
PRIMARY, SECONDARY, AND ENCLAVE LABOR MARKETS: A TRAINING SYSTEMS APPROACH*

THOMAS BAILEY
Columbia University

ROGER WALDINGER
University of California, Los Angeles

While research on ethnic enclaves has shown that workers employed in the enclave appear to enjoy at least some of the advantages associated with the primary sector, this "enclave effect" has not been adequately explained. In contrast to existing explanations that conceptualize the enclave as a special case of the primary sector, we emphasize the distinctive characteristics of ethnic economies, and explain the "enclave effect" using a single, consistent account of recruitment and skill acquisition processes in primary, secondary, and enclave labor markets. Unlike other sectors of the economy, the ethnic enclave is characterized by an external, informal training system that shapes the employment relationship and increases the availability and quality of information for workers and employers. We apply the concept to a case study of the New York garment industry.

With the revival of large-scale immigration to the United States, ethnic business is no longer a matter of strictly historical interest. Immigrants from some groups, such as Koreans, Chinese, or Cubans, rank high among the self-employed. Where ethnic businesses have burgeoned, opportunities to acquire skills and generate income also appear to have improved. Portes and Bach's (1985) longitudinal study of Cuban refugees found that previous employment by other Cubans increased the probability of subsequent self-employment for the refugees. About 37 percent of the refugees who were still employees in 1979 worked for other Cubans; these refugees gained a better return to investments in human capital such as education than their counterparts in nonethnic secondary firms (Portes and Bach 1985).

Though contested, these findings have galvanized research (e.g., Sanders and Nee 1987; Zhou and Logan 1989; Evans 1989), and for good rea-

son. Many of the industries comprising the enclave also make up the "secondary sector." The same structural factors that impede skill acquisition, attachment (to a particular firm, industry, or labor market), and upward mobility in the secondary sector also characterize the ethnic enclave. Yet despite all these similarities to the secondary sector, workers employed in the enclave appear to enjoy at least some of the advantages associated with the primary sector.

But why? The literature offers several competing arguments. In some accounts, the empirical results show an enclave effect, but the explanation lacks theoretical consistency. For example, Portes (1981) has argued that the ethnic enclave is a third mode of labor market incorporation (in addition to the primary and secondary sectors). But the presumed source of the distinctive enclave effect — ethnic solidarity — remains entirely external to the overall theory of labor market segmentation.

Other explanations have strived for theoretical integration by conceptualizing the enclave as if it were fundamentally similar to the primary sector. Portes and Bach wrote that immigrant "entrepreneurial activities . . . are able to reproduce . . . some of the features of *monopolistic control* that account for successful firms in the wider economy" (Portes and Bach 1985, p. 203, italics added). Noting the evidence on returns to investments in human capital among workers in the enclave, Wilson and Martin inferred that "the enclave labor market is similar to the primary labor market" (Wilson and Martin 1982, p. 139)

* Direct correspondence to Thomas Bailey, Box 211, Teachers College, Columbia University, New York, New York 10027 and Roger Waldinger, Department of Sociology, UCLA, Los Angeles, CA 90024. Grateful acknowledgements to: Michael Lapp for research assistance; The Ford Foundation for financial support for both authors; the Division of Immigration Research and Policy, International Labor Affairs Bureau, U.S. Department of Labor, for financial support to the second author; and Greta Gilbertson, Anthony Orum, and the anonymous readers and the editors of the *ASR* for their critical comments and advice. The views expressed herein are those of the authors alone; this paper is their joint work.

and proposed the hypothesis that the ethnic "enclave resembles the center economy" (p. 138). Jiobu built on these earlier ideas to develop his own concept of "ethnic hegemony," arguing that "within hegemonized firms and throughout a hegemonized economic area, the minority finds an *internal labor market open to it*" (Jiobu 1988, p. 356, italics added).

Thus, explanations of the enclave effect have reduced the enclave to a special case of the primary sector — a line of argument whose assumptions about monopoly power and internal labor markets we shall show are doubtful and unsupported. By contrast, our more parsimonious theoretical strategy relates the characteristics of ethnic economies to the "enclave effect" in terms of a single, consistent account of skill acquisition processes in the primary, secondary, and enclave sectors. Our framework rests on the concept of *training systems*, 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. Training systems are the mechanisms by which labor market information is circulated, workers are recruited, and skills are obtained. These mechanisms can be classified along two dimensions: their institutional context, whether occurring through formal channels or informal processes, and their relationship to the firm, whether internal or external. We differentiate the primary, secondary, and enclave labor markets in terms of these dimensions.

External, informal structures characterize the ethnic enclave, and yield the enclave effect in three ways. First, they shape the employment relationship by imparting a set of understandings common to workers and employers, thereby reducing the probability that informal understandings or implicit contracts will be broken. Second, they increase the availability of information that both workers and employers need in order to invest in skills. Third, they reduce the risks associated with skills training for both employers and workers.

To illustrate the framework, we develop an example based on a case study of the New York garment industry. The case study shows that the ethnic economy in the garment industry is a bounded, distinct social phenomenon. Two different training systems characterize immigrant and nonimmigrant segments within the garment industry; and the structures of labor market information, recruitment, and training prevailing

in the two segments barely intersect. We argue theoretically and empirically that the differences in training systems yield disparate opportunities for skill acquisition available to immigrants employed in the two segments.

