

2 Two social strategies in the production of new industrial spaces.¹

Danièle Leborgne and Alain Lipietz

'Flexibility' — in many countries (in particular those in which the crisis of the industrial sector is most severe), and in many international reports (such as the ones produced by the Organisation for Economic Cooperation and Development), this word seems to be the key that is supposed to open the door to the world beyond the crisis. The 'flexibility' of machines, induced by the 'technological revolution', is invoked. It goes without saying that this technological flexibility 'must' be accompanied by 'flexibility' of wage contracts. One is enjoined to 'smash the old rigidities'. What is more, some theoreticians referring to approaches that use concepts of regimes of accumulation and modes of regulation forecast a 'regime of flexible accumulation' a regime that will without doubt beget flexible, post-Fordist and post-modern towns, and why not 'flexible' houses as well. The slum, the favella, are they not really an unchangeable fact of our times?

The buildings in Tokyo certainly have flexible foundations, to resist earthquakes. This flexibility is not the same as the flexibility of the slum. It is another kind of flexibility . . . The crisis of earlier models definitely calls for a 'change of direction'. But which direction? To this question regulation approaches do not provide a deterministic answer, and certainly not one that is determined by the 'technological revolution'.

They do show however that, in the crisis in which new technological possibilities intersect with a transformation of the international division of labour, specific *territories* (regions or nations) are already more successful than others. We shall try to identify some of the *social* characteristics of these successes and of these failures. We shall show that there are two main categories of policies leading to different results: *offensive flexibility and defensive flexibility*.

In the first section we shall summarise the analytical tools of the 'theory of regulation' and the analysis it provides of the crisis of the dominant model of the post-war period: Fordism.

In the second section we shall distinguish and characterise, in terms of industrial relations and forms of industrial organisation, three subgroups of ways out of the crisis of Fordism (all of which are 'flexible' but in different ways).

In the third section we shall identify three types of urban region, corresponding to these three models, and we shall determine what 'offensive flexibility' and 'defensive flexibility' mean.

2.1 Fordism and its crisis.

2.1.1 Basic concepts²

The reproduction of a commodity-producing capitalist economy is far from self-sustaining. In its development the conditions of production are transformed, as are the distribution of income and the preferences for various social uses of output. The evidence shows however that, over long periods, these transformations prove to be compatible, and that accumulation, economic growth, occurs without major disturbance. This kind of joint and compatible mode of transformation of the norms of production, distribution and use is called a '*regime of accumulation*'. This regime rests on general principles of work organisation and use of techniques that one might call a *technological paradigm*.

A regime of accumulation therefore refers to a recorded set of regular macroeconomic relationships. These regularities are themselves an invaluable guide for economic agents, in particular for investors. Nevertheless their initiatives continue to be threatened by a deep-rooted uncertainty about their future overall coherence. There is therefore a need for regulatory mechanisms. We shall call the collection of norms — whether implicit or explicit — of institutions, of compensatory mechanisms and of information systems, which constantly adjust the expectations and behaviour of individuals to the general logic of the regime of accumulation, a *mode of regulation*. These forms of regulation are concerned in particular with wage formation, the forms of inter-firm competition, and the mechanisms of money and credit creation.

But the establishment and consolidation of a mode of regulation are heavily dependent on the political sphere. In this sphere what matter are political and social struggles and agreements and *institutional compromises*. Social groups, defined by their conditions of daily existence, and in particular by the position they occupy in economic relations, do not in fact devote themselves to an endless struggle. No matter how wide the divergences in their interests and the inequalities in their conditions may be, over long periods of time these groups make up a nation in which power relations are perpetuated without major dispute. A stable system of relations of domination, of alliances, and of concessions among different social groups (dominant and subordinate) is called a *social bloc*, and a social bloc is *hegemonic* when it, in a more or less coercive manner, secures recognition of its plan of action as one that conforms with the interests of the great majority of the inhabitants of a 'territory'.

Inasmuch as the interests, whose consideration defines the issues at the centre of the consensus on which the hegemonic bloc is constructed and reproduced, are economic, a coherent triangle of relations between a 'hegemonic bloc', a 'regime of accumulation' and a 'mode of regulation' takes shape. The condition and the basis for the reproduction of a hegemonic bloc is clearly the existence of a regime of accumulation that is capable of producing the conditions required to satisfy social needs in conditions acceptable to the parties that belong to the bloc (including dominated groups). In its turn the mode of regulation (on which the realisation of a regime of accumulation depends) is no more than a set of routines, of what Bourdieu called 'habitus', and of compromises institutionalised in the very process of establishment of the bloc and which last only as long as the bloc itself supports them. We shall call this whole a *model of development*.

