

# **Fighting the Piece-Rate System: New Dimensions of an Old Struggle in the Apparel Industry**

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The apparel industry, or the “needle trades,” provides an example *par excellence* of a labor-intensive, low-wage industry where women make up a large proportion of the labor force. Most of the women are employed in production, which is 80 percent female, and are paid on an incentive or “piece-rate” basis. The impact of technology has been, and will probably continue to be, low, especially as it affects women workers. Instead, workers have had to deal with two other issues: the tendency of this and other labor-intensive industries to “run away” to areas of cheaper labor, and the continuation of the piece-rate system within the context of increasing centralization of production and new strategies to “improve management techniques” (U. S. Bureau of Labor Statistics (BLS) 1977a:4). The reactions and counterstrategies of women workers and union locals to these recent trends will provide the focus for this paper. Much of my analysis will concentrate on data gathered on the shop floor of a New England apparel plant. However, to set the stage for this analysis I will first examine long-term characteristics and recent changes in the industry as a whole.

## **Long-Term Characteristics of the Apparel Industry**

The major technological innovation that made mass production of clothing possible and that still structures production was the invention of the sewing machine by Elias Howe in 1846 and its improvement by Issak Singer a few years later (Seidman 1942:15). This facilitated the transfer of tailoring from the

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home to the factory, increased the use of semiskilled workers who sewed by machine, and replaced the hand-tailoring of more skilled workers.

With the inexpensive and portable sewing machine at the center of the industry, it takes relatively little capital to set up an apparel shop—only \$50,000 in 1974 (NACLA 1977:6). The key to success is not continual investment in new plant and equipment, but style creativity and merchandizing (Helfgott 1959:25). As a result, the industry has since its early days been characterized by a division between “inside shops” or manufacturers (who perform all the steps of the process, including designing, purchasing fabric, cutting, sewing, and selling) and “outside shops” or contractors who sew already-cut garments received from a jobber and return the finished garments to the jobber to be sold (see Levine 1924: Ch. 2 for an early history of this division).

In the late nineteenth and early twentieth centuries, these outside shops were called “sweat shops” because they were located in tenements on the Lower East Side of New York City where unsanitary conditions, long hours, and extremely low wages prevailed (see Levine 1924: Ch. 4; Seidman 1942: 56–60; Zaretz 1934: Ch. 2 for a description of conditions). Unionization and government regulation have reduced a number of the evils of the “sweat shop,” but small production units, the contracting system, and lower wages with poorer conditions in smaller shops have persisted. As late as 1972, 50 percent of the firms employed less than twenty workers and only 14.3 percent employed over 100 (U. S. Department of Commerce 1976: vol. 1, p. 23, Table 5).

Easy entry has created a highly competitive industry: there were 24,428 apparel establishments in 1972. Competitiveness is exacerbated by the importance of style change and seasonality. In branches producing more standardized products (such as bras and underwear), employment fluctuates by 27.8 percent between the peak and off seasons, while in establishments producing women’s suits, coats, and dresses, employment may fluctuate as much as 132 percent (Helfgott 1959:41).

Seasonality is seen by some authors as a product of the “buying habits of the public” or the “whims of fashion-conscious American women” (*ibid.*:41, 57). However, it is clear that the apparel industry has expanded its market through seasonal and

yearly changes in fashion: the need to be "fashionably dressed" is a major factor in the "planned obsolescence" of clothing in a capitalist economy. In some socialist economies (e.g., China) clothing has become more standardized and is worn until it is outgrown or worn out, not until it has "gone out of style." Hence the capitalist mode of production itself may provide the prerequisites for keeping the industry attuned to changes in fashion; this in turn creates small production units, short production runs, and fierce competition.

The industry is currently organized into several branches. More than 35 percent of the workers are engaged in making clothing for men and boys, about 30 percent produce women's outerwear, and 22 percent make women's and children's undergarments, children's outerwear, hats, caps, and millinery and fur goods. Another 12 percent turn out curtains and housefurnishings (BLS 1969:14). There is a strict sexual division of labor in all branches. Women were employed in cutting operations until the cutting knife replaced shears during the 1870s, and men have dominated this skilled work ever since. Men are employed as sewing machine operators, but primarily in men's clothing and suits. Women are mainly sewing machine operators (sewers and stitchers), occupying 90 percent of these jobs (BLS 1977a:8). Recent wage surveys of subdivisions of the industry show that men are cutters, spreaders, machine repairmen, and janitors, while women are machine operators, baggers and boxers, garment folders, thread trimmers, basting pullers, final inspectors, and under pressers (BLS 1971:3; BLS 1974:3).

There are substantial wage differences between the sexes. Between 1971 and 1976 women in three branches of the industry earned between \$.36 and \$1.02 an hour less than men (BLS 1971:2; BLS 1974:3; BLS 1977b:4). Wages for women are based on a piece-rate system and tend to hover around the minimum wage, especially in the less unionized branches of the industry. For example, in 1974, when the minimum wage was \$2.00 per hour, women sewing machine operators averaged \$2.59 an hour in the trousers industry while male cutters and markers averaged over \$3.00 an hour and sewing machine adjusters earned \$3.80 an hour (BLS 1974:3). In the more heavily unionized suit-and-coat branch of the industry, women sewers earned an average of \$3.74-\$3.88 an hour in 1976 while male cutters earned \$5.64 an hour (BLS 1977b:5, 10).

