# BRAZILIAN FORDISM IN HISTORICAL PERSPECTIVE

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# **SOMMAIRE**

INTRODUCTION	143
1. INDUSTRIAL EXPERIENCE: SETTING THE FRAMEWORK	143
2. THE DEVELOPMENTS OF FORDISM IN BRAZIL BEFORE 1964	145
3. FORDISM UNDER THE DICTATORSHIP: FROM 1964 TO THE LATE 1970s	148
4 . THE 1980s	152
5. THE 1990s AND BEYOND	155
6. NOSTALGIC FORDISM	156
7. POST FORDISM	157
CONCLUDING REMARKS	158
BIBLIOGRAPHY	159

This essay traces the evolution of Fordism in Brazil from the period before 1964 until the early 1990s. The central emphasis is on the importance of the political regime and economic policies for the development of particular styles of management at the national and factory levels.

There is a consensus in the literature that the process of managerial modernization is very recent in Brazil. This process was driven by the multinationals in the early 1980s, not much latter than in some more economically advanced countries. But the diffusion and depth of changes have been narrower and shallower than in the latter.

There is also a basic understanding that the process is too new and that the country is too entangled in harsh economic conditions and political uncertainties, for researchers and policy makers to discern clearly the contours of the present style of management and to define its future trajectory. I aim to shed light on this debate by exploring the options and paths ahead through a review of the historical trajectory of fordist styles of management in Brazil.

The picture of current conditions in the modern industrial sector in Brazil shows restricted scope for extensive adoption of 'Japanese' practices, or 'lean production' strategies. Actually, these strategies appear in some firms (in the same way that these labels appear in the academic literature) without regard for the overall context of their development or the background conditions out of which they developed. This points to a need to develop a clear framework for research in the field. This paper is an attempt in this direction.

In the following pages, I explore Brazilian fordism in historical perspective by distinguishing and analysing five different styles and periods of management. The first, dominant before the military coup of 1964 is paternalist fordism. The second, prevailing during the dictatorship, from 1964 to the late 1970s is authoritarian fordism. In the 1980s the changes in technology and production management remade the pattern, introducing flexibilities in line with international trends towards democratizing fordism. The two alternative, or perhaps combined, styles prevailing in the 1990s are characterized as nostalgic fordism and/or post fordism.

### 1. INDUSTRIAL EXPERIENCE: SETTING THE FRAMEWORK

Brazilian industrialization is relatively recent. Until the middle of the 19th century it was very limited. Thereafter, industrial development progressed, but no big factory was established before 1917 (Suzigan, 1985). In the 1950s Brazil experienced a major industrial surge. Manufacturing output rose until the 1980s, since then it has slowed down.

Industrialization has been promoted by the state, has relied on foreign investment, and has been directed to supply the domestic market. The state was the instrument for financial centralization, co-ordinating large blocks of investment, developing the infrastructure and controlling production of raw materials and basic inputs. Industrial policies were concerned with establishing production capabilities within the framework of stimulus and protection of locally produced industrial goods. State intervention varied across different branches. The haste of elected governments to implement their policies in a context of political discontinuity, and the dominant role of multinationals operating within a mass production paradigm, provided the foundation for a rushed industrialization. There were no concerns with improving production and technological capabilities, except in special cases of capital goods produced by state entreprises (Serra, 1982).

The country counts on a mix of private national, multinational and state-owned firms. Mass production industry was installed in Brazil through imported capital intensive methods. It was concentrated in the south of the country, polarizing economic development and demands for manpower. Other regions in the country sent capital and unskilled labour. International immigration provided skilled labour and technicians in the early phase. The employment structure created by industrialization was marked by an over expansion of jobs in services, commerce and the civil service, and industrial employment was very limited and poorly utilized (Kowarick, 1975).

Industrialization has benefited few of the huge Brazilian population. A potentially large domestic market, a mass consumption market, has never materialized in Brazil because only the upper and, in some historical periods like in the 1970s, the middle classes have profited from the country's growth.

There are very different levels of modernization in different regions and branches, and very different economic practices coexist. Technological capabilities vary between firms in the same industry, according to production for local consumption and export-oriented activities. ECLAC's<sup>1</sup> concept of structural heterogeneity applies very properly to Brazil's style of development.

Arising from such a historical pattern, the main features of Brazilian recent social structure are: acute social heterogeneity with a great worsening of income disparities throughout the 1980s, with greater deprivation in the North-East and marginal improvements in education as well as in household infrastructure (Ferraz, Rush and Miles, 1992:66).

How do Brazilian characteristics fit into prevailing international trends of industrial development?

It has been widely noted that worldwide economic growth, particularly since the second World War, has been profoundly marked by the fordist style of management. This has basically consisted of growth in productivity as an effect of greater division of labour at all levels of economic activities and the spread of mechanization, in conjunction with wage increases and stimulus to mass consumption (Freyssenet, 1979; Aglietta, 1979; Boyer, 1992).

Some of the defining characteristics of the Fordist model, notably mass production and mass markets, have been restricted in Brazil and have developed only in particular regions (mainly the South and South East) and in modern industrial sectors. However, the management style of the most developed regions and industries has had a major impact upon the overall pattern of Brazilian development.

Historical configurations of Fordism vary widely and Brazil has had its own particular variant. The state and the political regime, be it populist, authoritarian or democratic, have always been an important special condition of the development of Fordism in Brazil.

Early industrial and managerial development took place under populist regimes giving rise to paternalist forms of relationship between capital, labour, and the state. The dictatorship followed

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from 1964 and, given the previous style of production management, very different historical alternatives existed. But, for over twenty years the military set the conditions for economic development. Although these were established under some of the previously existing institutional conditions, the authoritarian character of relations at different levels (workplace, trade unions, Labour Courts, and the state) expanded enormously, nourishing each other. This is the period strongly identified with classic (or "genuine") fordism.

