

CAPITAL, THE STATE AND LABOUR

*A Global
Perspective*



Edited by

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EDWARD ELGAR PUBLISHING LIMITED

ISBN 1-85898-295-2



9 781858 982953

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Hampshire GU11 3HR, UK

10. Capital–labour relations at the dawn of the twenty-first century

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I METHODOLOGICAL INTRODUCTION

Forecasting the future of capital–labour relations is far from an easy matter. As this volume has shown, there already exists a large variety of industrial relations, even within advanced capitalist countries. Moreover, in these very countries, the divergences are increasing by comparison to the 1950s and 1960s, when a rather unified pattern has prevailed: Fordism. This may be a transitory situation: the crisis of the old entails a period of random search for new industrial paradigms and new rules of the game.¹ A possibility remains for the emergence of a new paradigmatic order. But it may also be argued that the march of Fordism to hegemony was a unique success story in capitalist history. The future may be a more fuzzy situation, with a coexistence of many types of capital–labour relations, even in a single country: a configuration of complementary patterns of industrial relations. Moreover, a paradigmatic order may be just a creation of the theorist, a simplification of an unshaped reality, a subjective stylization of the chaos. Neither ‘Fordism’ nor ‘Taylorism’ ever existed as a pure reflection of their ideal models.

With all these caveats, it seems that prospective analysis in capital–labour relations (or any prospective analysis of social forms) is useless. Yet there are some reasons to believe that social relations obey an order and tend to adapt to typical forms. The best argument is that all the agents who participate in the shaping of social forms are subjects pursuing their goals in similar situations: optimization of efficiency, or at least ‘sufficing’ efficiency, in order to survive through conflicting interests within competition. In this process, they tend to imitate other experiences; management books and business magazine columnists are read; fashions are followed. People learn. Prospective analysis is about the possibilities of convergence within this learning process.

Yet there is no reason to believe that there is only one solution to the question of shaping social forms. In the field of industrial relations, this idea is often related to the assumption of an objective progress of productive forces to which social

relations would adapt themselves through the learning process. This idea, common to some old Marxist texts and to many writings about the 'necessities of the current information revolution', is discarded by the empirical observations evoked in the present volume. In fact, between technological evolution and the stabilization of typical professional relations lies a wide field of conflicting interests, mitigated by the national (or even local) traditions of former agreements. An industrial paradigm is a social compromise, more or less reluctantly accepted by managers and workers. Moreover, this paradigm contributes to frame the forms and direction of the technological evolution itself. Prospective analysis is not a pure speculative issue: it should be rooted in the examination of actual evolutions.

Fortunately (for the forecaster, at least), the year 1989 has dramatically simplified the situation. Within a few months, with the huge and tragic (but probably temporary) exception of the People's Republic of China, and the anecdotal exceptions of North Korea, Vietnam, Cuba and Albania, the 'socialist countries' have swung back to the explicit acceptance of the superiority of 'normal' capital-labour relations – based on commodity-producing firms organized by managers hiring a labour force. Nowadays, it is certain that the dawn of the twenty-first century will be capitalist. But *what* capitalism? That remains the question. If the complex East European professional relations analysed by Köllö (Chapter 8, this volume) are likely soon to become a curiosity of the past, the future of the former socialist countries is far less definite. Their learning and imitative process may try to converge towards a British, Swedish or any original new type of compromise. For, as Boyer (Chapter 2, this volume) reminds us, there is no agreement in the OECD about what is today the 'normal form' for capitalist professional relations.

Moreover, with the breakdown of the 'eastern way to socialism', all the 'national ways to socialism' in the Third World, from India to Algeria, have lost any appeal. There, capital-labour relations will certainly present an incredible mix of forms stretching from small-scale production to quasi-Japanese methods (see the Indian example in Mohan Rao, Chapter 7, this volume). Will the main changes lead to a 'Brazilian type' as put forward by Amadeo and Camargo (Chapter 5, this volume) or to 'Korean type' (You, Chapter 4, this volume)? And are we to expect a new world hierarchy according to the choices of nations for a particular form of professional relations?

Once again the future appears very indeterminate. Yet there are limitations. Professional relations should be consistent. First, they should be consistent in themselves, that is between their different aspects: wage contracts, labour organization, social reproduction of appropriately skilled labour forces. Second, they should be consistent with the broader complex of social life in concrete ways: general goals and accepted rules for life in a common society. Third, they should be consistent with the macroeconomics of some regime or social structure of

accumulation, both at the national and international level. Last, and not the least, the global ecological situation is now imposing strong constraints on the generalization of most models. This does not mean that at the dawn of the twenty-first century these constraints will be accepted. If they are not, the middle of the century may be out of control. All these social and logical constraints will limit the possibility of stabilization of new professional relations. Many things may happen, but not just anything. Unbalanced situations may develop for a while (such as Brazilian growth of the 1970s or US growth of the 1980s), but they are not stabilized regimes, with which prospective analysis should be concerned.

From what has been said so far the following points emerge:

- Technology provides possibilities; it does not determine the future.
- Social agents are trying to emerge from a crisis of outdated agreements. In doing this, they will struggle against each other in search of new agreements. The directions of research are influenced by the challenge posed by erosion of old compromises. Social agents are looking for not-yet-existing answers to existing questions. The answers proposed by social forces in any particular country depend on local traditions and experiences. Hence these answers are more likely to emerge in some countries rather than others. Yet some answers may become hegemonic worldwide by a process of imitation of the best experiments.
- However, partial answers cannot be chosen *à la carte*. Only some 'menus' are consistent. Not all the menus are mutually consistent.

These considerations lead us to the following procedure. Section II starts with an analysis of the shortcomings of the old paradigm, which was dominant in the advanced capitalist countries: Fordism. The available answers to these shortcomings will provide some internally consistent menus (we shall select two of them). Some typical countries will be seen to direct themselves towards one of these menus. But this is not a proof of their future stability. In Section III, we extend the analysis to Eastern and Southern countries. In Section IV, we look at the external constraints on the menus of professional relations: ecological, social and macroeconomic. This will not so much reduce the scope of consistent menus, but will outline the difficulties and opportunities stemming from their generalization. In the conclusion (Section V), we shall examine three scenarios based on the progressive generalization of some of the menus or a mix of them.

II TWO WAYS OUT OF FORDISM

Throughout the period after the Second World War, two paradigmatic models of development were proposed to developing countries: the Western one and

the socialist one. The latter has now acknowledged its complete failure. Meanwhile, capitalism in the Northwest of the world experienced its Golden Age. The model of development of this Golden Age (here labelled Fordism) went through a major crisis in the 1970s–1980s, but nobody believes that it was the ‘final crisis’. On the contrary, several reforms were proposed to this model, and at this writing (the end of the 1980s) all these reforms seem to combine into more or less promising results. We may infer from this that the fate of Fordism and the ways out of its crisis will once again be influential for the worldwide future of capital–labour relations. Hence our choice to start with Fordism, its crisis and the ways out of it, then extend these considerations to the South and the East.

