

**Progressive Labor Management Policy
During a Recession: Effects on White
and Minority Women**

by Guadalupe Fria

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About the Author: Name

Short Bio

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Progressive Labor Management Policy During a Recession: Effects on White and Minority Women

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Introduction

This article is based on a study of the work experience of production workers at MaikroTek's (a pseudonym) computer manufacturing division in California's Silicon Valley. The majority of the labor force was composed of men and women of color and white women, groups that presently are the fastest growing (Johnston and Packer 1987) sectors in the workforce. At the same time, participatory management policies are being implemented in major corporations throughout the country and MaikroTek is at the forefront of companies with such policies.

Demographic projections of the increasing importance of workers of color and women in the labor force as well as the trend towards participative management policies have received much attention in the media; yet relatively few studies have examined the workplace experience of white women and workers of color in such firms. The case of MaikroTek reveals that the labor force was stratified from the very beginning, and that workers' occupational mobility within and general responses to participatory management were, in part, a result of this stratification.

This study will show that men and women of color and white men and women hold different places in the firm's internal labor market, and that participatory management policies pose new problems for these workers. On the surface, such policies appear to provide more participation for all employees. However, this study reveals a differential effect on workers depending on structural and socio-demographic factors. Second, different groups of women workers responded differently to participatory management policies and to management's actions during the economy-wide recession of 1982-1983.

Workers, upon entering the firm, are stratified based on human capital characteristics. Later, they are promoted based on their ability and willingness to internalize and act upon the participatory ideology. Workers' responses are formed by such structural factors as their place in the division of labor, and such social/demographic factors as race, gender, age, education and their position in the family. Both sets of factors influence workers' perceptions and subsequent responses to management actions.

Heterogeneous Labor Force and Participatory Management

Several bodies of literature address aspects of the workplace experience of a diverse set of workers in the same industry or work site. First, studies have examined immigrant workers in the U.S. electronics industry (Hossfeld 1988; Fernandez Kelly and Garcia 1988; Keller, 1983; Green, 1983). These studies document a division of labor based on race and gender in which men and women of color and white women occupy the lowest paying jobs. They also portray workers as active agents in adapting, resisting, and coalescing with management.¹

All are based on a cross section of firms in the secondary labor market sector and do not examine the experience of workers at one firm over an extended period of time. Moreover, often the assumption is that immigrants are homogeneous in gender, skills, goals, and aspirations.² This assumption prevents analysis of immigrants' work experiences within internal labor markets. As Thomas Bailey (1987:2) points out,

Factors other than skill levels differentiate the roles of immigrant and native workers. These differences are not so much in the skills themselves but in the expectations and goals that group members bring to their jobs and in the mechanisms and processes through which they enter the labor market, acquire skills, and achieve or fail to achieve occupational mobility.³

For the foreign born, these factors emerge directly from the economic and social transition inherent in the process of immigration. That process itself shapes immigrant labor force participation in ways that differentiate it from the participation of low skilled natives.

Bailey explains that immigrants, like native-born Americans, will have different expectations about jobs and working conditions. A middle-class male Filipino immigrant will have different goals and skills from those of a working-class female Vietnamese employee. Immigrants are a heterogeneous group and thus one would expect to find that class, gender and racial characteristics influence their work experience.

The present study confirms that working conditions in the primary sector of the industry are much better than secondary sector jobs. At MaikroTek workers have stable employment, relatively high wages, and fringe benefits on the job. At MaikroTek however, the heterogeneity within and among women and workers of color is such that workers' responses to management policies vary.

With respect to heterogeneity among white women workers, relatively little research has been conducted on middle aged (age 40-64) women (Shaw & Shaw, 1987). Most of the research on such workers has been of men. This study provides some insight into the work experience of middle-aged white women.

Literature on internal labor markets has been especially helpful in analyzing occupational segregation by race/ethnicity and gender in particular types of jobs and industries (Hartmann, 1985; Osterman, 1987, 1979). This literature argues that workers' experience in the workplace is largely determined by the internal labor market (ILM), or the firm's rules and procedures regarding hiring, advancement, wages, and due process (Doeringer & Piore, 1975). This literature tends to focus on unionized workplaces and to emphasize the structural factors which often impede occupational mobility, such as short job ladders. Less attention however, has focussed on the qualitative aspects of workers' race, gender, and age and how such processes as on-the-job training, promotion, and due process impinge on the internal labor market.⁴ The focus of this study is on the responses of different groups of workers to management policies in firms with internal labor markets.

In recent years the literature on women and work reflects greater recognition that women of color must function and strive to succeed in a corporate climate in which racism and sexism are pervasive, though often subtle, forces (Fernandez, 1980; Kanter, 1977; Knouse, 1991). Women of color, like their male counterparts, must "prove themselves" over and over before they are promoted — even to lateral positions (Segura, 1989; Friez, 1989). Institutional racism means their employment is often limited to the race-gender labor market, or to jobs that are dominated by women of color (Segura, 1986:124). Even in unionized firms, for example, women of color have been relegated to jobs with shorter job ladders, or

have been limited by specific work rules such as narrow seniority units (Kelley, 1982; Zavella, 1987). Few studies, however, examine production workers in a non-union primary sector firm over an extended period of time. This case study of MaikroTek fills this gap.

Finally, a growing body of literature alternatively referred to as "enlightened" or "participative" labor management relations, has generated a lively controversy largely focused on the objectives and outcomes of this type of management. Participative management policies raise important questions about opportunities as well as challenges for labor. Lamphere and Grenier's study is one of the few which focuses on the impact of such models for white women and Mexican American women. They find that "participatory structures can reorganize the labor process as well as the social relations of the workforce to create new forms of management control." (Lamphere and Grenier, 1988:227). They note that firms with these types of models in place are considered among the best places to work, especially for women and minorities who historically have not had ready access to such jobs (1988:255). Yet, in the Lamphere and Grenier study, within the context of limited jobs and a climate of fear created by the company during a union drive, Mexican American women were not willing to vote for a union despite their dissatisfaction with existing working conditions. The present study elaborates on the responses of a diverse workforce to 'enlightened' labor management policies.