In the 1980s the pattern was modified alongside democratization of the political regime. This modernization paralleled changes occurring in advanced economies involving the adoption of flexible systems of production. The instability of economic policies, however, has impeded continuing investment, innovation and diffusion of technologies and organizational techniques. The perspectives for the 1990s are still unclear. The present scenario could worsen. Degradation would generate greater cleavages and traditional systems of management would prevail (Ferraz, Rush and Miles, 1992). However, there are still possibilities for Brazil to foster a mass market society (Castro, 1990), to tackle the problem of income distribution and to strength the process towards a new production paradigm.

Thus, the analysis of a post fordist perspective faces conflicting developments arising from both current circumstances and long established structural conditions. Whereas managements have recently been reluctant to invest in innovation or have diverted investment from production to the money markets, there has been no clear basis whereby workers can assess the advantages and disadvantages of current developments. This has been less from ignorance than because other pressures have diverted the attention of workers and the unions. The rampant inflation and continuous threats of unemployment due to the growing economic crisis have prevented deeper and wider reflection within the trade union movement as to the paths ahead. Debating the proposals regarding a national industrial policy, the president of one of the leading unions (Metalworkers of Sao Bernardo) questioned "... who would expect that, in face of industrial overcapacity and the (dire) perspectives for the economy, firms would risk buying modern equipment...?" The reasons for the low level of modernization, he argued, does not lie in nonexistent trade union resistance to automation or on management's neglect, but on the lack of any industrial policy, or policies for employment, skills and income distribution (Silva, Ago, 1991). Morevover, as has been demonstrated by international comparative studies of production processes and labour relations, conditions of work and employment in Brazil have historically been flexible enough not to curb management or require negotiations, leaving managers free to introduce new production methods and work organization (Silva, 1991: 343-348).

My analysis of the Brazilian trajectory focuses on the modern industrial sector, and specifically on the automobile industry. These industries have been the leading ones for setting standards on technological development, management, labour resources and industrial relations (see Table 1).

### 2. THE DEVELOPMENTS OF FORDISM IN BRAZIL BEFORE 1964

The industrialization policies of the Brazilian state in the first half of this century were well suited to the existence of a reservoir of workers of rural origin and the relatively small proportion of skilled labour formed by immigrants and Brazilians who were dedicated to craft production in workshop industries. When demand for industrial jobs increased in the 1950s, jobs on offer consisted mainly of simple and repetitive tasks which did not require previous skills.

The peculiar relationship between the state, entrepreneurs and workers has been crucial to the style of Brazilian industrial development. The state assumed, on one hand the institutional role

of curbing the organization of the working class through repression; on the other hand, it began to discipline the labour market in the 1920s issuing a series of social laws, many of them contrary to the wishes of entrepreneurs (Oliveira, 1972). Since the beginning of this century the state has been committed to an interventionist role to make viable development within a "cooperative and harmonious" order between different classes (Vianna, 1976).

In 1943 the state instituted the Consolidação das Leis do Trabalho, CLT, (Labour Code) which has ever since, although modified in some aspects, regulated relations between capital and labour. The CLT was based on the existing fascist Italian labour laws and brought to Brazil not only their authoritarian principles of regulation but also the fordist style of management. As in Italy during Facism (Contini, 1985: 196) the working class remained (until the late 1970s) without direct influence at the shop floor level. National agreements were imposed from above. Mundane occurences in daily working life were regulated at the national level. Practices, however, differed widely although bounded by the national framework.

The literature documenting management styles in different factories, sectors and regions during this period (and also in the subsequent periods) is relatively extensive but scattered. An effort to put these studies together in order to draw a picture of the overall style of production management in Brazil in the different periods is needed. Given the absence of such an analysis, I focus on two classic studies of factory work and management in Brazil in the late 1950s and early 1960s which illustrate the characteristics of fordism in Brazil at the time.

The first of these studies was done by Juarez Brandao Lopes on the basis of fieldwork carried out in 1956/7 in a car components company in Sao Paulo (Lopes, 1964). The other, by Leoncio Martins Rodrigues, is based on research done in 1963 with workers directly linked to production in a car plant in Sao Paulo (Rodrigues, 1970). Of special importance in both studies are the description of the production processes, and the characteristics of the workforce, payment systems, job structures, and labour turnover. Lopes' study provides more in depth analysis of the internal management of the firm. Both studies deal with assembly line mass production in the dominant sector of the economy.

Lopes found that 18% of employment in the company was accounted for by skilled workers and technicians. The great majority of them were Europeans (almost half of them Germans). Almost all the jobs in the foundry, on the lines, or in inspection did not require special skills or previous knowledge. The most difficult jobs in these areas required some days or weeks of learning. As a result, a great proportion of the workers were of rural origin. The pattern found by Rodrigues in the car factory was very similar.

Lopes' research described a change in the system of payment in the car component firm. Until 1957 the system was of measured day work plus an output bonus. Management decided to abolish the output bonus system. There was some disagreement within management on the issue. Some believed that productivity would fall with the abolition of the output bonus system. Others considered that productivity would not be affected and there would be savings in office work used to administer the system, and that a source of conflict would be eliminated. Workers complained of incorrect output measurement and of the varying performance of colleagues. Many times they were obliged to intensify their pace of work due to pressure from their companions on the line. Lopes was unable to verify how productivity was affected but he observed that the abolition of the output bonus had a positive impact on quality.