We have deliberately used the general term 'territory'. The question that arises is: in what geographical space is a unified model of development realised? We assume that three rough levels can be distinguished: regional, national and international (Lipietz 1977 and 1985a). The national level plays a central role as the hegemonic bloc is supported by the existence of the state, which ratifies and consolidates institutionalised compromises, asserts its monopoly of 'institutionalised violence', defends the currency, enforces legislation, and manages relations with other nations. But, as Gramsci showed when he introduced this concept, the hegemonic bloc can be *regionally* differentiated: it was not and is still not the same in the north as in the south of Italy, nor is it the same in the different states of Brasil or the United States.

In a symmetrical way to the case of regional hegemonic blocs, it is necessary to question the international compatibility of models of national development. In stable periods in the development of the world economy, an *international configuration* achieves this compatibility. It always involves the hegemony of a model of development adopted in one or several nation states which themselves are therefore considered hegemonic. This hegemony, based on the greater productive efficiency of their technological paradigm and the stability of their mode of regulation, is expressed not only in the advantages that dominant countries gain from international trade, but also in the rules that they are able to impose on what Keohane calls the 'international regime'.

2.1.2 The case of Fordism.

The dominant post-war model of development which shone forth from the United States is, after Gramsci, called 'Fordism'. As a regime of accumulation Fordism was the response that emerged at the end of the Second World War to the contradictions generated by the revolutions in the 'technological paradigm' that occurred in the first half of the twentieth century at the level of production forms, mainly in industry but also in the agricultural and service sectors: Taylorism and mechanisation.

Taylorist principles involve the fullest possible separation of the mental (research and development, design, and the 'scientific' organisation of work) and the manual aspects of work (unskilled operational tasks). To Taylorism

Fordism added the incorporation of the collective knowledge of the workforce into the machine system itself. To give an illustration, Fordism sets the 'organisation and methods office' against the 'assembly line'. The very rapid productivity gains that result raise the problem of effective demand in a particularly acute manner. The Fordist regime of accumulation is characterised by not only a rapid increase in the volume of investment per head but also by a growth in per capita consumption. The expansion of these two outlets provides, internally within each nation, a counterpart for the productivity gains generated by the technological paradigm.

As for the mode of regulation, Fordism requires:

- (1) stable forms of wage relation that ensures a division of productivity gains between capital and labour and regular incomes. The main structural forms are: collective agreements, the welfare state, and social legislation
- (2) forms of relations between firms, banks and markets that allow firms to absorb the financial costs of a continuous transformation of their plant and equipment without perverse effects largely as a result of administered price setting practices. There is a tendency for industrial concentration to occur among multi-sectoral, vertically and horizontally integrated firms, with subcontracting of unskilled tasks to small and medium-size firms
- (3) a specific form of money emission: credit money, issued by banks according to the needs of the economy, and under the control of the Central Bank, and
- (4) a massive increase in the role of the state, which 'intervenes' in the regulation of the economy mainly through its regulation of the wage relation and the issuing of money, and *secondarily* through its discretionary budgetary policies. The role of other classic instruments of the interventionist state (planning, industrial policy, structural agricultural policy, and protectionism) also increases. This project and this capacity of the state to exert direct influence over the state of the economy and at any rate to guarantee the mechanisms of Fordist regulation make up what is at present (and incorrectly) called 'Keynesianism'.

In the countries where Fordism was dominant — and which were consequently the dominant countries — this model gave the *national level* a privileged role. In contrast to the classic age of imperialism, the markets for capitalist production were sought and organised essentially on a domestic basis. Leaving aside the countries of East Europe, the 'first international division of labour' largely excluded peripheral countries from trade in manufactures, reducing them to 'sources' of raw materials and immigrants. The mode of regulation of this world configuration was characterised by the hegemony of the United States. Included were its political and military hegemony, of course, and the hegemony of its technological paradigm and model of consumption, which allowed it to impose the rules of free trade (with some concessions, especially to the reconstruction of Europe and Japan, and then to the countries of the 'South'), and above all to impose its own credit money, the dollar, as the international means of exchange.

