

FORDISM AND ITS MULTIPLE SEQUELS: the re-organization of work in Britain, France, Germany and Japan

Abstract

This text aims to question the current “post-Fordist” model, after defining the former Fordism, and showing some latter configurations of “post-Fordism” in Britain, France, Germany and Japan. The compilation of knowledge concerning the organization of work was developed, first of all, by F. W. Taylor, based on technical and scientific methods and on the division of work. Nowadays, many expressions with the prefix “neo” and “post” have appeared such as post-Fordism, post-modernism, neo-liberalism, neo-Marxism and so on. However, thinkers and writers themselves have criticised these innovations. To them post-Fordism is like Fordism as well as post-modernism is like modernism. Neo-liberalism is like liberalism and neo-Marxism is like Marxism. According to Green (1997), postmodernism should be seen not as a development beyond modernism but rather as a continuation of a certain idealist current within it. One can make the same statement about Fordism and post-Fordism.

Key words:

Fordism; post- Fordism; transformations in work organization; developed countries.

1. Introduction

This text was written during a split-PhD course undertaken at the Institute of Education of the University of London in 1998/9. It aims to question the current “post-Fordist” model, after defining the former Fordism, and showing some latter configurations of “post-Fordism” in Britain, France, Germany and Japan.

The third great transition in the history of humanity (after the Neolithic Revolution, the result of the development of agriculture around 6,000 B.C and the Industrial Revolution in the 18th century) is known variously as “the information technology revolution”, “the third wave”, “the third revolution”, “the information society” and “the automation revolution”. It is especially characterized by changes in the world of work provided by a significant development in micro-electronics, automation, production organization, biochemistry and biotechnology. It is a world phenomenon thus it involves the globalization process.

Regarding the current changes in the developed countries one can identify some common trends and, at the same time, some particular aspects. Perkin (1996) identifies ten interconnected common trends:

- dramatically higher living standards;
- the occupational dominance of services;
- a subtle change in social structure from horizontal class to vertical professional hierarchies;
- recruitment by merit;

- the incorporation of women into the professional workforce;
- the enormous growth of government;
- the rise of the welfare state;
- the expansion of higher education;
- the concentration of industry in a few large-scale corporations;
- the globalization of the world economy.

These trends have been producing some negative social effects such as the decline in morale, unemployment and the concomitant rise in crime, drugs, public disorder, mental illness as well as pollution and stress of life in overcrowded cities. As shown further, despite these convergences, the developed countries are, in fact, different societies with different histories, political and economic structures and social values.

The Industrial Revolution provided the mechanisation of production processes and, later, the rising of a specific management model. The Third Revolution, as called by Perkin (1996), is providing increased automation of the production processes and giving rise to a new work and production organization model.

This text presents some of the main characteristics of the Fordist model, the reasons for its crisis and of the emergence of “post-Fordism”. Further, it shows some characteristics and consequences of the “post-Fordist” model in the three largest European economies and Japan. In conclusion, these cases put in question the “post-Fordist” model. Even considering current changes in the work world, many of the main characteristics of the former Fordism have remained, especially the trends toward capital concentration and intensification of work by large corporations.

2. General aspects of the classical management model

Around the end of the nineteenth century and the beginning of the twentieth century, a range of management professionals, especially engineers, started to develop what was later to be called the classical management model. Among them, one can emphasize the contribution of the American engineers F. W. Taylor and H. Ford.

The compilation of knowledge concerning the organization of work, based on technical and scientific methods, was developed, first of all, by F. W. Taylor. It was based on the division of work, with the breakdown of tasks into simple and routine movements, with clear differentiation between the activities of planning and execution.

The principal object of the administrative system was to assure maximum prosperity for the owner and, at the same time, relative material improvement for the worker, meaning higher wages, better working conditions and higher productivity in comparison to the management initiative and incentive system. Maximum prosperity for the owner meant the development of all aspects of the business and the achievement of good financial results. Benefits for the worker meant offering relatively high salaries and more efficient utilization of labour, that is, the attribution of higher level tasks according to their present manual skills.

As shown by Pugh (1997, p. 275), to Taylor, an advantage which scientific management had over the management of initiative and incentive is that under scientific management the regular rhythm of the work is guaranteed. It means that scientific management was a better method for both sides, employer and employee.

Generally speaking, one can state that scientific management was based on:

- 1) formalized negotiation between capital and labour based on reciprocal co-operation idea;
- 2) a preconceived idea about human behaviour (man suffering from natural indolence);
- 3) the substitution of empirical methods by scientific methods;
- 4) the separation of the tasks of managers and workers.

More specifically, it is characterized by the implantation of the bonus piecework system – it rewards per work done rather than skill level –, by time-and-motion, by the standardization of the equipment of work and by functional supervision.