The payment system before 1957 corresponded to a very loose job structure. Lopes described how the worker was hired under the classification "general services" earning the national

minimum wage. He/she remained in this classification and wage for an indefinite period of days or months. The new worker's tasks were generally cleaning and some manual production operations. A change of job meant that the worker operated a machine, earned a slightly higher hourly rate and was entitled to the output bonus.

When the output bonus was abolished a new wage and job structure was introduced by management. Five broad job categories were created: general services, helpers, semi-craft, craft, specialized personnel (these latter had individualized wage rates). This classification was related to length of service in the company. By its introduction management achieved a relative stabilization of labour turnover. If workers left the job to work somewhere else they would generally only be hired at the minimum wage level according to the labour market norm.

The auto manufacturing company researched by Rodrigues payed relatively high wages. In 1963 vehicle production in Brazil was very new and there was a need to find workers for the growing number of industrial jobs. The adoption of an above average wage policy reproduced earlier Fordist practices in the USA and elsewhere. Rodrigues reports that according to workers' subjective accounts of their earnings there was no distinction between unskilled and skilled jobs. Wage and effort was the strongest relation perceived by workers in assessing their jobs.

Labour turnover and forms of labour stabilization have been major problems for management in Brazil. But they have taken completely different patterns in different periods since the begining of industrialization.

Stability of employment was a claim strongly raised by militant trade unionists in the late 1920s and 1930s. In 1943 a law of "indenização e estabilidade" (compensation and stability) was part of the Labor Code. The double aim of the law was to respond to workers demands and to make it attractive to workers to remain in the same job. After each year on the job their compensation for dismissal increased and after 10 years workers would have job security. The law was to tie workers to employers and facilitate training, career, and commitment. There was a scarcity of skilled labour. The state made employers investment in training more attractive (Ferrante, 1973). The absence of labour surplus strengthened workers bargaining power. This could be curbed by creating a captive labour force (Silva, 1975). Many of these aims were achieved in the short run. However, over time the application of the policy took different forms.

Lopes observed that at the end of the 1950s there was a high rate of labour turnover. He explained the instability of the workforce as a consequence of the cultural values of rural immigrants. He emphasized that the constitution of a stable industrial workforce was limited by the industry's technological constraints and lack of schooling among workers. Modern industry used a very small proportion of skilled workers. Lopes observed from his survey that only the most skilled ones were able to get stability of employment, i.e., remain in the same company for longer than 10 years. This resulted in a clear segmentation of the Brazilian labour market in the late 1950s and mid 1960s. About 15% of the industrial labour was "stable" and higher skilled. The remainder were subject to labour rotation provoked mainly by employers to prevent workers achieving higher compensation rights or becoming stable.

Rodrigues recounts that auto workers were not concerned with stabilility of employment in the early 1960s. He calls attention to the divergence of this pattern from that of workers in developed countries at that time. In Brazil, the labour law favoured part of the skilled workforce. The other part, was favoured by the buoyant labour market resulting from the expansion of the

industry. Employment was guaranteed, in other auto firms, for the ones subjugated to employers practices of labour turnover.

This evidence raises some important points regarding the initial development of fordism in Brazil. They confirm a paternalist style of management, in line with the character of the state, in its broad aspects:

- 1. Technological changes brought about by industrialization did not lead to an overall loss of workers skills. Rather, an industrial job meant skill acquisition for rural workers who mainly became semi-skilled industrial labour (Lopes, 1964: 144, and Rodrigues, 1970: 58).
- 2. Management's prerogatives in changing pay systems and job structures were usually uncontested.
- 3. Suitable labour was generally available at the beginning of industrialization. As industry expanded the state intervened in the labour market with policies to stabilize the workforce. This created a layer of "core" workers (stable and skilled) and another layer of unskilled or semi-skilled workers who were made to rotate between different employers.
- 4. Brazilian workers got some legitimation of their institutions of representation as early as the 1930s. Contrary to what occurred in many developed countries, in Brazil these institutions were granted by a paternalistic, authoritarian and controlling state (Rodrigues, 1970: 88). This is because the Brazilian state and dominant classes, since the beginning of this century, have oriented their politics to take workers' organizations into account, despite the fact that for most of this period workers have been reduced, disorganized and repressed (Pinheiro, 1975).

However, the outcomes that appeared likely to commentators in the early 1960s were turned up side down. Writing in the early 60s Lopes predicted that with industrial development there would soon be a stable industrial workforce, a greater diffusion of rationalized working methods, more financial incentives and greater acceptance of trade union influence at factory levels (Lopes, 1964:143). However, the military coup d'Etat in 1964 resulted in new controls over the economic and political institutions, which had wide implications for the subsequent character of Fordism.

# 3. FORDISM UNDER THE DICTATORSHIP: FROM 1964 TO THE LATE 1970s

Studies on production processes and labour management in Brazil in the 1970s stress a highly authoritarian system of industrial relations inside the factories. This tends to be interpreted as a reflection of characteristics intrinsic to classic Fordism. I will argue instead, however, that it is the authoritarian character of the state that shaped Fordism in Brazil in the peculiar way observed during the period of the economic "miracle" in the 1970s.

Institutional changes implemented by the military after 1964 affected real or presumed movements of the workforce in the labour market and of workers within the political system (Singer, 1974, and Ianni, 1971). The major state interventions on these issues in the late 1960s were: 1. Rigid state control of payment norms, by which salary/wage increases were always set below the rate of inflation and no rates of productivity were paid. 2. Prohibition of strikes and violent repression to enforce it. 3. Establishment of a new system for dismissal compensation (called FGTS) which ruled out stability of employment.