## The History of the Piece-Rate System

Given the low-profit, labor-intensive, and highly competitive nature of the industry, the apparel manufacturer has always sought to get as much work out of the workers as possible. The piece-rate system has been the main method of keeping production high. The piece-rate system had its beginning in the "task-system" of the 1870s (Zaretz 1934:34). A team made up of a machine sewer, a baster, and a finisher was paid by the "task," that is, a specific number of garments. Weekly wages were cut and hours lengthened by sweat-shop employers by increasing the number of garments in a "task," until it became difficult to complete even four or five tasks a week (Seidman 1941:4). Early strikes attempted to abolish the task and contracting systems, and to substitute a weekly wage. In 1919–1920 the three major unions were able to establish weekly wages in their major contracts.\* Some contracts retained piecework, however, and a "log" or schedule system replaced the old task system. Each type of garment was divided into working parts with rates fixed on each part. During the 1920s the unions lost the battle to eliminate piecework, since an expanding number of small, nonunion shops paid piece rates and severely threatened the unionized sectors of the industry (Carpenter 1972:103). The unions were willing to accept responsibility for establishing "standards of production" for those workers paid on a weekly basis, but they were never able to convince management that the workers would produce a "commensurate" amount of work under weekly pay. By the mid-1930s the return to piecework was virtually total.

Unions, especially the Amalgamated Clothing Workers of America (ACWA) under the leadership of Sidney Hillman, came to believe that they should control the piece-rate system rather than abolish it. This was a natural outgrowth of the policy of "union-management" cooperation which saw unionized workers allied with "responsible" manufacturers against nonunionized

\* The three major unions are the craft-oriented United Garment Workers, the Amalgamated Clothing Workers of America (ACWA), which split off from the UGW and organized the men's clothing branch of the industry, and the International Ladies Garment Workers Union (ILGWU), which organized the women's garment industry. In June 1976 the ACWA merged with the Textile Workers Union of America (TWUA) to form the Amalgamated Clothing and Textile Workers Union (ACTWU).

segments of the industry (*ibid.*:43–45). Hillman argued that the union should support the “efficiency” of union shops since “inefficiency” (lower production and higher wages) would eliminate the employer altogether. As an AWCA publication suggested, “If the firm makes a good profit, the workers are in a better position to ask for a raise. When the employer goes out of business, the workers lose their jobs. The success of the business is something which both the employer and the union consider of first importance” (ACWA 1941:25).

Retention of the piece rate and endorsement of “scientific management” became the policy of both the ILGWU and the ACWA. Both unions hired outside efficiency experts and proposed industry-wide piece-rate schemes. For example, the ILGWU adopted a “unit system” of piece rates whereby each operation was rated according to the style and difficulty of the operation, in turn determined by timing individual operators.

Although the piece rate is now a fixture of every garment shop, worker suspicion of management’s use of piece rates has persisted. Women sewers, like their predecessors in the early period of unionization, feel that the system can be used against them. They realize that it induces individuals to “speed up,” which causes fatigue, promotes individualism rather than collectivism among the workers, can be used to shorten the season since it encourages workers to get the work out faster and earlier, and by setting times by the faster workers can be used to cut rates, hence lowering the wage. I will discuss the way women workers struggle against these management tactics below.

### **Recent Changes in the Industry**

There has been a tendency for the apparel industry to move out of high-wage areas, as well as to introduce techniques for simplifying production and for further separating the design and sales functions from production. The first phase of this trend was the move out of New York City to Long Island and the surrounding states of Pennsylvania, New Jersey, and Connecticut, which began with the standardization of women’s clothing in the 1920s and continued with the post-World War II shift to more informal dress. These changes made it possible to mass-produce garments through “section work,” splitting production

into smaller operations (e.g., sewing shoulder seams, setting sleeves, hemming), each done by a different machine operator. Skilled tailors and hand sewers were eliminated and contractors were able to move to the cheap female labor force (Helfgott 1959:76, 82). Jobbers and manufacturers remained in New York City, where proximity to design centers and markets was crucial.

A more recent movement has been to the southern states (NACLA 1977), the U. S.-Mexican border area (NACLA 1975), and low-wage Asian countries. Between 1950 and 1973 the proportion of the apparel industry located in the Northeast declined from 62.3 percent to 35.7 percent, while in the South it increased from 16.7 percent to 44.2 percent (NACLA 1977:11). By 1973, there were 103 garment shops operating along the Mexican border, although both the entry and failure rate of firms is very high (NACLA 1975:15).\*

This second wave of migration has also been accompanied by changes in the organization of production. Southern shops tend to be larger, often over 250 employees (BLS 1971:2), and the "progressive bundle" system is used more frequently. Under this system, bundles of garments flow in a logical order from one operator to another, which is much more efficient than the older "line system" (treating garments separately) and "bundle system" (where there is no logical spatial organization of the operators) (*ibid.*:2).