Taylor (in Pugh, 1997) identified his method as a management model in which harmony is the rule rather than discord:

Of course I do not wish to be understood (as saying) that there are never any quarrels under scientific management. There are some, but they are very great exception, not the rule. And it is perfectly evident that while the workmen are learning to work under this new system, and while the management is learning to work under this new system, while they are both learning, each side to co-operate in this intimate way with the other, there is plenty of chance for disagreement and for quarrels and misunderstandings, but after both sides realize that it is utterly impossible to turn out the work of the establishment at the proper rate of speed and have it correct without this intimate, personal cooperation, when both sides realize that it is utterly impossible for either one to be successful without the intimate, brotherly cooperation of the other, the friction, the disagreements and quarrels are reduced to a minimum.

Taylor developed the ideological basis of his method which, in fact, deprived the workers of the pride which their monopoly of skills had given them in the workplace. Thus, the scientific methods seemed strange to them. As such, Lipietz (1992) states that the Taylorist model is a system of rationalization of production, based on a separation of the organizers of production ideas and the “operatives”, that is, semi-skilled manual workers performing repetitive tasks. However, it did not mean that the operatives had no need to think. Even when the engineer or the supervisor denied it and simply gave orders to follow, they expected the operative to use their initiative to assure that all would go well.

Therefore, it is not true that under the classical management model the operative does not need to think. In “Ford on Management” (1991, p. 144) one finds:

Man needs leisure to think, and the world needs thinkers. One of the hardest things in the industrial world today is to find enough men who are capable of thinking a problem through, executives who can do the whole job without further supervision or additional prompting.

Ford (1991, p. 142) also notes:

Give men or women the ability to think for themselves and they will soon acquire the facts necessary for the solution of their problems. The ability to recognize Truth when you see it and the ability to think a think through to its logical conclusion – these are important. These will help a man or woman to contribute his or her share to the social welfare and progress of the world.

One can suppose that the rigid supervision procedures in the classical management model were a demand within that social and educational context. In the same way of reasoning, one can also suppose that many other characteristics of the classical management model arose, during that time period, both as a need and an opportunity within that economic context.

Jessop (in Amin, 1994, p. 9) shows how dynamic is the Fordist model and presents four different levels to analyse it.

Firstly, as a distinctive type of labour process, Fordism is an industrial paradigm that involves mass production based on moving assembly-line techniques operated with semi-skilled labour, that is, a mass worker. Not all branches of business nor workers will be directly involved in mass production in a Fordist economy. Nevertheless, mass production is the main source of its dynamism.

Secondly, Fordism is a regime of accumulation. As a stable mode of macroeconomic growth it involves a virtuous circle of growth based on mass production, rising incomes linked to productivity, rising productivity based on economies of scale, increased mass demand due to rising wages, increased profits based on full utilisation of productive capacity and increased investment in improved mass production equipment and techniques.

Thirdly, as a mode of regulation, Fordism appears linked to the Taylorist concepts and involves the separation of ownership from control in large corporations with a distinctive multi-divisional, decentralised organization subject to central controls. Thus, it is a mode of social and economic regulation that can also involve monopoly pricing, union recognition and collective bargaining, wages connected to productivity growth and retail price inflation with monetary emission and credit policies orientated to securing effective aggregate demand.

Fourthly, Fordism can be seen as a general pattern of social organization. In this context it involves the consumption of standardised, mass commodities in nuclear family households and provision of collective, standardised goods and services by the bureaucratic state. It also manages the conflicts between capital and labour over both the individual and social wage.

So, the Fordist model was based on the mass production concept, replacing the artisanal producer and aiming to supply current human needs:

Human demands are increasing every day and the needs for their gratification are increasing also. This is as it should be. Gradually, under the benign influence of American industry, wives are released from work, little children are no longer exploited; and, given more time, they both become free to go out and find new products, new merchants and manufactures who are supplying them (Ford, 1991, p. 125).

Fordism was also based on the division of work, creating specialities and using costly and dedicated machines for each task. To Ford, the factory organization did not aim to prevent the development of ability, but to reduce the waste and losses due to mediocrity, once the machine demands that man be its master. However, Ford (1991, p. 142) identified a low education and skill level within the worker class:

Our youth want to get their education quickly. They want to find short cuts to knowledge. In some ways this is a desirable tendency. We are making use of it in our trade schools by teaching our boys many things by motion pictures. For example, we teach them how to use a micrometer, how to use gauges. Many of the processes which are hard to describe in words can be made plain in a few moments by good pictures.

So, even supposing that he had not intended to prevent the development of ability, in fact, his production organization model did just this by using various supervisory and control procedures.

The Fordism model arose in the USA. Large and vertically integrated firms were the epitome of Fordism. The model shaped both production relations and employment in post-war Europe as well.

Thus, it was possible to produce large volumes of the same goods by the use of production standards. The result was low prices for the customer, with a limited range of choice and monotonous work methods with little meaning for the worker. As in Taylorism, there is a clear division between intellectual and manual work, it being the job of the mental workers to manipulate ideas and information and that of the labouring class to work on the manual level with specific tasks, carrying them out as quickly as possible.