Economic expansion of the Brazilian economy from the late 1960s to the mid 1970s led to great industrial employment growth, work intensification and wage restraint. (According to studies by DIEESE, between 1969 and 1976 industrial productivity increased 57.5% and average real wages increased only 23.9% (Moisés, 1978: 49)). The features of the employment structure changed. There was an increased proportion of semi-skilled labour and massive hirings of female labour. The rapid increase of women in the workforce has been linked to the reduction in family incomes due to government wage restraint policies. There was also an increase of younger workers (DIEESE, 1974: 26/8).

Job and pay structures; control, discipline and labour turnover in the workplace, and paterns of union organization were all powerfully influenced by the responses of management to opportunities presented by the policies of the dictatorship.

The creation of corporate Industrial Relations departments proliferated in the 1970s. Joint Industrial Relations Working Groups, with members from the industrial relations management of various firms, grouped by geographical area or industrial activity, were formed. These dealt with wage market surveys, employee benefit policies, the application of government pay norms (based on complicated formulas), and, in some cases, the exchange of "black lists" of dismissed employees and records of discipline on the job.

Bureaucratic forms of labour management were developed to establish and implement obedience. One of the features of bureaucratic management was the development of detailed job classification systems. The principle of "equal pay for equal work" is part of the Brazilian Labour Code. Detailed descriptions differentiating jobs aimed at avoiding the application of such a principle, and at widening management's room for manoeuvre in adjusting employment levels and payrolls. Pay systems combined skills and length of service. It was commonly assumed that work experience differentiated job performance. Pay systems were, therefore, structured taking into account: 1. Wage groups based on skill levels, 2. Job titles classified into wage grades, and 3. Job description classification based on experience in the job (a form of seniority). These consisted of a progressive series of "steps".

Differentials between "steps" were small and grades usually overlapped. However, differentials in the wage structure could be very wide resulting in differences of over 200% between the bottom and top of a wage scale. A typical wage structure could, for example, include 4 skill groups, 11 wage grades for 103 job titles, and 6 wage steps for each grade according to the workers experience. For instance, it was possible to be a skilled worker (skill group) earning a "basic" wage step, or an unskilled worker (skill group) earning a "skilled" wage step. This pattern was reproduced within the whole industrial sector. This broadly consistent pattern of shop floor policies was guided by labour legislation at national level.

The consequences of this structure were to allow for great management flexibility in allocating workers to jobs, as entry level wages within the skill group were the same independent of the job title. A further flexibility came from overlapping wage differentials, which enabled management to transfer workers around the plant without much bureaucratic, cost or union hindrance, in contrast to some countries of more advanced economy. Moreover, internal unofficial working rules usually maintained workers' respect for the confidential nature of their colleages wages (Maroni, 1982: 33).

<sup>&</sup>lt;sup>1</sup>This example is taken from Ford Brasil. Actual details refer to 1985 but the structure of this company in the 1970s was basically the same and it illustrates well the prevailing pattern in other companies. Ford's structure included 55 different wage categories at São Bernardo. Excluding wage overlaps, there were about 20 wage levels. For more details and comparison with job and wages structures in Britain and the United States see Silva, 1988, Ch. 9.

Labour turnover policies further increased management's free hand on shop floor matters and the adjustment of employment and payroll levels. By 1966 about 15% of the Brazilian industrial workforce had acquired legal rights to stable employment. The management and government critique of the existing law of compensation and stability developed along two main axes. Firstly, workers with higher skills and with longer service were believed to take the lead in industrial conflicts because they were relatively protected against dismissal. Secondly, these sorts of workers were alleged to be the ones who became undisciplined and unproductive, in the hope of being fired and obtaining large sums of money compensation.

One of the military regime's most notable provisions of favourable conditions for industrial capital accumulation in Brazil was the institution in 1967 of employers' freedom to dismiss without incurring any significant costs.<sup>2</sup> It is very controversial whether the motivation for changing the system was to increase productivity. A stronger reason seems to have been the introduction of flexibility in hiring and firing. This had major consequences for the movement of workers in the labour market, levels of wages, workplace discipline, and trade union organization.

In the 1970s labour turnover rates doubled in relation to the 1960s. 3/4 of total dismissals in the 1970s were initiated by employers (Barelli, 1977). Every day long queues grew outside recruitment officies for factory work. Every day large numbers were fired. The most affected were unskilled workers in easy to substitute jobs.

In extensive research on the subject of labour turnover in Brazil in the 1970s, I argued that dismissals were used as a central means to maintain discipline and also had the effect of controlling wage costs. The pattern of labour turnover responded to broad movements in the level of economic activity and changes in production processes. In times of economic prosperity, when job offers boomed, workers had the opportunity to change jobs for better opportunities, while employers slowed down their firing policies. Turnover rates tended to be higher in smaller firms where training and integration were simpler and in seasonal industries where they varied according to output levels. More complex production processes were associated with workforces with a longer length of service. Longer service was also found among more skilled workers, particularly maintenance workers (Silva, 1981, Barelli, 1977, Humphrey, 1982: 87-100, Cavignato, Conceiçao and Bresciani, 1989).

In the 1970s labour control was a major issue for management and for the government. In all social groups almost any manifestation against institutional authority was curbed or liable to legal punishment. In some firms such control proved effective but in others excesses hindered efficiency. (Humphrey, 1982, argues that in the motor industry in Brazil during the 1970s management were able to intensify work and make great profits thanks to great control over the workforce. Job and wage structures were utilized for this purpose). (Afonso Fleury, 1988, argues on the basis of research carried out in the late 1970s that firms sought to achieve control even at the expense of achieving efficiency).

<sup>1</sup>Figure presented by President Castelo Branco at speech to the Legislative Assembly in Minais Gerais on 28/02/1966, a few month before the introduction of the new system of compensation for dismissals, by witch stability of employment was legally abolished.