Background and Methodology

This article investigates the effects of new labor management systems on men and women of color and white women workers in an industry which has remained largely inaccessible to researchers, due to the concern with protection of its trade secrets. A case study approach allows for an in-depth understanding of how women and minority workers experience a "participative" labor management model in a nonunion setting. MaikroTek (pseudonym) is a multinational electronics company listed on the Fortune 500. This company has a number of plants in Silicon Valley and throughout the United States.

MaikroTek assisted me in collecting employment data for a cohort of 220 production workers

employed at one of MaikroTek's computer manufacturing plants in Silicon Valley. The data covered the period of employment from 1978-84. I developed a survey form which I filled out with the assistance of clerks in the Personnel department. I collected data on workers' background characteristics, job search, and employment and earnings history. Open ended in-depth interviews with production workers, managers, and supervisors complement the firm data. I interviewed 26 production workers, five supervisors and ten engineers and managers. All except the managers were randomly selected from the same cohort of workers hired in production in 1978.⁶

Employment security, or a policy which claims not to lay-off workers so long as their performance is maintained at a given level, is the defining feature of MaikroTek's internal labor market.⁷ Employment security reflects a patriarchal and paternalistic philosophy which views employees as part of one big family. Corporate culture emphasizes the importance of the individual employee in the company. An example of the form of paternalism embedded in MaikroTek's philosophy is the program set up to support the children of MaikroTek employees through a summer employment program and a scholarship fund.

MaikroTek's philosophy represents what Foulkes (1984) calls "doing it right," or a policy that aims to make workers identify with the company's goals. In this view, promotion from within and a policy of no layoffs are necessary in order to create and reinforce what Foulkes refers to as a "climate of trust." Such a climate dispels workers' fears of layoffs and creates a loyal workforce. In the computer manufacturing industry, demand is cyclical and layoffs sweep Silicon Valley during every downturn. A climate of trust leads to lower employee turnover, as the firm provides a significant amount of training on the job and employment security is a way of protecting their investment. This is especially so during economic upturns when skilled workers can be easily lured away.

Employment security and promotion from within, buttressed by a written set of guidelines regarding employee grievances are key components of MaikroTek's labor management philosophy. These policies and the way they are interpreted by lower level management on a daily basis combine to form a

very specific type of internal labor market and company culture.⁸ In this setting, employees are expected to be assertive about certain workplace problems. In particular, they are expected to be able to communicate suggested changes to the production process which would increase the efficiency of the line. Employees interested in a promotion are also expected to continually upgrade their own skills, either on the job, or externally by taking classes. Overall, such a philosophy seems to provide more avenues for participation, but as we shall see, in practice, the model worked only for certain employees.

Finally, Maikrotek is very much aware of the importance of "doing it right" in order to keep unions out. Maikrotek's comprehensive management model helps it maintain significant "control" over its workforce by ensuring a "happy workforce," thereby thwarting collective unionization.

The Internal Labor Market.

In order to understand the effect of MaikroTek's participatory management policy on different groups of workers, it is important to understand how the production labor force was structured. The internal labor market at Maikrotek's computer manufacturing division is made up of assemblers, material handlers, clerks, and technicians. Production workers were involved in assembling computers and peripherals (e.g., printers, modems, etc.). Women represented 55% of the 1979 cohort of production workers, and a little over half (56%) were women of color. Workers of color (54%) were a racially diverse labor force (Table 1). Immigrants represented about 19% (42) of the cohort.

Table 1: Race and Gender Composition of 1979 Cohort

<i>N</i> =220				
Minority		(118)		54%
Female		(121)		55%
<i>Race</i>	<i>Men</i>	<i>Women</i>	<i>Number</i>	<i>Percent</i>
Black	13	10	23	10
Asian	20	25	45	20
Hispan	15	31	46	21
Am Ind	2	2	4	2
<i>Minority</i>	<i>50</i>	<i>68</i>	<i>118</i>	<i>53</i>
<i>White</i>	<i>49</i>	<i>53</i>	<i>102</i>	<i>46</i>
Total	99	121	220	99

Asians represented about 20% of all workers in this cohort and about 85% of the Asians were immigrants. Of these, 60% immigrated from the Philippines, with the rest having come from Korea, Vietnam, Laos, and Cambodia.

Twenty-one percent of those hired by MaikroTek in 1979 were Hispanic⁹; three (7%) were immigrants, the rest were first generation Mexican. Blacks represented 10% of the cohort studied, one from Nigeria and the rest were native born.¹⁰

Many middle-aged workers defined as 45 years or older were hired during the 1978-79 rapid growth period. Middle-aged workers represented 13% (28) of the cohort. The majority (64%) of the middle-aged workers were women and a little over half of these were white women.

Assemblers made up by far the largest part of MaikroTek's workforce, holding 83% of the jobs. Material handlers constituted 6%, and technicians 8% of the workers. Comprising 55% of the cohort, female workers constituted 67% of assemblers. In contrast, male workers dominated the technician and material-handler positions, holding 95% of these jobs.

Table 2: Occupational Distribution by Job Category: 1979

N=220

		<i>Men</i>	<i>Women</i>	<i>Minority</i>	<i>White</i>
Assembler	83%	33%	67%	58%	42%
Mat Handler	6%	95%	5%	38%	62%
Technician	8%	95%	5%	38%	62%
Other	3%				

This data includes all workers hired in production as assemblers, material handlers, and technicians in 1979. I did not have access to data on the sex/race/age composition of the incumbent workforce; however, we can infer from industry statistics that the incumbent workforce closely resembles the race/sex composition of the 1979 cohort with one difference: this cohort probably includes a larger percentage of middle-aged women and immigrants hired during a labor shortage in 1978-79.