The Rise and Fall of the Golden Age²

First let us recall briefly what Fordism was. As any model of development, it could be analysed three ways:

1. As a general principle of organization of labour, Fordism is nothing more than Taylorism plus mechanization. Taylorism implies a strict separation between the conception of the labour process, which is the task of organization and methods (O&M) on the one hand, and the execution of standardized and formally prescribed tasks on the shop floor on the other hand. Mechanization is the way in which collective knowledge of O&M is embedded into the material apparatus (both hardware and software). As a result, workers’ involvement is supposed not to be needed for the implementation of the prescriptions of O&M.
2. As a macroeconomic pattern (or regime or social structure of accumulation), Fordism implied that the gains in productivity arising from these principles of production were matched, on the one hand, by an increase of investments financed by profits and, on the other hand, by an increase in purchasing power of the waged workers. As a result, both the share of wages in value-added and the capital–output ratio were roughly constant; hence the rate of profit was roughly stable and the outlets for production and consumption goods were growing in pace with productivity.
3. As a system of rules of the game (or as a model of regulation), Fordism implied long-term contracting of the wage relation, with rigid limitation of redundancies; and a programme of wage increases indexed on prices (cost-of-living adjustments) and general productivity (annual improvement factor). Moreover, a large socialization of revenues through the welfare state and social security ensured a permanent income to wage-earners. The counterpart was the acknowledgement by unions of the privileges of

management. As a result, both the principles of labour process organization and the macroeconomic pattern were respected.³

This model of development was the result of ‘chance discoveries’ and of a process of learning through imitation. The Taylorist principles reached hegemony throughout the first half of the century. Henry Ford and J.M. Keynes popularized the idea that demand mattered and that demand from wage-earners was the most stable basis for social demand. Workers’ struggles and political changes in the 1930s, under Roosevelt’s presidency or in social democratic Europe, imposed new rules on the game. The social compromises of the Roosevelt period were spread in liberated Europe and defeated Japan after the Second World War, both by the administration of the Marshall plan and by the US unions’ support for ‘reformist’ European unions.⁴ This crusade for the ‘American Way of Life’ was matched by the indigenous push of the European labour movement resulting in important improvements of the model (e.g. the European elaboration of the welfare state along the lines of the Beveridge report).

The success of the Golden Age model was thus based on the wage-led increase of internal markets in each advanced capitalist country. The foreign constraint was limited by the coincidence of growth in all these countries, the reduced importance of growth in international trade by comparison to the growth in internal markets, and by the hegemony of the US economy.

Yet, in the late 1960s, the stability of the Golden Age growth path began to crumble. The first and most obvious reason appeared on the demand side. Competitiveness equalized between the US, Europe and Japan. The search for economies of scale induced internationalization of productive processes and markets. The increase in the price of raw materials imported from the South (notably oil) stirred up the competition for exports in the early 1970s. The regulation of the growth of internal markets through wage policy was now challenged by the necessity to balance external trade.

In front of this demand-side crisis, the reaction of international élites was clearly Keynesian. The idea was to coordinate (through the OECD, the IMF, Trilateral Commission, etc.) the upholding of world demand. That was clearly the line of the First Economic Summit at Rambouillet in 1975. It has been argued that the actual policies were sub-optimal in respect of demand.⁵ But at least concern with demand remained common knowledge. In fact, real wage increases were dramatically slowed down and more firms shifted their plants to non-unionized areas, or outsourced to Third World countries, but the basic rules of the game were maintained in advanced capitalist countries.

Yet at the end of the 1970s, the mood changed in international élites of the capitalist world. The demand-side management of the crisis had certainly avoided a great depression. But a significant limit appeared: the fall in profitability. This was due to several causes on the supply side: slowdown in

productivity with an increase in total labour price (including welfare payments), increase in the capital–output ratio, and an increase in the relative price of raw materials. In those conditions, Keynesian devices such as an increase in the real wage (however limited it was) and monetary laxity could only induce inflation and erosion of the reserve value of monies, especially the international one: the dollar (Lipietz, 1983). Hence the shift to supply-side policies, that is, to industrial relations, a field which encompasses aspects of the industrial paradigm and the rules of the game.

Even within the present theoretical frame work, the supply-side problem with Fordism is subject to two interpretations. First, according to Kaleckian tradition, the rise in the relative price of labour and raw materials was the result of the long boom of the Golden Age. The profit squeeze (Itoh, 1980; Armstrong, Glyn and Harrison, 1984) was the result of the previous expansion and of a full-employment situation. Moreover, the welfare state had dramatically weakened the cost of job loss (Bowles, 1985), and that could also account for the slowdown in productivity.

We shall come back to a complementary explanation, but the fact is that the profit-squeeze analysis became the official explanation by the end of the 1970s. Profits were too low because workers (and raw materials suppliers) were too strong and the rules of the game were too rigid, which led to difficulties in restructuring the productive apparatus, thus missing the opportunities of the technological revolution. This analysis was heralded at the Economic Summit in Venice, 1980, after the second oil shock. Fighting inflation (instead of unemployment) was proclaimed the ‘first priority’, through a commitment to increase productivity and to redistribute capital from declining sectors to sunrise sectors, from public sector to private, from consumption to investment. There was a clear commitment to ‘avoid measures protecting particular interests from the harshness of adjustment’. In other words, the rigid rules of the game were to be overthrown.

That ‘liberal-flexibility’ policy was fostered by the UK, then the US, and was eventually implemented in many countries of the OECD, including the socialist–communist French government (Lipietz, 1984). The repudiation of the former rules of the game reached different levels on different fronts: from the annual improvement factor + cost of living adjustment rules to the scope and depth of social security protection, from the liberalization of redundancy procedures to the proliferation of precarious jobs. This process was carried on in an authoritarian manner (governments and management seizing the opportunity of defeating unions or reinforcing conservative policies) or through concession bargaining between capital and labour in the context of increased job losses.

After an experience with recession in the early 1980s, the recovery developed after 1983. Yet, that recovery was largely fostered by a renewal of Keynesian budget policies (Lipietz, 1985; 1989) and it is difficult to conclude that it was

merely the result of liberal-flexibility policies. Moreover, the experience of the 1980s did not turn out to favour the most significant experiments in flexibilization in the US, the UK and France. On the contrary, these countries exhibited both de-industrialization and trade deficit. The winners in competition (Japan, Germany, the European Free Trade Agreement) seem to be characterized by *another* solution to the supply-side crisis.

Let us return to the theoretical explanation of this supply-side crisis of Fordism. An alternative or, more aptly, a complementary explanation to the Kaleckian ‘full-employment profit-squeeze’ theory insists on the unravelling of the efficiency of the Taylorist principles. Full employment may account for the decline in productivity growth and the rise in capital–output ratio in the late 1960s and early 1970s. However, the increase in unemployment since that time failed to bring about a recovery in productivity growth. In fact, the elimination of shop-floor workers from any initiative in relation to the labour process is of limited rationality. It is a good device to secure management’s direct control of the intensity of work. But more responsible autonomy on the shop floor may appear as a better principle, especially as the implementation of new technologies, or the shift to just-in-time management, requires the involvement of direct operators and their willing cooperation with the managers and the designers.⁶ And that was precisely the alternative way selected by many important firms in Japan, Germany, Austria, Switzerland and Scandinavia. There, the pressure of unions and other organizational traditions fostered the choice of a ‘negotiated involvement’ solution to the crisis of Fordism (Mahon, 1987).

At the end of the 1980s, the superiority of this policy is increasingly acknowledged, not only in that second group of countries, but also in management books and by writers in the first group. Certainly, the competitive success of the second group weighs a lot in this evolution, but the difficult experiments in implementing high technologies in a liberal-flexibility context also fostered a change in management fashions.⁷ Yet, at this moment, liberal flexibility and negotiated involvement seem to be mere devices that could be combined *à la carte*. We now examine their mutual consistency.

After Fordism, What?

The previous survey of recent economic history may be summarized as follows:

- Acceptance, then rejection, of ‘demand-side’ concern, as if it had become irrelevant, because internationalization had made it unmanageable, or because the boom of the second part of the 1980s had made it useless.
- Development of two tenets about direct industrial relations: liberal flexibility versus negotiated involvement.