<sup>&</sup>lt;sup>2</sup>The FCTS charged employers 8% over total payroll but its institution replaced other dues. The result was an additionnal contribution of about 2.8% in exchange for emplyers total flexibility in adjusting its personnel to output fluctuations. Source: *O Estato de São Paulo*, 24/12/1966, p.16.

Industrial relations management sought strategies to achieve the right amount of control. Dismissal procedures illustrate two types of strategy. One, adopted by smaller companies producing low quality car components, was to dismiss workers whenever conflicts arose. In this case, the power of immediate supervisors was strengthened and workers average length of service was 3 years. The other strategy was for industrial relations management to enforce disciplinary norms and procedures companywide. The power of immediate supervisors was mediated by policies of personnel management and shop floor control was extended to other levels of the hierarchy. This type of control was typical of bigger firms with more complex production processes, e.g., high quality car components and motor vehicle manufacturing. Moreover, procedures were enforced in accordance to output fluctuations, skills, and the disciplinary records of workers. The average length of service was 5 years with a high proportion of highly skilled labour around 10 years (Silva, 1981: 121-162).

The first pattern of labour turnover resembles descriptions of the pre-Fordist American auto industy. The second type of strategy better matches the features of the American classic Fordism. However, neither fits the pattern completely and a lot of the policies and practices were embedded in the Brazilian authoritarian political regime.

Workplace resistance became quite prominent from 1972/73 in industries around Sao Paulo and Rio de Janeiro (Moisés, 1978: 58/9). They were not noticeable to those who lived far from factories. Censorship in the press and TV reinforced the difficulties of co-ordinating workers' protests. Most of the trade unions were controlled by directors appointed by the military after intervention in the 1960s. Any worker who stood out as a militant would get the sack and find another job only with difficulty. In this context resistance took a quieter form. Collective petitions to management were the most recurrent practices. But very few collective action to control the pace of work existed. Workers who slowed down did so on their own, for their own personal reasons. Foremen tended to transfer these workers to other jobs where they would not compromise the flow of production, and tended to deal with grievances individually.

In fieldwork carried out in a metal working firm located in the ABC area in 1970/1, "at the hight of the euphoria of the economic miracle", Celso Frederico (1976: 33-42) found that collective slowing down expressed workers attempts to control their pace of work and to achieve some room for maneouvre in their jobs. His research showed that skilled workers whose output decreased were able to bargain with management, but unskilled workers were often dismissed.

Forms of workplace resistance became stronger and more sophisticated over the decade. The identification of leaders was not an easy task for supervisors. As conflicts were dealt with at firm level, the legal apparatus of state mediation started to crumble. The experiences of negotiation between workers and management transformed factories into "personas" (Vianna, 1979: 59). For instance, during the 1970s, although trade unions strongly stressed the effect of labour turnover on wages (DIEESE, 1971 no.1 and 2), they were resistant to claiming that labour turnover was used by management to control workers. They directed complaints at the labour legislation issued by the state. Dealing with control at the workplace required a major step by trade unionists used to deal only with the state because they would have to face employers directly. During the 1970s, trade unionists continously claimed that wages were being eroded by readjustment rates below inflation level and by employers' use of labour turnover and demanded that the government should change its wage/salary policies and the FGTS. However, it was only in the early 1980s that the issue of labour turnover was linked to policies for control of the workplace in trade union demands.

Trade union mobilization followed the strengthening of workplace resistance. Many demands concerning the organization of work and production were raised by the unions in the late 1970s. They demanded in particular the total prohibition of dangerous and hazardous jobs, abolition of output bonuses (to curb individual competition between workers), the abolition of overtime work, the reduction of working time to 40 hours per week with free Saturdays, the abolition of shift systems, the establishment of flexible working hours according to workers' interests, the institution of rest periods of 15 minutes every 4 hours without loss of earnings, and the establishment of norms regarding the pace of work, particularly in assembly line systems, to be set up by a joint commission of management and workers and not to be altered without consent from the union (Maroni, 1982: 120/1, Humphrey, 1982, Rainho and Bargas, 1983, Neder, 1988).

In the conclusions of their studies of the conditions of factory life in the 1950s and 1960s both Lopes and Rodrigues pointed towards a historical alternative for the Brazilian style of management that did not materialize. They had perceived a need for workforce stabilization. But, the institution of the FGTS in 1967, which had the reverse effect, had strong support from those most in tune with labour markets' needs: particularly industrialists and multinationals (R.C.B.,1966: 386-402). Since the workforce necessary for Fordist systems of production was already trained according to industrial requirements, the stability law became a hindrance. Lopes and Rodrigues also anticipated that trade union influence would increase, and that collective workplace control would get stronger, as had happened in industrialized countries. They did not anticipate, however, a military regime that would make this very hard to achieve. They still expected a process in which paternalistic labour relations would be transformed into a modern and democratic system with out going through a period of authoritarian labour relations.

The style of authoritarian management in Brazil in the 1970s was transformed from the early 1980s in the context of the revival of democracy and technological and organizational changes in the modern sectors of the economy, mainly financial services and manufacturing companies most linked to international trade. Japanese practices in these areas have been adapted to Brazilian firms, sometimes mediated by previous adaptations by parent companies in the United States and Europe. Let us now consider the following directions of these recent practices in Brazil.

#### 4. THE 1980s

Brazil had impressive economic growth rates until the 1980s. Since then, the trend has slowed down considerably, accompanied by declining investment rates that resulted from the debt crisis and continuous high inflation. However, between 1980 and 1985 the growth in exports was outstanding. Exported products ranged from steel, pulp and paper, processed soya and transport equipment.