### **The Role of Technology**

Although apparel is the least mechanized of all manufacturing industries, there have been significant technological innovations

\* Lower wages were clearly the major reason for the move. In 1974, workers in New York State earned an average of \$3.69 per hour while workers in the South earned between \$2.53 and \$2.68. In the men's coat and suit industry, workers in the mid-Atlantic region, including New York City, earned \$4.26 an hour while in the Southeast (Kentucky and Georgia) they earned an average of \$3.20 an hour (BLS 1977b:8). Workers in the Northeast generally receive eight or more paid holidays, while workers in the Southeast receive six or less (NACLA 1977:13). Rates of unionization are low in the South, due to "right to work" laws. In the Northeast, the industry is 80-90 percent organized, but it is only 25-30 percent organized in the Southeast (*ibid.*:16; BLS 1971:2). Even within the South there are \$.32 to \$.35 wage differentials between unionized and nonunionized plants.

in the last few years in the areas of cutting, sewing, and sales/distribution.

In cutting, new computer-guided laser systems rapidly and precisely cut fifty layers of cloth at a time. Laser systems and numerically controlled cutting devices have been implemented only in larger shops, primarily in the men's suit industry where material is costly and accuracy is important. Nevertheless, they represent a clear assault on the more highly paid men's jobs, a strategy for reducing the wage bill of larger firms (BLS 1977a: 2-3).

Most sewing innovations have centered around eliminating the most skilled part of the work: guiding the material through the machine at an extremely fast pace. Sewers only spend 20 percent of their time actually sewing; the rest is spent handling the garment (*ibid.*:4). A few devices (like thread cutters, parts stackers, needle positioners, and button feeders) have been added to the machines to eliminate some of this work.

More substantial changes take place with the introduction of numerically controlled sewing machines. Here the machine is computer-programmed to sew a particular operation, the stitcher becomes a machine loader and fabric positioner able to tend more than one machine at a time. Training takes less time on these machines, a clear indication that the job is "deskilled." Machines already installed have eliminated jobs as well. For example, an automated button sewing system has increased production from 190 dozen pieces to 330 dozen pieces a day and a tape-controlled machine that sews shirt collars can attain the same level of output with 64 percent fewer workers (*ibid.*:4).

In the apparel plant where I worked, tape-controlled machines were used in the embroidery department. The operator's job was to load and set a device controlling a whole row of machines that embroidered a design on ten to twelve garments simultaneously. In the sewing department, a device was in the planning stages that would eliminate the most tricky and skilled operation performed in attaching collars. It would guide the collar and neck opening through the sewing machine, leaving the stitcher to load and unload the machine.

A final innovation is "sonic sewing" where a wheel or "horn" vibrates the fabrics at such high speeds that they are fused together (*ibid.*:4). The cloth used must have a high percentage of synthetic content in order to be fusible, but the technique is already being used on labels, linings, and short seams.

The Bureau of Labor Statistics predicts that these innovations will be limited to larger plants and/or clothes made of a high synthetic content. But with the use of PROMs (Programmable Read Only Memory Units)—computer-controlled mini-memory units that can be attached to individual machines—some of the machine-guided systems may become more widespread (*ibid.*:4).

More important is the use of computers in sales and distribution. By 1974, 297 computers had been installed for sales analysis, processing inventory, and work flow management (*ibid.*:4). There was a reduction of the apparel labor force of 200,000 workers in 1974–1975, bringing the industry total to 1.2 million, down from 1.4 million in 1969. The BLS predicts a rise in the work force to previous levels, but increased numbers of jobs will be in sales, management, and professional categories, not among operatives and craft workers (*ibid.*:9).

The BLS also suggests that the companies are centralizing production and assembly—for example, by doing the cutting in one plant and sewing the garments in another. It also notes a trend toward shipping cut parts to low-wage areas in foreign countries where they are assembled and sent back to the United States for marketing. As part of this centralization, “increased emphasis has been placed on raising productivity through improved management techniques. Work flow studies for determining plant layout, and time and motion studies to optimize the arrangement of machines and operators, are being applied more widely in apparel plants” (*ibid.*:4–5). Despite these developments, the piece-rate system is likely to be a fixture in the industry for at least the next decade.

### **Scientific Management and the Piece Rate: A Case Study**

The center of the struggle between workers and management in the garment industry revolves around the way work is organized and how the piece-rate system is implemented—old issues that have persisted in modernized form. The dialectical relationship between new management policies and worker response is best seen through an examination of the work situation itself. During 1977 I worked for five months as a trainee sewer

for a children's outerwear manufacturer in New England, and I also spent several weeks in the firm's computerized distribution center, filling orders and pinning garments preparatory to boxing. My experiences provide data as to how recent changes in the garment industry have affected the attitudes and behavior of women workers.

