were well represented, however, immigrant workers enjoyed considerable

discretion. For the most part, the small-scale contractors or freelance “flippers” who hired them were absent from the job site: often, they arrived in the morning to provide supplies and give direction, and did not return until the next day. As a result, workers had the freedom to organize their work processes however they saw fit. In most cases, they borrowed heavily from flexible and holistic approach characteristic of Mexican construction. They opted for heterarchical teams where the worker who had the most expertise in the task assigned would take a temporary leadership role. As immigrant workers were confronted with new tools, new materials, and new construction approaches on their U.S. job site, they self-organized in ways that supported knowledge sharing and experimentation and, ultimately, innovation in production techniques. Among the innovations they authored were more cost-effective uses of cement, more efficient approaches to drywall and plastering especially tailored to the rehabilitation of the nineteenth-century housing stock in downtown Philadelphia, and more adaptive techniques for repairing brick wall facades (Iskander and Lowe 2011).

There were limits, however, to the latitude that Mexican immigrants had in shaping their work practices and in developing new building techniques. The main constraint was employer resistance. While employers were receptive to improvements in construction technique once their immigrant workers had demonstrated their effectiveness, they were reluctant to grant their employees the explicit freedom to experiment and innovate. A common refrain among the immigrants we interviewed, for example, was that they were more skilled in the use of concrete than their employers but did not reveal their ability to them until after they had finished the task successfully, in their style, at which point they detailed the steps they had taken to complete the job to their employers. In a sense, immigrant workers were forced to innovate on the sly. When they proposed process improvements, it almost inevitably led to serious conflict. The altercations Julio describes having with his employer were typical: “Several times, I have threatened to quit and take my *compadres* with me if he doesn’t let me do things the way I know how. My boss wants me to do things his way, but I know it will turn out badly and then he’ll blame me.” In addition to employer control, a broader institutional constraint on immigrant innovation was the immigration regulations that prevented skilled workers from becoming independent contractors. The Secure Communities program, for example, which mandates the verification of legal

status of immigrants detained for even minor infractions, discouraged undocumented immigrants from opening their own business. Unable to obtain a driver's license in Philadelphia, immigrants judged that driving to jobs and picking up materials put them at serious risk of deportation (Iskander, Lowe, and Riordan 2010).

In Raleigh-Durham, where the broader construction labor market was certainly more inclusive than in Philadelphia, the workplace structures were markedly more inflexible. Building processes on projects ranging from modest residential to large-scale commercial were subdivided into highly specialized tasks, and the building techniques were standardized and sophisticated. Supervision of building techniques was detailed and focused on making sure that workers did not deviate from the mandated use of tools or handling of materials. The rigid production routines severely limited the room that immigrants had to exercise their discretion.

There were, however, some important exceptions to this general rule. We discovered instances in which employers recognized the potential of their immigrant employees as a vector for process innovation and took decisive steps to support their influence on production practices. The supervisor on one site, for example, noticed that a group of immigrant workers, when they worked together as team, was more efficient than his other crews at finishing tasks. Each of the immigrants in the group combined a skill specialization with a generalist's—a *todologo's*—understanding of the construction process, and together they complemented each other's knowledge. They were more than the sum of their parts, reported the employer. The supervisor dispatched this group of workers—which he nicknamed “the A Team”—to multiple job sites to control the quality of production processes on site and to solve construction problems that the crews more narrowly focused on specific task areas were unable to resolve. When the Raleigh-Durham area adopted legislation that made undocumented immigrants who were caught driving without a license vulnerable to deportation, the employer bought a van so that the workers with valid driver's licenses could pick up their colleagues and go to whatever jobsite needed their generalist's skills. In this case, as well as in others we observed in Raleigh-Durham, the supervisor or employer made otherwise rigid production process and institutions malleable and enabled the industry to benefit more fully from immigrant contributions (Iskander and Lowe 2012).

Returning and Renewing Construction Practices

Piore's analysis of the role that immigrants played in industrial production stopped at the U.S. border. He argued that the contributions that immigrants made to the development of their countries of origin when they returned was minimal and, in any case, had little relationship with the role they had played in the economy to which they had migrated. By and large, examinations of immigrant incorporations into receiving economies concur: immigrants contribute through resources they transfer back rather than through the ways they engage with industries and the processes of production in their countries of origin.