2.1.3 The crisis of Fordism: origins and periodisation

It is essential to understand that the crisis of Fordism, which developed in the 1970s, did not owe its origin to a single cause but to two sequences of destabilising events, each of which overdetermined the other. In particular it is incorrect to think that it was a matter of a new global 'crisis of under-consumption' (Piore and Sabel 1984, p. 254), and it is equally incorrect to argue, as liberals do, that it was a simple matter of a 'supply-side crisis' (inadequate profit rates) and that a restoration of profits is 'therefore' all that is needed to find a way out of the crisis. In practice the development of the crisis must be understood as articulations of 'internal causes' (the crisis of the model of development itself, principally on the supply side) and 'external' causes (the internationalisation of the economy which jeopardised the national management of demand) (Glyn *et al.* 1990; Lipietz 1985a).

Several phases can be distinguished in the articulation of this twofold set of events. The model of development along with the international configuration started to crack at the end of the 1960s. At first the productivity gains generated by Taylorism started to slow down, in spite of an increase in the capital-output ratio. The reasons for this phenomenon are many, but they can be reduced to the main principle of Taylorism. An increasingly educated working class was asked to work without thinking, which was both inefficient (from the point of view of the capitalist) and intolerable (from the point of view of the wage earners). As purchasing power continued to increase at the earlier rate, rates of profit fell, and rates of investment followed. Unemployment started to rise, putting pressure on the finances of the welfare state. The increase in oil rents accelerated this first sequence of events: crisis in the organisation of work – investment crisis – crisis of the welfare state. However, from 1973 to 1979, the security nets of the mode of regulation in crisis were fully operational. Up till 1979 the lax issue of money (in particular of dollars) and the support given to domestic demand prevented a repetition of the collapse of the 1930s. Increasing inflation concealed the underlying conflicts.

This first phase of the crisis even allowed the newly industrialising countries to spring up. Credit was plentiful, and demand was still increasing in the North; some countries in the South got into debt in order to industrialise, with the intention of exporting in order to repay the loans. Various regimes of accumulation were adopted ('primitive Taylorism' and 'peripheral Fordism'). International organisations and banks encouraged them in this action.

But with the approach of 1979 the political, financial and industrial élites in the North had to accept that 'Keynesian' policies of support for demand were not resolving the supply-side crisis, that of profitability. Profits were not restored, inflation was accelerating dangerously, and the value of the over-issued dollar fell rapidly. Then, as a result of the second oil crisis, 'monetarist' ideas were adopted: 'Reduce wages. Dismantle the welfare state. Tighten credit. There will be some victims, but the firms which manage to invent a new model of development will survive.' From 1979 to 1982 the shock was terrible. The world recession triggered off by the monetary authorities in the first countries converted to 'monetarism' (Great Britain and the United States) spread to the rest of the world. It superimposed a demand-side crisis on the

supply-side crisis, bringing to light the second sequence of events that generated the crisis: the absence of international regulation.

To balance its trade, each country had to reduce its wages more than its neighbour in order to export more and import less. To balance its capital account, each country had to increase its rates of interest more than its rivals in order to attract mobile funds. In 1982 this war of 'competitive recession' was on the verge of recreating the crisis conditions of the 1930s. In particular it was paralysing the European Community, a free trade zone without a common social policy. The newly industrialising countries trapped between rocketing interest rates and markets that were drying up were seized by the throat.

In August 1982, in the face of the imminent catastrophe foreshadowed by an increase in the number of major bankruptcies and Mexico's decision to suspend loan repayments, the world monetary authorities, in particular the American Federal Reserve Bank, put an end to this second phase. The United States resumed a policy of domestic expansion and easy credit. The recovery was extended to the rest of the world. In contrast to the first phase this recovery was not accompanied by renewed inflation, and profits started to increase again. The 'supply-side' crisis seemed over. But very sharp differences appeared.

First of all, over the years, two diametrically opposed approaches to tackling the 'supply-side crisis' were established. Some countries (the United States, Britain and France), rather than introduce innovations in the field of work organisation, restored profits and eliminated inflation by attacking the status of workers and the gains they had made. Others, mainly Japan and Northern European countries, on the other hand, managed to combine the revolution in electronics with the questioning of Taylorism. This second group of countries was shown, in the 1980s, to have chosen the more competitive course of action: they had large trade surpluses.