The plant was established in a New England industrial town in the 1930s, although the main offices remained in New York, creating the territorial division between production and design/sales noted earlier. The company had a reputation for being a sweatshop, especially in the 1930s when sewers were paid \$3.50 a week until the NRA mandated weekly salaries of \$13. As one Polish worker reported,

"Oh yes, that was a sweat shop. I was underpaid. You had to put out a lot of garments to make your rate—that was on piecework, you know. They make money like that—the company—they make millions. They could've paid us better. I worked there so long; you think they'd give me something for workin' there so long—nothin', not even a good watch." (After her retirement in 1978 and 29 years of work for the company.)\*

The plant was organized in 1951 by the Amalgamated Clothing Workers. The union contract negotiates piece rates, protects jobs (since laid-off union members are the first to be recalled), guarantees seniority, and provides small pensions and a medical-care program. Workers get three weeks' vacation (paid as a percentage of wages earned), in addition to eight paid vacation days and a paid birthday.

In the past ten years there have been two important changes in the company. First, as the paternalistic owner reached retirement age, he sold out to a large conglomerate. The company was already in the process of expanding, having added a plant in Virginia and a distribution center (warehouse) in New England, but the conglomerate increased the productive capacity of the company by 50 percent, starting a sewing plant in Alabama, a knitting mill in New England, and a sewing operation in Puerto Rico.

Second, as increasing numbers of older workers retired from this particular plant, management hired recent Portuguese and Latin American immigrants to New England to replace them.

\* Oral interview with Mrs. S. conducted on July 22, 1978, by Eva Houser of Johns Hopkins University as part of her dissertation research.

The sewing departments were characterized by the personnel manager as “predominantly Portuguese.” “They are the backbone of our sewing operation,” he commented.

### **The Organization of Production**

The plant is located in a three-story brick mill building and has a number of conveniences that make it one of the better workplaces in the town in which it is located. Cutting is done on the third floor and the offices are on the first floor. The heart of the sewing operation takes place on the second floor, where there are seven departments; three additional departments are on the third floor and two at the back of first floor.

At first sight the room seems chaotic—filled with sewing machines all rapidly whirring away, chutes of cut and partially sewn garments, and between 200 and 300 women. However, there is order in the chaos. Each department stretches across the large room with a central aisle bifurcating it. Work comes down from the cutting room in large wooden trolleys and is placed at the “back” of a department, near one set of windows. Sewing machines are set up in rows of three or four from back to front, though some rows run crossways. The work is cut in “lots” of 80–120 dozen garments, and the lots are further divided into bundles of 2½ or 5 dozen garments. The “progressive bundle” system is used. All the parts of a garment are tied in the same bundle, with a “ticket” that specifies the “operations” that have to be done to complete the garment. Each operation has a number and each style of garment has a rate for each operation. For example, I was trained to do Operation 37, “set sleeves,” and the piece rates varied depending on the size of the garment in the bundle and whether it was a dress or polo shirt.

At the row of machines close to the “back” of the department, women perform the first operations in the process (shoulder seams, neck bindings, collars). As the work progresses toward the “front,” labels are attached, and the tops and bottoms of girls’ dresses are joined. Next the sleeves are set and the sides are seamed. Finally, across the center aisle, the garments are hemmed, pressed, folded, and pinned. They are then taken off the floor to be boxed and sent to the distribution center, where

shirts and pants are assembled into outfits and orders from across the country are filled.

### **The Piece-Rate System**

The piece-rate system used in this plant is a variation of the "unit system," but is based on a complex decimal system that is both easy to computerize and baffling to the workers since it is not clearly related to the garments bundled in dozens or to minutes that show on the wall clocks. The hour is divided into 100 parts and the rates calculated accordingly. For example, 10 minutes is really .167 of an hour, and a piece rate of .073 means that an operation must be performed on a dozen garments in 4.38 minutes if a sewer is to earn the *base rate* of \$3.31 per hour on which the piece rates are figured. Workers are guaranteed the minimum wage (\$2.30 an hour, or \$92 a week, in 1977), but they can earn above that if the dozens of garments finished throughout the week average more. This is called a worker's "piece-work average." For example, the rate on "set sleeves" ranges from .068 for sleeves on small boys' polo shirts to .089 on little girls' dresses, with some very difficult shirred sleeves having a rate of .106. If the rate is .073, a sewer must complete a dozen garments (setting two sleeves in each) every 6.3 minutes and 76 dozen garments a day in order to earn the minimum wage. To earn \$3.30 an hour (\$132 a week), a sewer had to complete 110 dozen garments a day.

### **The Training Program**

The firm's training program is an excellent example of the recent industry trend toward centralizing production and improving management techniques. The program was initiated in January 1976 as part of conglomerate policy and has apparently standardized training in northern as well as southern plants.

Each of the "operations" has been categorized into "A," "B," and "C" jobs. A sewer can be trained for an "A" job (neck binding, collars, sleeve bindings) in six weeks, for a "B" job

(labeling) in twelve weeks, and for a "C" job (set sleeves, seam sides, hemming) in eighteen weeks. An efficiency curve for each type of job indicates the percent efficiency a sewer must attain each week in order to become 100 percent efficient at the end of the training period. For setting sleeves this meant producing 110 dozen pairs of set sleeves a day after four and a half months.

