

Nancy Plankey Videla  
University of Wisconsin, Madison  
Sociology Department

## FLEXIBILITY FOR WHOM?

### The (Un)Intended Consequences of Modular Production in a Mexican Garment Factory

Flexible specialization theories hold that re-organizing production processes through modular assembly in the garment industry help lower production costs by decreasing work-in-process, inventory, through put time, and rework. As a result productivity and quality improve while at the same time providing augmented responsiveness to clients in terms of turn around time and model changes (Appelbaum et al. 2000; Abernathy et al.1999; Berg et al. 1996; Dunlop and Weil 1996; Bailey 1993). According to Berg and his colleagues (1996), under modular production workers are empowered to take control of the work process, having the challenge of producing a larger segment of the garment and focusing on issues of quality. Increased worker satisfaction arising from the trust and responsibility given to them, in turn translate, into greater productivity. Furthermore, since teams are self-regulating, middle management disappears, lowering payroll costs and providing direct and constructive communication between workers and management (Tello and Greene 1996; Arthur 1994). Given these expectations it is not surprising that teamwork is praised by policymakers and entrepreneurs alike.

However, Collin's (Forthcoming) work posits that instead of encouraging the Italian model of cooperative craft-like firms, flexible specialization in the garment industry has entrenched what she calls "hyper-Taylorism," the need for workers to manufacture more products in less time for lower costs. Absent from the literature on the garment industry and flexible specialization are firm-level case studies that attempt to understand how workers' experience re-organization of the shop floor, and how this affects the functioning of the firm. This is the goal of present study. In this way, as more firms shift to flexible production

strategies to compete in the global marketplace, we can begin to answer the question, flexibility for whom?

Preliminary results from research at an established garment factory in Central Mexico, Moctezuma Textiles, demonstrate it is not such a clear-cut case.<sup>1</sup> The improvement in quality and productivity has been moderate. Turnover rates, an important measure of worker satisfaction, have fluctuated wildly, skyrocketing training costs and lowering efficiency on the shop floor.<sup>2</sup> Since the adoption of modular assembly, the company has lost important clients such as JC Penny and Polo due specifically to quality problems. Through in-depth interviews of 30 workers and participant observation on the shop floor, it is clear a major reason shop re-organization has not had the expected benefits is the way workers' experience modular sewing. Many workers feel that modular production is not empowering but rather a straightjacket. Piece-rate sewing allowed them to individually work harder for bonuses and increased take-home pay. Teamwork sets a ceiling on production to avoid bottlenecks on the shop floor, while the same time shifting troublesome responsibilities such as disciplining and control to the teams.

#### A WORD ON METHODOLOGY

This paper is a progress report on research still on-going in Mexico. It is based solely on interviews with managers and workers as well as my own experiences, observations and discussions on the shopfloor during six months. While there, I worked in two teams, one from Jackets, the other from the Pants Department. I expect to work in two more teams before completing fieldwork. The teams were chosen to exemplify a well-functioning and problematic team as defined by department heads using production, re-work and personal inter-relations as criteria. The dissertation will be based on participant observation as well as interviews with

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<sup>1</sup> The name of the company, as well as that of workers, has been changed to assure their anonymity.

<sup>2</sup> While the dissertation will further examine the issues of productivity, quality and turnover with both qualitative and quantitative data, the focus of this paper is the way worker's experience modular assembly.

managers, government officials, and industry and union representatives in order to understand the institutional context of the firm.<sup>3</sup> In addition, census data will be used to complement the analysis of the local labor market.

Since I began the project, Moctezuma Textiles has undergone a number of changes. When I coursed the training program back in October of 2000, there were two shifts consisting of 1,400 workers. As I write this paper in May of 2001, the company has declared itself in economic difficulty, the second shift has been eliminated, annual salary negotiations resulted in cuts in pay and benefits, a strike, a contested change of union leadership and illegal dismissals of said leadership and supporters. There are approximately 900 workers now, most of whom are waging a daily battle in the streets, media and the shop floor for a reinstatement of their elected union officials and their previous wage/benefit package.