These surpluses worsened the crisis of the international order. The United States financed its expansion by means of a gigantic budget deficit, while (after 1986) Britain's was sustained by wage increases. No longer competitive, these countries accumulated enormous trade deficits that had to be financed by loans. Interest rates started to rise again, all the more so as Third World debt was not reimbursed. Certainly the newly industrialising countries of South East Asia like South Korea, whose industrial structures were transformed with success, gained from the growth of the American market and started to repay their debts. The case of Latin America (especially Brasil) and of the rest of the Third World was however different. The banks had in fact progressively to write off a part of their debts, but these write-offs were offset by new tensions over interest rates.

At the end of 1986 the accumulated imbalances threatened the success of this third phase. Rapid increases in the rate of interest on loans cannot in the end be sustained by productive capital. This tension resulted in the stock market crash of October 1987. The crash was immediately stemmed by a stream of issues of new money, which led to a dramatic fall in interest rates — American growth was able to continue, as was world growth, with the growing risk of renewed inflation (a little like 1979). The fact is that a passage to a fourth phase is very difficult to achieve and, despite more and more frequent stock market

crashes, this situation continues to prevail at the beginning of the 1990s. It is necessary to eliminate the American deficit without allowing the onset of a recession, which would be as catastrophic for the world as a whole, for the Third World in particular, and even for Japan and South Korea as that of the second phase.

2.2 The challenge of international competition: the invention of new forms of organisation of work

Our analysis allowed us to examine and interrelate the two main aspects of the crisis: the 'demand side', and the 'supply side'. The 'demand side', that is the erosion of the conditions that allowed 'Keynesian states' to stimulate growth by increasing domestic demand, does not yet have a satisfactory solution. And there will be no solution until new international agreements contain the law of the jungle that rules in the field of exchange rates, rates of interest, and also national variations in wage levels. In fact, over the course of the crisis, there were phases when the growth of the United States and the abundance of Eurodollars allowed world expansion (1975-9, 1983-?), and phases when North American 'monetarism' plunged the world into depression.

But, as we have also just pointed out, the countries of central and of peripheral Fordism did not all respond to the crisis in the same way. West Germany, Japan and Korea advanced on the new map of the international division of labour, while the United States, the United Kingdom and France lost ground, and Brasil, which set off like an arrow, is experiencing serious difficulties. Within countries interregional relations were also profoundly changed. As we shall show, a country's successes and failures are expressed in the development of *urban areas* with profoundly different internal dynamics.

In the world configuration of the Golden Age of Fordism, and even in the first phase of the crisis, the growth of world markets guaranteed all countries and all regions that gambled on growth a permanent positive sum game. Today, however, it is necessary to struggle to *conquer* markets whose size is sometimes increasing and sometimes decreasing. Even the growth of a country's domestic market is subordinated to the growth of its share of the world market as a result of balance of payments constraints. This rule can be bypassed through borrowing (as in the case, in the past, of Brasil and the United States and the United Kingdom) but at the risk of setting off a spiral of cumulative indebtedness.

Leaving on one side the problem (which can nevertheless not be avoided (Lipietz 1989)) of the organisation of a progressive international order, we shall concentrate on the capacity of a territory (nation or region) to face international competition.

The latter seems to be a matter of 'adaptation to the new technologies' and of the well-known need for 'flexibility'. In reality, as our former studies have suggested (Leborgne and Lipietz 1988), these 'adaptations' can vary a great deal. *Several models* have taken root, and they imply several possible hegemonic models. First of all we shall summarise the results of our analysis of the different forms of wage relations and of inter-firm relations that are

developing today, as well as of their spatial implications. Then we shall show that these differences are associated with political and cultural differences.

2.2.1 The false promises of the 'new technologies'

The erosion of the technical efficiency of Taylorism, as it appeared at the end of the 1960s, was in fact a result of social factors. The Fordist worker is in principle *not involved* in the course of the process of manufacture. Responsibility resides with technicians, engineers, and the organisation and methods office. This non-involvement generates resistance and rebellion. In the Fordist system the latter can only be avoided via excessive automation. The 'electronic revolution' seemed to offer a solution.

The main characteristic of the current technological revolution is the invasion of the microprocessor and electronic interfaces, not only into new products, but also into the process of labour itself: microelectronics redefines the very meaning of automation.

First of all microelectronics provide the devices required to make the movement of machines more complex. In this regard electronics are only an extension of earlier trends in mechanisation: increases in productivity, and increases in the volume of capital per head. Their effect on profitability is not determined.