A training department is directed by a second-generation Portuguese woman who has had years of experience as a "floor lady" or department supervisor.\* Under her are three young bilingual first-generation Portuguese women who do the actual instruction, in either Portuguese or English. The supervisor has worked out a "method" for each task, a series of steps that the instructor shows the trainee, including where to place the pieces of the garment, how to pick them up, how to sew them, and how to stack them in a pile afterward. On the first day, one of the instructors shows the girls how to "control," thread, and sew simple seams on an industrial machine. She gives each trainee a series of timed tests that involve sewing circles and zigzags (without thread in the machine); she gives dexterity and shape perception tests as well. On the basis of these tests and the needs of the departments, she assigns a girl to an "A," "B," or "C" job.

On the second day, girls are assigned to their operation and have met their future floor ladies. Since I was learning to set sleeves, I was trained on a "merrow machine"—a three-needle machine that sews a "bound seam" as it cuts off excess material. Both the preliminary instructor and a second instructor showed me how to set sleeves, first on "dummies" (garments not used in production) and then on "real work" brought from my future department. Despite the elaborate paper work of the training program, teaching is by demonstration, not by verbal or written instruction. There is a tremendous amount of hand/eye coordination in sewing, and these techniques seem best communicated by watching a skilled sewer.

By the end of the first week, a girl is usually put into her

\* The training program uses the "scientific management" terminology of "supervisor," "training center instructor," and "production manager." These terms have not supplanted those used in the workplace itself, such as calling the workers "girls" ("old girls" and "new girls," or recent employees). Supervisors are "floor ladies" and the managers are "bosses." I have used the word "girl" instead of woman since it is the term used by the women on the shop floor.

department, depending on how well she is doing and whether there is a machine ready for her. The training supervisor told me I now knew how to do the job, and it would be good to get out in the department and “feel the pressure” of everyone working under the piece-rate system. The mechanic who adjusted my machine as I moved into my new department said, “Now you are in the zoo. Back there [in the training room] it’s nice and quiet, but out here there’s all the noise and talk—a real zoo.”\*

A girl’s work is monitored each day by an instructor. If errors are found by other workers or by quality-control checkers, the instructor is called in to help with repairs and supervise the trainee more closely. The dozens completed per day are noted before quitting time, and the next morning the instructor marks the girl’s progress on an efficiency chart tied to her machine. If her improvement falls below the efficiency line on the chart, the instructor suggests techniques for improvement. When the trainee seems to be making the minimum wage (about 70 percent efficiency), and *if* she is still on the job, she is given a certificate for completing the program and is transferred to the supervision of the department floor lady. If she has worked for ninety days, she is enrolled in the union.

The training program streamlines production and brings work under the supervision of management in the following ways.

(1) By using the skill of trained sewers (like the head of the training program), the motions of the sewers are rationalized. Since 80 percent of a sewer’s time goes into nonsewing motions, this is a direct attempt on management’s part to raise production by reducing this portion of the work. Each trainee is supposed to learn an operation the same way. There is some resistance to this on the part of sewers, since they incorporate their own “tricks” into their routines and so speed up their work, and there is often a struggle between an instructor and an “old girl” when an instructor is assigned to teach an experienced employee how to

\* Marx, in the first volume of *Capital* (1967:326), notes that merely bringing workers together creates greater production since “mere social contact begets in most industries an emulation and a stimulation of the animal spirits that heighten the efficiency of each individual workman.” Marx also provides an interesting and insightful analysis of the English apparel industry in the mid-nineteenth century (*ibid.*:447–59).

do “correctly” an operation she has been performing for several years.

(2) The close supervision of trainees (e.g., the use of time clocks and efficiency charts) pushes the new employee to work faster until she is able to pace herself solely through the operation of the piece-rate system and the incentive of “making money” (factory vocabulary for making over the minimum wage).

(3) The training program uses bilingual instructors and is thus an extremely effective way of integrating Portuguese workers into the production system, especially since most floor ladies do not speak Portuguese. Once a girl has learned the job, there is less need to communicate to her, and when the need arises a nearby bilingual worker can interpret.

(4) The program cuts down on worker conflict by slowly integrating the new worker into production and by providing a neutral person outside the department authority system—the instructor—to act as mediator if the trainee makes mistakes that affect the work of others (and cause their day’s wages to decline). It also takes the burden of close supervision off the floor lady, who has a great deal else to do.

(5) Finally, and most importantly, the training program controls the turnover rate in a nondisruptive way. There is a high turnover rate in the apparel industry (BLS 1969:16), and workers are often hired at peak seasons and let go a few weeks later. Trainees may even be used for pinning and boxing when orders must be completed, an indication that these women are an accessible surplus labor force. The testing and close supervision reveal those girls who are willing to “stick with” the job. A large number of trainees quit after a few weeks: some rebel against the supervision, others find it difficult to attain any speed, others feel they can find better jobs, and still others have difficulty with family responsibilities (such as arranging babysitters). Trainees are the first to be laid off in a slack period, and many do not return when production picks up again.