We shall come back to the first issue when dealing with the macroeconomic consistency of professional relations, and we focus here on the supply side. We shall not follow the complex and rich taxonomy proposed by Boyer (Chapter 2, this volume), but a quite simplified version first proposed in Lipietz (1984). The reason for this is that this prospective is only a loose exercise. Our only aim is to consider alternative paradigms after the demise of Fordism. Too much precision would eliminate the difference between conflicting paradigms and variations inside *the same* paradigm. Moreover, the two tenets represent two different possible paradigms (or menus), even when it seems that they could be mixed in a dynamic manner.

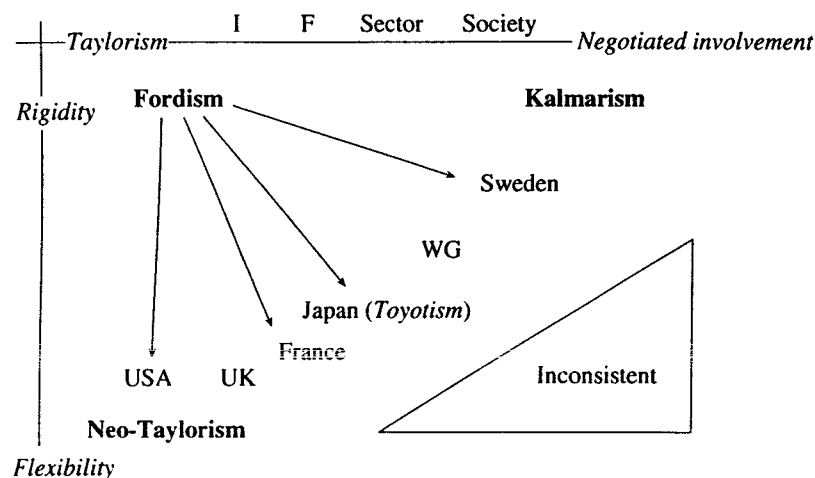


Figure 10.1 After-Fordist professional relations

In fact, the two tenets may be thought of as two axes of Fordist professional relations: Taylorism as direct control by the management of the activity of workers, rigidity of the wage contract (see Figure 10.1). The first tenet fosters move from 'rigidity' towards 'flexibility', the second from 'direct control' towards 'responsible autonomy'. In other words, the first axis refers to the external labour market, to the bond between the firms and the manpower to be hired and rewarded. The second axis refers to the internal labour market, the forms of organization of cooperation/hierarchy inside the firm.⁸

On the first, 'external' axis, there are several aspects to do with rigidity and flexibility, as we have already noticed. The rules of the game could include rules on setting of direct wage, rules on hiring and firing, rules on allocation of the indirect wage: the external market is a more or less organized one. The axis represents the synthetic solution. Moreover, the rules may be set at the level of

individuals, professions, firms, sectors and society. We shall consider this when dealing with the other axis.

On the second, 'internal' axis, there are also different aspects: involvement means skilling, horizontal cooperation, participation in the definition and monitoring of tasks, and so on.⁹ Once again it is a synthetic axis, but here, for obvious reasons, we must note the *level* of the negotiation of the involvement of workers. This involvement may be implemented in the following ways:

1. It may be *individually* negotiated and fulfilled by bonus, career, and so on. This is limited by the *collective* character of the required involvement in most processes of cooperative production. So the 'individually negotiated involvement' (I in Figure 10.1) may be extended to a team or a shop. This is not far from incentive practices, and thus quite compatible with a flexible labour contract.¹⁰
2. It may be negotiated firm by firm, between management and unions (F in Figure 10.1). Here the firm and the workforce share the rewards of the specific skills accumulated in the learning process. This implies an 'external rigidity' of the wage contract, but does not involve outsiders.¹¹
3. It may be negotiated at the sector level, thus limiting firms' risks of competition through 'social dumping', and inducing them to share skilling institutions and so on. The external labour market is likely to be more organized, that is, broadly speaking, more rigid with greater socialization of labour revenues.¹²
4. It may be negotiated at the level of the whole society, unions of workers and business negotiating at the regional or national level¹³ the social orientation of production, with unions seeing that 'their' people do their best on the shop floor. Here, the external labour market is likely to be at least as well organized as in the most advanced Fordist-corporatist cases.

However, collective involvement of the workers is unlikely to emerge if there is no solidarity about goals between the firms and the workforce, that is in a context of external flexibility, at any level. So, the limit of consistency between flexibility and involvement appears as an arc of a circle between our two axes, with a triangle of inconsistency and two most plausible lines of evolution, that is two real paradigms (Figure 10.1):

1. External flexibility associated with hierarchical direct control. We are back to some form of Taylorist organization of the labour process, without the social counterparts of the Golden Age Fordism. Let us call this paradigm *neo-Taylorism*.
2. External rigidity (organization) of the labour market associated with negotiated involvement of the operators. Let us call this paradigm *Kalmarian*,

in honour of the first car factory reorganized according to the involvement principle in a social democratic country: Sweden.

Looking back to the recent experience of the OECD countries, the industrial relations in these countries seem to range along the arc of the circle, with the US and the UK favouring flexibility and ignoring involvement, or introducing individually rewarded involvement (as in France); Japan practising negotiated involvement at the large-firm level; Germany at the sector level, and Sweden being closer to the Kalmarian model.

What about the attractive power of the axes? The experience of the US shows that it is difficult to negotiate involvement at the shop or even plant level in a broader flexible-liberal context, yet individually negotiated involvement may be developed.¹⁴ On the other hand, Germany appears as a less socially advanced form of the Kalmarian paradigm. Only Japan seems to occupy an intermediate position, with a strong duality (rigid/flexible) in its external labour market. This is possible because the scope of the capital-labour agreement is the firm level. But this is not done randomly. As Lazonick (Chapter 3, this volume) points out, the Japanese model forms a system, with the major firms negotiating the involvement of their core workers, and the small subcontractors sticking to flexible Taylorized industrial relations. Moreover, Lazonick (Chapter 3, this volume) implies some forms of continuity between these two extreme situations. Let us call this pattern 'Toyotism'.

'Toyotism' is not the pattern of capital-labour relations existing in Toyota.¹⁵ It captures the idea that the national model allows for differences between firms along the diagonal 'Kalmarism to neo-Taylorism'. How is it socially acceptable? We shall come back to this when studying the broader consistency of our paradigms. But first we consider non-OECD countries.

III SOUTH AND EAST: TOWARDS WHICH POST-FORDISM?

While the East developed a completely original form of professional relations (self-labelled, doubtfully, 'socialist'), the South may be precisely defined as the countries which did *not* succeed in imitating either the Western or the Eastern models.

In the 1950s and 1960s there was a common idea that the fastest way to develop industrialization was the Eastern way. This idea stemmed from two considerations:

1. The East had already a model of accelerated growth, at the time faster than Fordism. The Stalinist Soviet Union could thus be considered as a former underdeveloped country which was succeeding because of the superiority of its 'rules of coordination'.
2. The West was presenting itself as opposed to the industrialization of the South. Not only had colonial rule been based explicitly on an 'international division of labour', reserving for the South primary production, but the automatic dynamics of free trade were reproducing the same division within post-Independence neocolonial relations. This fact had been realized since David Ricardo's theory of comparative advantage, and now it was negatively theorized under the heading of 'dependency theory'.¹⁶ Thus, unorthodox models (that is including some Eastern devices) appeared as a way to catch up with the West, even in non-socialist Southern countries.

There were, however, counter-examples, such as Finland, a former part of the Russian Empire, nowadays under social democratic post-Fordism. But only the success of the newly industrializing countries, coexisting with the failures of peripheral and even central socialism, would change the general idea, more convincingly than Rostowian rhetoric. Thus we start our analysis with Eastern Europe.