We can see from Table 2 that women and minorities (both male and female) hold different places within MaikroTek's internal labor market. The initial job distribution and subsequent career progression of workers in the 1979 cohort suggest occupational segregation by race and gender¹¹ (Table 3). Women were almost exclusively hired as assemblers (98%), and virtually all of the middle-aged women workers were hired in assembly. White and minority men were hired in all job categories. The minority men hired as technicians were almost all Vietnamese.

Table 3: Occupational Distribution by Race and Gender, 1979

N=220

	<i>Technician</i>	<i>Mat.Handler</i>	<i>Assembler</i>
Women	1%	1%	98%
Men	21%	20%	59%
Minority Women	0%	0%	100%
Minority Men	16%	16%	68%

MaikroTek's policy of promotion from within emphasized occupational mobility based on performance. MaikroTek's meritocratic philosophy rewarded individual initiative on the job as demonstrated by improving the work process, and off the job as demonstrated by obtaining additional training.¹²

The general progression within assembly was to start in *performing*, move on to *loading* printed circuit boards, and then to *touch-up*. Vertical mobility was defined as movement within one job ladder, for example, production 1 to production 2, to technician and eventually to supervisor or engineer, (see ILM diagram). A lateral move across job ladders was also possible, and although the pay scale remained the same, the working conditions made such a move desirable for some workers.

Workers' experiences at this firm, both in terms of job satisfaction and in terms of occupational mobility, are determined by structural and socio-demographic factors. Structural factors include the firm's internal labor market, the type of role models in the firm, and company apprenticeship programs (these are discussed at length in Friez, 1989). Socio-demographic factors include the workers' human capital characteristics such as skill, education, age, race, and gender. Included in socio-demographic factors are position in the family, and length of stay

in the United States. These two sets of variables interact and worker's experiences in the firm influence their perceptions of management policies.

Upon hire, workers are stratified based on human capital characteristics. The hiring process is a gendered process in that "advantage and disadvantage, exploitation and control, action and emotion, meaning and identity, are patterned through and in terms of a distinction between male and female, masculine and feminine." (Acker, 1990:146). Job training centers often segregated women directly into the female typed occupations such as electronics assembly, while men were more likely to be channeled into the technician program. In addition, the experience of workers (all men) who had served in the military was valued over women's experiences even within the electronics industry.

The employment data I collected by 1984, the end of the study period, are shown in Table 4. Of the workers in the original cohort, 153 of them were still employed by MaikroTek as of 1984.¹³

Table 4. Occupational Distribution at End of Period, 1984, By Sex:

N = 147

Job Class	Men	Women
Tech 1	3	4
Tech 2	10	2
Prod 1	10	28
Prod 2 or Supervisory	44	25
Clerical	7	10
Other	3	1

Once placed in those jobs, the job structure itself made it easier for workers in the male dominated occupations to achieve upward mobility within the firm's internal labor market. From Table 4 we see that more men were in Production 2 and Technician 2. Conversely, it was more difficult for workers in the female dominated occupations, such as Production 1 to achieve vertical mobility, again, because of the structure. Thus, workers' experience with the firm's policy of promotion from within was deeply influenced by their initial position in the division of labor.

In order to better understand the experience of workers, I divided workers into two groups which I label "movers" and "settlers." "Settlers" initially believed they could move up largely because of the

corporate philosophy's emphasis on the rewards of individual initiative. Even before the recession however, "settlers" "saw through" the policy — that achieving mobility often was just not worth the effort on the job and the time away from other priorities at home. Some had worked in the secondary sector of the electronics industry for many years and a job at Maikrotek fit their definition of success. Success by these workers' definition was simply having a job at a good company — one which offered relatively good wages, fringe benefits, some protection from capricious supervisors, and most importantly, employment security.

As in any typology, there is some diversity within the categories. The "settlers" were largely composed of middle-aged divorced or widowed white women and South East Asian immigrant women. However, some younger white, Mexican American and Filipino women who did not develop a successful strategy, had bad luck, or had responsibilities that required all their attention, were included in this group. The "settlers" also included a few working class white and minority men.

Kay is a white woman in her middle 50's who exemplifies the middle-aged "settler" category. Kay was married and cared for her children until they were school age; she was divorced about five years ago. She had trouble receiving alimony and worked as a clerk in a small shop to support herself and occasionally supported one of her two grown daughters whenever they needed her. She was hired at MaikroTek in 1978 in assembly. Women like Kay faced two constraints: their financial situation and a conviction that they were too old to learn or that, given their age, it was not worth the effort. Kay explains:

A fellow in charge of sending workers to school asked if I wanted to [train to] be an engineer or technician. Well I would've but you had to have geometry and algebra and I didn't care for that. I love math but as far as learning algebra, geometry — I like actual numbers, I don't care for symbol math. So I wouldn't pass anyhow. Besides it was a time when I didn't have enough money to even think about it... I was more concerned with keeping my head above water.

Most of the middle-aged women never bought into the “promotion from within” policy and thus, did not strive to achieve mobility.

Immigrants as a group were heterogeneous in terms of ethnicity/race, socio-economic class background, and gender and therefore could not be placed in one category or another. Asians were the group that had the largest percentage of immigrants (85%). The key difference within the Asian immigrants was socio- economic class and length of time in the United States. All immigrants were here legally and had a length of stay of at least five years. Filipinos as a group have a much longer history of immigration to the U.S. than South East Asian immigrants. Filipinos had worked at MaikroTek since the early 1970’s and a few Filipino men managed to move into supervisory jobs. The interviewees confirmed that one of MaikroTek’s key methods of recruitment is through work based networks. By 1984, Filipinos had well established networks which Filipino men and women used to achieve mobility.

In contrast, South East Asian immigrants were first hired in the late 1970’s and were not as well established within the firm. There were no South East Asian supervisors. Among the Laotian, Vietnamese, and Cambodians, it was the men who were “movers.” They had entered the firm with a technical background and/or some college education and most were going to school to further their education. Their position within the family for both single and married men was such that they had wives and/or mothers who could support them while they worked and went to school.