Thus the training program is a major attempt by the firm to regulate a fluctuating labor force and to control the work process more directly. That an informal method of teaching and that learning individualized “tricks” and skills persist indicates how difficult it is for management to totally rationalize and deskill important aspects of sewing.

## **On the Shop Floor: Fighting the Piece-Rate System**

Within a particular department, especially among experienced workers, there are other signs of resistance to management control of production and attempts to protect their collective interests. The work force is divided along age and ethnic lines; language and cultural differences have created barriers to communication between Portuguese and non-Portuguese workers. Though some women are relatively isolated, most get together in informal groups of two to five co-workers at breaks and lunch hour, but there is relatively little crossing of Portuguese/non-Portuguese lines in these groups.

All workers, however, face the same conditions. Despite the “deskilling” of sewing, the women are conscious that their work is skilled, involving a great deal of hand/eye coordination, dexterity, attention, and, above all, speed. As my sewing instructor said on my first day, “Not anybody can do this work—sewing. You have to have patience. It’s almost as if the machine can tell if you are too nervous or too impatient.”

The women are also aware that they are being paid low wages. I explained to two of the older workers that I had been told that the base rate was \$3.31 per hour, which I would be making in three or four months. An Italian woman snapped back, “I’ve been here ten years, and I don’t make that!” A French Canadian woman said, “You tell them that if an old girl who’s been here twenty-two years can’t make it, then you can’t do it.”

On the one hand, the piece-rate system forces the sewer to work as rapidly as possible without making a mistake. On the other hand, because of the way in which management enforces the system, the women are under constant threat of being further underpaid (if the rates drop) or even eliminated (if styles are simplified or operations eliminated).

Women deal with the piece-rate system in several ways. First, they keep careful track of how many dozen pieces they have sewn each day and keep a sharp eye out for rates that are too low for the difficulty of the style. Second, they watch that cutting-room mistakes are not blamed on individuals and that individuals are treated fairly by the floor lady or the training instructor. In some instances, women cover over for mistakes of others or “just let the work go through,” so that a woman will not lose wages by having to do the work over.

Both Portuguese and non-Portuguese women expressed their awareness of the skilled nature of their work and complained of low pay and of policies that had the effect of lowering wages. Although few Portuguese women are active in the union leadership, both Portuguese and non-Portuguese women seem equally supportive of the union. But there are tensions between the two groups. The attitudes and behavior of Portuguese immigrants are slightly different from those of their co-workers who come from groups with a longer history in New England. The Portuguese women's response to work is a product of contradictory forces that are an outcome of their rural, small-holder backgrounds (in the Azores and on the Continent) and the socializing pressures of the workplace itself. On the one hand, management hires Portuguese workers because of their reputation as hard workers, and the Portuguese fulfill the expectation. This leads some of the other workers to see the Portuguese women as working too hard, sometimes cutting corners to keep their wages up or engaging in "rate busting." "She never misses a penny," one woman commented about an Azorean woman in my department. A co-worker commented that the same woman "ruined that job for everyone" by working so fast that the piece rate on the job was lowered and the workers had to increase their output to make the same pay. "And she makes more than anyone on the floor" was the final comment. On the other hand, the Portuguese women often feel discriminated against and say that the Americans do not work hard enough. Non-Portuguese, who have their own prejudices, may accept preferential treatment by management or act in other ways to segregate themselves from Portuguese workers.

There are, however, informal institutions that cut across ethnic lines and bring the workers together. These include wedding and baby showers and retirement parties, which are organized along department lines and which express solidarity and good feeling among workers. Equally important is an informal set of work rules that makes sure the work is equally shared and that "rate busting" is kept at a minimum. While the economic situation and background of long, hard work pushes the Portuguese women to be "rate busters," there are important socializing pressures to act in a less individualistic manner. Newcomers to a shop floor, including new immigrants, are socialized to these rules, and they are enforced by both Portuguese and non-Portuguese workers.

One of the clearest examples occurred among those of us in my department who were setting sleeves on little girls' dresses. There was an informal rule that everyone should "work by sizes": each sewer should work on a bundle of small-sized sleeves (size 4) and then the largest size (6X), and finally sizes 6 and 5. In this way, no one ends up doing all of the larger sizes, while another girl makes more money by working faster on the smaller sizes. A newly arrived continental Portuguese girl was the center of conflict for several days because she was observed leaving the large sizes. Her instructor and the head of the training department (both Portuguese) were brought in to explain the "rules" to her, and her co-workers also spoke to her. Even women who had jobs adjacent to us (including a Brazilian and an Azorean) were interested in seeing that the work was fairly distributed and explained the situation, urging her to change her behavior. When another continental Portuguese woman, fairly new to the department, returned from vacation and pulled over a chute of dresses to her machine without looking to see if she had taken a disproportionate number of small-sized bundles, she too was told to "work by sizes" (by the Brazilian woman and a third Portuguese-speaking woman, an Azorean). In both instances, because the women knew little English, Portuguese-speaking women communicated and enforced the rules; in cases involving English speakers (like myself), other non-Portuguese women participated more directly. In the course of time, the Portuguese women learn to defer less to the bosses and to be wary of management decisions.