The relationship and the complement between Taylorism and Fordism occur in the division of work. One can observe, in Taylor, a preoccupation with production management and control, such as time-and-motion studies and functional supervision. Whereas Ford looked at the production line and reorganized the industrial plant, from which arises the mass production concept. However, the two models objectify the continuous improvement of the production line, high productivity and rationalisation of human work. To Hirsch (1991, p. 15):

The Fordism formation is based on a strategy of 'intensive' capital accumulation, which rests essentially on the Taylorist reorganisation of the labour process (...). The establishment of Taylorism signified a decisive intensification of exploitation, based on far-reaching deskilling processes, the destruction of traditional craft forms of workers' power and the introduction of efficient techniques of managerial control and supervision. The Taylorist reorganisation of production and the enormous increase which it brought in the productivity of labour made possible the mass production of cheap consumption goods and created thereby the precondition for the establishment of new key technologies (...).

The Taylorist model also made possible a gradual and perceptible increase in real wages. In other words, the mass production worker created by Taylorism could become the mass consumer of industrially produced commodities. Thus, the Fordist articulation of production and reproduction was created (Hirsch, 1991, p. 16). From a similar point of view, Lipietz (1992) shows that the Fordist model involved the conjunction of Taylorism and mechanization within

large firms. So, there is a clear relationship between the ideas of Taylor and Ford giving rise to the classical management model, the “old pattern” of production and work organization.

However, there is a tendency to identify the whole of the classical management model as only Fordism and, in a similar way, every current technological innovation, regarding transformations in the world of work, as post-Fordism. To Bonefeld & Holloway (1991, p. 1),

The old pattern is generally seen as having been characterised by mass production based on the assembly-line principle adopted so successfully by Henry Ford, by rising wages which provided the basis for a new articulation between mass consumption and mass production, by large factories, and by a high degree of state intervention based on Keynesian principles, the development of the welfare state and a central role for the trade unions both in institutionalising collective bargaining and in the formulation of state policies. The new pattern of post-Fordism capitalism is said to be characterised by new methods of production based on microelectronics, by flexible working practices, a much reduced role for trade unions in society, a new individualism, a reduction of state intervention and a new relation between production and consumption.

It makes sense to think in this way, since Fordism can be seen as a form of capitalism accumulation as well as a production method that has consequences for political relationships between employees and employers. It is important to emphasize that, as a production method, Fordism was a dominant model that allied with both capitalism and socialism. Nevertheless, as shown further, even among capitalist countries it did not assume a universal form. The same fact occurs regarding the post-Fordist model.

3. The 70's crisis and the arrival of Post-Fordism

The classical management conception was successful until the 70's. It is a common point that from the 70's onward the economic, social and political contexts changed the world markets and caused economic recession. In this period there were great technological changes such as developing of Computer-aided design -CAD, Computer-aided manufacturing – CAM, Computer numerical control – CNC, Computer-integrated manufacturing – CIM and Flexible manufacturing systems - FMS; the emergence of the Japanese economy, an increase in oil and raw material prices and in the affluence of consumers looking for differentiated quality which contributed to a search for new organizational forms. As Lane states (1995, p. 64) the Fordist model “became associated with rigidity and was pronounced to be unable to respond to the new problems and challenges”. Existing production models were being undermined by new market demands and by the competitive challenges.

If “post-Fordism is also associated with broader social and cultural changes”, for instance, “greater fragmentation and pluralism, the weakening of older collective solidarities and block identities and the emergence of new identities associated with greater work flexibility, the maximisation of individual choices through personal consumption” (Hall, in Amin, 1994, p. 4), then one can state that the crisis of Fordism is also the crisis of the Fordist political system. Thus, the economic crisis which has persisted since the mid-70’s is a deeper crisis of the capitalism cycle.

The diagnosis of the economists, as shown by Hirsch (in Benefedl & Holloway, 1991, p. 8) is the following:

The decisive cause of the crisis is the excessive rises in wages over the years, together with an extreme expansion of ‘consumptive’ state expenditure (that is, welfare state expenditure in the wider sense) and of the state indebtedness which that implies; the cost of the ‘labour factor’ was increased further by the costly economic and social decisions of the state (such as expansion of the social security system, and legislation protecting labour against dismissal); the result of this development was rising inflation.

The current crisis of the Fordist model is seen, by Hirsch, as a crisis of:

- the Taylorist organization of work: increasing intensification of work, deskilling, monotony and alienation lead to forms of resistance which affects the level of the regulatory interest-bureaucracy and increases costs regarding absenteeism, sloppiness and sabotage;
- the corporatist welfare state: considering that the Taylorism labour process leads to a crisis of productivity, its organizational-political basis, the system of bureaucratically centralised, corporatistically integrated trade unions and the institutionalised system of social security also become a barrier to the process of the valorisation of capital;
- interventionist state: the bureaucratic welfare and interventionist state become a crisis factor both because it institutionalises certain standards of material reproduction for the working class and shows its limit regarding the ability to pursue a ‘structural policy’ which can bring socio-technological processes of modernisation;
- contradictions of the model of consumption and the “changes in values”: since Fordism makes the reproduction of labour power and mass production a decisive basis for the process of accumulation and valorisation, it must aim for a tendentially unlimited expansion of consumption, it systematically institutionalises ‘wish production’ and it constantly extends needs. In general, one can assume that its form of socialisation contradicts the functional standards of normality and of the discipline of work and consumption;
- ecology: based on the unlimited availability of cheap raw material and sources of energy, together with the possibility of exploiting without limit the natural bases of production and reproduction as a “free force of production”, the Fordist model has lost some of its preconditions upon which to continue, so it has begun to discuss the current threats against the ecological equilibrium after years of irrational exploitation;
- crisis of the “global Fordism”: an important basis for the Fordist model of accumulation was the selective industrialisation of third world countries, which allowed some degree of development in those countries by transferring technology, capital and industrial activities.