At the begining of the decade it seemed that the fast diffusion of new technology, particularly numerically controlled machine tools (NCMT), would irrevocably enhance the competitiveness of Brazilian industry and the democratization process would be an important component for a qualitative leap in economic development (Tauile, 1984). There were, however, major concerns regarding the effects of new technology and new management techniques, such as Quality Circles, on the labour market and managerial or worker control over the labour process (SEI, 1984, Hirata, 1983, Salerno, 1985).

Major changes in the labour market and labour management in Brazil occured in the 1980s. They derived primarily from the change of the political regime. Specifically they have involved

shifts in market demand, employment structures, workplace relations and relations between workers, entrepreneurs and the state.

The market for consumer durables in the 1970s had expanded thanks to the government's income policies favouring the "middle classes". The speed of income concentration was faster during the years of the "economic miracle" than the rising costs of international capital borrowings, and as a result the domestic market enlarged as much as income concentrated (Oliveira, 1977: 114-139). Because of increasing costs of international borrowing and the political limitations of policies of increased income disparities, the Brazilian domestic market then shrank.

In the 1980s export markets become more attractive, giving a greater push towards technological and organizational modernization. This created a dual pattern of renovation in the modern industrial sector, where the production processes concerned with exports were updated at a greater extent and speed. The leading export firms were foreign owned and large. Thus, investment in productivity and quality were basically related to an overseas market orientation. Differences in modernization strategies according to ownership, however, were significant. Ferraz, Rush and Miles (1992: 129) indicate that multinational firms tended to invest less in flexible automation than state run companies or domestic private firms. They argue that this may indicate an intention of multinationals to rely on low labour costs for their competitive advantage. Against this line of argument there is evidence that multinational production and sales strategies in the 1980s considered a much more complex set of variables in which labour costs lost their traditional prominence.

For instance, the very successful export strategy of Escorts from Ford in Brazil to the Scandinavian market in the mid 1980s was interrupted in 1987 basically because exchange rates made shipment less attractive, European workers protested against having "their" market taken over by Brazilian made cars, and because Ford favoured investment in other Newly Industrialized Countries in East Asia and in Mexico. As with Ford, as the Brazilian economy deteriorated other multinationals have switched their investments to other localities (Silva, 1992: 118). Actually, the introduction of flexible automation and organization techniques are not directed at labour savings. And I agree with Ferraz, Rush and Miles (1992: 117/9) that Brazilian firms in general do appreciate the potential of modernizing innovations for improving their productivity and increasing their capacity to respond to market needs and opportunities. Their scope for continuous improvement in the 1990s is a matter for debate.

Regarding the employment structure, the 1980s seems to have presented a tendency towards greater demand for higher skilled workers in those industries which adopted new production methods. This trend in Brazil has not apparently faced any greater scarcity of these sorts of workers than industrialized Western economies, nor has it showed peculiar tendencies.

Between 1980 and 1986, a survey of 61 firms (car components, machine tools and aircraft industries) conducted by Fleury (1988) showed an increase in the number of hourly workers and an increase of technicians (including maintenance workers). Hiring policies emphasized "tacit knowledge", and workers whose tasks were related to automated processes were paid higher wages than the ones who worked with traditional machines. There is an association of these policies with attempts to stabilize the workforce in order to raise personnel's experience in dealing with new technology. On similar lines, E. Leite (1988) verified a great expansion of employment of skilled workers between 1985 and 1988 in the mechanical industries in Sao Paulo in her research about the impacts of microelectronics on employment and skills. Educational levels of new recruits were higher (completed primary level for operators and

secondary level for programmers and maintenance workers). Also, the most important requirement for jobs of greater responsibility was an average length of service of 7 years in the firm.

Thus, another factor related to both the labour market and workplace control that changed is labour turnover, compounded by the greater demand for longer length of service. Labour turnover rates were higher in the 1970s. Despite no rights to stability of employment having been achieved in the 1980s, the character of hire and fire policies changed towards greater "stabilization" of the workforce. In this aspect, however, the privileges of more skilled workers seem to have continued.

In workplace relations, the power of immediate supervision has been curbed. Some restrictions on managerial power developed through claims in collective bargaining, or via the internal policies of firms which implemented new labour relations. Other restrictions derived from the redesigning of production processes with direct control for quality or inventory level assigned to workers. Organization on the shop floor has spread with more recognition of Factory Committees by management. Programmes developed to achieve greater involvement of workers in production activities have had considerable success, as evidence on comparative product quality shows. A more motivated workforce was being created in the modern industrial sectors together with the process of democratization of the political regime nationally, in the unions and factories.

The main change in relations between workers, entrepreneurs and the state in the 1980s occurred in the field of collective bargaining. Wages, working conditions and other issues were extensively discussed between workers and employers, face to face. This establishment of negotiating machinery, and of clear procedures changed greatly the 1980s scene from the one prevailing in the 1970s.

The early 1980s in particular highlighted the growing importance of political issues related to shop floor representation and the role of the state in the regulation of capital and labour relations. After a period of increased violence and repression from both the state and employers (the civil government was instituted only in March 1985), the industrial relations system began to be changed. The car industry led the way in the recognition of shop floor representation, and the unions began to be involved in organization at factory level. (Ford's Factory Commitee, for instance, was established as a union body because management did not believe that they could effectively exclude the union. Volkswagen had attempted to do so and failed).