The Rise and Fall of the Iron Age

The Stalinist Soviet Union adopted a peculiar model of development which could be called an 'Iron model' by comparison to the Fordist 'Golden' one (Lipietz, 1979):

- The Taylorist industrial paradigm was explicitly imported by Lenin into revolutionary Russia.
- The regime of accumulation was based on extensive accumulation of productive forces, through import substitution, without an important increase in mass consumption.
- The rules of coordination (or mode of regulation) were based on central planning. This is the socialist content. The idea was that what was wrong with capitalism was its 'market' aspect. With more 'organization' – and hierarchy – the 'rationality of Taylorism' would spread to the whole society.

To be sure, that was a very efficient model in a 'Lewisian' situation (i.e. with a huge reserve army in the peasantry). Taylorism was supposed to be suited to set to work unskilled workers.¹⁷ Extensive accumulation does not require great flexibility, and it increases the average productivity of the economy as and when industrialized and mechanized forms of production are substituted for pre-industrialized ones.¹⁸ With a slowly growing real wage, huge surpluses could

be accumulated. And the central organization of demand replaces the demand constraint with the risk of supply constraints (Kornai, 1979). As for the professional relations, their initial harshness was progressively stabilized in an acceptable compromise (by the 1950s' standards): in exchange for its Taylorist subordination, the industrial and tertiary workforce was granted quasi-tenure. Such a menu (Taylorism + tenure) was 'cousin' to Fordism; hence their similarity and competition in the 1950s.¹⁹

Now, problems arise when the Lewisian reserve army of labour is exhausted or never existed (as in Czechoslovakia and East Germany). As Köllö (Chapter 8, this volume) and Sapir (1990) show, the impossibility of organizing interfirm relations at the same degree as intrafirm relations is manifested through bottlenecks and wasting. In turn, anarchy in social planning is reflected within the organization of the firms. The involvement of workers is discouraged by the unravelling of revolutionary ideals, by the anarchy in industrial organization, and by the lack of any incentive, either negative (cost of job loss) or positive (access to higher consumption). The compromise of 'tenure with low wage' appears then as completely stagnationist.

Although it is different from Fordism, the Iron Age socialist paradigm is thus experiencing a similar supply-side crisis. The great differences are:

- There is no demand-side crisis.
- Socialist tenure is much more rigid than Fordism.
- Rigidity also concerns the other aspects of industrial organization.
- Even the non-involvement of workers seems to result more from insufficiency of management than from an excess of scientific management *à la* Taylor.

Clearly, the Eastern mode of coordination and regulation needs more flexibility in its industrial organization. Hence the general wish of Eastern reformists in favour of autonomy in firm management. But the first degree of freedom required by firms is the liberty to adjust their workforce to their needs, according to potential productivity of existing assets and to social demand. Thus, very quickly, liberal flexibility in professional relations – that is, external flexibility and the end of socialist tenure – appears as a panacea. Ten years after the West, some former socialist countries (typically Hungary and Poland) are rushing towards this new panacea, forgetting the other side of the problem: the inner organization of labour processes.

How could we see the situation in terms of our two axes? On the vertical axes, 'tenure' can obviously be represented as an 'excess of rigidity'. But on the inner axis (organization) the situation is less clear. The trade-off is less between 'direct control' and 'responsible autonomy' than between 'inefficient control' and 'irresponsible autonomy'. Despite Lenin's choice for Taylorism in the

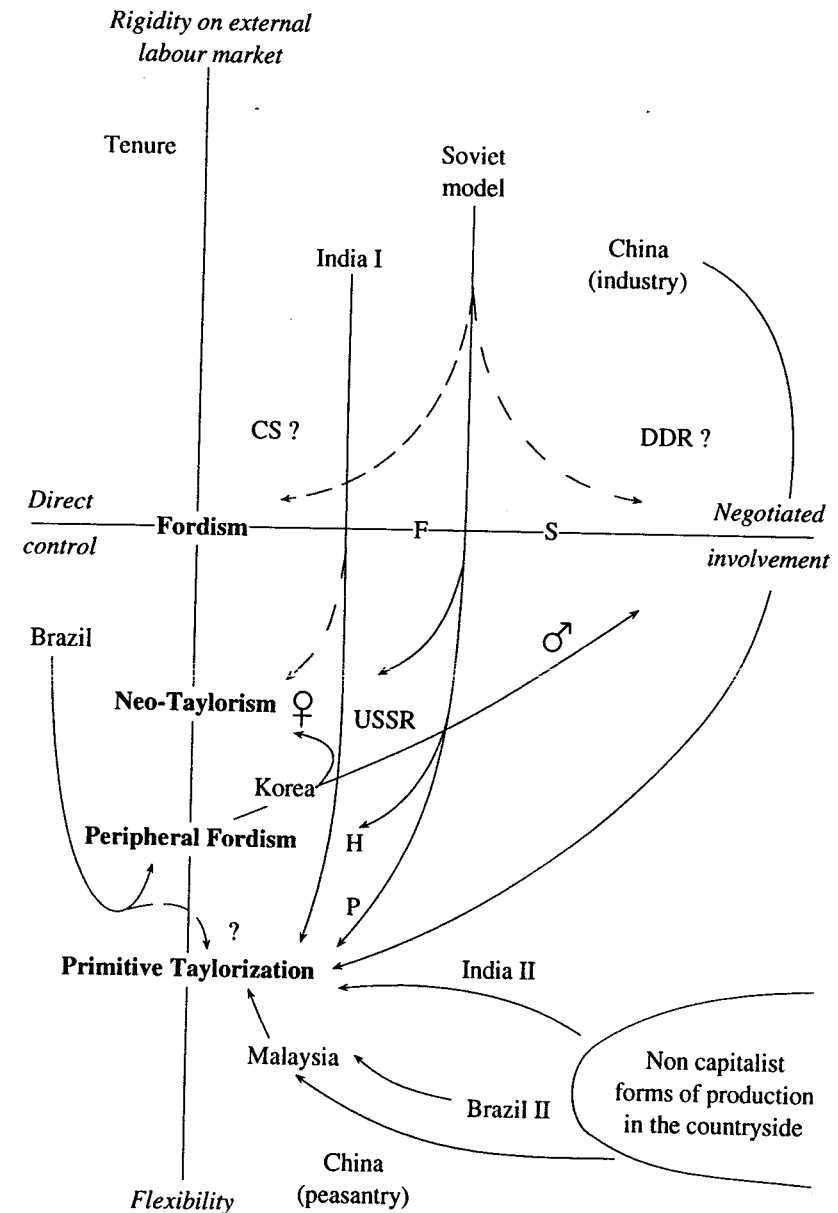


Figure 10.2 Around Fordism

industrial mobilization of former peasantry, and despite Stalin's slogan 'the management decides everything', there exists an autonomy of the direct workers, due to a revolutionary tradition²⁰ or an industrial tradition (East Germany, Czechoslovakia) or at any rate due to the incapacity of management to organize scientifically direct control. On our synthetic axis, this position could be placed between 'firm' and 'sector-negotiated involvement', since, as Köllö shows, the negotiation of compromises takes place between the sector ministry and the firms' directors acting as representatives of their workers.²¹

From this starting point on Figure 10.2, the movement is certainly downwards, that is to more flexibility in wage contracts. But, giving up the 'tenure' compromise, will the workers try to stick to some social-democratic compromise of the Fordist type, or will they be obliged or induced to accept the panacea of 'liberal flexibilization'? That is an open question, at this level of our analysis, and in the objective social-political process.