Nowdays, this strategy appears as one of the causes of slow growth and unemployment in the metropolis, while some countries in the third world have been increasing economically. There is, also, a debt crisis, represented by the limit to exporting the means of production especially to some newly industrialised countries.

Piore & Sabel (1984, p.116) identify five critical episodes and the limitations of the system as elements that strengthen the changes. The first episode was the social unrest in the USA and some countries in Europe. In the USA, in the late 60's, occurred significant students protests against the war in Vietnam and several civil-rights movements. In Western Europe, social unrest was more diffuse and included students and such minorities as immigrant and workers and, in France and Italy, some white-collar workers. The goals in Europe also were diffuse and provoked debate about the ends and means of the industrial society. In the USA that debate was subordinated to concerns about economic opportunity and the war.

The second episode was floating exchange rates. During the social unrest of the 1960's the monetary system changed by abandoning fixed exchange rates and adopting the shift to a system of floating currencies. The immediate cause of the change in the international monetary system how every was the rapid deterioration in the USA competitive position in international markets. Piore & Sabel state:

The loss of competitiveness was due largely to domestic inflation, touched off by President Johnson's unwillingness to raise taxes to pay for the Vietnam war. By mid-1971, the surplus in the balance of payments on goods, services and remittances had fallen from a high of 7,6 billion dollars in 1964 to near zero.

The change to a system of floating exchange rates solved problems both for the USA and its major trading partners, but this caused instability and confusion in world markets. It is clear that the variation in the USA dollar's value weakened the stability on which mass production was based.

The third episode was the first oil shock and the Russian wheat deal. The first oil shock refers to the oil embargo, by the Arab states, as a political reaction against Western support for Israel in the Arab-Israeli war of 1973. The Russian wheat deal was triggered off by a chain of poor harvests in the Soviet Union, which forced the Soviets to turn to Western markets to overcome the shortages. Both events increased the instability of national economic systems that were predicated on rigid wages and prices and hence vulnerable to shortages in basic inputs and raw materials.

The fourth episode was the second oil shock that occurred during the Iranian revolution of 1979. It forced the International Monetary Fund to help third world debtors. Coordinated with private banks, that policy brought an expansion of world purchasing power, at the same time that it destroyed confidence in the international adjustment system. Again, oil prices rose dramatically and this caused recession and inflation in the industrial world.

The fifth episode appeared because of high interest rates, the debt crisis and world recession. Piore & Sabel show that the reserve discount rate – the price banks pay for money when their own reserves do not cover their needs – rose more than 7 points from 1977 (5.5 percent) to 1981 (13.4 percent). The prime rate charged by banks surged from 6.8 to 18.9 percent, at the same time that real interest rate rose from near zero in 1979 to 9.4 percent in 1981. These unprecedented interest rates prolonged recession.

Piore & Sabel (1984, p. 184) also discuss the crisis caused by limitations of the system itself:

The most consequential and long-term post-war development was saturation of consumer-goods markets in the industrial countries, and the consequent interpretation – through trade – of the industrialized economies. By the late 1960s, domestic consumption of the goods that had led post-war expansion had begun to reach its limits.

This saturation made it more difficult to increase economies of mass production through the expansion of domestic markets alone. This problem was accelerated by the development strategies of many third-world countries which included training, importing of technology and creating financial and marketing institutions. By the 1970s, two groups of countries had applied several of these strategies. The first group consisted of the East and Southeast Asian producers: South Korea, Taiwan, Hong Kong and Singapore. The other consisted of the Latin American countries, mainly Brazil, Mexico and Argentina.

The trends toward diversity and the exhaustion of raw materials are also mentioned by Piore & Sabel (1984, p. 189):

The most sophisticated argument in favour of a long-term diversification of tastes rests on the notion of a hierarchy of needs and wants. So long as incomes are low –this argument goes– consumers satisfy their fundamental needs for food, clothing and shelter by purchasing the cheapest available goods, which are mass-produced. But as incomes rise, consumers can express in the market more refined wants, for more specialized goods, whose satisfaction was previously unaffordable. In this view, mass markets are a consequence of a low standard of living, and the rise of the latter contributed to the stagnation of the former.

It means that at every level of consumption, the desire for particular goods is shaped by collective and cultural ideas.

The idea of increasing shortages was a central point of debate in the 1970s. To Piore & Sabel, this debate brought questions about the stability of mass production industry and limits to growth.

From the mid-1970s onwards these changes forced the large firms to search for new strategic orientations and organizational structure 'resulting transformations in structure and strategy have been variously conceptualized as the need to adopt a new regime of accumulation (Regulation Theory) or a new production model, best suited to smaller units (Flexible Specialization)' (Lane, 1995, p. 69).