Needless to say, this has also become a case study of downsizing and social movement unionism. But that is another chapter. These dramatic events have posed serious challenges to the execution of fieldwork. Given this, is it possible to interrogate modular production in a company going through such turmoil? I would answer affirmatively for the following reasons. First, the company's economic difficulties resulted in part from strategies chosen to compete in a globalized economy. The confluence of five factors have led to downsizing at the garment factory: 1) in an effort to diversify its holdings, the industrial group invested in a high profile international café which has failed; 2) the company was forced to buy the U.S. distribution center it used to export its product when the latter threatened to close when the 5 year contract ended, resulting in an unexpected heavy investment; 3) NAFTA has further intertwined the textile and garment industry with the U.S. market and is thus feeling the effects of the de-celeration of the U.S. economy; 4) the Mexican textile and garment industry as a whole is in decline due to

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<sup>3</sup> The benefits and challenges of participant observation are a whole other topic for discussions. My presence on the shop floor became more important and difficult as downsizing and worker movements began in the middle of

increased imports from Asia and a lack of credits to upgrade and buy inputs; and 4) the change to modular production has not had the expected results of increased production, quality, and quick delivery needed to compete in the high-end suit market. Therefore, in an effort to diversify and become more flexible to compete in a globalized economy, the company has encountered economic difficulties, leading to dismissals and labor unrest.

Secondly, I began participant observation and interviews five months before downsizing began. Hence, I have available to me a wealth of data on modular production before labor conditions became critical on the shop floor and can evaluate how mobilizations have affected the opinions given in later interviews. In fact, not a single worker interviewed preferred modular assembly over piecework before March 15, when negotiations between the company and union broke down. Since that date, only one worker has mentioned that modular assembly can work in the benefit of both company and worker. Therefore, when several workers turned to me during the strike to say, “see where teamwork got us,” I believed their claim to be fair and the mobilizations following a consequence, in part, of the re-organization of the shop floor to modular production.

## THE CASE STUDY

This study examines one of the most important men’s suit factory in Mexico which manufactures for export to the U.S., Canada, Europe, Asia and Latin America (under Calvin Klein and Hugo Boss labels among others) and for the high-end national market. Located near Mexico City, it was first established in 1954 by Italian capital but has been since 1995 formed part of a Mexican-owned vertically integrated industrial group consisting of two textile mills, garment factory, outlet stores and international distribution center. Responding to increased

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March. Methodological and ethical questions as what to do in such special and unexpected circumstances dogged me at all times.

competition in the high-end market for suits, the company began re-organization from the Progressive Bundle System (PBS)<sup>4</sup> to Modular Production (MP) in 1996 to lower production costs. With the assistance of a consulting firm, one of three production lines was first converted to MP. After a year's time, the rest of pants and jacket assembly followed. However, Cutting remains under individual operation and Ironing only recently changed to teamwork.

Teams of between 5 to 30 workers, of which 80% are women and over half of these are single mothers, carry all of the assembly of pants and jackets out. Each team has a team leader who rotates every four months according to seniority. All workers must be certified in one operation, which consists of passing a rigorous time and quality test, but are given incremental bonuses for learning more skills with the goal of having a multi-skilled workforce.

At the beginning of implementation of MP, which they call Productive Units in this factory, payment was based on each team meeting its production quota. After several months, it was changed to departmental goals. Soon after payment was made commensurate with the entire shop floor (two shifts) reaching and surpassing the production-quality goal of 3,000 suits a day. After the second shift was cancelled in mid-March of this year, the production goal was modified to 2,200 jackets and 1,900 pants per day. Therefore, individual efforts have to be folded into plant-wide goals for bonuses to be received. While the base pay \$384 pesos per week (equivalent to 1.6 minimum wages or U.S. \$42) for a workers in training and \$646 pesos a week (2.7 minimum wages or U.S. \$70) with one operation certified, it was possible to make a respectable \$1,000 pesos a week (4.1 minimum wages or U.S. \$109) after taxes and discounts

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<sup>4</sup> The Progressive Bundle System is the dominant form of assembly in the garment industry. Each sewing operator performs the same task, which has been calibrated to standard allocated minutes by industrial engineers. Workers receive bundles of pre-cut fabric upon which they perform their one operation. These bundles are stacked in buffers from where the next sewer takes her work. In this way, the buffers result in large amounts of inventory on the shopfloor so that one worker's pace does not impact another's. Each worker is paid piece-rate for the specific bundles they received. This system existed at Moctezuma Textiles with the slight difference that there never existed large buffers on the shopfloor.

with multi-skill and production bonuses.<sup>5</sup> For years, workers at this company had been considered among the highest paid in the regional garment industry.