But above all electronics enable equipment to be made more flexible. In other words they make it theoretically possible to change, even automatically, the mode of operation of standardised machines. Flexible machines, which are at least as expensive as, if not more expensive than, rigid Fordist equipment, also require continuous use though not necessarily in the production of a single product. The profitable use of a flexible machine is possible with several short runs selected from a range of *differentiated* products aimed at smaller, segmented markets.

Still more important is the fact that the management of the workshop can itself be modified with the introduction of electronics. Computer-assisted manufacturing significantly increases the possibilities of controlling in real time the in-process stocks required for each operation. Stocks can be controlled in accordance with the production needs of the workshop, while the latter can be optimised in the light of the levels of intermediate and final demand. This 'just-in-time' principle can be extended to the relations between workshops in an establishment, between the establishments of a single firm, and between firms and their subcontractors.

But these 'advantages of the new technologies' are not without disadvantages. Machines can cost a great deal, and the virtues of machines (it is assumed that machines never get tired and never go on strike) are counterbalanced by the fact that they do break down. The down-time of an automated workshop made up of thirty to fifty industrial robots could be as high as 30 to 50 per cent unless manual operatives are able, on the spot, to assume responsibility for operations that are interrupted. This fact raises the issue of the involvement and skills of the workers.

Still more severe are the limits to flexibility. Contrary to a common

overestimation of the extent of a new 'industrial divide' (Piore and Sabel 1984), the flexibility entailed by electronics does not necessarily imply the end of the tendency for the technical and financial concentration of capital to increase. In fact the flexibility of equipment is limited to a narrow range of related products. Moreover the implementation of this flexibility is a very complicated task that requires a great deal of simultaneous real-time activity on the part of the design, maintenance and manufacturing staff. Finally the machine system itself can be made obsolete as quickly as the range of products for which it was initially designed. This fact significantly reduces the advantages of flexibility.

The 'electronics revolution' therefore worsens rather than resolves the problem that underlies the crisis of the Fordist paradigm: the problem of the *involvement* or *non-involvement* of the direct worker. It is at this point that 'future models of development' start to differ.

2.2.2 Three types of industrial relations.

The first alternative path could end with the total removal of all initiative from the direct operative and with the triumph of production engineers and the organisation and methods office. The tendency could be for the workshop to become completely automatic, perhaps with a few blue-collar workers for some materials handling and cleaning tasks, and a few white-collar technicians to adjust the process. This result may be the dream of the majority of employers who remain faithful to the principles of Taylorism. It would be a matter of a *deepening* of the Fordist industrial paradigm, and not a way out of it.

The alternative is quite clearly the choice of technical systems that are less sophisticated but that require the real-time involvement of the direct operatives. The goal is to encourage the workforce, not just to involve itself voluntarily in the permanent adjustment and maintenance of equipment, but to do so in such a way that improvements could be incorporated systematically into the hardware and software. The knowledge acquired through learning-by-doing in the daily maintenance of the productive process should be amenable to formalisation and assimilation by the methods office and production engineering staff. In fact the problem is to *reconnect what Taylorism has separated: the manual and intellectual aspects of work*.

Industrial relations of this kind could seem to be more efficient than earlier types (Aoki 1986). But involvement and skill increase the autonomy of workers, and this independence was the 'hidden' reason for Taylorism. It is therefore necessary for management to give something in return.

The first alternative involves an *individual* compromise: in return for the worker's involvement he/she gets a share of the advances a firm makes in the form of bonuses, career advantages, and so on. The other alternative is collectively *negotiated* involvement. A trade union offers the involvement of its members in the struggle for increased productivity and high standards in exchange for control over working conditions, redundancies, and the distribution of productivity gains.

At the moment none of these three ways (A: continued polarisation,

B: individually negotiated involvement, and C: collectively bargained involvement) has emerged as a new hegemonic model, a new paradigm of industrialisation. They coexist within most countries, within firms, and even within plants.

2.2.3 The 'flexibility' of the wage contract.

The nature of the compromise that is finally negotiated will have profound implications for the regime of accumulation. But even without entering into a study of the macroeconomics of possible regimes, one can see straight away that much will depend on the *stability* of the *wage contract*. We touch here on 'the other' classical theme of the 'flexibility' debate.

This flexibility, which allows employers to recruit and lay off workers as they see fit, is proclaimed as necessary by many spokespersons for the employers. Its imposition is one of the aims of monetarist policies. A definitive attack against the 'excessive rigidity' of the Fordist type of wage contract would, it was argued, open the path to a new regime of accumulation. In order to outline the different possible models, we must consider, therefore, not only the three typical forms of labour process reorganisation, but also two typical forms of employment contract (I: rigid, and II: flexible). Of course what is more likely is the development of a *segmented* labour market. However an investigation of alternative future scenarios requires an examination of the most distinct combinations of alternatives.