There is a common denominator in the two theories: the necessity to achieve greater flexibility in all aspects of enterprise activity and to engage in some organizational fragmentation. To Hirsch (1991, p. 25) the crisis of Fordism has as its theoretical basis a combination of political-institutional relations and established social power structures. Thus, its development brings, in fact, a new reorganization of the labour process, more flexible combinations of people and machines, the creation of new hierarchies and a systematic individualisation of work relations:

The aims are a fragmentation and diversification of the Taylorism mass worker through the labour process and the organization of work, a reduction in the vulnerability of the production process, a rise in the

utilisation of capacity (continuous production) and the undermining of collective interest organization based on standardised working conditions.

This new way of accumulation and work organization, although assuming these common characteristics, has also assumed some specific aspects in every country where it has arisen. This fact has occurred due to the need to adapt to social, political and economic factors present in each economy.

Beyond this fact, it is important to call attention to the “theory of industrial dualism” developed by Piore and collaborators during 70’s. Their theory identifies a series of dichotomies which spanning different economic systems. As shown by Amin (1994, p. 50), dichotomies were included:

- (a) in the enterprise structure of modern industrial economies between a large, monopolist sector and a small, competitive sector;
- (b) in developing economies between a modern, organized sector and a traditional, informal sector;
- (c) in the labour market, between a stable core of high-waged workers (typically white/male) and an unstable periphery of low-waged workers (typically black/female).

Dualist theory is considered helpful by Piore (Amin, 1994, p. 50) to explain the structure of industries in developed economies that have failed to develop a large-scale monopoly sector. To Piore, the degree of standardization of output is a crucial factor for determining industrial structure and the persistence of certain kinds of craft production. In fact, the activities of modern craft producers appear as a necessary complement to the activities of mass producers. In this way of reasoning, it means that, even in developed economies, post-Fordism does not replace the Fordism model at all. Still in the early 90’s, Wild & Jones (1991, p. 390) referring to Britain and Germany industrial sectors the following stated:

Dominance of older technological modes of production, in which the giant plants of the Fordism type, with their assembly-line output of standardised products, is the predominant type of factory. In both Britain and Germany, and particularly in their northern regions, it is precisely this outdated Fordist model which is in a fast retreat.

They also found a weak organizational basis in many industrial branches in declining regions, with a paucity of headquarter-control establishments, and a low degree of involvement in high-level-decision making, which further hamper industrial restructuring of these regions. Therefore, it sounds more suitable to talk about a mixed situation in which “old” management procedures are joined by “new” techniques, or simply “old” management procedures are just adapted to the new social, political and educational contexts.

4. Some specific aspects of the new concept of work and production organization in Britain, France, Germany and Japan

As stated before, one can identify some common characteristics wherever the Post-Fordism model has been established around the globe, such as the emphasis in flexibility, capacity to adapt to changes, permanent training, general qualification, work in groups and co-operation. Lane (1995,

p. 146) observes that in Britain, Germany and France the new production policy requires initiative and responsibility from workers and, thus, managers have striven to develop increased communication and co-operation on the shop floor. However, according to the type of capitalism, those and other characteristics have assumed different degrees and composition in each society, creating distinctive national patterns of industrial organization.

In Britain, two centuries ago, occurred “the second major turning point in the history of mankind” (Perkin, 1996, p. 50). The Industrial Revolution gave to Britain leadership in world trade until the beginning of the twentieth century. At the end of the Second World War Britain assumed the second best position, after the USA.

As Perkin states, when the British economic decline began is a matter of debate. In spite of the debate, which involves political, economic, social, historical and cultural aspects, one can note that Britain lost its leadership in competitiveness as soon as the Fordist model rose in the USA. Among other historical, political, social and cultural explanations, one can emphasize that Britain remained with a “backlog of old plants and equipment left over from traditional industry, an attachment to older ways of producing goods” (Perkin, 1996, p. 59). Hence,

In 1900 Britain was still a super power, head of the largest empire the world has ever seen, the largest exporter of manufactures, the owner of the world’s shipping, the largest banker, insurer, and investor, and dominant naval power, able to project its strength across all seven seas.’

Perkin (1996, p. 63) also argues that Britain had the right kind of society to pioneer the Industrial Revolution but the wrong kind to exploit and benefit from the Third Revolution:

It continued to contain what Pareto called ‘residues’ of the society created by that earlier revolution, the class attitudes that militated against further innovations ... Class differences are built into the fabric of British society and industry. The social distance between management and workers, expressed in different hours and conditions of work, different schooling, accent, language, separate canteens, lavatories, and car parks, and different structures of reward ... leads to an ‘us versus them’ mentality that makes production a struggle for income and control rather than a cooperative endeavour.

The result is that the British model of work and production organization was characterized by a “low trust” industrial relations (as called by Alan Fox) and a mutual suspicion between managers and workers that frustrates collaboration for common profit and innovation.