In order to evaluate the functioning of Productive Units at this garment factory, I will first discuss re-organization on the shop floor in the areas of management, production and quality. Then the ways in which these changes have affected workers and the company will be explored.

### Management Practices

According to the Human Resource director, modular production was chosen explicitly for its cooperative management practices to do away with the conflictive and authoritarian system of supervisors, which created antagonisms between management and workers. This is congruent with Arthur's (1994) thesis that "commitment" maximizing human resource practices, instead of control policies, enhances productivity, lowers quality problems and employee turnover rates. For these specific reasons, team leaders have replaced middle management. It is their job to be channels of communication between department heads and workers, translating company requirements to the workers, and the worker's opinions and ideas to management. According to management, they have brought the company's theoretical framework down to the shopfloor with this enhanced communication. Now workers and management know what orders are on the shopfloor, what are the problems, and both can participate in creating solutions.

In the system of Productive Units, much of the authority is to be transferred to the teams through self-administration. In this manner, the team should decide what operations each member will do to fulfill a pre-set quota of a semi-product. In an effort to do away with free

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<sup>5</sup> The salary resulting from the contested negotiations are not totally clear and under review by government, company and union representatives. What seems clear is that an un-certified workers makes a base wage of \$350 pesos a week (1.3 minimum wages and U.S. \$38), going up to \$550 (2.2 minimum wages or U.S. \$60) if certified with one operation, \$575 (U.S. \$63) for two operations. Multi-skill bonuses and production bonuses have disappeared. Given the outburst of discontent, the company promised everyone a minimum of \$650 (2.7 minimum wages or U.S. \$71) plus \$150 pesos (U.S. \$16) of food coupons for five months and then a return to the above

rider problems, teams can even expel members from the job for unruly behavior or poor performance. Team leaders have the responsibility to move workers around to cover absenteeisms, shore up bottleneck operations or deal with other problems. A crucial element of self-administration is that teams provide their own members with permission slips to miss hours of work and they respond directly to each other, and through the team leader to the department head. Such issues are dealt with in quick meetings called by the team at any time. Another cornerstone of self-administration is the system of advisors. Instead of the previous system of supervisors roaming the shop floor, under Productive Units there are only a few advisors per department who can only participate in teams when invited or when there is a serious problem in a team. They are experts on production and quality as well as being responsible for following client orders through the production line. If they observe a problem, it is their job to make the team leader aware of it. Only after repeated unanswered requests, can the advisors speak directly to workers responsible for shoddy work. This, as repeated often by workers, is in the contract.

Theoretically, the above-described system of Productive Units devolves much power back to the workers through teamwork. However, multiple interviews and my own experience on the shop floor prove this not to be entirely correct. The system of team leaders does away with a substantial number of middle managers, thus saving the company money, but it transforms team leaders into unwitting worker-managers. Most team leaders feel the company inadequately uses the position for which they are given a bonus of \$120 pesos a week (U.S. \$13). Until last year, team leaders were required to turn in 100% of their production quota (now down to 75%) while at the same time required to attend daily departmental meetings to discuss production matters, weekly union-team leader meetings to check for problems, keep daily absenteeism and permit records, report and follow-up on repairs, count inventory per operation in the morning,

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scale. In addition, in the salary negotiations, the benefits of uniforms, Christmas baskets, soap, towels, gift of a suit for marriage, \$125 pesos (U.S. \$14) gift for births and company child care where taken away.

record units produced by team every two hours and totals at the end of the day, facilitate almost daily team meetings besides making sure the team runs smoothly, answering questions about company regulations, product specifications and quality problems. On top of this, team leaders mediate interpersonal relations between team members that are often conflictive. Not a single team leader has said to be able to juggle their own work and leadership responsibilities. Instead they find themselves stressed and in the middle of an antagonistic relationship. Management presses them to push teams harder for more production while team members often accuse them of being a peon of management and not standing up to them to protect worker's rights. All workers interviewed who had been or are presently team leaders, claimed friendships with team members were severely fractured, sometimes irreparably. One young man had a nervous breakdown, and most would have gladly returned their team leader bonus instead of performing the job. As one young woman put it, "now we do all the work supervisors used to do but we don't get paid for it."