The situation on the horizontal axis is also open. The main tendency for 'autonomous' firm managers will certainly be to implement fully Taylorist principles, especially in less advanced countries (Poland, Hungary, Roumania, most of the Soviet Union). But they will meet severe resistance from skilled workers, especially in areas attracted by West German and Scandinavian examples of the Kalmarian paradigm: ex-East Germany, Czechoslovakia, and the Baltic countries.

We may now summarize the first part of our discussion. Facing the challenge of the crisis of their industrial paradigm from the supply side, Eastern countries will tend to answer by correcting the most obvious shortcoming: rigidity. As far as professional relations are concerned, that will mean the end of the tenure system. And since Taylorist principles have not met their limits because they were never fully implemented, the main attraction will be the menu 'Taylorism + liberal flexibility', that is, the neo-Taylorist paradigm that seems to these countries to be the basis of the West's success. Yet, between tenure and total flexibility of wage contract, they may also adopt a wiser middle way, either towards the old Fordist menu (with its possibilities in the East) or towards some 'involvement' menu of Kalmarian type. Between the tendency and these two possibilities, history will decide, according to some overriding constraints we shall discuss later.

Two Rural Giants with Industrial Islands

In the present volume, China and India have been the Southern countries which adopted most closely the model of development of the Soviet Union. The great difference from Eastern European countries is the size of their peasantry: around one-third of the world's population. The great difference between China and India is the dramatic rural revolution of China.

China enjoyed an agrarian reform and a strict organization of its rural economy. As a result, it did not experience until recently a massive exodus towards towns. Thus the situation is a 'hidden Lewisian' one, with an artificial shortage of industrial workers dedicated to a Soviet-type strategy of extensive accumulation by import substitution. This strategy was extended by Maoism to a quasi-autarchy. Moreover, the Great Leap Forward and the Cultural Revolution may be understood as the first attempts to criticize capitalist industrial relations (in fact, Taylorism) from the supply side: as a hierarchical direct control system. Attempts were also made towards decentralized forms of planning of social demand through popular communes. China thus experienced a kind of 'micro-economic revolution within the revolution' (Riskin, Chapter 9, this volume).

The success of this microeconomic and managerial revolution is doubtful, yet its failure is less obvious than the winner of the 1975 counter-revolution, Deng Xiaoping, has pretended. After a first attempt to realign to stricter Stalinist principles, the Deng regime was the first in the socialist world (with the Hungarian) to acknowledge its organizational shortcomings and reintroduce flexibility, not only in factories, but in the countryside. The Maoist attempts to involve workers in the management of firms and local communities were destroyed. All that remained was a culture of local leadership initiative. The liberal reforms revealed the Lewisian situation of the workforce as very flexible, extremely poorly paid, with a considerable cost of job loss, and a very authoritarian regime. These are the conditions of what we call 'primitive Taylorization', a model experimented with in the 1970s by the newly industrializing countries of Southeastern Asia.

In the middle of the 1980s, China, especially its coastal provinces, was clearly converging towards this model. Yet the unsuccessful revolt of Tienanmen (1989) blocked that revolution, revealing the strength of the old organizational principles, and calling the necessarily repressive character of 'primitive Taylorism'. The trend remains the same, but the participation of the working class in the next political movements could introduce some surprises.

In Figure 10.2, the trajectory of China could be represented in the following way. Starting from the Soviet model, and after a bend towards the right on the involvement axis, industrial China rushes downwards to 'primitive Taylorism' below neo-Taylorism (because the workers' rights will be worse than the most extremist dreams of liberal supply siders). Moreover, the peasantry will be set to waged work directly through the primitive Taylorization paradigm.

In India, there was practically no land reform, the country was never a 'state socialism', and it did not experience real centralized planning. Yet many features of the Soviet model are visible in its post-Independence industrial history. The state-led import-substitution policy fostered the development of an important inward-oriented industrial and tertiary structure whose workers enjoyed the 'tenure principle' (Rao, Chapter 7, this volume). These workers were less involved than in socialist countries yet they were not exactly Taylorized.

The great difference with China is the permanent flow of primitive Taylorization of workers excluded from pre-capitalist relations, or integrated into capitalist relations through some form of subcontracting system: Rao thus found a second archipelago of industrial wage relations in the ocean of rural India. For cultural and historical reasons,²² Taylorization did not reach the degree of absolute control by (hardly existing) O&M. In Figure 10.2, this process is represented by an arrow entering the K/L diagram from the bottom right.

The stream of economic liberalization in the 1980s is likely to shift professional relations in India towards classical forms of primitive Taylorization. With the opening to international competition, the informal sector will be induced to deeper forms of direct control without improving notably real wages and social legislation. Tenure practices will have to be given up in the formal sector, yet a possibility remains that the privileged fraction of the workforce could negotiate a limited liberal flexibility, and Fordist-type social counterparts to the rationalization of the labour process.

The NICs: How Will They Continue?

Two classical examples of NICs are examined in this volume: Brazil and South Korea. At present they are important industrializing countries. Aspects of their regimes of accumulation have been examined elsewhere under two headings: primitive Taylorization and peripheral Fordism (Lipietz, 1985).

1. Primitive (or 'bloody') Taylorization is a case of the delocalization of precise and limited segments of industrial sectors in social formations with very strong rates of exploitation (in wages, duration and intensity of labour etc.), the products being mainly re-exported to more advanced economies. In the 1960s, the export free zones and the workshop states of Asia were the best illustration of this strategy, which is widespread today, and illustrated by the case of Malaysia in this volume (Chapter 6). Two characteristics of this strategy may be noted. First, the activities are mainly Taylorized but relatively non-mechanized. The technical composition of capital in these firms is particularly low. Hence, this pattern of industrialization avoids the disadvantage of import substitution: the cost of importing capital goods. On the other hand, since it mobilizes a largely female workforce, it incorporates all the know-how acquired through domestic patriarchal exploitation. Second, it is 'bloody' in Marx's sense when he speaks of 'bloody legislation' at the dawn of central capitalism. To the ancestral oppression of women it adds all the modern arms of anti-worker oppression (managed unionization, lack of social rights, imprisonment and torture of opposition). Jomo (Chapter 6, this volume) on Malaysia is a good example of what 'bloody legislation' could mean at the dawn of the twenty-first century.

2. Peripheral Fordism. Like Fordism, it is based on the coupling of intensive accumulation and the growth of markets. But it remains peripheral in the sense that, in the global circuits of productive sectors, skilled employment positions (above all in engineering) remain largely external to these countries. Further, its markets correspond to a specific combination of local middle-class consumption, along with increasing workers' consumption of domestic durables, and cheap exports towards the centre.

Brazil started its industrialization as a kind of earlier and more successful India. The agrarian reform was as limited as in India, the Lewisian labour reserve army was supplied, and, as early as in the Vargas period (during the Second World War), state-led import-substitution strategy was implemented in the urban sector by national capital, with a corporatist type of social legislation (not so far from Fordist principles). Yet, two major shifts made the difference. First, the developmentalist state, while protecting its internal market from imports, did not hesitate, under Jocelino Kubitschek, to open the doors to Northwest capital and technology. Second, the military coup of 1964 suppressed *de facto* the social advantages of Vargas legislation (precisely out of the fear of 'union power' under the presidency of Goulart). As a result, scientific management developed without other limitations than technological dependency, and a bloody repression of unions supplied capital with a quite 'flexible' workforce. In the late 1960s and early 1970s Brazil developed a very competitive industry, achieving its import substitution, and developing industrial exports.