The argument developed in the case study portion of this paper builds on research that we have reported elsewhere (Waldinger 1986; Bailey 1987), although we used that work for background purposes only unless otherwise specified. The case study is more directly stimulated by several recent projects, including an evaluation of training programs (Bailey and Waldinger 1987), studies of technological and organizational change (Bailey forthcoming; Bailey 1989; Waldinger and Bailey 1990), and an assessment of the impact of the Immigration Reform and Control Act (Waldinger and Lapp 1988). In the course of these projects, we have spoken with over 70 employers in contexts ranging from 30-minute interviews to day-long factory visits. Our interviews treated recruitment, training, labor force demographics, technology, factory organization, and supplier and customer linkages. We chose employers, at times in consultation with industry insiders as the directors of employers' associations or union officials, to include a broad spectrum differing in size, technology, and ethnicity. In addition, these studies included interviews with representatives of every New York City local of the two major apparel unions and with the directors of every employers' association engaged in collective bargaining with one of these local unions. We also interviewed the directors of every apparel training program in New York that we could identify after extensive consultations with industry experts and with the agencies that fund many of these programs.

EXPLAINING THE "ENCLAVE" EFFECT

Wilson and Martin's (1982) influential article made the most explicit attempt to integrate notions of the enclave into broader economic and labor market theory. Using theories of economic dualism, they argued that enclave economies can "reproduce crucial features of the center economy":

Enclave economies that are vertically and horizontally integrated yield higher initial profits per unit of demand, create higher levels of production in related industries (caused by the higher wages and create more jobs (again because of the initial demand). (p. 138)

Using input-output analysis and data from the 1977 *Survey of Minority-Owned Businesses*, Wilson and Martin concluded that "a high degree of vertical integration (within the Cuban enclave) is possible," yielding the potential for an additional 50 percent increase in spending within the Cuban community after the "injection of initial demand" (p. 154).

Since this argument has been so influential, it deserves a closer look. Wilson and Martin implied a necessary relationship between vertical and horizontal integration. Historically, however, vertical integration has been much less common than horizontal integration: Many oligopolistic industries have relatively low levels of vertical integration (Scherer 1980, pp. 78-80). The two forms of integration also yield different effects. Horizontal integration resulting in monopolistic or oligopolistic market power does indeed yield a higher profit rate, but at the price of *lower* production, *lower* employment, and *higher* prices. In contrast, vertical integration can lead to greater production efficiency, and thereby yield higher profits and wages (and probably *lower* prices), in the absence of market power. However, after proposing it Wilson and Martin abandoned their contention about monopoly market power. They never presented any data on horizontal integration, nor did they theoretically or empirically support an argument that production efficiencies may be induced by vertical integration.

Instead, Wilson and Martin suggested that vertical integration keeps money and profits generated by Cuban consumption (final demand) within the Cuban community and thereby yields higher profit per unit of final demand. This contention confused the volume of profit with the profit *rate* or the profit per worker. Higher profits per worker allow primary sector firms to pay higher compensation, provide greater security, and so on; but, as noted above, no market power or efficiency effects occur in the Cuban ethnic economy, providing no reason to believe that vertical integration in the enclave will lead to higher profits per worker. As long as all Cuban firms are earning only normal profit, the fact that they are in a chain of Cuban firms or that they supply to or order from other Cuban firms does not alter the wage determination process. In other words, horizontal competition prevents firms from passing along increases in compensation, regardless of vertical linkages.¹

¹ And again, Wilson and Martin present no data

Wilson and Martin's theoretical framework confounded three different concepts: vertical integration, horizontal integration, and the retention within the Cuban community of profits generated by Cuban demand. Only monopoly power or some efficiency effect would account for primary sector-type effects on wages. Yet Wilson and Martin only presented information on vertical integration.

Even this evidence does not bear up under re-examination. Because Wilson and Martin used data aggregated at the one-digit industry level, they estimated the potential for interdependencies on the assumption that all transactions occur *among* industry sectors (e.g., manufacturing and construction). The reality of production and distribution, of course, is far more complex. Many steps and numerous transactions typically occur from raw material production to completion of a product. While the data for a disaggregated look at possible interdependencies are not available at the local level, available disaggregated national-level data do not show the potential for vertical integration along the lines that Wilson and Martin suggested.

The garment industry, accounting for 7.4 percent of all employment in Cuban-owned firms in the United States in 1982, is a good case in point.² While apparel is the single largest Cuban manufacturing industry, there are no Cuban-owned yarn or thread mills, weaving mills, or textile finishing mills from which Cuban apparel makers may buy their supplies. In fact, total sales accounted for by all Cuban-owned textile firms amounted to only \$1.5 million dollars, whereas Cuban apparel firms reported sales of \$25.7 million dollars — one-fourth of which was the costs of purchasing textiles. Downstream linkages for Cuban-owned garment makers are not abundant either.

Jiobu's (1988) concept of "ethnic hegemony" fell short for similar reasons. Like Wilson and

about the proportion of business generated by Cuban demand.

² We use the 1982 *Survey of Minority Owned Business* because it is based on a more comprehensive sample than the 1977 Survey used by Wilson and Martin (U.S. Bureau of the Census 1986, p. vii), provides greater disaggregations, and leaves a much smaller proportion of business and employment in residual, not classifiable categories. Theoretically, use of the 1982 Survey should be favorable to the Wilson and Martin hypothesis, since the passage of time should allow for greater immigrant movement into industries with higher capital and technical barriers to entry.

Martin, Jiobu emphasized vertical integration "as an important method of ethnic economic control," but added that "ethnic hegemony," which he defined in terms that appear to mean monopoly, is needed to "guarantee great economic gains" (p. 356). The advent of ethnic hegemony yields an internal labor market that provides steadier employment and upward occupational mobility.