I call “movers” those workers who achieved occupational mobility, either vertically or horizontally. Those who were located in jobs with more room for mobility such as technician or material handling, were men (see Tables 2 and 3). Workers initially hired in these jobs achieved at least one promotion, (see Table 5). Men moved up within their job ladder and, to a lesser extent, moved laterally to clerical jobs. Thus, there was a gender distinction within the “movers.” Women achieved mobility laterally and vertically. Female “movers,” younger white, Filipino and Mexican American women, defined success in two ways: as “moving out of production,” that is, a lateral move to a clerical position, or as a vertical move from production 1 to production 2.

Table 5: Mobility by Job Classification: 1984

N=150

<i>Job Class</i>	<i>At Least One Promotion</i>	<i>Merit Only</i>	<i>Separation</i>
Technicians	76%	0%	23%
Mat. Handler	61%	1%	30%
Assemblers	53%	15%	32%
Clerical	80%	20%	00

The women “movers” I interviewed spoke about moving “out of production.” Although clerical jobs were on the same pay curve as production 1 jobs, clerical jobs were white collar jobs with greater status than blue collar jobs. Clerical jobs permitted more autonomy on the job — a desk, a phone, and a more feminine and middle class attire. Some of the “movers” even took pay cuts to get on the clerical ladder. Others, who entered the firm’s training program, had to take classes to learn clerical skills.

The “movers” shared common attributes, some structural, some social/demographic. The men were positioned in jobs which facilitated mobility and both male and female “movers” were in families that provided support for their endeavors. “Movers” were very determined to achieve mobility; they found mentors; they developed strategies.

Tom Nguyen is a 26-year-old Vietnamese man who exemplifies the male “mover” category. He emigrated here with his family and completed high school in the United States. He had been working as a welder which frequently exposed him to lead dust, when his friend told him about MaikroTek and Tom applied. He accepted MaikroTek’s subsequent job offer even though it represented a salary cut. He had heard MaikroTek was a good company, and the promise of employment security was attractive to him.

Tom had no previous experience in electronics, and he was hired in production in the area known as “touch-up.” There, he inspected parts eight hours a day and gradually learned other areas on the production line. Tom’s employment strategy was to learn to do the jobs no one else was interested in doing. This involved teaching himself to trouble-shoot computers. After about a year, he and another male coworker convinced a supervisor to let them tackle some technical problems on the line. The supervisor agreed, and consequently, Tom was recognized as being one of the best trouble-shooters on the line.

Before the end of his second year at MaikroTek, Tom was promoted to Production II, representing about a fifty% increase in salary. Tom realized he would have to go to school and take engineering courses if he wanted more promotions. Tom was single and lived with his extended family; he could work full-time and attend a local state university without much conflict.

In contrast, the settlers decided within the first three years that overcoming the barriers was not worth their personal effort. They weighed the pros and cons and decided that *given their constraints*, both at home and at work, they were better off simply “checking in and checking out.”

“Settlers” placed a higher value on personal relationships within work teams and on maintaining a stable work environment rather than achieving a promotion. The importance of personal relationships can be better understood if we study the work process itself. The monotony and boredom of working in assembly was often counteracted by talking with co-workers. Kay describes her job:

It was very rough and my eyes sometimes would close and I'm trying to do those boards and it's tough because the boards are very simple, the parts we put on aren't that many, maybe seven parts. But you're doing something repetitious like that all day long, you have to be alert. If you get the polarity the wrong direction, if you get the wrong thing down, or... if you put like an IC or a chip, they have to take that out with all those little legs and put it back in. You hear about it, they write you up because they've got inspectors.

Susana is a 30-year-old Mexican American worker who started working at MaikroTek soon after high school in 1978. Susana became a “settler” because she took a pregnancy leave during her tenure at MaikroTek and then returned when the economy was slowing down. Susana describes the kind of “family” atmosphere that workers created:

It's like a family, everybody knows each other, of course they go around talking about so and so whatever, but it was kind of like a family at that time. We all just helped each other. Those who did not talk or did not want

to bother becoming a friend of yours, we just didn't bother them and they didn't bother us. There's usually just one person who is shy or rather keep to themselves. Everyone else is always talking — that's what I like about it.... They (management) like you to talk but keep your hands moving... I taught myself keep talking and keep working at the same time, ...that's what supervisors watch for.

This sense of family and belonging to a group made the work tolerable and thus, was highly valued by settlers.

The importance of the group for the “settlers” explains in large part their likely resistance to almost any work related change. In comparison “movers” were more open to change and less reliant on work teams and stability.¹⁴

In this typology there is room for movement between the two groups. That is, workers could start out as movers and circumstances could lead them to become settlers, and vice versa. A variety of factors could block mobility. For example, the economic climate during which a worker requested a promotion might allow for faster mobility during a period of rapid growth and no mobility during a slowdown; luck/chance might lead some workers to progress faster than others simply because of the product line they were involved in; or a supervisor's bias might lead some workers to be developed and not others.¹⁵

Thus there is no direct relationship between movers/settlers and gender/ethnicity. Instead, movers include both men and women. The common thread is that movers are positioned in families which support them in making work and education a top priority; they are very articulate in English and they understand and have internalized the values which underlie the corporate culture such as individualism and competition.

In contrast, the settlers are middle-aged white women and working class immigrant and minority women. The middle-aged white women are not interested in going to school to improve their chances of being promoted. They are getting ready to retire. The barriers for the other “settler” women (white, immigrant and minority) stemmed from their position in their families which required them to support husbands who worked and studied, or to care for

children and/or elders. Other barriers to mobility included settlers inability or unwillingness to adopt values inherent in the corporate culture, and inadequate retraining programs within the firm.