However, despite the aims of a democratic project, the "New Republic" had considerable continuity from the old regime. There was no sharp break with the institutional framework of labour management. Authoritarianism had not been incompatible with profitability in the 1970s. Productivity trends in many modern industries, the car industry for example, were upwards until the mid 1980s and were accompanied by increased worker organization, technological innovation and new organizational techniques. Was increased worker participation really necessary for growing productivity? Was there a stimulus towards economic gains in the democratizing strategy? A clear statement was given in 1985 by the then president of Ford in Brasil, Mr. R.M.Gerrity. He declared at a press conference that "...without the metalworkers organization, as it is today, it would hardly have been possible for Ford to achieve the productivity and quality levels that have allowed it to sell cars in Europe..." (Gazeta Mercantil, 17/05/85). Management's views were not consensual, however. The leading employers organization, FIESP, was divided over the issue of stability of employment and shop floor representation. The academic debate also presents lack of consensus as some view the 1980s as

a period of invigoration of fordism (e.g. Carvalho and Schmitz, 1989), here understood as the Brazilian style of authoritarian fordism. I have elsewhere addressed such controversy (Silva, 1992b). There is sufficient evidence in the literature to point towards a democratizing style of management in the 1980s, particularly in the auto industry. This was a transition period and not a homogeneous process, though.

The transformation undergone by the Brazilian industry in the 1980s seems at the same time fairly extensive and yet limited. The general conclusion from surveys and case-studies on the performance of Brazilian firms is that a substantial gap exists in relation to world class manufacturing (Braga, 1987; Fundaçao Vanzollini, 1986). A survey undertaken in 1990 covering 220 firms (Sequeira, 1990) concluded that products had low quality levels with too many defective parts produced, customers were unhappy about their purchases, stock turnover was low, lead time was high. On the whole, the survey demonstrated that less than 10% of Brazilian firms reached world standards in any one of the indicators or efficiency.

From this legacy two alternatives emerged in the 1990s. Either the more progressive style of management emerging in the 1980s is strengthened and becomes prevalent all over the country, or this potential for competitiveness is lost in obsolete management styles that eclipse positive transformations.

### 5. THE 1990s AND BEYOND

The label of the lost decade has stuck to the 1980s since the national economic indicators dropped, except inflation and foreign debt that soared plus the social indicators of poverty that also climbed. The major losers were the workers, or the generally most deprived.

Wages in the motor industry decreased enormously from 1985 to 1992. In September 1992 the total wages amounted to only 58% of those in April 1985 (Documento DIEESE, Oct.1992). The price structure of Brazilian cars was modified because of reductions in the cost of raw material and labour. Most of these modifications resulted from adjustments to inflation rates. For fortunate ones, such changes turned into gains. For instance, between March 1986 and October 1992 manufacturers' profits more than doubled per car sold in the domestic market, moving form 10.5% of the total price to 29.7%! (idem).

The lack of stability of economic policy in Brazil has become a major obstacle to investment, innovation and diffusion of technologies and organizational techniques. Shortage accounts for some of the reasons and gains for others. Resources that could have been directed to productive activities have earned greater returns when played in the money markets. Common sense among the Brazilian middle class, including smaller entrepreneurs, is that investment required in working is greater than in inactivity, once returns from money in the bank grow quicker than from dirtying one's hands. Whenever the leading firms adopted such practice, they showed great skill in protecting themselves against losses from the economic crisis and high inflation. Most of them entered the 1990s in financial strength, potent to grow, despite national growth rates having slowed down.

What are then the prospective directions in management practices and work organization that could emerge in Brazil from this legacy? How are they aligned with the international prevailing trends?

The worldwide renewal of management styles at the end of the 1980s had as basic principles:

1. recognition of skills and workers commitment, 2. decentralization of management, and 3. long run contractural arrangements with suppliers (Boyer, 1991). Also, views have converged regarding the decisive need to reorganize the continuity of productive flows, to negotiate a new plan for industrial relations and to gain commitment and productivity from employees. These have been regarded as the areas of major investment, considered of greater importance than the area of equipment in the form of microelectronics. These changes identify a movement away from Fordism, creating a Post Fordist model. This new style of management, like the old one varies from country to country. National styles combine traditional flexibilities such as varying the hours worked, reducing unemployment, adjusting wages to the economic environment, with the new technical and organizational flexibilities (Boyer, 1991: 9). Such combination gives national styles a hybrid character.

Adoption of new styles of management, however, may prove very difficult and the national economy may carry on been afflicted by a nostalgia that perceives the new as unattainable or undesired, reasserting the traditional way of doing things as the best practice. At the level of the theory this is, for instance, the case of analyses that fail to recognize the benefits of new technology and reorganizations of the labour process and systems of worker participation by pointing towards a persistent and overall degradation of the life of labourers<sup>1</sup>. At the concrete level the traditional management practices and work organization mean poor productivity records, no upgrading of skills, lack of commitment, high production costs, general losses in competitiveness.

These two categories of styles of management, Post Fordism and Nostalgic Fordism, provide a very suitable framework for assessing the paths ahead for change in the Brazilian trajectory.<sup>2</sup>

## 6. NOSTALGIC FORDISM

Nostalgic fordism will be the path in the future if Brazil remains a case marked by structural heterogeneity, with a wide dispersion of income distribution, strong regional disparities, high productivity differential between and within economic sectors. For instance, car producers would tend to offer top of the market models for those used to changing cars often. Car dealers would make huge money out of selling imported cars to the privileged strata. This is the style to dominate if no drastic change is made over the existing institutional structure, economic trends and business practices.

The industrial basis would be destroyed and production capabilities would perish if the predatory behaviour, including the predatory use of labour, remained and widespread with the prevalence of conflictual relations, economic instability persistence and the continuing deterioration of social and economic standards. Then, firms would be likely to balance exporting with production for the local market. But export oriented growth opportunities would be limited. In the case of auto production, because of the subordination to the parent companies' global plans, as it was, for instance, the case of Ford described above. Daimler Benz had a similar strategy of exporting components from its Campinas factory to Germany but shifted plans to Turquey seeking more favourable access to the European Common Market (Conceiçao, n.d.).