This paved the way for primitive Taylorization. Yet Brazil did not engage clearly in an export-substitution strategy. Capital goods were mainly paid by primary goods exports and indebtedness. The benefits of primitive Taylorization were reinvested in the development of a dualistic peripheral Fordism, in which economic gains accrued only to a fraction of the population (the new middle class stabilized in a Fordist way of life, the wage-earners benefiting in the second half of the 1970s from the growth in productivity stemming from mechanization and rationalization). This fraction included a part of the formal sector (Amadeo and Camargo, Chapter 5, this volume) and also a part of the working class which, at the end of the 1970s, regained some advantages warranted by the Vargas legislation. On the other hand, a huge fraction of the workforce remained excluded from the benefits of the Brazilian miracle: 'Lewisian' ex-peasants, informal workers and low-paid formal workers in small firms.

In the 1980s, the debt crisis broke out and then democracy came. The resulting evolution is rather complex. On the one hand, democratization increased the bargaining power of workers and their legal guarantees. On the other hand, super-inflation hindered their capacity to control the evolution of their real wage. Distributional conflicts took front place in industrial debates. Professional relations cannot stabilize in this permanent tempest involving the Lewisian

marginalized reserve army, the informal sector, and the different degrees of the formal sector. In this chaotic situation, Brazil remains open to three possible futures: a return to primitive Taylorization, a consolidation of peripheral Fordism, or even an evolution towards Fordism with local evolutions towards Kalmarian aspects.

By comparison, the 1985–87 revolution in South Korea is heir to a much better situation. The root of everything is the original land reform of the 1950s and the continuing support of peasants' revenues. Primitive Taylorization in Korea was not under the pressure of a Lewisian reserve army. All the workforce was hired under a flexible wage contract, but hired formally. Moreover, the state managed to plan carefully the export capacities in order to pay for the external debt. The situation of women was of terrible exploitation, especially in the export sector, but the revenues of average families increased throughout the 1970s and accelerated in the 1980s. As a result, Korea went through a transition from primitive Taylorization to peripheral Fordism. Moreover, in the male fraction of the working class, corporate patriotism was developed in a way preparing the imitation of some aspects of Japanese firm-level negotiated involvement (You, Chapter 4, this volume).

Democratization is likely to foster these tendencies, since there is no more debt constraint. Korea could evolve towards a less and less peripheral form of Toyotism. It would be a dualistic one, professional relations differing according to genders: firm-negotiated involvement for males and neo-Taylorism for women. On this example, conditions of consistency external to professional relations appear very clearly. We now consider these points.

IV CONSISTENCY PROBLEMS OF POST-FORDISM

Professional relations are but a part of feasible model of development. Capital–labour relations are thus subject to other constraints than the ones developed within the direct wage relation. Macroeconomists commonly acknowledge demand constraint and international constraint. Political scientists emphasize the necessity to legitimate the social order. More recently, ecological constraints have appeared of paramount importance.

The Dangers of Productivism

Capitalist development not only 'degraded work' until the climax of Taylorism (Braverman, 1974). We now perceive how much it exhausted the Earth, according to Marx's prophecy (and this is also true in the state-owned capitalism of the East). In fact, capital–labour compromises have been settled until now at the expense of nature, hence at the expense of the next generations. The hole in the ozone layer and the greenhouse effect are the consequences of the great

industrial boom of the Golden Age. The recovery of the 1980s has increased the frequency of industrial disasters, and is worsening the global ecological crisis. Now the limits of any productivist model are fully perceived, at the local or global level, and the necessity for future models of development to be sustainable, that is ecologically consistent, is more and more acknowledged.²³

Yet the strength of this perception is different according to each case, so ecological limits are not equally perceived as limits to future models of development. Local dangers are more and perceived and refused by, among others, workers whose jobs are the causes of the danger. Unecological practices are perceived and refused when concentrated in a definite territory, such as Los Angeles, Netherlands, and even in an NIC like Taiwan. But global effects resulting from a model of human consumption inherited from Fordist compromises may be ignored for a while. Ecological limits are thus both absolute and loose. Humankind may select unsustainable models until the first third of the twenty-first century. The local or regional concentration of environmental damage will foster social movements opposing these models, but in many cases, the local victims will be blamed from more accountable regions.²⁴

If we assume a development of ecological movements all round the world (and this is the case in the West, in the East, but less in the South), sustainability will become a factor of legitimation of the next social capital–labour compromises. From this we may infer that, if they are negotiated, the counterparts of gains in productivity will be granted in the form of an increase of free time, rather than in the form of an increase in real wage (as it used to be in Fordism). That solution will prevail in the most socialized form of Kalmarian compromises.²⁵ Another solution, consisting in halting the damage to the environment through ecologically-sound industries would be favoured by overconsuming upper classes attached to neo-Taylorism, thus increasing the price of consumption goods to the detriment of lower tiers of society. In Eastern and Southern countries, there is a risk that ecological sustainability remains ignored, especially if the more immediate debt constraints weigh heavily on these countries.²⁶

We may conclude that when ecological constraints are taken into account – and that could be the case in fairly developed countries, without major financial constraint, especially where a regional ecological crisis is already developing – capital–labour compromises based on the increase of free time and social (public) forms of consumption will be favoured, hence Kalmarian industrial relations. This conclusion does not hold (unfortunately) in less developed countries, or in advanced countries where individualistic ideologies are too strong.

The Problem of Social Cohesion

Obviously, models of development based on Kalmarian professional relations imply general knowledge, education and culture common to all citizens, hence

a rather egalitarian distribution of revenues and powers with a well organized and skilled sector of public services (Lipietz, 1989; Mahon, 1989; Mathews, 1989). On the contrary, neo-Taylorist professional relations imply a polarization of skills, revenues, ownership, and access to wealth and education. Models of development based on such professional relations are thus more conflictual than the former. In the extreme case of 'primitive Taylorization', this may be solved by 'bloody legislation' (see the Malay case). Within a liberal democratic order, serious problems of cohesion appear, that can only be solved through political and cultural specificities of places where these industrial relations are to be implemented.

The neo-Taylorian paradigm is thus more likely to develop where individualistic ideologies prevail and where the waged population is divided. This conclusion also holds when workers' involvement is negotiated firm by firm. This is what Aoki et al. (1990), writing about Japan, have labelled 'the paradox of workers' democracy'. In that case, the surpluses of productivity are specific to the firm, and the resulting quasi-rents of the firm hold as long as a differential productivity is maintained in the face of other competitors. The negotiated compensations (in terms of higher wages, reduction of labour time or lifetime career) are limited to this quasi-rent. In that condition, insiders and management are allied against newcomers and competitors. This tends to consolidate a 'workers' aristocracy' (or a 'yeomen democracy' in Piore and Sabel's – 1984 – vision) at the top of a generalized meritocratic hierarchy in the whole society, which may be a part of national culture.²⁷ This hierarchy may develop into a completely dualistic structure (negotiated involvement/neo-Taylorism), especially when gender differences come into play, as in Japan and Korea, or ethnic differences as in West Germany (see Walraff, 1986).

As a conclusion, the Kalmarian paradigm can prevail when the labour movement is strong, takes into account the interests of the whole waged population, accepts being involved in a dialectic of struggles and agreements with management, including on organizational and productive issues, and when feminism is strong. When labour is divided by aristocratic traditions, gender and ethnic exclusions, and when (like in France, the US and UK) management and unions have a strong conflictual tradition, neo-Taylorism, or some dualistic configuration, is more likely to develop.²⁸

Now, in the South, the second group of conditions pertains generally and neo-Taylorism will largely prevail for a while. In more advanced countries (Brazil and Korea), much will depend on the capacities of labour movements to overcome intersectional, racial and gender divisions.