While it is true that Productive Units allows workers to have more say in production matters through daily departmental meetings, the structures of power are softened but unchanged. When asked if self-administrative capacities empowered workers, some agreed but most laughed and then reflected on limited freedoms. Examples of this are the supposedly rigid constraints on advisors. Notwithstanding the contract, advisors in both departments where I worked were continually ordering workers and team leaders much the way they did when supervisors. In the Pants department especially, this had created tensions. Many in my team, complained in meetings that advisor Hilda "butts in too much" and should be told to keep out. However, the team leader felt overwhelmed with her duties and thus relied on Hilda to take an active part in pushing co-workers to reach production quotas and to respond to concerns with quality. Besides, Hilda and other advisors' knowledge are extensive and often very helpful. Another team further down the line, however, which is one of the best functioning and well

organized teams in Pants, complained to the union and top management of Hilda's overreaching presence. She is no longer allowed to enter their area without invitation. Thus, constraints on management can be enforced if workers decide to force the issue and can fulfill their end of the production bargain.

Under Modular Production, workers are empowered to regulate tardiness and absenteeism in their teams. The power dynamics have been changed. No longer do workers have to ask the supervisor for permission slips to miss work. A worker asks the team leader to call a meeting, where said workers expounds the special circumstances she believes require time off. In the well-functioning team I participated in, most permissions were granted without discussion and the worker repaid the hours missed on the honor system. However, the other team I worked in which did not function well, questioned the person, took into account how many times permissions had been granted and tardiness. The merits of the case, the person, and if they were to repay the hours were debated with a show of hands at the end. Central to these discussions were the internal politics of the group where conflicts between three factions became evident in almost every vote. Hence, while the supervisor has less say over individual workers' lives, the fact that teams now provide permissions does not automatically empower them. On the contrary, it can become a contentious tool to dole out punishment and reward in an arena of shifting alliances and interests. Besides, even though teams are self-administering, department heads have been known to veto permits or provide them to individuals when their team has turned them down. Such cases serve to reinforce some worker's belief that self-administration is a joke.

For others self-administration is code for control. Now it is not only management pressing you to work harder, but also your teammates. In interviews, pressure from team members was by far the worst problem on the shop floor since the change to modular production. In fact, most of the workers had considered voluntarily leaving their jobs due to the unpleasant atmosphere caused by continuous pressure by other workers. I witnessed several discussions in

team meetings where complaints were made of others spending too much time in the bathroom or drinking water. Interestingly, however, complaints almost always were directed at those members with less seniority or network connections in the team, that is, with less power. Most conflicts in teams arose from someone not fulfilling 100% of their production quota or the perception that they did not. Such persons would be under constant pressure and even harassment from team members since bonus payments are based not on individual but shop floor performance. In one case, one of my co-workers preferred to resign than be expelled from the team for poor performance, forfeiting a substantial indemnization due to dismissal. Peer pressure can be the strongest form of control.

Lastly, under the system of Productive Units supervisors and managers have less power over individuals on a daily basis. This has translated into fewer cases of sexual harassment, according to those interviewed. As in most other garment factories, the majority of workers are women and most managers are men. However, with the new system of advisors who must be invited into a team versus the former regime of supervisor, there are few occasions for managers to be alone with a worker. Furthermore, advisors do not control payment or dismissal powers over workers used formally to exert pressure on young women in exchange for sexual favors. This is an important and positive consequence of the change to modular production as garment industry in Mexico, as elsewhere, is riddled with cases of sexual harassment.

### Production

As explained to the workers, under modular production there would be a smooth and organized procession of several models of suits passing through their stations. Hence, everyone would receive combinations of difficult and easy models, evening out to an average price paid to the worker for suit completed. It all seemed very fair. Under the PBS, you were paid for what you produced. Therefore, machine operators would, in their own words, “fight” for the easy

models of which more could be completed per hour. While one was paid higher for more difficult suits, the fact they were complicated translated into more opportunities for mistakes and wasted time.