Jiobu did show that, collectively, Japanese businesses accounted for a substantial share of sales of selected vegetable and fruit products in California and, further, that co-ethnic wholesalers and retailers were often linked together. But because he never demonstrated that numerical dominance in selected markets enabled Japanese businesses to exercise price control, the achievement of ethnic hegemony is open to doubt. Indeed, the circumstances of the Japanese ethnic economy were unlikely to provide the ingredients that ethnic hegemony required. First, the structure of the Japanese ethnic economy, with its abundance of small firms, was far more conducive to price cutting than to price control. Second, the existence of vertical links between independent firms should have constrained oligopolistic pricing. In other words, in Jiobu's framework price control can benefit an ethnic community only if it is passed through the entire vertical chain. But it is hard to imagine that the Japanese could have sustained their market among white consumers if Japanese growers, wholesalers, and retailers all received oligopolistic prices. Third, market control is a necessary but not sufficient condition of oligopoly: In addition to controlling provision of a product, sellers need a product for which the demand is inelastic. In this light, southern Californians may have enjoyed eating asparagus and berries, but were unlikely to have been willing to gratify those tastes at any price.

Without a showing of market power, Jiobu's framework is reduced to an account of the *employment* effect of ethnic business growth: the more ethnic firms in a business line, the greater the potential for co-ethnic employment. But why that employment should lead to upward mobility, let alone why jobs should be arranged in ways that resemble or are identical to internal labor markets, is a question that Jiobu did not address.

While Wilson and Martin and Jiobu sought to integrate the enclave argument into broader labor market theory, their accounts could not be sustained theoretically and the material they presented to support their arguments was inadequate. Evidence suggests that there may be an enclave effect, but the existing theoretical and empirical

literature leaves one wondering why. To answer that question we turn to the training system concept.

TRAINING SYSTEMS

The cost of training creates a fundamental problem for market economies because training is an investment that earns a return only in the future. The employer, who often lacks adequate information about a worker's skills and propensities before recruitment, finds that hiring itself is "an investment in uncertainty" (Spence 1974, p. 2). While the firm can only recoup its training investment if trained workers stay, it has no legal way to guarantee that the workers will not carry their newly acquired skills to other employers.

A dilemma of a similar sort confronts the worker. Like the employer, the worker may not have the information needed to assess accurately the likelihood that investment in training will yield an adequate reward. The worker's uncertainty can be a powerful constraint since, to the extent that workers pay for their training (through lower than average wages at the early stages of a job), they can only gain a return if they remain employed in the firm or industry for which the training is relevant.

By organizing the recruitment, skill acquisition, and the circulation of labor market information, training systems increase the probability that firms and/or workers will use the skills in which they have invested thereby reducing the risks associated with those investments. Training systems can be classified along two dimensions: their institutional context (either formal channels or informal on-the-job learning) and their relationship to the firm, whether internal or external.

Formal and Informal Structures

Formal structures include both schooling and job-related mechanisms for which rules and processes that influence entry into a labor market, training, and movement through stages in a career are explicitly stated in agreements or laws. The literature (e.g., Doeringer and Piore 1971) emphasizes internal rules, such as those established in collective bargaining agreements, which protect investments in specific training made by both the worker and the employer. These rules also provide mechanisms to enforce an understanding between the two parties — for example, when a contract directly prohibits layoffs of workers except under stated circumstances. While contrac-

tual agreements preventing quits are not enforceable, formal training structures can reduce incentives to quit because of the loss of seniority, non-vested pensions, and firm-specific skills. They can also be used to guarantee a supply of workers for each skill level through on-the-job training.

Formal structures are not always internal to the firm. Educational and licensing requirements are one way to maintain the value of training investments, but unions, especially craft unions, often furnish an external formal structure. A good example of this pattern occurs in construction unions, which have helped consolidate a skilled work force by providing training, restricting entry, and matching workers with jobs through hiring halls or other referral practices. The government's employment service is another example of a formal training structure that is external to the firm.

Training systems that are both internal and external to the firm also can be based on informal relationships or understandings. This type of mechanism is recognized in the literature on implicit contracting; here, aversion to contract violation or firm reputation (Holmstrom 1981) is assumed to help maintain the implicit agreement. Doeringer and Piore (1971) also emphasize the importance of custom in the functioning of the internal labor market. They argue that custom, which is the residue in which mobility rules are embedded, emerges out of long-standing, on-the-job interactions among workers and between workers and employers.

But the informal or customary factors that influence employment and training characteristics need not always be generated within the firm. Social ties based on kinship, ethnicity, community, or friendship exist outside the firm and can have powerful effects within the workplace (Granovetter and Tilly 1989). Network hiring organizes information flows, shaping job-search and recruitment patterns. Because network hiring also imports previously existing relationships into the workplace, hiring networks are more than sources of information — they are also independent factors that constrain and shape the employment and training process in the workplace. Network hiring reduces uncertainty by recruiting new workers who reproduce the features of the existing work force. When network hiring is used, the new recruit is never completely unknown. Network hiring also eases training because the intermediary who acts as a recruiter may take responsibility for "breaking in" the new employee; equally important, the latter may feel constrained

by the awareness that his or her work reflects on the recruiter.

But immigrant employers may be able to make much better use of these "word-of-mouth" recruiting techniques than their nonimmigrant counterparts who recruit an ethnically heterogeneous population. In the latter case, relationships between natives and immigrants may be conflictual and hence inimical to implicit understandings or contracts, just as segmented labor market theory suggests (Doeringer and Piore 1971). And even with little conflict, social distance between natives and immigrant groups may make it difficult to discern accurately the characteristics of both incumbent workers and applicants and may impede the development of trust. By contrast, network recruitment in immigrant firms taps a flow of workers whose characteristics are known and whose behavior is more predictable. Because these networks also link employers and workers to a common community, they also generate the type of customary factors that shape employment and training processes in internal or craft labor markets.