<sup>1</sup>On those lines, the work of Braverman (1974) had great influence. An example of this line of reflection regarding the Brazilian case is the article by Carvalho and Schmitz (1989).

<sup>&</sup>lt;sup>2</sup>My appraisal of the conditions for these two styles of management in Brazil is partially built upon the scenarios for the 1990s, drawn by Ferraz, Rush and Miles (1992, Ch. 9) on the basis of an extensive survey of modernizing innovations in Brazil.

Modernization could exist in nostalgic fordism but it would be selective, happening in isolation. As local demand deteriorates firms with access to export markets would abandon the domestic market in order to survive.

There are various examples of this style of management in Brazil as well as strong forces to compel its dominance. One is the broad management culture, traditionally authoritarian and conservative. This is embedded in the survival of the institutional framework from the authoritarian regime and in the systematic non-observance of the legal norms. There is an extensive, and growing, informal economy with illegal and irregular employment practices combined with very detailed and complex legal regulation of the labour market and capital and labour relations.

Another force towards nostalgic fordism is the necessity to regress on progresses made because of continuous economic recession. For example, Ruas (1993: 29) reports the case of a firm where the commitment to stability of employment established in 1987 was abandoned in 1990 with 30% workforce reduction due to fall in demand. M.T.Fleury also describes some cases of similar strategy (1993: 37). An example is a car components firm that unable to attend to the assemblers demands for higher quality and lower price abandoned its Quality Circle programme, reduced and simplified the programme for Statistical Process Control, eliminated most of its Kanban and closed down its production of microelectronic equipment.

Away from the leading firms, when considering the Brazilian manufacturing sector as a whole, the weight of low technological levels and taylorist principles of production combined with authoritarian fordist styles of management (great job segmentation, low skills, low schooling, high labour turnover, low wages, labour intensification) are greatly expanded (Carvalho, 1992: 22-39). This indicates that nostalgic fordism is large in the 1990s. But, it is combined with post fordism and it is yet difficult to assert the dominance of one over the other as far as the future of Brazil is concerned.

#### 7. POST FORDISM

This style of management would become dominant if an economic policy aimed to alter profoundly the objectives, direction and progression of industrial development were established. This could be achieved through the fostering of a mass market society (Castro, 1990). An income distribution policy would be central to this development strategy. This would increase Brazilian attractiveness to foreign producers. Abundant raw material and labour that made past success would be complemented by new organizational techniques and technologies.

In the assessment of Ferraz, Rush and Miles (1992: 232) Brazil already has most of the institutions (agencies, legislation, training establishments, etc...) required to support state programmes for modernization.

The workers proposal in the Automotive Sector Chamber, a tripartite organization established in 1991, outlined a strategy for Brazil's international competitiveness based on three aspects: 1. income distribution via a negotiated process with political parties and trade unions; 2. training and re-training of workers coupled with unemployment reduction; and 3. increase in industrial productivity and efficiency. The document emphasized the expansion of the domestic market as a basic condition to enable economies of scale and greater economic and social equality (Documento sindical, Mar.1992: 21 and 24). This seems a good indication of favourable support for a post fordist style of management. Efforts towards increased purchasing power for workers

have also been made by the government via the Ministry for Labour which raised the minimum wage by a relatively large amount while preparing negotiations for further increases if the volatility of high rank government posts allows for it.

In the modern industrial sector lasting changes in working and employment practices have been recognized in a number of more recent studies. Fleury and Humphrey (1992) reported Brazilian firms to be very advanced in the introduction of quality and productivity programmes. Gitahy, Rabelo and Costa (1991) in a study of subcontracting firms in the region of Campinas (near Sao Paulo) argue that the effects of the 1980s economic crisis on employment was minimum. This follows findings by Brusco (1982) concerning the Northern Italian experience with subcontracting networks. These small companies have been successful even in economically adverse conditions, have undertaken training programmes for their workers, invested in new technology, were seeking access to foreign markets. The authors have identified a transfer of the managerial culture of modernization from the assemblers to the suppliers, showed by reduction in hierarchical tiers and discussions of changes at the shop floor level, rather than imposition. Policies for direct resolution of conflicts, without recurring to third parties like the union or the labour courts, were also identified (pp.20- 32/3).

At the level of the firms tendencies towards post fordist styles of management are also illustrated by Fleury's research (1993: 39). Case studies show that companies have reduced the managerial hierarchy eliminating supervisory functions, have invested in education and training of direct production workers, technical and managerial staff, while labour turnover rates have decreased greatly.

While examples are abundant, the newness of the process does not allow for a clear assessment of its potential for survival and diffusion. For instance, Fleury concluded from her study that firms confronted by the challenge of competitiveness have in general made successful changes in various areas of the production process and labour management, but cases of consolidated change are few. The latter have shown increased regard for learning and permanent innovation by opening the opportunities for participation by all employees in daily operations and in long range strategy.

This would indicate more nostalgia, less post fordism, but undeniably a combination of the two styles at the national level, in a context of undecided direction of major economic and political changes. At this point no one can say how these styles of management will evolve because so much depends on the political regime and economic policies.

### CONCLUDING REMARKS

Perhaps the strongest claim of this essay is that for making sense of the key changes and contrasts of the present times, and to assess future possibilities, it is important to work on historically grounded analysis that considers the effects of political and economic circumstances in society.

More thorough investigation of each of the periods considered in the Brazilian trajectory of Fordism is needed, in order for the concepts to be clarified and explanations to be used in the analyses of the social structures and social changes. It is hope that this contribution will serve for this purpose.

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