But theory has not been put into practice. On the contrary, most often a series of urgent orders follow each other on the assembly line, each being a specific model, requiring the exact same operations and thus causing bottlenecks. For example, there are two ways to sew front and back pant leg panels together depending on the type of pant pocket. If the pocket openings attach top and bottom to the seam, it must be carefully sewn manually. This is operation number 110. However, if it is a “V” opening, an automatic machine can do operation 112. According to the theoretical plan for Productive Units in the Pants Department, there would always be a combination of models so that the two 110 operators and the two 112 operators were always working at 100% level. However, most of the time, single model rush orders are pushed through which all require either one or the other operation. This requires pulling in a third person who is multi-skilled from another team and placing them where needed, while the two other operators have little or no work. Such bottlenecks further complicate matters for the following operations where similar situations occur.

Not only do bottlenecks emerge that stunt progress on the line, but also workers end up producing the more complicated models for the price of an average suit. More often than not, the rush (and larger) orders are higher cost suits so it does not even out for the worker. And they are very aware of this.

Another significant change from PBS to MP is the responsibilities of the garment workers. Under the PBS system, each worker sewed or ironed at their own pace, and when they needed more thread or another needle, they asked the line supervisor for it. Likewise, when a machine broke down, or a defective or incorrectly sewn piece appeared, it was the supervisor who reported the machine, followed up that it was fixed, sent the defective part back to Cutting

for replacement, or returned an article with poor quality to the person responsible, waiting for it to be sewn again. In the mean time, the workers continued to accrue units worked per hour in order to complete 100% efficiency or more for which a bonus was given. If for some reason they had to stop sewing to concentrate on rework or there was no work to be done, they punched their time card so the down time would not be counted against them. Of course, this meant that if there was little work on the shop floor, they may have to stay 10 hours to complete their 100%.

Under Productive Units, it is now responsibility of the worker to stand up and go to local storage units for inputs. When a machine breaks down, the worker tells the team leader who then goes to the office to report it. If is not fixed right away, the worker will keep pressuring the team leader to have it fixed. In the meantime, if the worker is multi-skilled and there is another machine available, she or he will continue to work. If not, it will be wasted time which will go against the worker when efficiencies are recorded at the end of the day. When a defective piece appears, it is the worker who must go to the Cutting Department for an exchange. Perhaps the most controversial of changes, is that one must return poor quality work to other workers. More will be said about this later.

In sum, not only do team leaders carry out work previously delegated to supervisors, but also so must all workers on the shop floor. Furthermore, they do not receive compensation for this work even though it prevents their reaching the daily production quotas. Each operation has been carefully studied by the Engineering Department that designates the standard allocated minutes per operation and sets a number of units to be produced per hour. Such designations allow very little wiggle room. Therefore, when asked what was necessary to reach one's 100%, inevitably the response was not get up too often to go the bathroom, or drink water, and to not receive work with poor quality or problems.

While daily efficiencies are not recorded by management, they are done so by team leaders who then must push slow workers to reach their production quotas. Even if team leaders

did not mark individual efficiencies, team members know who is producing less and will warn and harass the slow worker to pick up the speed. Therefore, if a worker loses efficiency due to another worker's poor quality work, there is ample reason for discontent. There are also economic reasons for pushing each other to reach production quotas. If individuals do not fulfill their 100%, neither can the team, nor the entire workforce on the shop floor where production levels are tallied to dole out bonuses. The major complaint of Productive Units by workers is that no matter how hard you work, your level of payment is not in your hands but that of your co-workers. Solving the free-rider problem becomes all-consuming, with workers aggressively making sure that others are working as hard as them.

### Quality

Improvements in quality control are extremely important to compete in the global market today and an important way to achieve this is changing assembly to Modular Production. Under MP in the garment industry, each operator checks the work done before them, having been shown the correct guidelines for every operation. The mantra posted on Moctezuma Textiles' walls reads like this: "Quality from the start. Do not do, receive or pass work with poor quality." Since every person writes their worker identification number in the operation slot for each bundle of 5 or 10 pieces, it is easy to track down those who do, receive or pass shoddy work. It is these people who are given the pieces to fix, thus losing time on their production quota. This discourages over-emphasis on production over quality.