Here one must be cautious. There is sometimes a tendency to imply that there is a link between the 'flexibility' of the new technologies and the flexibility of the wage contract. No such link exists. Before the war assembly-line workers had a 'flexible' contract, and sometimes very independent, multi-skilled workers already benefited from very 'rigid' collective agreements. What the character of the wage contract will be tomorrow depends on the social struggles of today (and, of course, on the traditions of the past). But are flexibility and rigidity compatible with any form of reorganisation of the labour process? At this stage of historical experience we can only consider the logical implications of different combinations and evaluate their initial results.

The first combination (skill polarisation with rigid contracts) is the point of departure for Fordism. It can be assumed that it will continue to predominate for a while, with a 'natural' evolution towards the second (skill polarisation with flexible contracts aimed at reducing wage costs). This scenario (a further development of Taylorist principles in conjunction with automation and fewer 'Fordist' gains for workers) can be called the *neo-Taylorist path* of technological and social development. It leads to very unsatisfactory social structures, with a polarisation of skills, a dual labour market, and a dual society. It is a future that is possible but not very nice. It is the path that seems to have been the majority choice for North American, British and French capitalism.

On the contrary, the combination of 'collective involvement with flexibility' seems quite simply inconsistent, an exercise in wishful thinking on the part of employers. The combination of 'collective involvement with a rigid contract' may seem, when compared with the previous one, a utopian dream on the part

Table 2.1 The new wage relations

Work organisation	Non-involvement	Negotiated involvement	
	Polarisation of tasks A	Individual B	Collective C
Nature of compromise			
I: rigid employment contract	Continuation of the Fordist model	Participative employers' path for a stable core of employees	Participative path with compensation for all workers
II: flexible employment contract	Liberal employers' path without compensation	Liberal and participative employers' path of 'corporate culture' type	Incoherent
Type of model	Neo-Taylorist	Californian	Kalmarian

of the workers. However this dream of a 'new deal' for the twenty-first century (Lipietz 1989) seems to be shared by some employers, not only in Sweden but also in Japan, Germany and Northern Italy. Models of development of this kind are likely to display the properties of stability of Fordism, with the employers profiting from technological trends that are less capital-intensive and more productive, and the workers being granted greater job security, higher wages and/or shorter working hours. Let us call this family of models 'Kalmarian'.³

What remain are the cases of 'individually negotiated involvement'. The difficulties of the 'rigid' variant (the voluntaristic way of involving workers) can be removed by taking into account the possibility of differentiating wages in accordance with the individual contributions of workers. Combined with the 'stick' of job loss in the flexible variant, this 'carrot' may lead to a sort of recommodification of the wage relation, which seems to be directly in line with the ideological fashion for market regulation. Let us call this class of models 'Californian' (see Table 2.1).

The evidence has quite obviously already settled the matter: Kalmarian models crush, commercially, neo-Taylorist models. The grey zone of Californian models (under which we are inclined to include Silicon Valley, San José dos Campos in Brasil, and the Third Italy) is the only one that provides arguments (often vague) for those who associate the 'flexibility of the wage relation' with 'competitiveness'. It is necessary in fact to examine each of these experiences more closely, but let us turn instead to a third form of 'flexibility': the relations among firms, which we call *industrial organisation*.

2.2.4 The forms of 'vertical near integration'

The classical form of industrial organisation in the Fordist model was the intra-firm division of labour between workshops, in accordance with Taylorist principles (I: production engineering and the organisation and methods office, II: the skilled manufacture of machines, and III: unskilled execution as, for example, in the case of assembly lines. So sharp was this division that the division between workshops could assume the form of a division between establishments, a 'spatial disintegration', and even a division at level III between final producers and subcontractors, a *vertical disintegration*. This set of divisions led to the theory of *branch circuits* (Lipietz 1974 and 1977, Lafont, Leborgne and Lipietz 1980). The new technologies offer new possibilities in the area of industrial organisation, largely as a result of the computerised management of flows of information and products, the flexibility of machines, the standardisation allowed by high-precision automated manufacturing, the modular design of products, and automated assembly of sub-assemblies. (On what follows see Leborgne (1987 and 1988).)