Internal and External Systems

Formal and informal training structures can be either internal or external to the firm. One important determinant of whether a structure is internal is firm size. Large firms are more likely to have internal structures for at least three reasons: They have a more articulated job hierarchy; they are more able to pay for training; and they are more likely to be unionized, and thus are more likely to have training structures specified in contracts. In contrast, the more competitive market position and lower capital-labor ratios of small firms yield lower wages and limited promotion opportunities.

The different functioning of internal and external structures can be made clearer by comparing the difficulties of mobility in industries dominated by large firms containing internal labor markets with those in industries dominated by small firms where internal structures have not been established. In industries dominated by large firms, workers can expect to earn the returns to their training within the same firm; the employer can also expect to recoup some of the training costs and need not require the worker to assume all of these costs.

By contrast, in small-firm industries, upward mobility almost always requires movement among firms. Except when structure is imposed

by an outside organization or union, the need to move in order to learn increases the uncertainty associated with attaining a given skill. Therefore, the risk is higher as a result of lower initial pay, higher foregone earnings, and the need to switch firms in order to advance. Furthermore, unskilled workers in small firms are less likely than such workers in large firms to know of skilled workers who have moved up systematically from the lower levels. Interfirm movement also eliminates the benefits of investment in firm-specific skills. At the same time, because it is probable that good workers will leave, employers are less willing to pay for general training that would be useful in other firms or industries. Therefore, several different factors substantially increase the risks of skill acquisition for workers in small firms.

Both formal and informal structures can reduce the uncertainties of skill acquisition and interfirm mobility in industries with weak internal labor markets. The formal institutions of the unionized construction sector perform precisely these functions (See Waldinger and Bailey forthcoming). Joint (union-employer) apprenticeship programs and union hiring halls organize and integrate the flow of information, recruitment of labor, and acquisition of skills. Payroll levies on all signatories of collective agreements socialize the costs of training: Every contractor equally risks paying the costs of training a competitor's crew. By keeping enrollments tightly controlled, apprenticeship programs improve the chances that young workers will find employment for their new skills, thereby increasing their incentives to devote the time and expense needed to become a craftworker. Enrollment caps also eliminate the threat that journeyworkers may be undercut, thus motivating the latter to provide on-the-job training. Apprenticeship also provides certification, conveying information needed to make hiring decisions. Since business agents in hiring halls are embedded in an organizational matrix that links them to firms and unionized construction supervisors, these connections quickly mobilize labor and provide a reliable flow of information.

In ethnic economies, informal structures operate in an analogous (but not identical) way. Ethnic networks facilitate movement into an industry and across the industry's firms and reduce the risks for both workers and employers. On the one hand, because network hiring furnishes the employer with more knowledge about the workers that are hired, the employer can evaluate with greater certainty the prospects for employment

stability and the related probability of earning an adequate return to investment in skill. On the other hand, the wider the worker's contacts within the industry, the higher the probability that he or she will be able to move successfully through a variety of jobs and firms and thereby obtain appropriate skills. From this point of view, a crucial factor is the tendency of immigrants to pile up in particular occupations or industries (Lieberson 1980) producing "ethnic niches." Because the ethnic niche is spanned by social networks among newcomers and settlers, the uncertainties of mobility are reduced on both sides of the employment equation.

The two-dimensional conceptualization of training systems — formal versus informal and internal versus external — places the effects of employment in ethnic firms within the context of the overall labor market. However, the ethnic enclave debate, our concern here, focuses on employment in industries characterized by external structures. Indeed, the entire problem arises because employment in the ethnic economy seems to override the disadvantage of working in small, unstable firms that have at best weak internal structures.

By explicitly focusing the analysis on external structures, the training system concept clarifies the relevant comparisons. The issue is not whether the ethnic economy is "separate but equal" to the primary sector, as Sanders and Nee claim (1987, p. 748), or is "structured in the image" of the primary sector, as Wilson and Martin (1982, p. 138) contend. Rather, the debate hinges on how immigrant firms differ from nonimmigrant firms in industries characterized by external labor markets of the secondary type.

This structural issue suggests a fundamental problem in Wilson and Martin's and Jiobu's attempts to draw a parallel between the enclave and the primary sector. Primary-sector training is based on internal structures that are necessarily much weaker in small firms in the enclave. Moreover, the prevalence of small firms precludes the recourse to the risk reduction strategies that shape recruitment and training in the primary sector. Therefore, the relevant standard of reference is not the internal labor markets of primary firms, but rather the craft or occupational labor markets that provide for upward mobility in external structures.

The contrast among different types of training systems within external labor markets also answers Portes and Jensen's question, "What's an ethnic enclave?" (Portes and Jensen 1987). As

Table 1. Ethnic Composition of the New York Garment Industry: 1970, 1980

Group		All Employed				Production Workers			
		1970		1980		1970		1980	
		No.	%	No.	%	No.	%	No.	%
Whites:	FB	35,200	25.1	21,140	16.7	28,900	27.4	17,600	18.5
	NB	53,100	37.8	32,040	25.3	30,000	28.5	13,640	14.3
Blacks:	FB	2,600	1.9	5,220	4.1	2,400	2.3	4,060	4.3
	NB	11,200	8.0	8,580	6.8	9,000	8.5	5,920	6.2
Asians:	FB	4,700	3.3	17,000	13.4	4,400	4.2	16,080	16.9
	NB	300	.2	400	.3	300	.3	260	.3
Hispanics:	FB	14,500	10.3	25,800	20.4	13,200	12.5	23,700	24.9
	NB	18,800	13.4	16,520	13.0	17,200	16.3	13,920	14.6
Total		140,400	100.0	126,700	100.0	105,400	100.0	95,180	100.0

Note: FB = foreign born; NB = native born.