Expense-Reduction Measures During the Recession

The downturn in the electronics industry in 1982-86 was perhaps the most serious ever experienced by the industry.¹⁶ The recession was brought on by advances in technology, imports, and off-shore production (Monthly Labor Review, February 1986: 27- 36). Advances in technology in the work place increased worker productivity, which contributed to over-capacity in the industry; a strong dollar made imports more attractive; and the transfer of local manufacturing to off-shore production sites led to falling demand and industry profits.

Changes in the economy and in company strategy disrupted the entire company.¹⁷ To make things worse, MaikroTek's liberal hiring policy of 1978-79 left the firm with an excess supply of labor. The company failed to adequately forecast the scope or depth of the recession.¹⁸ Product shifts, especially in the computer and components groups, caused yet another problem — some divisions had excess workers while other divisions were short. MaikroTek clearly had not adequately planned its skills mix. A member of the corporate staffing department concedes:

Historically we've done a good job of looking at how much direct labor goes into manufacturing our products, but we haven't looked at the special sets of skills we've needed within that labor component. That's why we've got these retraining programs in place and why we have to do a better job of planning in the future.

MaikroTek responded by developing a program to internally redistribute its workforce, and this cost the company more than \$1 million.¹⁹

Given the economic slump and MaikroTek's commitment to employment security, the firm had to undertake drastic measures such as job transfers, work sharing arrangements, and a shorter work week. This process, however, began without sufficient directives

from the corporate office, and the policies that were eventually developed took shape in the middle of the recession. As a result, recessionary measures were not implemented smoothly or consistently throughout the firm. By the time company policy was relayed to the various divisions, lower-level management had developed their own guidelines to deal with the daily crises. For some situations there were no clear company precedents, so lower-level management had to interpret the new guidelines.

MaikroTek froze hiring, reduced hours, cut entire work shifts, and introduced measures that affected working conditions. A skills bank was set up to match workers with available jobs in other plants in the area. Workers and MaikroTek incurred the costs associated with such transfers. Relocation costs to workers included increased travel, different commute patterns, and adjustment to a new work group, while MaikroTek shouldered the retraining and administrative costs.

The reduction in work hours affected employees' paychecks the most. For at least nine months, the company reduced the number of hours worked by most employees; workers could mitigate the impact by borrowing days from vacation time. In addition, paid holidays such as Thanksgiving and Christmas were extended without pay for several days beyond the standard period. Employees were encouraged to move up vacation schedules. Merit wage increases that averaged between 5 and 10% a year during normal economic conditions were reduced to 5%, depending on employment tenure (they appeared to get smaller with tenure), and were distributed every eighteen months instead of the previous yearly increases.

Employees often looked forward to profit sharing which, during growth periods, had been as high as 7 to 9% of employees' gross salary and was distributed every six months. But profit sharing in December 1985 was only 5%²⁰ — the lowest since 1973 and down from 9% in 1980.²¹ In addition to shortened work hours, the company cut back on fringes. In sum, the reduced work hours and the cuts in profit shares generally resulted in a significant decline in workers' incomes. This was especially difficult for single-income families. About 20 per cent of the employees interviewed were single heads of household, all of them women. Nan, a 29 year old white single mother of one child comments,

They [workers] don't like it. It affects their wages, and everyone lives off their paycheck. I know I do, and I barely make it. I'm getting a roommate, and I'm thinking about getting a second job just to make ends meet.

Single heads of household and two income households in which both adults were employed either in the same firm or in the same industry were forced to seek alternative means of economic survival. It was not uncommon for workers to have two jobs.

Changes in Working Conditions and Their Effect on Employee Morale

MaikroTek's expense-reduction measures negatively affected workers' paychecks and working conditions. Employee morale followed suit. Policy decisions made at the corporate level were designed to be consistent with company philosophy and culture. But the implementation of some policy changes was mishandled. In some cases, supervisors and lower-level managers interpreted the mandated expense-reduction measures and the new climate of austerity as a larger mandate to undertake arbitrary changes in the work rules.

Specifically, supervisors and managers became more rigid in general matters governing the behavior of workers. Nan's comment illustrates this perception:

We used to have flexible hours from 6 to 8:30 a.m. So the manager came in one day, and it's 6:00 a.m. and the workers are all sitting around when there was work to do! Now they cut the time off. They said: "You have to be here at 6:40 and that's IT — no flexible hours, no nothing, 6:40 you start work!"

*I'm going "Wow! They did **that**?" I'm going. "Geez! What happened to open policy?" So everything's changing.*

A better response to such a situation — one more consistent with company philosophy — would have focused on those employees who had violated the guideline. Instead, all employees were punished, including those normally scheduled to start work

after 6:40 a.m. The arbitrary and sudden response of this particular manager left employees feeling insecure because they feared other potential changes in company philosophy, including MaikroTek's commitment to its labor force.

Managers held meetings to explain the need for the new measures to workers and to reassure them about the firm's commitment to employment security, but the rash action of one manager could hardly have been reassuring. Managers at the computer manufacturing division knew that the power of workers vis-a-vis management had been weakened by the recession, so they tended to enforce rules more vigorously than they were enforced during growth periods. One worker noted several people had been "let go," concluding that management was enforcing many rules in an effort to decrease its labor force.

Company guidelines regarding the job allocation process during the recession were also altered. Under normal economic conditions, if relocation was required because a given product had been phased out, for example, or robots had been introduced into production, employees could choose from a wide range of jobs; company policy allowed an employee to wait for a desired slot. During the recession, however, guidelines stipulated that employees were required to seek another job, either within the company's various plants in Silicon Valley or in other regions of the United States. Employees who did not succeed in finding a job for themselves would be offered a job by the supervisor; workers would be allowed to pass up only one job. They had to accept the second offer even if it meant relocating outside Silicon Valley. Workers appeared to be confused about this guideline: some workers said you could turn down two offers and others said the rule was you could turn down only one. Seniority was not a factor in these choices.

The relocation of workers was a complicated process that involved a great deal of coordination among divisions. This relocation process had a differential impact on movers and settlers. The movers took action early and sought other jobs. As a result, they had a bit more of a choice. This group of workers had a better "track record," they had better interviewing skills, and generally were more aware about what they had to do.