However Calvin Klein's quality auditor believes the system does not work. It was his responsibility to roam the shop floor, pointing out quality concerns to the advisors. Technically, under modular production, defective units are caught before they reach final pressing and quality control, drastically decreasing rework. But this is not the case. Several times, when I was on the shop floor, he stopped over 300 jackets at the end of the line due to poor quality. He continually

complained to me that his concerns fell on deaf ears. While in theory it is possible to have production and quality as equal priorities, it is almost impossible on the shop floor. Recently a department head said to me, "We are told that quality and production go hand in hand, but that is not true. The advisor in charge of quality stops production in a team due to poor quality and then I go there pressuring them to keep it going. If they stop, I get yelled at by my boss for not getting the jackets out." More importantly, for every day that a shipment is late, the company pays a fine of 1 U.S. cent per unit. When most shipments are of several thousand, the fines add up. While I was working in Pants, every single order was late by at least a week. No wonder, JC Penny and Polo ceased ordering and Calvin Klein is looking into alternative production sites in Latin America.

In my opinion, the most important reason quality control under Productive Units fails is that it is premised on workers controlling and disciplining each other. When a worker receives a piece that is not correctly done, she or he must stop their work, check who is responsible for defective work, return the piece and then either wait for it or pick it up later. Not until all of this is done can the worker perform the operation for which he or she has either seconds or minutes to do according to its degree of complication. Needless to say, there is lost time which then cuts into a person's efficiency levels. If there is a particular worker who continuously performs poorly, tensions emerge. Quite often, defective work is thrown at the person responsible, who in retaliation does not fix it until later. This backs up the whole line and creates conflicts between workers that make teamwork more difficult than it already is.

I witnessed teams where people would not even speak to each other or receive each other's work due to fights emanating from poor quality. This places the team leader and other members in difficult situations as they mediate interpersonal relations, production and quality concerns.

### Team Structure and Communication

In general, the above-discussion has demonstrated the way shifting to MP has increased worker responsibility, lead to decreased to pay and heightened conflicts. However, changing to MP also has had some unintended consequences, namely facilitating worker coordination in conflicts with management. Under Productive Units, the workforce is divided into teams, each with a leader. Meetings can be called by a leader at any time of day, and leaders are free to move around the shopfloor as they are responsible for coordinating with other departments and team leaders. Furthermore, leaders gather daily in departmental meetings and weekly in the union office, providing opportunities for them to get acquainted and share opinions. Ironically, such a structure of communication has enhanced the worker's ability to mobilize on the shopfloor.

Since Productive Units were instituted in 1997 there have been 7 to 9 work stoppages and a strike. According to worker's, under the PBS there were no more than 1 or 2 work stoppages.<sup>6</sup> This interview data is reinforced by my own experiences on the shopfloor. The day after the second shift was eradicated, our team leader Petra called a meeting around noon. We looked around and saw all the other teams also in meetings. The issue in question, she said, "do we walk out in protest for the second shift's cancellation or do we keep working." After heated discussion, we decided by majority vote that we needed more information but if other's were willing to walk out, we would support them. Petra quickly communicated with other team leaders and together decided that it was better to wait until Monday when the union would make a formal complaint. As the entire shopfloor returned to work, the managers just stood by their office doors in bewilderment as to what had just happened. This scenario repeated itself several times while I worked on the shopfloor. On other occasions, the worker's decided to stop the

lines. Mobilizations of 1400 workers have been decided in minutes due to the efficient structure of communication and decision-making implemented by modular production.

The team structure also helps worker's deal with the free-rider problem during mobilization. As mentioned previously, management and worker's are presently waging a battle in the streets and in the media for the reinstatement of the dismissed leaders and the nullification of the new bargaining contract. I will not delve into this process but will just provide examples to show make my case. In order to assure that worker's attended marches, team leaders picked up company identifications from their team members, to be returned at the end of the event. If at the end, the leader still had your ID, he or she knew you stepped out and you would not be able to enter company premises the next day without it. Lists were kept of those that did not support the majority movement, discouraging free-riders.