In Eastern Europe, the situation is still more complex, because an official labour movement has existed, in favour of equality in skills, revenues, and preaching for collective labour involvement in management. But in the mind of the waged population, this official labour movement is associated with hypocrisy and

oppression! There, the ideological and political struggle will be of paramount relevance. The swing towards liberty may lead to individualistic liberalism and, as far as professional relations are concerned, towards neo-Taylorism. This seems to be the case in Poland and Hungary, and the indebted situation of these countries, with the associated IMF medicine, will foster this evolution. Or deeper traditions, sometimes rooted in religion or in the memories of the pre-Stalinist labour movement, will hinder these tendencies. Then, an alternative may develop towards a more solidaristic and ecological model, based on Kalmarian professional relations. Some chances remain for this evolution in East Germany, Czechoslovakia and the Baltic countries.

Macroeconomic Constraints

Macroeconomic constraints should be well known to economists; moreover they represent a logical aspect of prospective analysis. First, any model of capital-labour relations must be profitable. Second, it should be competitive. Third, demand should match supply.

From the first constraint it results that, when a great part of the surplus has to be reserved for debt servicing, there is little room for 'negotiating involvement' because the wage has to be as low as possible. The existing debt constraint thus induces neo-Taylorism. Second, countries which are already engaged in neo-Taylorism, and are less productive than 'involving' ones, are also handicapped in the search for a better capital-labour truce. As a result, in our sample, the US, the UK, France, Brazil, Eastern Europe and Malaysia will have a great deal of difficulty shifting towards a Kalmarian paradigm. On the other hand, Scandinavia, West Germany, Japan and Korea may be considered as marching towards the twenty-first century in a good position.

As far as demand is concerned, the Kalmarian paradigm offers much more possibility of regulating internal markets than neo-Taylorism. The latter will be associated with a cycle of exhilarating periods of boom (with an increase of profits and the revenues of the upper tier of society) and periods of depression (due to overinvestment or 'cooling-off' policies): the return of business cycles, as opposed to the more regular pattern of Fordism.

The great and open question is the combination of the two models within the same free-trade space, such as the EEC. We may assume that in labour-intensive sectors, neo-Taylorism could dominate negotiated involvement at a sufficiently low wage. Then, by transposition of Ricardo's theory of comparative advantage, countries (or regions) will tend to specialize in sectors using more intensively the factor with which they are comparatively better endowed: either flexibility – and low wages – or involvement. In that case, the total amount of demand will be limited by the competition on wages due to the coexistence of regions of 'low wage and low involvement' and regions of 'higher wage and higher

involvement'. The greater the possibility of practising 'social dumping' in neo-Taylorist regions, the smaller will be the islands of 'workers' democracy'.²⁹

Of course, a very simple way to limit social dumping (of competitors!) is protectionism, either through a low rate of exchange, or through explicit or implicit import limitations. Japan and Korea have been using both these devices for a while. The EEC is not fully open to the competition of the NICs, especially of the Malaysian type; the US becoming less so. Once admitted that it is unfair to be protectionist against a group of countries and at the same time insist on paying off their debt, reasonable protectionism appears as a way to open the way for better social compromises than pure free trade. But it only opens the way!

PROSPECTIVE CONCLUSIONS

The post-Second World War ruling paradigm in industrial relations, Fordism, is exhausted. It was so powerful that for twenty years it marginalized Southern and Eastern countries from world industrial trade. It used to combine a rigid organization of the external labour market with collective bargaining, the welfare state, social legislation, and direct control of the management of a semi-skilled workforce in the labour process.

Challenged by the decline of the rate of growth in productivity, management reacted in the 1970s in two ways: relax the rigidity of Fordism, or shift from direct control to negotiated worker involvement. These two ways appear mutually inconsistent when applied to the same workforce. Thus two major paradigms emerged in the 1980s. On the one hand, neo-Taylorism may be defined as a return to pre-Fordist flexibility of the labour force, with lower wages and increased risks of job loss, with direct control by management in the implementation of more or less modernized technologies. On the other hand, collectively negotiated involvement may be defined as the commitment of the workforce in the battle for quality, productivity, and improved new technologies, in exchange for social guarantees and sharing out of gains in productivity. The two paradigms may coexist in the same society when the involvement is negotiated firm by firm, but the greatest social achievements are obtained when the involvement is negotiated at the level of the whole society: then we called it 'Kalmarian'. The US, the UK and France are shifting towards the first direction, Scandinavia and West Germany towards the second; and Japan represents a clear dualistic example.

At the end of the 1980s, the second paradigm seems to have outclassed the first one in the Northwest. Yet, Soviet-type management-labour relations, characterized by very high rigidity in the external labour market, are also exhausted. The Eastern countries are hesitating between the two Western paradigms, but

the neo-Taylorist seems to be the most attractive. This is also true in the South, with the exception of the most successful NICs, notably Korea.

What have been, and what will be the main causal factors of these national evolutions? Debt and short-term competitiveness constraints, division of the labour movement, traditions of individualism or hierarchy, and gender or ethnic divisions in society will foster the first paradigm or the dualistic combination. Social concern for ecology, egalitarianism, solidarity, equal rights between genders and races, preference for macroeconomic stability, existence of strong and universalistic unions, will foster the Kalmarian paradigm where the competitiveness of the economy is already secured.

At the international level, several scenarios are thinkable. The dominance of the neo-Taylorist paradigm no doubt was the dream of Anglo-Saxon management, the administration of Ronald Reagan and Margaret Thatcher. But the Kalmarian paradigm proved its superiority in the implementation of new technologies. On the other hand, it seems unlikely that the latter could marginalize neo-Taylorism at the global level just as Fordism did to any other industrial relations in the 1960s. The most credible scenario is the formation of a new hierarchical world economy. It will not oppose an industrial Fordist core to a primary-goods-producing periphery, but will present itself as a *de facto* new industrial division of labour. The core economies will be those which have adopted a Kalmarian compromise in a great part of production, with a possibility of internal dualism (Kalmarism/neo-Taylorism), for instance, according to gender. They will dedicate themselves to high-tech and less labour-intensive production. The periphery will be composed of economies organized according to the neo-Taylorist paradigm, and dedicated to routinized and labour-intensive activities.

In this new world industrial hierarchy, some former core economies may become semi-peripheral, including the UK, France, and even many states of the US. Conversely, Japan and West Germany will consolidate their place in the core, with some other former core economies like Sweden, and some former peripheral ones catching up, such as Korea, renewing the trajectory of Finland. A part of Eastern Europe could be involved in this process, while the rest would be integrated as a periphery in the unified world economy.

The proportion of core to periphery is an open question. The more important the neo-Taylorian share of the world, the more unstable its macroeconomics, the less advantageous the social compensations for worker involvement even in Kalmarian countries, and the greater the ecological threat. Faced with this conclusion, not surprisingly, the author would favour the choice of a progressive generalization of Kalmarian professional relations. This requires not only national social struggles, but also the setting up of an international economic order preventing social and ecological dumping (Lipietz, 1989).

Humankind has given up, for the time being, the dream of non-capitalist development. At the dawn of the twenty-first century, it has yet to make the

choice between several forms of capitalism, based on different capital-labour relations. The consequences of these choices will include social, international, democratic and ecological effects. Professional relations are not a matter restricted to unions and management specialists. They concern all the social movements that work towards shaping our common future.