In contrast, the settlers were more adversely affected because of their response to relocation policies. Settlers were less likely to take the initiative early on and search for another job. Settlers placed a higher value on personal relationships at work and thus, tended to cling longer to each other within their work group. They often waited to the last possible moment to look for another job and therefore had trouble finding one. As a result, they were pressured to take the jobs offered by their supervisor. Settlers were very reluctant to move and, without their cooperation, the process was stymied. Susana, the 30 year old Mexican American woman, explains:

*They loaned ‘em out all over [various divisions in Silicon Valley], and did not take into account where people lived. That was a real big problem, I remember. You were **asked** to accept a given offer, there were tours to look at jobs first and a lot of people weren’t doing it the right way and they had a real big meeting with all of us, kinda like we had a **lecture**. A lot of people were being interviewed and they asked them questions about themselves, how would they like this job whatever — the person would say, ‘Well, I don’t know why I’m here, but I was just told to come here and I don’t want the job.’*

All of us got in trouble for it. People did NOT want to go, I didn’t either, but if I had to I had to. IT WAS HARD! Especially for the managers, they sat us down and said, “You better show that you’re interested in that job.” There was pressure.

Although intrafirm mobility had been understood as one of the conditions of employment, many settlers resisted the relocation measures. Susana’s explanation provides insight into this reluctance:

*It was really weird — everyone was used to working there, everyone knew everybody, and even though I was used to working at [another Division] and here, I just didn’t want to move because I don’t know anybody up there. And of course there’s going to be talk about the other division, like: “Oh that division is awful! Don’t go there! Oh those people are **terrible**, they’re really awful.”*

Although workers’ apprehensions sometimes proved to be unfounded, there were real reasons for workers’ reluctance to move. Moving to another division, temporary or permanent, was similar to starting a new job. Starting a new job meant gaining acceptance with a new work group, developing a relationship with a new supervisor, and establishing a “reputation” from scratch.

Employees also were reluctant to relocate because of longer commuting times, a particular hardship for parents with elaborate child-care arrangements. A twenty-five year old Laotian production worker explains, “I know friends that worked with me for many years who have babysitting problem. They used to live 10 minutes away from work — now they gotta travel a half hour to an hour, one way!”

Among the settlers, some were pressured more than others about relocating. Such pressures were widely perceived as unfair and as yet another example of inconsistently implemented guidelines. Some employees were actually told to accept a given job or leave the company. This type of situation, wherein employees were given ultimatums, appeared to be more likely with the less-assertive employees who were often immigrant women. Susana explains,

*I saw some people who were **really** pressured into “You better do it or else — you’re **out!**” I go, “They told you **that**? They **can’t** say that to you.” But they said “Yeah, they told me that.” It looks like certain people were picked to move and I wasn’t picked at that time.*

Resistance to change is not an uncommon reaction among workers in general and whenever structural changes are introduced, behavioral changes will necessarily be involved (Lonergan, 1965). MaikroTek needed to address settlers’ attitudes about relocating and about viewing change as an ongoing process. However, the company was primarily concerned with maintaining its no-layoff policy and was unable to take specific steps to overcome these attitudinal difficulties.

During this period the workers cooperated, even with their loss of income. But their trust in the company eroded when they were promised one thing and were later forced to accept something else less

desirable. For example, some workers were “loaned out” to the printed circuit (PC) shop, an area to which many workers would not voluntarily relocate because of the highly toxic chemicals used in the production process. These workers were told it would be a temporary move. Susana’s account follows:

They said, “If you don’t like being at the printed circuit shop, you can come back.” That was a choice they gave us.... So we go “OK.” And we stayed back there. And finally one day I hear that people who were temporary back there were becoming permanent! I said, “No, — NOT us... we weren’t told anything.” Finally... our manager and our supervisor says, ‘We would like you to stay here with us and become permanent.’

He goes, “Well, you don’t have a choice.” He ignored our objections and kept telling us how happy he was to have us working for him. I felt I was talking to a brick wall.

These employees felt tricked, especially since few wanted to work in the printed circuit shop. One of the displaced workers (a settler), who was involuntarily placed in the Printed Circuit shop permanently, developed an allergic reaction to the chemicals. She nevertheless expressed a reluctance to persist in trying to leave the Printed Circuit shop because she felt the supervisor would view her legitimate complaint merely as an excuse to return to her previous job.²²

While both movers and settlers were hurt by the overall changes, movers were especially hurt when they were demoted. Some “relocations” meant that supervisors were demoted to assembly work. Although company policy specified that the demoted worker would continue to receive a supervisor’s pay, it could not protect a worker from diminished status and/or working conditions. Nan explains,

About a month or two ago they got rid of QA [quality assurance] people altogether! I mean there’s people who worked at QA for 15 years, and they put them back in the manufacturing line! And talk about sad....In the last two years this division has really changed a lot. Morale went [motions thumb down]!

Previous status differences (actual or perceived) between workers can be a source of great conflict when employees have to work side by side. Thus, status differences made inspectors reluctant to accept assembly jobs for reasons described above. Second, assembly workers were reluctant to accept inspectors as coworkers. Teamwork and cooperation are essential in the workplace; they improve productivity by reducing the likelihood of errors and by increasing output. Teamwork and cooperation also lessen the need for supervision. But these highly prized qualities were jeopardized at MaikroTek by pressures brought on by the recession.

Thus, both movers and settlers experienced recessionary measures differently. First, the guidelines changed; second, some changes were not handled well or implemented consistently. Both groups of workers experienced a decline in morale but for different reasons. Susana, a settler elaborates:

I just didn’t think it was fair. Neither did a lot of other people that were put in those areas. I thought it was wrong. And we couldn’t do anything about it.

A lot of people said to go up there, you know, over their heads, and I just didn’t think it would do any good. I would have to go through a lot of steps before I get way up there. I’m sure if a lot of us spoke up, something would get done. But there are a lot of them [workers] that just won’t want to go into something like that — just don’t want to speak up.