Lane (1995, p. 3) asserts that the British model remains a “financier-dominated capitalism, characterized by voluntarism, ‘arm’s-length relationships and by a high degree of fragmentation and diversity”. The actors are committed and unable to share risks. Moreover, the British firms are loose associations of lowly committed actors who are exceptionally socially isolated as well. In this context, managers have been concerned with implementing techniques such as Quality Circles (QC’s) and Total Quality Management (TQM) as a way to improve direct communication. They also have introduced share ownership and declared their interest in training. However, many of these managerial schemes have been implemented in a haphazard and half-hearted way, providing passive and reactive participation and involvement and dangerous underdeveloped training and upgrading.

These schemes have been, in fact, increasing employment insecurity, receiving low resonance among employees and marginalizing union action through more direct and informal forms of employee involvement.

The German model is an expression of an industrial order in which economic actors adhere to a “social market”. It is a production-oriented capitalism and implies a closer integration of management and labour. Both the greater collective orientation and the productivist bias are dependent on a mode of finance provision which allows the development of long-term horizons in developing strategy for both individual firms and whole industries.

In industrial relations in Germany each branch of industry has its corresponding union which negotiates labour contracts with their own management counterparts. As shown by Dusseldorf (1992, p. 29), the German trade unionism has a dual structure, which is characterized by:

- a) organizational division into trade unions and works councils;
- b) jurisdictional division into the representation of overall trade union membership interests through collective bargaining and, on the other hand, representation of the interests of particular workforces through the negotiation of works agreements;
- c) division of spheres of influence and instruments of power: the right to strike at the super-plant, industry-wide level (trade union); close to the work force, struggle-free plant level (works council).

This dual system is marked by a flexible handling of problems and also by a well-developed capacity for both conflict and compromise. Industrial relations have been characterized by an orderly structure, a highly professional and efficient union organization, legal guarantees of union and codetermination rights which create a strong labour movement. Thus, good industrial relations gained for the unions a high degree of political legitimacy and have secured their inclusion in many political decision-making bodies in a quasi-corporatist or corporatist manner. As cited by Lane (1995, p. 122), despite this, the system has created its own problems:

The strong juridification of the whole system and process of industrial relations has made for cumbersome, slow and costly decision-making processes in some areas and has imposed very high costs, by world standards, on German employers. Wage and social costs are among the highest in the developed world and are increasingly viewed as an excessive burden by German industrialists, although high levels of productivity have, by and large, kept unit wage costs in line with those of major competitor countries.’

Other problem resulting from the relatively high degree of employment security of workers, achieved by intervention of workers unions, is the very closed nature of employment system and the constant exclusion of weaker elements of the labour force from core jobs.

For Lane (1995, p. 4), “the French model shares some features of the Germany industrial order in attenuated form, such as longer-term and a strong concern with qualifications”; but the French model has got a strong concern with product design rather than production organization as a whole, as in Germany.

Regarding unionism, the class compromise in France remained much more brittle and it only has been sustained by the frequent substitution of state intervention for autonomous bargaining between union federations and employer’s associations. Unions became negotiating partners

without necessarily being representative of the workers for whom they bargain. Thus, agreements can be valid as long as one of the union federations sign. As such, the state often extends agreements to the industries and regions which have not participated in that negotiation. Hence the incentive to join a union in France is reduced (Lane, 1995)..

Deutschmann (1987) found in Japan a different type of organisation which appears to be a structure that reverts to a simple level of social differentiation, far below the complex constellation of rational bureaucracy, the “juridified” society and the individualised personality. For a suitable characterisation of the Japanese organizational type scholars have used terms such as “clan” or domestic reproductive community, which point to pre-industrial forms of social organization. But this is merely one side of the coin. Upon closer inspection, it becomes evident that it is precisely the regression to seemingly “traditional” forms of integration which enables the Japanese enterprise to develop the principle of organizational reflexivity – the “organising organization” – to ultimate perfection. This provides it with a degree of flexibility and innovative power, outstripping rational bureaucracy by far, and it reveals its superiority all the more as more “mass production” becomes unprofitable.

Lean production started in Japan after 1950, as the result of many difficulties discovered by the engineer Eiji Toyoda in implanting the mass production model in his country. The problems were connected, principally, with the limited domestic market and with the fragility of the local economy (Japan had been devastated by the war).

Lean production is so known because it utilises small quantities of everything in comparison to mass production. It utilises half of the industrial workers, half of the space for manufacturing, half of the investment in tools, half of the hours of planning to develop new goods in half of the time (Woomack, Jones & Roos, 1992).

The central idea of lean production is to reduce costs by flexibility. It means the possibility of frequent changes of the moulds to adapt, in a simple way, the mechanisms that permit profitable production and the simultaneous accomplishment of customer demands, observing the individual satisfaction of their wishes. In other words, “lean production combines the best features of mass production (speed, cost per product) with those of craft production (flexibility, quality) to form a new production concept” (Dusseldorf, 1992, p. 6).

It involves:

- the decentralisation of some decisions at the entrepreneurial level which makes the hierarchy more flexible;
- the reduction of hierarchical levels (in Toyota there are just three organisational levels: group manager, section manager and firm manager);
- the consensual way of management;
- work in groups;
- organizational process innovations by using total quality control, quality circles and other managerial tools.