Exploring immigrant participation in production through an industry lens, however, underscores that industries stretch across borders, and that immigrant workers who participate in them shape the organization of production in the multiple places where the industries are located. Just as in migrant-receiving economies, the ability of migrants to inform how production occurs in migrant-sending areas depends on how malleable the institutions that govern the industry are and on how flexible the routines that define work practices tend to be. The degree to which migrants can shape industry practices in their countries of origin determines how interconnected industries in the different economies ultimately become. In the construction industry, we found that Mexican immigrants were spearheading the blending of Mexican and U.S. practices on both sides of the border. In Mexico, the innovations that migrant workers brought to construction practices depended on how receptive the institutions that governed the industry were to change.

The crash in the U.S. housing market and the resulting slowdown in construction had a significant impact on immigrant employment in the industry. For Mexican immigrant workers in Philadelphia, where housing construction and renovation screeched to a halt, the blow was devastating. In Raleigh-Durham, where Mexican immigrants worked on commercial projects that were less affected by the downturn in addition to residential projects, layoffs were pervasive but did not decimate their employment in construction. In both cities, most Mexican immigrants decided to stay put and ride out the downturn while exploring employment options in other sectors. Some immigrants did, however, decide to return to Mexico, to their communities of origin, and even more frequently to large cities nearby. Moreover, many of those who

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did return had plans to continue working in construction, with ambitions to open up their own construction companies.

For some of the returnees, their business plans had crystallized while working in the United States. Migrant workers we interviewed on both sides of the border explained that as they mastered U.S. construction techniques, they began to envision how these could be applied to Mexican buildings. They also began to perceive possibilities for entrepreneurship: several interviewees described wanting to establish firms that were dedicated to luxury residential construction, or that offered specialized services (e.g., painting or insulation) to commercial construction companies. For others, this process began once they returned to Mexico. Several migrants interviewed for this study in Mexico City reported noticing the adoption of materials and techniques reminiscent of those they used in the United States on construction sites for high-end residential or specialized commercial buildings. Moreover, our interviews also suggested that a demand for the construction skills that many migrants brought back with them from the United States not only existed but was growing. In one example, a major construction materials company specialized in paint and other wall finishings recently introduced a series of drywall equivalents to the Mexican market. One of the main obstacles this company faced in expanding their sales of these new products was the shortage of workers in central Mexico who know how to install drywall and achieve high-end finishes. So significant was this bottleneck that the firm folded a training component into its sales strategy; indeed, one director of sales/training for this line was so excited by our account of migrants returning with related construction abilities that he eagerly called out to us as we were leaving his office: “Do you have a list of migrants who can hang drywall? Can you send me a list?”

Despite the fact that migrants were returning with relevant construction skill and despite the demand in the industry for the abilities they had, we encountered more than one migrant driving a cab or tending to a corner store because his plans for setting up a firm had been frustrated. Returning workers faced daunting barriers to entry in the Mexican construction industry. These were mainly informal and grew out of the system of skill building that is ubiquitous in Mexican construction. Formal training programs were scarce and marginal to the industry, and training occurred informally on job sites through ad hoc apprenticeships. Accessing both employment and skill-building opportunities depended on social networks, with job supervisors hiring

and choosing to train relatives, friends, or people from their neighborhood or village. Occupational advancement occurred by rising up through these social-cum-employment networks, and acquiring the broad spectrums of skills required to understand the interrelationship between different building elements, a key ability on Mexican construction sites that rely heavily on the use of concrete. Virtually no formal certification systems or licensing programs existed for these abilities, and actors in the Mexican construction industry, be they local contractors or engineers and architects, depended social reputation to indicate skill when hiring. Returning Mexican migrants, absent often for years at a time and unable to join in the social and professional exchanges needed to maintain these employment networks, found that they were shut out from the labor market. They had no contact who could vouch for the skills they acquired abroad, which were often different enough from local skills that they were unintelligible to contractors. Migrants we interviewed reported that they would have to reenter the labor market at the bottom, well below their skill level, if they wanted to work in the construction industry upon their return. Thus, although the institutions that governed skill development and demonstration in Mexico were informal, they were rigid and unresponsive to the infusion of new skill.