During this month of May 47 leaders were fired. In response, worker's decided to work at 50%. The slowdown lasted two weeks. But it could not have lasted that long without the support of team leaders who kept an eye on their teams' production levels, pressured those that did not want to go along and defended others against management backlash. While it is possible for a team leader to not go along with a decision the union membership has made, it is not probable. Teams can and have removed team leaders. Just last week the team I worked with in pants removed the newly selected leader (by seniority) who was on the side of management. The team asked for her removal, but given the tense situation on the shopfloor and the lack of a union, management would not accept. Hence, she was harrassed and insulted to such a degree by her teammates that she quit. Regulations set forth by the system of Productive Units worked against management and strengthened the workers' efforts to be autonomous.

Lastly, another unintended consequence of Productive Units structure has been to create solidarity among team members during these mobilizations. During the strike, 12 hour guard

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<sup>6</sup> Further research will better quantify and compare the two systems and mobilizations.

shifts at every factory door were organized by teams. By this time, it was my first week with a new team in jackets. We were responsible for guarding the door to the Human Resource office. Those hours spent together brought everyone closer, even though they were already a relatively close knit group. However, the other team I had worked in consisted of several factions who did not speak to each other. After several months of marches, demonstrations, and other mobilizations, they have become “compañeras” or companions. For the first time since they became a team in 1997, they gathered after work to celebrate, on this occasion, Mother’s Day. As we sat there laughing and eating, discussion turned to strategy for the upcoming union elections. Clearly, this group of women that began as enemies had forged an identity as fellow workers that they did not exhibit only a few months ago. Not only did they support each other but they also had acquired a class consciousness through the mobilizations. While Productive Units did not foster such comradeship or consciousness, the structure of teams facilitated mobilizations. Since actions during the mobilizations were organized by teams, there was a structure available that encouraged alliances based on class issues instead of individual interests.

## CONCLUSION

One startling conclusion of this paper is that workers prefer piece-rate or Fordist production practices rather than Modular Production. Much has been written about the success of Modular Production. But missing from those studies were the voices of the workers themselves. This dissertation attempts to correct that silence.

While still in the midst of fieldwork, it has become evident that the system of Productive Units does more to constrain than empower workers. Team leaders are given undue responsibilities, transforming them into supervisors of their own co-workers without the commensurate pay. Furthermore, they perform duties traditionally reserved for managers such as disciplining workers and prioritizing production. While the powers of self-administration

provide some relief from management observation through team permissions for tardiness and absenteeism, it also fostered an environment of peer pressure to reach production quota, discipline slow workers and ensure high quality garments. In the end, most workers' interviewed believed peer pressure to be more stressful and all-encompassing as well as detrimental to the working environment than management control.

While Modular Production was thought to assure smooth running assembly lines without bottlenecks and quality problems, this has not been the case. The garment factory in question has not been able to balance its lines with combinations of models in order to avoid bottlenecks, resulting in workers being underpaid for performing rush jobs on complicated suit orders. In addition workers must now do more work for the same pay; they re-stock their own work stations and report broken machines, among other things, that previously fell under the purview of supervisors. Likewise, under MP responsibility for quality is placed upon workers who must check each other's work, losing valuable time returning problematic items and waiting for them to be fixed. This is time lost they are not compensated for which in fact prevents them from reaching their own production quotas, making them vulnerable to reprimands and disciplining. In the end, conflicts between workers arise that transform teams into war zones.

One consequence not expected by those favoring industrial transformation to Modular Production, has been the facilitation of worker mobilization. MP provides a structure of teams and team leaders that can more easily set in motion worker discussion and decision-making regarding social movement actions. With management not allowed to enter team meetings, and team leaders able to freely move around the shopfloor, coordination can be swiftly achieved.

While enhanced ability to mobilize under MP benefits workers, the majority of workers interviewed preferred a return to the piece-rate system. Constant peer control and depending on others for payment levels have worn down any hope they had of MP improving their lives. In

the face of this, workers have rebelled against the system by slowing production, passing defective work and ultimately, going on strike. Therefore, for re-organization on the shopfloor to result in higher productivity and quality, it is not only management but also the workforce that must participate in its benefits.

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