Lean production is the alliance of several Japanese techniques of work organization. It has in its view: teamwork; “kaizen”/CIP – Continuous Improvement Process); the Zero-Defect Principle; the JIT – Just in Time or Zero Buffer Time Principle; customer orientation; efficient research

and development; an enterprise culture and integration of suppliers (prime cost reduction and no stockpile – “kanban”).

It believes that perfection can not be attained, but the incessant search for it can bring surprising effects.

It values work in groups, participation, inter-firm industrial organization, intensification of work and the suppression of everything that is superfluous. To Dusseldorf (1992) a further particularity of Japanese groups is the regulating of one’s own tasks based on high level of basic qualification. But, the sense of identity and competence associated with skilled work, that is, specialized and occupational training, are not developed. Teamwork management orientates itself to the “one-best-way” and, so, teamwork appears as an approach to rationalization. The decisive competitive factor is “kaizen”.

To Imai (in Dusseldorf, 1992, 14) the most significant difference between Japanese and Western management concepts is just “kaizen”, as it involves a process-oriented thinking that supports and acknowledges the efforts of the employees: “Perhaps the most decisive point, however, is the fact that KAIZEN is human-centred while technology and cost questions are the real centre of gravity within the innovation concept.”

Regarding industrial relations Japan is grounded in the existence of company unions and usually includes a section of the closely allied component-parts suppliers within the “Shitanke system”, which also involves collective bargaining. The fundamental principle of company unions is co-operation with management, representing the regular core workforce, but not the peripheral workers who are governed by short-term contracts.

From the second level and below, states Dusseldorf, there is decreasing trade union representation and correspondingly worse wages and working conditions. Japanese trade unions also pay attention to the business performance of the company and act in a cautious and co-operative way.

5. Consequences and trends of Post-Fordism on work organization, employment and income division

The current debate over consequences of the post-Fordism model on work organization, employment and income division has many points in agreement, among them, three trends: work relationship and more flexible labour market, increased unemployment and income concentration. As shown by Bonefeld (1991), the post-Fordism model seems to decrease the scope of living labour and to flexibilize wages, work practices and labour markets.

This is much more true with regard to the industrial sector where just as Fordism, the post-Fordism model arose with many effects in the work world (later, both spread out through other economic activities). Nowadays, there is a clear trend toward de-industrialisation at the same time that the service sector has been increasing. Wild & Jones (1991) argue that, in spite of current debate in the economic and social sciences, regarding the definition and measurement of ‘de-industrialisation’, there is a general consensus that, among other negative trends, it involves prolonged and persistent unemployment and an absolute decline in employment in the industrial sector within a national economy.

The unemployment trend within a national economy appears as a point of agreement among scholars, being that the relationship between gains and losses among productive sectors has produced a very strong contrast in the overall employment market, with its attendant implications for unemployment. The study completed by Wild & Jones (1991) in Germany and the United Kingdom is a good example in this matter and shows that industrial employment reduction is more significant than the service employment increase.

The gap between labour reduction in the industrial sector and labour absorption in other economic activities has increased nowadays due to, among other factors, new technologies based on micro-electronics systems. When Ford (1991, p.107) stated that “the machine demands that man be its master” and that “the modern system needs more brains for its operation than did the old” his thinking was centred on the former mechanic machines.

There is, however, a difference between mechanisation of the industrial process which took place from the XVII century until 1950’s and the current industrial automation process. If in the former industrial mechanisation process the machinery needed a worker to operate and to maintain it, in the latter automation process this is not completely true. Being that the automatic machine is clever and clean, its dependence regarding human labour is dramatically reduced by auto-managed systems.

To discuss changes in the world of work, it is interesting to note that de-industrialisation within advanced industrial societies should be viewed as part of a wider process of economic restructuring. As Wild & Jones (1991) state, the arena for such economic restructuring is increasingly the international and global economy, which is subject both to cyclical oscillations and secular trends towards increased capital and managerial mobility.

Wild & Jones (1991, p. 391) found in declining regions in Britain and Germany a generally lower quality of employment, with assembly-line production being much more prevalent than elite occupations such as information processing, marketing, and research and product development. They also argue that it is difficult to apply new technology without incurring a large corresponding loss of jobs and that there are problems both in old-industrial regions and in newly industrialised spaces.

In the old-industrial regions, the problems are those associated with decline – high levels of unemployment, deteriorating social and economic capital, outdated infrastructures, scarred environments, and negative images. Newly-industrialising spaces, however, are also not without their problems, although these are of a different kind. For example, economic expansion generates demand for jobs which often outruns local labour markets, stimulating substantial population immigration, which in turn intensifies pressures on housing, health, education and transport facilities.’

In this way of reasoning, when this subject is put within the global arena, it becomes possible to identify similar effects when industries move on from developed economies to developing ones. Thus, Lal (1997) states that industrialisation has become identified with development in the Third World and that most Third World people live in countries whose most abundant resource is just labour. Labour-intensive industrialisation has been a way to make use of abundant labour to raise output, productivity and incomes. In such a situation, developing countries nowadays have been assuming a similar role to those new-industrialising spaces in Britain and Germany during early 90’s.