### **New Management Policies and the Role of the Union**

While workers on the shop floor are conscious of recent management tactics, important issues may not emerge as part of an overall pattern until they reach the attention of the union through individual grievance procedures or at monthly meetings. Both workers and the union business agent are clear about the difference between dealing with the old paternalistic management and the new conglomerate. For example, while the business agent felt that the old company "owed us something," he characterized the new management as a "cold-blooded corpo-

ration" that lacked compassion for workers and "was concerned only with the dollar sign."

In 1977, management attempts to erode the position of the workers focused on three areas. First, the company wanted to set piece rates without calculating in a 20 percent allowance to make up for fatigue and the need for a rest. It maintained that this was already built into the piece rates in use. The union insisted that the company had timed a girl and then multiplied the hour's production by an eight-hour day, without making the 20 percent reduction. The company admitted that it felt that wages of over \$4.00 an hour indicated "inflated rates" and so justified its attempt to re-time and lower the rates. The union hired an engineer and was able to raise the rates on set sleeves by about 10 percent, a temporary victory for the union in an area of constant conflict.

A second set of issues has remained unresolved and focuses on the operation of the new distribution center. The workers complained that the number of stockmen had been cut back and that they were being pressed to work harder with closer supervision. In addition, the company policy of hiring temporary workers through employment agencies was reducing the possibility that sewers could transfer to the more highly paid "order picking" jobs at the warehouse and was at the same time keeping a segment of the labor force out of the union.

A third and crucial set of issues centered on "full employment" for the sewers at the main plant. As part of an agreement with the union, workers at the main New England sewing facility are to get full employment during slack seasons while workers from newer plants in the South are to be laid off first. At the end of spring season production in March 1977, a number of sewers were laid off. It was not until later that the union discovered that other shops in Maine had work, while in Georgia workers were employed, though not full time. The production manager admitted that 5000 dresses had been cut at the New England plant, sent to Georgia, and then sent out to a contractor (presumably at lower wage rates). In the meantime, New England pieceworkers had been out five, six, or seven weeks. The union took this to arbitration. The company argued that it tried to spread the work evenly, and that the "full employment agreement" had been negotiated with the original management twenty-five years ago and did not hold for today's situation.

All of these examples indicate ways in which an expanding

apparel company can move to cut its labor costs while at the same time centralizing production and distribution. As the case study shows, the firm is following trends in the industry as a whole, often doing so through day-to-day shifts in policy that slowly erode the power of the union and require careful watchfulness on the part of the workers if their position within the production process is not to be threatened. Lowering the piece rates on particular operations and resisting union attempts to raise them, cutting the permanent labor force at the distribution center in favor of hiring temporary help through an agency, and slowly sending work to the South are all part of the same management strategy to cut labor costs and increase profits.

### Conclusions

I have argued here that although there have been important technological innovations in the apparel industry, their application to large sectors of the industry has been retarded by its highly competitive, seasonal nature under a capitalist economy. Thus the industry has remained labor-intensive, utilizing a large pool of low-paid female workers mainly as sewing machine operators. It is just this quality of labor intensiveness that has led to the phenomenon of the runaway shop, as employers have sought cheaper labor in the South, in the Carribean and Mexican border areas, and in Asia.

For those workers who remain, their struggle has not centered around the threat of technological innovations, but around an old struggle in this industry—the administration of the piece-rate system which employers have always used to increase productivity (by making workers work faster) and to increase competition for higher wages. This struggle has taken on new forms through more efficient techniques of scientific management. Historically, production was first split into smaller and smaller units through the advent of “section work” and the elimination of the task system where several workers completed a whole garment. More recently, operations continue to be divided; for example, setting sleeves and sewing sides become separate tasks done by two groups of workers. At the same time other operations are eliminated and garments are simplified. In addition, piece rates are now calculated through complicated, yet easily

computerized, systems, and training programs are used to rationalize a sewer's movements and train her to monitor herself in increasing her production.

Workers have evolved a number of strategies to deal with the piece-rate system, ranging from keeping close track of their own work, protesting against rates which seem unfair, and constructing a set of informal work rules which reduce "rate busting" and spread work evenly. Apparel unions are in a weakened position, since movement to southern "right to work" states has reduced union membership and leverage against individual companies. However, union locals try to fight management tactics, and workers continue to struggle against scientific management, working out formal and informal ways of protecting their jobs, their pay, and their skills.

**The Piece Rate:  
Class Struggle on the Shop Floor.  
Evidence from the Costume Jewelry Industry  
in Providence, Rhode Island**

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**Nina Shapiro-Perl**

**Introduction**

When standing alongside such industrial giants as automobiles, rubber, steel, electronics, or mining, the costume jewelry industry is dwarfed in comparison. In 1972 it employed 21,400 workers across the country, with 43 percent of the industry's shipments coming from Rhode Island (Seltzer 1976: Appendix). While costume jewelry is Rhode Island's leading industrial employer, it is not exactly part of the nation's economic backbone.