Source: 1970, 1980 Census of Population, Public Use Microdata Sample.

Portes and Jensen (1987) correctly noted, the activities of workers and business owners in the enclave "are closely intertwined with the broader economy" (p. 768), and therefore the enclave does not comprise a self-encapsulated economy. But they remain in an enclave to the extent that a training system serves to distinguish and separate the labor market for immigrant firms from otherwise comparable nonimmigrant competitors.

We now turn to the case study to show how such an informal training system works.

THE CASE STUDY

Background: The Garment Industry

Wherever they have settled, immigrants and immigrant entrepreneurs have consistently gravitated into the clothing trade. Indeed, the garment industry appears to be the paradigmatic case of immigrant enterprise. Where else if not in clothing — an industry that is risk-laden, supportive of small concerns, and still dependent on traditional sewing skills — can immigrants find business success?

A sizeable immigrant garment industry is to be found in each of the sites — Miami (Sanders and Nee 1987; Portes and Jensen 1989), San Francisco (Sanders and Nee 1987), and New York (Zhou and Logan 1989) — and for each of the two immigrant groups — Cubans and Chinese — that have been used for the quantitative tests of the original enclave hypothesis. Extensive ethnographic and case study evidence documents

the proliferation of immigrant firms in each area as well.³

New York's garment industry. Despite four decades of decline, at the end of the 1980s about 100,000 apparel jobs still existed in New York City (New York State Department of Labor 1989). But the industry's ethnic composition had been transformed during the previous two decades. As recently as 1970, native and foreign whites comprised the majority of the industry's workers as well as its production labor force. But with the influx of new immigrants to New York following the Hart-Cellars Act of 1965, immigrant apparel employment actually grew while total New York employment in the industry continued to decline (see Table 1).

As a highly competitive industry, apparel has pursued a strategy of fragmentation to cut costs (Bailey forthcoming). At the organizational level this strategy has yielded the distinctive "contracting" system, where "manufacturers" purchase raw materials, design clothes, and sell finished goods to wholesalers or stores, but contract out the actual production. This arrangement allows the manufacturer to limit investment in fixed capital and thereby reduce risks, while lowering the capital and technical requirements for contractors seeking to enter the business. In New York, contracting is prevalent in almost all branches of the industry except men's clothing and women's undergarments.

³ See Waldinger (1986) and the literature cited therein.

Contracting has been the vehicle through which the immigrant influx has also transformed the ranks of the industry's petty entrepreneurs. Historically, an ample supply of Jewish and Italian sewing-machine operators, cutters, salespeople, and patternmakers had been eager to move ahead by starting up a clothing business of their own, but the changing social structure of Jewish and Italian-Americans has altered patterns of recruitment into the industry. While many Jewish- and Italian-owned garment factories remain, only a negligible proportion consists of new start-ups. By contrast, garment contracting firms established by new immigrants have burgeoned. From 1960 to 1985, the number of Chinese-owned garment firms in Chinatown climbed from 16 to 480 (Waldinger 1986, p. 117). There are also several hundred Korean garment shops and scores of factories owned by Dominican and other Hispanic immigrants. Though immigrant contractors have proliferated, as yet they have not moved very far into the more complex and capital-demanding manufacturing end of the business.

The continuing importance of skill. Although jobs in the needle trades are often characterized as entry-level positions, and apparel historically has been the employer of first instance for new immigrants, most jobs in fact require considerable proficiency. Most basic sewing and stitching jobs listed by New York City employers with the New York State Job Service require at least one year of experience.

The weakness of internal labor markets. The production technologies that prevail in New York's garment shops reinforce the industry's fragmentation. In some cases, as among high-priced dressmakers who sew a complete garment, no mechanisms exist to bridge the gap between highly skilled operators and entry-level sorters or finishers. In other cases, as in the so-called bundle shops where many operators perform single repetitive operations, the complexities of material handling ensure that other operators require a high level of skill. Consequently, the industry's numerous low-level positions are often isolated from jobs that are one notch up in the skill hierarchy.

Training Systems: Formal and Informal Structures

Since few firms in the garment industry maintain internal labor markets, the central concern in analyzing training systems involves differences between external formal and informal systems.

The formal system. New York City has several schools, training programs, and labor market intermediaries that serve substantial numbers of native-born workers, including minorities. These institutions include both a public fashion industry high school and a branch of the state university granting associate and bachelor's degrees. Although the high school was started in the 1930s to train sewing machine operators, the current graduates are not interested in factory work. Eighty percent go on to some form of postsecondary education and the principal told us that he "couldn't give a single instance of a child whom [he] placed in a production job." Graduates of the state university branch are even less likely to end up in a factory, heading instead for designing, marketing, and management positions. Two proprietary schools also train workers, mostly immigrants in these cases, for lower skilled jobs in design, patternmaking and other nonfactory based functions. The few federally funded job training programs that do train disadvantaged participants for factory jobs enroll only limited numbers of trainees and place even fewer. Thus the large formal training system is virtually detached from the factory sector; minority students (and trainees) who pass through this system may indeed find jobs in the apparel industry, but few find them in production-related positions.

Formal institutions for finding jobs are more important than these training programs. The New York State Job Service maintains two special apparel industry offices. Employers call the Job Service with postings; unemployed workers are then directed to openings. The New York Joint Board of the Amalgamated Clothing and Textile Workers, which has contracts with firms in the men's clothing trades, runs a hiring hall. Employers whose shops are organized by this union agree to list their openings with the hiring hall before looking elsewhere; unemployed union members in this trade report to the hiring halls in lieu of the Job Service. In the other clothing trades the degree to which unions assist in matching workers to jobs varies considerably: Some unions offer an organized, though voluntary, referral service; in other cases, the unions refer workers to jobs on an ad hoc basis; in still others, the unions do not refer workers to jobs.