For migrants who contemplated establishing their own construction company, and reentering the labor market from the top, analogous but equally formidable obstacles existed. The Mexican construction industry was essentially bifurcated into two very different segments, and the divide between the two was almost impossible to cross. On one side are the architects and engineers, with a university education and from a middle- or upper-class background: not only were they the owners of construction businesses, they handled client relations and all aspects of building design, including the selection of the materials used. The second group comprised the construction workers who did the actual building. Regardless of how experienced a builder became, even often developing a more sophisticated understanding of how to translate design concepts into built structures with specific materials, it was extremely rare for anyone from this latter category to cross over into the upper segment of the industry and establish a construction firm and conduct business with clients. The social and class barriers were too difficult to scale. Returning migrants with ambitions to set up their own firms, especially those who envisioned establishing boutique outfits for high-end clients open to using materials new to the Mexican

market, found that while their business plans were technically and financially feasible, they were socially impossible. Thus, the institutions that govern Mexican construction, informal though they may be, excluded returning migrants, and deprived the industry as whole from the contributions they might have made to production processes.

One exception to this general state of affairs was migrants' construction of their own homes. Many migrants who returned permanently, as well as those who remained abroad but returned periodically, built family homes in their communities of origin—or increasingly often, in the closest nearby town or regional center. Because their homes were their own projects, they had the freedom to determine how the buildings would be constructed, which materials would be used, and if they supervised the project, what building techniques would be applied. In a pattern typical of return migrants, homes were often constructed in the style of the places in which migrants had settled: in the small hamlet of San Mateo de Ozolco nestled in volcanic foothills in the state of Puebla, for example, freestanding oversized Philadelphia-style row homes were a common sight. As migrants built their homes, they often hired local architects to help them interpret how to use available materials to achieve the aesthetics they sought to import. In the process, they came up with ways to coax new effects out of local material and discovered strategies that allowed them to combine seamlessly inputs that remain specialized and expensive in the Mexican markets (e.g., drywall) with those that are widely available. Not only did they develop new building techniques, but in the process of building their homes, they trained local workers in new approaches to construction—approaches that were inspired by their experiences in the United States but were made hybrid when introduced into Mexican contexts. The latitude migrants enjoyed as both builder and client enabled them to enhance local industry practices.

Immigration and Industry Development

Catalina was a successful real estate developer living in Monterrey, Mexico. In our interview with her, she described the expansion of her operation into several cities in Arizona. In the early 2000s, she decided to take advantage of the rapidly rising housing prices in the state and began several residential projects there. To recruit workers for her ventures, she asked around in the small northern Mexican town she was

originally from to ascertain which residents had migrated and were working in construction in Arizona, a popular destination state for her community. Drawing on her social networks, she was able to staff her construction projects quickly, with workers she described as skilled in both Mexican and U.S. construction styles. This skill base, she emphasized, was critical to the success of her projects. Not only could she be confident that the men she hired would be “good workers,” she also reported that this binational construction experience meant that her workers would be able to understand her implicitly. They would be able to intuit her concerns about a given structure or process. They had the capacity to build “Mexican-style,” in terms of technique but also in terms of work organization, but with U.S. materials and using U.S. approaches. She relied on the workers in this social network for her projects in northern Mexico as well: they were, according to her, more likely to have a “broader vision” of construction, with the ability to incorporate U.S.-type materials and construction techniques where appropriate.

For Catalina, immigration was a resource that supported her business development in ways much more nuanced and much more significant than the simple provision of labor. The connections migration fostered supported industrial renewal. Her perception, through what was de facto an industry lens, differs radically from the perspectives on labor migration that shape the totality of policy discussions today, and many of the scholarly analyses that underpin them, which focus on how to manage, and more saliently, how to restrict immigration flows, particularly of workers considered to be low-skilled.

The arguments that dominate policy discussion today are not new, although the tenor has grown more strident. They are based on the idea that if policy makers reduce the supply of immigrant workers to the economy, the demand for labor will push up working conditions and wages for all workers. However, as Piore argues, an approach that begins by looking at how the economy uses migrants makes clear that simply restricting the inflow of immigrants without addressing the function of the secondary labor market, and the working conditions that characterize it, will have little impact on worker welfare: stated differently, if native workers replace immigrant workers in jobs that are poor in quality, where the work is arduous and the wages low, then immigration restriction will have done little to help them. The solution, proposed Piore, is to enforce policy that would compel employers to hire workers under better terms, and to organize their production such

that they are less dependent on a secondary sector to cope with market variability. The solution is to lift the floor for all workers.