The segmentation of labour processes into modules and the integrated management of the sequence of modular stages allow the transformation of sequential batch processes into continuous flow processes and the continuous production of differentiated goods. The optimal management of integrated modular processes would seem to call for greater vertical integration of firms. But flexible automation (which permits the continuous production of differentiated goods) and computerised management of flows (which reduces 'transaction costs', that is the costs of establishing a market relation between two stages in a process of production) in effect presents new possibilities for vertical disintegration. The new solution that is emerging is the *specialised firm*, producing a limited range of differentiated (final or intermediate) goods. It is at this level that the management of quality, innovation and time economies is optimised.

In fact automation leads to a proliferation of specialised know-how and to an extension of the division of labour. Moreover flexible production constantly increases the importance of control over a sequence of short series. However the complexity of the integration of modular tasks increases more than in proportion to the number of links in the chain: as a result some technical disintegration allows tighter control over costs and quality. Then computer-aided management of external flows, that is of flows between firms, along with greater precision in manufacturing, allows the major firms to coordinate just-in-time subcontractors. What results is a *network of specialised firms*.

To these *technical* reasons for disintegration must be added economic and financial *pressures*: the importance of *pooling the risks* of research and development, of high-technology fixed assets, and of fixed assets in general among *several* owners of capital. The deverticalisation of large groups into networks of specialised firms, or the grouping of firms into networks of this kind may be an answer to this challenge: it is known as *vertical near integration* (Houssiaux 1957; Enrietti 1983).

Vertical near integration (VNI) involves stable relations between suppliers and their clients, customers that account for a large share of their suppliers'

turnovers, an extension of the domain of subcontracting from design to marketing, and non-commodity forms of inter-firm relations that range from subordination to partnership. It implies a generalisation of non-market relations between firms: strategic alliances, transfers of technology, joint research programmes, 'joint ventures', and so on. When the 'subordination' of subcontractors predominates (subcontractors have little initiative and do little applied research) we shall refer to *weak VNI*: it is the old tendency of Fordism. When, on the other hand, specialised firms have control over the development of their particular expertise and develop relations of partnership with their customers we shall refer to *strong VNI* or 'oblique near integration'.

But over which spaces will networks of these kinds be organised? Today one can observe two polar forms of VNI which correspond, naturally, to weak VNI and strong VNI.⁴

In the case of the United States, VNI is established by processes of geographical decentralisation and recourse to specialised firms *in other countries*: in Japan (for high-skilled, high-technology tasks) and in Third World countries for unskilled and even for semi-skilled tasks (Scott 1987). Let us call this form '*territorially disintegrated near integration*'. It results in marked deindustrialisation, a weak diffusion of high-technology innovations within national industries, and so on.

On the contrary '*territorially integrated near integration*' is realised as a network within a single national, or even regional, space. Macroeconomic multiplier and accelerator effects remain internal to the country, which retains control over the diffusion of innovations from one sector to another through direct intra-regional relations. It is the typical model in the Po Valley in Italy, in many German *Länder*, and so on.

2.3 Territorial blocs and new models of development.

The facts *already* show that certain territories (countries or regions) have advantageous combinations of a certain model of industrial relations (capital-labour relations) and a certain model of industrial organisation (inter-firm relations). The forms vary, of course, from one sector to another even in a single region (Lafont, Leborgne and Lipietz 1980). But experience shows that a 'hegemonic model', a particular combination of social relations of this kind, has a good chance of prevailing at regional or national levels. A model of development is in fact by its nature located in a particular territory: social relations of that sort, which prevail in social space, tend to spread from one sector of activity to another. This diffusion is a product of the fact that a model must take the shape of a territorial hegemonic bloc, a set of norms of social and cultural behaviour and of mental frameworks that are condensed into a compromise institutionalised at the national or regional level (Lipietz 1985b).

2.3.1 Three types of urban region

The neo-Taylorist path, as a descendant of the Fordist model whose classical tendencies were analysed in a sequence of studies from Lipietz (1974) to

Noyelle (1982), results in processes of territorial disintegration: activities at each of the three levels of skill are located in three types of region with subcontracting more and more common at the lower levels of skill (except for the final downstream assembly operations). It can be considered as the weakest form of VNI: the mediocre quality of the links in the hierarchy of firms reflects the poor quality of industrial relations within the firms. In these circumstances it is normal for territorially disintegrated VNI to prevail.