Ethnic networks and the informal system. These labor market intermediaries coexist with two other mechanisms by which workers are matched with jobs and acquire skills. The first resembles a casual hiring process: Workers look for jobs by traveling to the specialized geographic areas

where garment factories cluster, moving from one loft to another asking for work.

This casual hiring process works with limited success for both workers and employers. On the one hand, as even the nonimmigrant employers testified, there is no shortage of "people who come around, knocking on the door and looking for a job." On the other hand, there are relatively few positions at which totally unskilled workers can be employed. As we have noted, most jobs require at least some skills; but because these skills are general and can be used by any employer in the industry, few employers are willing to train workers who come in the door through this casual process.

Instead, for jobs requiring training employers seek recruits among the relatives and ethnic group members of the workers whom they already employ. During New York's heyday as an apparel production center, employers depended on their access to the ethnic communities that then dominated the ranks of entrepreneurs and workers alike. Up until the 1970s, European immigrants continued to provide a core labor force; in the post-World War II period, their dwindling ranks were replenished by a smaller but substantial influx from Europe that began with the arrival of "displaced persons" in the late 1940s and continued through the 1960s. Because many of these immigrants had undergone multiyear apprenticeships prior to their arrival in the United States, they supplied a pool of highly skilled labor. More important than the immigrants, however, were second-generation workers who moved into the industry through a training system mediated by kin and ethnic connections. One employer, a Sephardic Jew who inherited the shop his father had started in 1936, explained how this traditional recruitment system worked:

In the old days, I used to train. At that time, I used to get operators through the families. I would locate a daughter next to her mother. End of my responsibility. The daughter was not on the payroll and would assist her mother. When the mother felt that the daughter could do the work herself, then I put her on the payroll. With this arrangement I was just obligated to pay piece rates. The business agents would wink at this practice.

The present-day counterpart of this system survives in the burgeoning immigrant sector where, as one immigrant contractor pointed out, "We work with our own ethnic group." Ties between new arrivals and immigrant owners steer new-

comers into the ethnic economy. "When new immigrants come in, they need a job," explained one well-established contractor in Chinatown. "We know they are hard workers." As in the past, immigrant owners provide newcomers with some instruction, material, and a place to work. As one Chinese contractor explained,

Most of my workers, they've been with me for a long time. Lots of them have been trained here. When they first started I gave them a little basic training on a machine and some pattern stitching. I hire unskilled workers and train, mostly through recommendations of other workers. They seem to have more confidence in the shop. They must hear something good about the shop. Of course, I have had problems: I expect that some workers will go. The only thing is I have to let people know that if you're looking for a temporary job, this is not the right place. I want someone to work here for a while. I will train them, but I want someone that stays after the training.

Not only do the ties between owners and newcomers provide the information that both sides need for decisions about hiring and training, those connections also provide a social structure in which skills can be acquired more readily.

We prefer to train referrals; we know them; they also have friends or relatives in the shop. At least if they have anything difficult, they can help each other out; they will show them how to do this [particular operation].

Furthermore, immigrant workers who acquire skills become part of a labor force that immigrant employers share as a group. One contractor noted that "in Chinatown people will work for someone in the morning, and then, if they get laid off, work for you in the afternoon." Thus the informal system provides the immigrant sector with an important external economy.

The new ethnic labor force of today consists almost entirely of first-generation immigrants. In contrast to the earlier pattern, when newcomers and native-born ethnic workers were both to be found in the industry, "the younger generation they don't want to work in sewing, they'd rather work in the office, even at a lower salary." Nonetheless, the web of social relationships that links the small contractor to his or her immigrant or ethnic community takes the place of direct family ties. Immigrant firms therefore tend to be dominated by a single ethnic group, with hometown or provincial recruitment networks often playing an important role.

Formal or Informal — What Difference Does It Make?

As we have noted, the casual hiring process furnishes a substantial flow of potential recruits. But since these workers lack skills, they are ill-matched with the needs of employers; nowhere is this more evident than in the nonimmigrant sector. As one better-garment contractor pointed out, "I never hire them [inexperienced operators] because I can't afford to have them ruin a garment: the material costs as much as \$100 a yard." More important, disconnection from these casual recruits makes investment in any training seem like a bad bet. "When I take people from the street," noted a Brooklyn manufacturer of hand-tailored suits, "the problem is undependability."

The casual hiring process generates an ample supply of workers that employers in the nonimmigrant sector cannot adequately use. At the same time, because the story of the Italian and Jewish proletariat in New York's needle trades has at last come to an end, the informal training system no longer plays its former role. "When I went into the business," noted one Jewish factory owner, himself an immigrant, "we had a lot of experienced people who wanted to work: they got older, retired, and their children don't want to go near a factory." Under these circumstances, white ethnic employers turn to new immigrants. But the old, informal training system depended heavily on connections to co-ethnics and on the goodwill those ties engendered. The exodus of the old-timers and their replacement by immigrants leave nonimmigrant employers uncoupled from the networks that previously structured their labor market. The Sephardic Jewish employer quoted above noted that "these days family recruitment is fairly infrequent."

Instead, the nonimmigrant factories now depend on the formal organizations that act as intermediaries between workers and employers for recruitment and job finding, such as the Job Service and the union hiring halls. The hiring halls mobilize a shared labor force, but they do not furnish employers with recruits who seem good candidates for training. Because they lack ties to new populations that could expand the labor supply significantly, the hiring halls can only circulate the existing labor force from one factory to another. Men's clothing manufacturers noted that they always attempt to obtain referrals from the union hiring hall, but that with few skilled members who need new jobs, the union "can't help us."