Costume jewelry does, however, provide an excellent illustration of the historical and dialectical processes determining the condition of work in twentieth-century America—revealed to us by Harry Braverman in *Labor and Monopoly Capital*. We note in the following pages the destruction of jewelry craftsmanship, the deskilling and erosion of the wages of the jewelry work force, and the application of scientific management techniques to certain stages of the jewelry-making process. We consider, for example, how in labor-intensive operations jewelry manufacturers make use of time and motion studies in establishing piece rates to increase worker productivity in place of widescale technological innovation.

In terms of its present-day characteristics, the costume jewelry industry conforms to James O'Connor's typology of manufacturing concerns in the competitive sector (O'Connor 1978:159–60). The unstable seasonal nature of costume jewelry gives rise to a workforce that sometimes of choice, but most often of necessity, is unable to find work in the monopoly or state sector. This in part explains the high concentrations of women, immigrants,

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home to the factory, increased the use of semiskilled workers who sewed by machine, and replaced the hand-tailoring of more skilled workers.

With the inexpensive and portable sewing machine at the center of the industry, it takes relatively little capital to set up an apparel shop—only \$50,000 in 1974 (NACLA 1977:6). The key to success is not continual investment in new plant and equipment, but style creativity and merchandizing (Helfgott 1959:25). As a result, the industry has since its early days been characterized by a division between “inside shops” or manufacturers (who perform all the steps of the process, including designing, purchasing fabric, cutting, sewing, and selling) and “outside shops” or contractors who sew already-cut garments received from a jobber and return the finished garments to the jobber to be sold (see Levine 1924: Ch. 2 for an early history of this division).

In the late nineteenth and early twentieth centuries, these outside shops were called “sweat shops” because they were located in tenements on the Lower East Side of New York City where unsanitary conditions, long hours, and extremely low wages prevailed (see Levine 1924: Ch. 4; Seidman 1942: 56–60; Zaretz 1934: Ch. 2 for a description of conditions). Unionization and government regulation have reduced a number of the evils of the “sweat shop,” but small production units, the contracting system, and lower wages with poorer conditions in smaller shops have persisted. As late as 1972, 50 percent of the firms employed less than twenty workers and only 14.3 percent employed over 100 (U. S. Department of Commerce 1976: vol. 1, p. 23, Table 5).

Easy entry has created a highly competitive industry: there were 24,428 apparel establishments in 1972. Competitiveness is exacerbated by the importance of style change and seasonality. In branches producing more standardized products (such as bras and underwear), employment fluctuates by 27.8 percent between the peak and off seasons, while in establishments producing women’s suits, coats, and dresses, employment may fluctuate as much as 132 percent (Helfgott 1959:41).

Seasonality is seen by some authors as a product of the “buying habits of the public” or the “whims of fashion-conscious American women” (*ibid.*:41, 57). However, it is clear that the apparel industry has expanded its market through seasonal and

yearly changes in fashion: the need to be "fashionably dressed" is a major factor in the "planned obsolescence" of clothing in a capitalist economy. In some socialist economies (e.g., China), clothing has become more standardized and is worn until it is outgrown or worn out, not until it has "gone out of style." Hence the capitalist mode of production itself may provide the prerequisites for keeping the industry attuned to changes in fashion; this in turn creates small production units, short production runs, and fierce competition.

The industry is currently organized into several branches. More than 35 percent of the workers are engaged in making clothing for men and boys, about 30 percent produce women's outerwear, and 22 percent make women's and children's undergarments, children's outerwear, hats, caps, and millinery and fur goods. Another 12 percent turn out curtains and housefurnishings (BLS 1969:14). There is a strict sexual division of labor in all branches. Women were employed in cutting operations until the cutting knife replaced shears during the 1870s, and men have dominated this skilled work ever since. Men are employed as sewing machine operators, but primarily in men's clothing and suits. Women are mainly sewing machine operators (sewers and stitchers), occupying 90 percent of these jobs (BLS 1977a:8). Recent wage surveys of subdivisions of the industry show that men are cutters, spreaders, machine repairmen, and janitors, while women are machine operators, baggers and boxers, garment folders, thread trimmers, basting pullers, final inspectors, and under pressers (BLS 1971:3; BLS 1974:3).

There are substantial wage differences between the sexes. Between 1971 and 1976 women in three branches of the industry earned between \$.36 and \$1.02 an hour less than men (BLS 1971:2; BLS 1974:3; BLS 1977b:4). Wages for women are based on a piece-rate system and tend to hover around the minimum wage, especially in the less unionized branches of the industry. For example, in 1974, when the minimum wage was \$2.00 per hour, women sewing machine operators averaged \$2.59 an hour in the trousers industry while male cutters and markers averaged over \$3.00 an hour and sewing machine adjusters earned \$3.80 an hour (BLS 1974:3). In the more heavily unionized suit-and-coat branch of the industry, women sewers earned an average of \$3.74-\$3.88 an hour in 1976 while male cutters earned \$5.64 an hour (BLS 1977b:5, 10).