Peters (1996, p.50) also presents another motive that has changed. In the developed countries jobs have seen a drift away from the industrial towards the service sector. Going beyond automation, manufacturing jobs have been hardest hit because of competition in labour costs from the developing countries. Switzerland's industrial labour costs \$ 28 per hour and Germany's \$ 25 per /hour while China's estimated labour costs between \$ 0,50 and \$ 1,00 dollar per hour.

So, one can see that in times of high technology and strong competition among companies, labour has lost its importance and value, being that automatic machinery is less dependent on industrial operatives' hands and minds.

6. Conclusion

From the above it is possible to deduce some conclusions. First of all, there are changes in the way by which work is done and controlled. The Fordism model is authoritarian, with rigid discipline, technical and specific personnel training, taking man as a simple appendage of the machine and separating the intellectual from the manual work. Classical management control is performed by rigid supervision procedures. The "post-Fordist" model presents flexible authority and control systems by which conformism and passivity open spaces for dynamism and creativity (according to the management model established earlier).

However, when this analysis is centred on the objects and ideology that guide the productive process, one can conclude that no evolution has occurred. Management, yesterday and today, aims toward maximum rationalization of the production system, greater increase in productivity, profitability and competition, maintaining intact the older way of production.

In this way, intensification of human work in Post-Fordism, for example, does not abandon Taylorism-Fordism organizational methods. There are:

(...) good jobs, expensive jobs, productive jobs, but much fewer of them. Those jobs are not for everyone. They are not for those who want more space in their lives for other things. For families for instance. Those kinds of jobs are difficult for women if they want to raise a family, or for men, for that matter, who might want to do likewise. (Handy, 1994, p. 9).

On the other hand, Lane (1995, p. 64) shows that large corporations in the three largest European societies (Britain, France and Germany) present a trend toward capital concentration and that the dominance of large corporations has greatly intensified during the post-war period. It is important to pinpoint that large corporations, vertically integrated, were seen as the epitome of Fordism and that both employment and production relations in post-war Europe were shaped by this type of firm.

When that concentration is measured in employment terms, aggregate data for the mid-70s to the mid-80s show that larger firms in all three societies have been shedding labour, even though disproportionately. This fact must be analysed also by the quality of employment, the quality of life and the security of economic recovery, and not just from the point of view of job creation in terms of head-counts.

Beyond the work intensification and capital concentration, the post-Fordism model maintains the division of work, although on more ample bases. If in Taylorism-Fordism the tasks were broken

down into simple and routine movements, in post-Fordism the division into fractions of work happens with the attribution of responsibility to the groups that fulfil a set of specific tasks (activities). There is widespread agreement in the literature that due to the need for more flexible and speedier reaction to changing market demands, de-centralization of decision-making and flattening of managerial hierarchies has occurred. However, there is little systematic evidence as to what form that de-centralization has taken and which hierarchical levels have been affected.

Lane (1995, p. 72) calls into question whether the de-centralization of decision-making and flattening of managerial hierarchies in post-Fordist has led to a de-centralization of managerial control, or whether Fordist centralized management control is being maintained, even in spatially decentralized units, through the development of new control technologies. In fact, there is not, in either model, a proposal that guarantee the autonomy of the worker. In both, Taylor and Ford, task obligations are reached through rigid control and supervision concerning the worker. In the “post-Fordism” model, task obligations occur by way of a rigid management scheme. Direct supervisory control is inhibited, assuming either the form of auto-control or control by complex technological procedures, nevertheless, it continues to exist.

In recent times in Britain there has been much emphasis on instrumental learning, focused on the needs of the economy. Since the establishment of the National Council for Vocational Qualifications, in 1986, much debate and controversy has been generated. In spite of this debate, Raggatt argues that:

The development of National Vocational Qualifications (NVQs) in Britain is linked to a Fordist conception of employment needs, continuing the division of mental and manual labour which has been the historical base of British capitalism. (in Usher & Edwards, 1994, p. 103).

This tendency can be seen to be functioning in many of the educational systems in the developed countries (Usher & Edwards). Thus, in “post-Fordist” times, training systems in the developed countries preserve characteristics of the former Fordist times.

In the recent past many expressions with the prefix “neo” and “post” have appeared such as post-Fordism, post-modernism, neo-liberalism, neo-Marxism etc. However, today, many thinkers and writers themselves have criticised these innovations. To them post-Fordism is like Fordism as well as post-modernism is like modernism. Neo-liberalism is like liberalism and neo-Marxism is like Marxism. As Hall notes (Green, 1997), postmodernism is another version of that historical amnesia characteristic of American culture – the tyranny of the new. According to Green (1997), postmodernism should be seen not as a development beyond modernism but rather as a continuation of a certain idealist current within it. One can make the same statement about Fordism and post-Fordism.

Finally, it seems opportune to repeat the words of Ford from back in the 40’s (Ford, 1991, p. 141):

We are not living in a machine age, we are living in the power age. This power age of ours has great possibilities, depending upon how we use it. Of course it can be abused. But, it can also be used greatly to benefit mankind’.

If this sentence were true during that period of time, today it seems even more adequate.

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