In contrast, the Job Service is a source of new applicants, but the information that the employer can acquire about these applicants is of much lower quality than the information provided when a recruit is referred by someone already in the plant. Information is less important in the case of skilled workers, since an employer quickly perceives whether a newly hired worker can sew a collar or sleeve. When the Job Service sends unskilled or less skilled workers, employers lack knowledge about the stability and reliability of these referrals; hence they are unwilling to commit to training and upgrading. As one official in the Job Service noted, "Employers in this industry are unwilling to train. They have to be on the edge of desperation to do any training."

The other side of the coin is that few employers consider the Job Service to be a source of reliable, skilled labor. "The Employment Service hasn't sent me a decent worker in more than thirty years" captures the spirit of comments we heard from several employers. Of course, employers do make wide use of the Job Service, belying their insistence that it is often useless. But their views reflect the problems in hiring and retaining workers who lack any attachment to a firm and its stable network of employees.

Substantial wage increases would certainly help attract new workers to the industry, but intense international competition and widespread seasonality make it difficult for employers to compete on pay. The low status of the unskilled jobs keep many workers away, while skilled workers often have alternatives to the apparel factory — the standard complaint among men's clothing makers is that the alteration rooms of department stores "soak up our skilled labor and pay them better."

In the nonimmigrant sector one thus finds the paradox of a "tremendous void in skilled labor" and a "labor situation [that] is good for bad operators" despite the continued loss of jobs. We canvassed the directors of seven employers' associations, all of whom thought there was a shortage of workers in the city's garment industry. Officials at the New York State Department of Labor confirmed these views: One noted that "only two to three people come [to this office] in a week seeking garment industry work. But every day employers call seeking 10 to 20 workers for sewing and other types of jobs."

Union officials are somewhat more skeptical about the depth of the shortage, though differences in opinion clearly reflect the variations in members' skill levels and the prevalence of new immigrant firms. Officials attached to union lo-

cals whose members tend to be skilled and are only rarely employed by new immigrant owners are particularly likely to emphasize the paucity of new skilled workers. For example, one official in the men's clothing industry commented that the "labor force has disappeared" and pointed out that the union's hiring hall can no longer fill vacancies when employers send requests.

The effectiveness of the informal system in the immigrant sector. Casual recruits also flow into the immigrant sector, where they are likelier to find a job, especially in small, peripheral neighborhood shops where wages and working conditions fall so far below the industry's depressed average that only inexperienced operators will take this kind of work. Elsewhere in the immigrant sector, unskilled recruits without connections to employers or established employees fare less well. There are always more unskilled job seekers than there are positions on the floor; too many operative jobs, as one immigrant factory owner put it, "require that you know what you're doing," and even immigrant shops "are looking for a person with experience."

Nonetheless, the informal training system provides the immigrant sector with an adequate supply of new workers and of existing workers circulating from firm to firm. No complaints about labor shortages have emerged from interviews and discussions with Chinese employers. As one Chinatown contractor told us, "The availability of workers is very good. We have a large pool of garment machine operators and are never really short of workers."

Skill development and mobility opportunities. So far we have focused on the process of entry and initial skill acquisition. What about the opportunities for movement up the skill hierarchy? For workers in the immigrant sector, opportunities have expanded as the sector has grown, as firms have increased their range of proficiencies, and as entrepreneurs have moved into new product lines. At the outset, most Chinese firms simply handled the sewing operations; the skilled jobs required to cut textiles were typically done by white workers employed by manufacturers. Over time, Chinese firms have steadily increased their share of cutting work, with numerous firms maintaining their own cutting facilities where immigrant cutters, and the even more skilled pattern- and markmakers, are employed. Greater expertise has also enabled owners to move upstream into product lines with higher quality demands and for which more complex factory setups are required. While some of these firms have

pursued a strategy of job fragmentation, their continuing need for flexibility limits their ability to do so. For example, as one employer stated:

Most of the workers here have cross-training: One doesn't just set a sleeve; one has to have training in other operations. A sleeve setter can be a seam sewer; the underpresser doesn't just underpress, doesn't just bust open a seam, he's finishing, semi-finishing parts. The button sewer has to know button hole operations; the blind stitcher has to know some type of sewing.

Finally, the immigrant sector has helped perpetuate the long-established patterns of movement into entrepreneurial ranks. Waldinger's (1986) interviews with nonimmigrant and immigrant owners revealed a striking parallel between the experiences of Dominican and Chinese newcomers and Jewish and Italian factory owners, most of whom opened factories in the 1940s and 1950s. Thirty-four of the 41 Jewish and Italian owners whom Waldinger interviewed had had work experience prior to starting up their own businesses; of those 34, 14 had been garment workers, 7 had been blue-collar workers in other industries, and the rest had previously been in a white-collar or some other self-employed position. Ninety-three of the 96 new immigrant business owners he interviewed had been employed prior to going into business; of those 93, 63 had been garment workers, 23 had been employed in other blue-collar jobs, and 7 had previously owned another business or had been salaried employees.

Thus, in the immigrant sector, the informal training system structures the long-term development of skill. By contrast, in the nonimmigrant sector the difficulties in recruiting and training skilled workers increasingly lead employers to fragment the labor process and downgrade the existing skill level. Speaking about the men's clothing industry, a union business agent pointed out that "the contractors need more supervision, they have to run factories more tightly, they expect to never have highly skilled people again." One menswear maker, considered among the industry's more "advanced" local producers, told us that "we have an engineering staff trying to take the labor content out of manufacturing; machines don't get sick and don't need vacations." This view is shared by what is perhaps the city's most technologically progressive factory, whose manager noted that "there is less of an available workforce that has had skills." This firm, which employs conveyers in a bundle system to keep

"the sewing floor highly disciplined," has invested in new technologies designed to further "reduce labor content."