NOTES

1. This term will be made more precise later. Equivalent terms are used in the US 'social structure of accumulation theory' (e.g. Bowles, Gordon and Weisskopf, 1986), or French 'regulation theory' (e.g. Boyer, 1986; Lipietz, 1985) or in previous works of the WIDER project (e.g. Marglin and Schor, 1990). The word 'paradigm' should be understood both in its original greek meaning ('example') and its modern linguistic and epistemological meaning (set of terms unified by a common notion, like the branches of a tree).
2. The following subsection is a summary of Glyn et al. (1990); Lipietz (1985; 1989).
3. Here we see that Fordism was a 'menu'. The coexistence of Taylorism and pre-Fordism 'rules of the game' for the determination of wages led to the Great Depression.
4. On the support of US unions to this 'politics of productivity' and their role in its spread through Western Europe and Japan, see Carew (1987).
5. This is the well known position of Ajit Singh: see Glyn et al (1990). The position of Lipietz (1985) emphasizes credit-based overtrading in the 1970s.
6. See Aoki (1987; 1990). Long ago, Andrew Friedman (1977) had opposed 'responsible autonomy' to 'direct control' as two *permanent* conflicting tendencies in capitalist organization of labour. In Aoki's writings (e.g. 1987), the opposition of 'semi-horizontal' and 'vertical' structures is connected to broader considerations of industrial organization. Significantly, he first demonstrates the superiority of the former on the latter in the case of just-in-time (*kanban*) management of 'river-like' production process (car assembly lines). Then he admits the superiority of responsible autonomy in most kinds of labour process. Here we notice the relative independence of industrial relations, not only *vis-à-vis* technology, but also *vis-à-vis* other aspects of intrafirm management and of industrial organization. This independence is only relative: my bet is that new technologies emphasize the superiority of responsible autonomy (without determining it, *à la* Piore and Sabel, 1984). Moreover, responsible autonomy may fit peculiarly well with sophisticated forms of industrial organizations (just-in-time, 'network-corporation', and so on). This is outside the scope of the present paper. On the possible menus crossing professional and industrial relations, with spatial consequences, see Leborgne and Lipietz (1987; 1990).
7. See quotations from the US business press in Messine (1987), Lorino (1989), and the French Report to the Prime Minister by Riboud (1987).
8. See Doeringer and Piore (1971). The term 'market' may be confusing: even the (external) labour market is not a real market, and the internal market is certainly not a market at all. Yet the opposition internal/external (or 'hierarchy vs market' *à la* Williamson, 1985 is rooted in a long tradition established by Marx (1865), Ch. XIV as technical vs social division of labour. As shown in Lipietz (1979) (in the Marxist line) and Favereau (1989) (in a 'conventional economics' line), there are strong tendencies to project the 'organized' character of intrafirm relations towards outside market relations, and vice versa.
9. As may be seen here, 'involvement' in wage relations may imply external aspects of professional relations, such as general schooling, participation in planning commissions in corporatist states, and so on.
10. The fact that incentive practices could be dealt with in the frame of extended microeconomic theory is an index of the liberal-market character of these industrial relations (see for instance Laffont and Maskin, 1982).

11. In the mainstream heterodox framework, this situation is captured through 'contract theory' (for instance McLeod and Malcomson, 1988).
12. Here we see the complexity of the synthetic 'external' axis flexibility/rigidity. The best example is the Italian *Casa Integrazione*, a collective fund which facilitates the flexibility of redundancies. Another example is the US practice according to which redundant workers still belong to the scope of major firms and are re-hired as a priority.
13. If not at the international level! The problem of the adequate geographical scope of paradigms is one of the most difficult and unexplored (however see Lipietz, 1985b; Leborgne and Lipietz 1989). We come back to this point later.
14. In a previous attempt at taxonomy Leborgne and Lipietz (1987), following Messine (1987), had labelled *Californian* the menu: flexibility + individually negotiated involvement. In fact the Californian model appears to be a form of incentive practice within the neo-Taylorian context each time the involvement of the wage-earner is required, such as high skills or high-profile office jobs. Messine (1987) had proposed 'Saturnine' for the menu: rigid labour contract + collective involvement, but the limitation of the General Motors Saturn project has proved the difficulty of its implementation in a *single* firm. Thus, according to a suggestion by Rianne Mahon, we moved to the Kalmarian label. In another text (Leborgne and Lipietz, 1990), we made a clearcut distinction between the two labels frequently met in the Anglo-Saxon literature on this topic: neo-Fordism and post-Fordism, and we associated them respectively with the neo-Taylorian and the Kalmarian axes.
15. Otherwise, it would be a decentralized form of Kalmarism, which Kenney and Florida (1988) label 'Fujitsuism'. This would ignore the precarious condition of subcontractors. But it would be just as unfair to emphasize only the dark side of capital-labour relations in Japan. As some commentators have emphasized, the industrial paradigms in major Japanese firms are a real breakthrough. This debate was presented in the Japanese review *Mado* throughout 1990.
16. For a critique of dependency theory, see Lipietz (1985).
17. It is not exactly true. Taylorism implies the pre-existence of industrial social knowledge by the management, and a culture of industrial discipline among operators. So implementation of Taylorism was as deceptive in the Soviet Union as in developing countries. Any process of industrialization requires a process of primitive accumulation of industrial social knowledge. Yet Taylorism may appear as an accelerated form of systematization of this process.
18. On the contrary, intensive accumulation of the Fordist type allows for a regular increase in productivity of existing plants.
19. On the common origins of Stalinism, Fordism and corporatism in the 1920s-1930s debates, see Lipietz (1979).
20. This raises the difficult point of a worker-aristocracy's support of Sovietism. Stakhanovism should not be reduced to a mere alienation, even in countries where socialism was imported by the Soviet Army as in Poland (see the great movie by A. Wajda, *Iron Man*).
21. Here, a double principal-agent representation could be useful.
22. The classical transition from precapitalist forms of production to capital-labour relations goes through subcontracting system, then simple integration in a single plant, then division of labour within factories, to Taylorism. In Marxist terms, formal subordination of labour to capital precedes its real subordination. Moreover, Marglin (1990) argues that the resistance of Indian workers to Taylorism reflects a cultural resistance to the Western separation between intellectual and operative aspects of labour (*techné* versus *epistémè*). In Figure 10.2, this is expressed by the shape of the arrow from non-capitalist forms of production to primitive Taylorization, which moves horizontally to the left, through non-Taylorized organizational forms (e.g., craftwork). A more vertical transition (directly to Taylorism) is also allowed for the NICs and China.
23. 'Sustainable' is the term adopted for 'long-term ecologically consistent' in the report of the United Nations Commission on Environment coordinated by Brundtland (1987).
24. Northern writers have recently criticized the Brazilian people for the burning of Amazonia. Yet the gross yearly contribution of France (40 per cent of Brazilian population) to the global greenhouse effect is 120 per cent of the total Brazilian contribution. More generally, this is a basis for a new opposition between North and South, which is fully expressed in the

- process of negotiation at the United Nations Conference on Environment and Development (Rio, 1992). See the polemics between the World Resources Institute (1990) and Agarwal and Narain (1991).
25. When strong unions take into account the 'outsiders', they include reduction of work time in their objective in order to fight unemployment and to improve the quality of life. See the German I.G. Metall strategy.
 26. In a statement at the Pacific Forum (March 1991), Mahathir Mohamad, Prime Minister of Malaysia, rejected ecological constraints, democracy, labour legislation and human rights altogether.
 27. This may be the case with Confucianism in Japan and Korea.
 28. As an extended consequence of the 'paradox of workers' democracy', a feedback effect may be expected from the superiority of an industrial paradigm adopted in a single country to the 'aristocratic' attitude of the unions of this country. The British labour movement developed this attitude, then the AFL-CIO in the Fordist US, despite the origins of the CIO (see Davis, 1986), and now it could be the case in Japan.
 29. This is a new consequence of Aoki's paradox. For the example of the EEC, see Leborgne and Lipietz (1989).

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