Thus, the absence of well-defined company guidelines at the onset of the recession caused difficulties with the implementation process. The failure to plan and to manage changes was perhaps inevitable given the strategic changes being introduced by the company. Nevertheless, the result was resentment, doubt, and a decline in employee morale.

In spite of the problems inherent in MaikroTek’s paternalistic labor-management model, workers at MaikroTek were grateful to be working and were loyal to the company. Kay concludes:

“I figured that’s the way it is. You want a job, you just do what they say and shut your mouth and that’s it. I’m grateful I’m with this company because I think it’s a good company. I’m still in my house.”

The cyclical nature of the industry places a premium on stable employment. Reports of layoffs in other firms served as constant reminders to MaikroTek workers that they were fortunate to be employed at a firm with a no-layoff policy. But workers still feared MaikroTek’s ability to keep its promise, official policy notwithstanding. Nan, a single white mother of two says:

“But they’re really trying not to [lay people off]. They’re going all out — all of us have really accepted to do this... otherwise lose your job... Even the way they feel now, they STILL like Maikro — they wouldn’t leave it for the world.”

Most of MaikroTek’s workers had worked for other companies and understood that, compared to those companies, MaikroTek was “easy going” and “laid back.” Indeed, after working at MaikroTek for over six years, they had grown accustomed to being treated a certain way. So, with the onset of the recession they felt the company philosophy had changed and that things were not done the way they used to be. They also believed these changes may have been brought on by more than the recession, that fundamental changes were being wrought in the company philosophy itself.

Indeed, interviews with managers indicated that in the future MaikroTek would more carefully select prospective employees so as to avoid the mistake of the 1978-79 upturn when they hired “indiscriminately.” Management learned that a policy of employment security requires employees with “mover” characteristics, that is employees willing to be cross-trained and to continually upgrade their skills. MaikroTek will not likely hire workers with “settler” characteristics because of the perceived expense involved in training them to adopt behavior valued by the corporate culture.

Lessons from the Recession

The case of MaikroTek reveals that white women and both men and women of color hold different places in the firm’s internal labor market, and workers’ occupational mobility and general responses to participatory management were, in part, a result of this stratification. This study reveals a differential effect depending on structural and socio-demographic factors.

Workers, upon entering the firm, are stratified based on human capital characteristics and promoted on their ability and willingness to internalize and act upon the participatory ideology.

Settlers were the group most adversely affected by the recession, because they were less adept at negotiating the informal system of getting ahead at MaikroTek, and they placed greater value on personal relationships at work than on “getting ahead.” By the end of the recession, employees were expected to adopt “mover” behavior not simply as a way of “getting ahead” but as a condition for *keeping* their jobs.

Movers were adversely affected by the all-around cutbacks, but were most affected by demotions and the uncertainty about employment security. Movers were able to respond quickly to management directives to find other jobs within the corporation.

The success of MaikroTek’s management model lies in its ability to make good on its promise of employment security. Employment security has its costs in the form of direct outlays and foregone income. Although costly, the firm’s no-layoff policy can also be viewed as an intangible, but valuable, long-term investment. The firm that offers and honors employment security stands poised to take advantage of new opportunities once a new growth period sets in. It does not have to recruit, hire, train, and socialize new workers. Workers seek out employment at this firm on the basis of its reputation, and its current workers will not be wooed away by other firms paying slightly higher wages.

This recession represented the utmost challenge for the company. Although its efforts to maintain employment security were marred by poor policy implementation and an excess supply of workers,

MaikroTek's internal labor market persisted in the face of cutbacks in demand — a noteworthy accomplishment. Three things made this possible: (1) management had the freedom to do almost anything deemed necessary — short of massive long-term layoffs; (2) the workers were cooperative; and (3) the company was well diversified.

In the aftermath of the recession, the company adopted even broader job categories and continually emphasized the importance of flexible skills. Workers were expected to continually update their skills or, at a minimum, be actively taking classes offered either internally or externally at community colleges and/or training centers. This is one way the company was able to distinguish between movers and settlers. After the recession, MaikroTek faced the task of retraining its workforce — that is, ensuring that all workers internalized the company philosophy and behaved like movers. During the recession, one supervisor and several workers indicated that workers were being fired based on tighter enforcement of company rules.

In the future, companies such as MaikroTek will be more hesitant to hire large numbers of female immigrants, minority, and middle-aged women because they are not likely to behave as movers. After the recession, more and more companies, including MaikroTek, adopted the practice of using temporary workers both as a way of screening for movers, and for the times when they need settlers. Management learned they cannot afford to promise employment security to settlers because they are too expensive to train into movers. This study provides both employment data and qualitative data over a six year period in a non-union primary sector electronics firm. It shows that structural and socio-demographic factors deeply influence the work experience of workers from varied backgrounds. More such studies are necessary in order to evaluate the impact of “enlightened” labor management policies on a diverse workforce.

Endnotes

1. Most of these studies have been of firms in the semiconductor industry. Both large and small firms in this sector of the electronics industry fail to offer stable employment because they are usually subcontractors for electronics companies in the primary sector of the industry; consequently very little occupational mobility occurs and success on the job is defined simply as keeping one's job.
2. This leads scholars to assert that immigrants are primarily employed in the secondary sector (Piore et al., 1979). Although it is true that most immigrants enter the labor market through the secondary sector, they don't always stay there. Yet the focus of much of the literature, particularly the economics literature, has been on the displacement effects of immigrants on low-skilled natives and on wages. Consequently, the aspects of immigrant status have been neglected. Thomas (1985) is one example of a recent study which analyzes citizenship and gender as a system of inequality that runs parallel to class.
3. Bailey, Thomas. 1987. *Immigrant and Native Workers: Contrasts and Competition*. Boulder: Westview Press, p.2.
4. Studies which do examine race often assume the particular race/ethnicity is irrelevant and generalize from the experience of blacks to all other race/ethnic groups — this is particularly true in quantitative studies.
5. Participatory labor management systems include a paternalistic ideology in which workers are deemed to be as important as management. Benefits are allocated equally for blue collar and white collar workers. The organizations have adopted broad job categories and the organizational structure is flattened (see Lamphere, forthcoming). Such firms generally develop employee involvement programs, and adopt one or more Japanese manufacturing techniques, such as Just-in-Time (JIT) or statistical quality control (SQC).
Controversy has arisen from the following questions: Does participative management equally benefit labor and capital as its proponents claim? Are such policies aimed primarily at increasing productivity and decision-making or at increasing management's control of workers? (Parker & Slaughter, 1988; Grenier, 1988; Kochan, Katz, & Mower 1984).
6. The interview questions were open ended and lasted from one to two hours in length. MaikroTek also gave me access to company newsletters and an internal study conducted by the firm.
My response rate was about 80%, with white men and women being more forthcoming. Workers of color, especially immigrant women consented to an interview only after repeated calls and some