An analysis of immigration that examines particular industries shows that lifting the floor is not enough. We must also raise the roof.

As the case featured here shows, Mexican immigrant workers in the construction industry faced significant obstacles to professional growth on both sides of the border. In the aggregate, these impediments undercut the possibilities for development in the construction industry, and ultimately the working opportunities available to its workers, immigrant and nonimmigrant alike. To better the circumstances of all workers, and to improve the prospects of the industry, policy measures that support the connections and exchanges migration creates are necessary. Among the most important are measures to facilitate the mobility of immigrant workers. At issue are both their physical mobility—the ease with which they can cross national borders—and the mobility of their skill. Any strategy that seeks to take advantage of migration for industry development must not only cease to criminalize immigration but also establish a system that allows migrants to move straightforwardly between the various areas in which they work, regardless of which side of the borders those areas may be located. Moreover, when migrants move, their skill must remain visible and intelligible to industry actors. When Mexican workers in the construction industry move from areas in the United States to areas in Mexico, or from Mexico to U.S. cities, the skill they have acquired is not fully visible and thus not fully used. This valuable resource is, as a result, lost to the industry. To address this issue, a transnational certification program that could make the skill that immigrants acquire in a given labor market legible and defensible represents a promising option. The Mexican government, at both the federal and state levels, is currently experimenting with policy interventions of this type; its efforts in the construction industry have met with mixed results, but it has developed pilot transnational certification programs agricultural programs that have been successful. Exploring the reasons for their effectiveness and translating those insights into structures that would be appropriate for the construction is an obvious next step.

In addition to facilitating the mobility of migrants, policy interventions that help immigrants overcome the institutional obstacles that limit their contribution to the industry are urgently needed. The policies required are of two types. In the first group are interventions that draw attention to the ways the industry is curtailing its own

possibilities for development when it restricts immigrant participation. Examples might include scholarly or policy studies that detail what development opportunities the industry may be forgoing when it curtails the process through which immigrant workers author innovations in techniques or suggest improvement in production practices. The second type of policy intervention consists of direct support to help immigrants scale the institutional barriers they face when working in the construction industry. A program recently launched by Mexico City's Secretariat of Community Development offers a promising model. The intensive training program focuses on helping migrants translate the skills acquire abroad into a business; the training includes specific assistance in areas, such as client relations and skill demonstration, which have been challenges for returning migrants seeking to rejoin the construction industry.

These are two areas of potential policy interventions. There are many others: transnational partnerships between industry actors, including industry associations, research institutions, and building trade unions, geared toward improving production; immigration visas that mandate access to training; and building material producers that extend training in their cutting-edge materials to workers, strengthening the role of labor in spearheading change in construction practices. The important thing is that the policy interventions should support and cultivate the contribution that migration can make to an industry. The form such interventions take depends on the industry, and their design requires the examination of migration through an industry lens. More essentially, however, it requires us to contemplate how different our migration policy migration might be if we began with a grounded appreciation of the connections immigration forges and the prosperity it can bring to us all.

Notes

The case material presented in this chapter grows out of a collaborative project with Dr. Nichola Lowe, professor the UNC-Chapel Hill, Department of Urban and Regional Planning. The project—Hidden Talent: Tacit Skill and Mexican Immigrants in the Construction Industry—was jointly conceived and researched, and the analysis of the data collected was fully collaborative. Papers from this project are marked with an asterisk in the works cited section of this chapter.

1. For a more detailed description of this study, see Iskander and Lowe 2010.
2. In our interviews, we found that many immigrants who had helped build family houses did not consider their participation to be construction experience, even though, upon further exploration, it became clear that they had had completed essential building

tasks. Rather, they viewed their knowledge to be similar to that of household maintenance and did not perceive that they had acquired industry-related knowledge. Consequently, our estimates of the percentage of immigrants in our sample with construction-related experience may be conservative.

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