Barriers to mobility from the immigrant to the nonimmigrant segment. Given the disparity in the availability of workers in the two sectors, one might think that experienced operators from the immigrant sector could move into the nonimmigrant sector and learn the more advanced skills on the job. To some extent this does happen, but not frequently enough. The problem is that ties and information flows between the two sectors are not sufficiently strong to make movement out of the immigrant enclave a common path of mobility. The same informal connections that lubricate recruitment and training in the immigrant sector make workers reluctant to leave immigrant firms where they are more comfortable, work in a familiar environment, and enjoy ties to other workers who share their culture and language. Employers in the more skilled lines, for example, were eager to recruit Chinese workers and indeed had made some efforts to do so. As one employer told us,

I hear about the Chinese and would love to have some [in the factory], but they need to have people in the shop to relate to and I don't have anyone in the shop who can communicate in Chinese.

Since normal recruitment procedures are so ineffective, one of the unions in the men's clothing industry has hired a Chinese recruiter whose specific task is to find Chinese employees to transfer into men's clothing factories.

However, workers often prefer continued employment in the immigrant sector. Chinese workers, for example, make virtually no use of Job Service referrals. Workers in the immigrant sector can also take advantage of informal work arrangements that give them flexibility with respect to hours and attendance — practices that do not obtain in the more formally administered firms in the skilled, nonimmigrant segment. One contractor in Chinatown who, unlike many of his competitors paid his workers by check and wanted consistent punctuality and attendance, pointed out that while "people are very hard working and diligent, our biggest problem is to undo some of the bad habits that the workers had acquired from other contractors. For example, they are used to working for local contractors who don't have strict working hours."

In summary, the production end of New York's garment industry is detached from those formal training structures that enroll and recruit a size-

able native born and minority population; formal labor market intermediaries do not substitute as alternative sources of new, nonimmigrant labor. Rather, access to the industry depends on connections to ethnic social networks in which on-the-job training processes are embedded. Consequently, the informal training system is both cause and consequence of the growth of the immigrant sector. The ability of immigrant employers to secure a known and reliable labor force through network recruitment has combined with the structural characteristics of the industry to offer immigrants a permissive environment in which to start up new businesses. Once in place, the immigrant sector has grown in a self-feeding process: Newcomers take up work in immigrant firms, and workers who have gained skills and experience working for co-ethnic owners set up new businesses of their own.

CONCLUSION

Small business industries like clothing, restaurants, or construction are environments in which new immigrant businesses can arise. In these industries, size of establishment and competitive conditions constrain the development of internal labor markets. Consequently, the ethnic economy cannot reproduce primary-sector features that promote skill acquisition and upward mobility.

But if internal labor markets do not arise, how and why should workers and employers in the ethnic economy invest in skills? The concept of the training system answers that question. In the ethnic economy, firms turn to the external market to secure a labor force. In the process, relationships based on ties to a common community move into the immigrant firm. By increasing the amount and quality of information available to workers and employers and by creating the normative basis for implicit contracts, network hiring reduces the risks in skill acquisition for workers and employers alike. Thereby it produces the employment patterns similar to those that characterize the primary sector even though structural characteristics of the enclave appear to have more in common with those of the secondary sector.

The training system concept also specifies the difference between immigrant firms and their nonimmigrant "secondary sector" counterparts. Because secondary sector-type firms are not integrated into networks that create informal training systems, they are more likely to rely on formal mechanisms. But those characteristics that

define the secondary sector also diminish the effectiveness of those formal systems. Thus labor market arrangements in the nonimmigrant sector of the garment industry tend to be unstructured, lacking "few, if any, established institutions by means of which people obtain information, move into and out of jobs, qualify for advances in rank or pay, or identify with any organization" (Phelps 1957, p. 406).

The training system concept can be developed further to illuminate other issues raised by the research on ethnic enclaves. Rather than focusing debate on whether the ethnic enclave is characterized by reciprocal or exploitative relations between ethnic employers and workers, the training system concept implies that outcomes are contingent upon and determined by the ways in which ethnic economies develop. Both workers and employers experience costs in the expectation of future and uncertain rewards. While it is therefore in the interests of both sides to reduce the risks, interests sometimes coincide (within limits), and other times conflict.

The persistence of the informal, external training system that we have described here probably depends on the continuing arrival of new immigrants. When a particular immigration stream slows down or stops, immigrant owners must turn to other groups. If this happens, the ethnic ties that induce implicit contracts between co-ethnic workers and employers become attenuated. Rather than strengthening training structures, ethnicity undermines them and the relationship between immigrant owners and the outsiders they employ resembles the relationship in otherwise comparable nonimmigrant firms.

THOMAS BAILEY is Associate Professor of Economics at Teachers College, Columbia University. He is the author of *Immigrant and Native Workers: Contrasts and Competition* (Westview Press, 1987) and numerous articles and book chapters on technological change, education and training, employment policy, and immigration. With Roger Waldinger, he is completing a new book, *Urban Fates: New Immigrants and African-Americans in Post-Industrial New York*.

ROGER WALDINGER is Professor of Sociology at UCLA and Visiting Associate at Conservation of Human Resources, Columbia University. He is the author of *Through the Eye of the Needle: Immigrants and Enterprise in New York's Garment Trades* (New York University Press, 1986), and with Howard Aldrich, Robin Ward, and associates, *Ethnic Entrepreneurs: Immigrant Business in Industrial Societies* (Sage, 1990).

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