encouragement from their supervisors.

7. MaikroTek operates in the context of a competitive and rapidly changing environment. This environment places certain constraints on the firm. The firm responds by developing a strategy in order to succeed in this environment. The internal labor market and the corporate culture which supports it are seen as integral components of this strategy.
8. Like most internal labor markets, the specific form they take is partly determined by the industry, the firm's place in the industry, and the relevant occupation within the firm (Osterman, 1984).
9. This is the term MaikroTek uses to collect data. However, throughout the text I will use workers of color and minorities interchangeably.
10. Thirty-six percent of all minorities in the cohort were immigrants.

<i>Race</i>	<i>Number</i>	<i>Immigrant</i>	<i>Percent</i>
Black	23	(1)	4%
Asian	45	(38)	85%
Hispanic	46	(3)	7%
Am Indian	04	00	
Minority	118	(42)	96%
White*	102		
Total N = 220	(42)		

There were a few Portuguese immigrants, and one from Spain.

11. The workers in this cohort were hired during a rapid growth period. This implies that the demographic composition of this cohort includes a slightly higher number of women, immigrants, and minorities than the incumbent workforce.
12. The company reimbursed employees for school expenses directly related to their job at local junior colleges and universities. MaikroTek also offered apprenticeship programs workers could enroll in. An expanded discussion of worker's experiences with such programs may be found in Friaz, 1989, Chap. 4.
13. Three of the 153 were omitted. Slightly more female workers were placed in assembly in 1979, but because of higher termination rate, the workforce was about equally divided between men and women by 1984.

Racial Composition of Employees: 1984

<i>Race</i>	<i>Number</i>	<i>Percent</i>
<i>Minority</i>	(87)	58.0
Black	10	7.0
Asian	40	26.0
Nat.Am.	03	2.0
Hispan.	34	22.0
<i>White</i>	(63)	41.7
Total	150	99.7%

14. One such change involved Maikro's move to adopt statistical quality control (SQC). Here, workers' errors are tracked and, for a short time, they were posted by employee number. Workers did not feel that SQC would make much of a difference and management had a difficult time implementing it.
15. For an extensive discussion of the factors determining occupational mobility, see Chapter 4 and Chapter 5, Part II in Friaz, 1989.
16. Local newspapers frequently reported employment losses at many highly visible electronics firms such as Apple, Intel, American Micro Devices, and National Semiconductor. According to the California Employment Development Department, there was an average of 201,500 employees working in the electronics industry in Santa Clara County in 1985—a 5% (11,100) drop in the number of workers in only one year (Annual Report, EDD, 1985).

According to the National Bureau of Economic Research, the general recession took place roughly from 1981 to 1982*, followed by the industry-specific recession from 1982 to 1983.* This lag can be explained by several factors. The electronics industry manufactures products that offer major improvements on overall industry productivity. And even in hard times other industries will invest in equipment that improves productivity. Many companies, including MaikroTek, also have a substantial part of their business in international markets, so a domestic recession does not necessarily result in an overall decline in revenues. In addition, many of the more established companies—MaikroTek in particular—receive a substantial number of federal defense contracts. Many industry analysts therefore believed the industry to be recession-proof (Ong, 1988).

In the computer manufacturing industry, the business cycle generally follows a decline in capital spending, typically lagging behind the rest of the economic cycle (The High Tech Research Group, January 1986).

17. See Paul Osterman et.al., *Employment Security in a Changing Environment: A Case Study of Digital Equipment Corporation*, Working Paper, MIT Sloan School of Management, 1988, for a discussion of the "transition" process of laying off workers at DEC.
18. Although Maikro was well diversified, its computer-products group (which contributed about half of sales and more than half of profits) was severely affected by the industry's economic slump. Price cuts and a saturated market contributed to lower than expected orders.
19. Company magazine, May/June 1984, [Mikro.doc 28].
20. Profit sharing was figured as a percentage of net revenues minus fringes provided (e.g., coffee, snacks etc.), multiplied by worker's gross salary. An employee must have worked at MaikroTek for at least a year before he/she received these benefits.

21. Division publication, May 1984, mikro.doc2.
22. This worker went to the company clinic; the clinic sent her to a dermatologist who said the scabs on her face were natural. The worker reported, "she made me feel like I was lying." This worker did not "push the issue" because she didn't want the company to think it was an excuse to move out of the PC shop. This worker had obtained a four to five page list of all the chemicals she had been exposed to. She said she had to take her glasses off to wipe them about every hour because a thin film formed on them. She claims she is sick more often than before she began working at the Printed Circuit shop, and coughs a lot at work.
23. At the time of the interviews, the firm was redesigning its job classification and compensation policy so that workers would receive compensation commensurate with their permanent job responsibilities. If such a policy is adopted, the firm can expect even greater resistance to its efforts to redistribute its workforce among different job categories because, for workers who are assigned permanently to a lower paying job, relocation will mean a pay cut. On the positive side, this means workers will no longer be "on loan" indefinitely.

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