Agglomerations of subcontractors are consequently formed around major firms or in low-wage zones in order to maximise external economies of transport and minimise transaction costs. Zones of this kind can be observed in South East Asia (Scott 1987), and it is areas of this sort that enterprise zone policies are seeking to encourage in deindustrialised regions. But they can also emerge spontaneously. They correspond to *specialised productive areas* in the typologies of Garofoli (1986) and Courlet (1987). Specialised productive areas are recently formed agglomerations that have weak relations with the pre-existing regional social formation. They are monosectoral, and export-oriented, with weak intra-regional, inter-firm relations.

High-level service sector tasks (research and development, design, finance, and so on) are concentrated in the 'nodal centres' of a few metropolises or, more precisely, in their city centres, with a complete hierarchy of secondary urban centres, 'specialised tertiary areas' of 'back office jobs' (Nelson 1986).

Now let us consider the spatial manifestation of the Californian way. Its fundamental characteristic is the involvement of workers on an individual basis (with bonuses, career advantages, and the fear of redundancy as incentives). Involvement means more professionalism and more 'face-to-face' (non-hierarchical and non-market) contacts. But market regulation still prevails in the Californian models whether in industrial relations or in the exchange of products. Consequently vertical disintegration tends to become the dominant form of industrial organisation. But the need for face-to-face contacts and professionalism entails spatial concentration in zones that (again with reference to Garofoli's terminology) we shall call *local productive systems*. A local productive system is also monosectoral and export-led, but there is an intra-sectoral specialisation of firms, and therefore a tendency for *local* vertical near integration to develop among the firms. It requires a local (and probably longstanding) supply of industrial skills. The origin of the firms may be external or (through spin-off) internal. The classic example is of course Silicon Valley, Santa Clara, the earliest example of a technopole supported upstream by the 'supply of skills' from Stanford University and downstream by defence contracts. There is a large number of local productive systems spontaneously created on the basis of older traditions and regional know-how in Italy, Germany and elsewhere. The experience of South East Asia shows that state intervention and the organised diffusion of technological know-how allow a transition from a neo-Taylorist, specialised productive area to a local productive system (Scott 1987).

The class of Kalmarian models rests not only on the involvement of workers but also on collective, non-market negotiation of this involvement. Trade unions and employers' organisations, as well as political administrations at all levels, are therefore involved in the mode of regulation. There is no longer any

Table 2.2 The organisation of work and urban regions

	Wage relations		
	A	B	C
Industrial organisation			
Weak VNI	Specialised area for unskilled tasks	Specialised area for unskilled tasks	Unstable
Strong VNI	System area for high-level services in a nodal urban centre	Local productive system	System area

doubt that this class of models (examples are found in Sweden, and to some extent in Japan, Germany, Northern Italy and in a few American states such as Michigan) exhibits the highest levels of performance from a capitalist point of view.

It is certainly possible for an establishment isolated from its spatial context to adopt Kalmarian industrial relations. That situation is probably unstable. As intra-firm industrial relations are based on skill and cooperation, there is a good chance that the principles of industrial organisation will be based on a dense web of partnerships between firms, trade unions, universities and local administrations. In Garofoli's and Courlet's typology the spatial expression of this complex is called a *system area*. In this case VNI takes the form of a multi-sectoral, diversified and territorially integrated network of specialised firms and principal firms. In effect, the deployment of Kalmarian models in *system areas* requires and consolidates a social consensus: the formation of an innovative territorial hegemonic bloc.

Table 2.2 summarises this discussion. As is clear, all of these models share a tendency to favour *urban agglomerations*. The reason why lies in the way in which vertical near integration strengthens the market and face-to-face character of relationships between establishments. Both market and face-to-face relations imply proximity. Rural establishments will, of course, continue to develop, but will be less important. However urban areas may experience very different rates of growth.

2.3.2 Defensive flexibility and offensive flexibility

What are the determinants of these divergent developments? The determinants are, of course, inherited from the past, but this inheritance is reflected through the prism that results from the formation of a territorial social bloc which, through the struggles and compromises that define it, influences *all of the actors* and determines a territory's destiny. The formation of blocs of this kind

is at present under way: for the moment one can only speak of 'politico-cultural projects' whose goals are the constitution of these blocs, and of the practices of actors that tend to establish them.

Just as the 'flexibility' of machines, of work relations, and of inter-firm relations can be interpreted in different ways, so do the territorial policies and projects conducted in the name of 'flexibility' correspond to emerging social blocs that are quite different from one another. To simplify matters we shall distinguish the discourses and practices of 'defensive flexibility' and 'offensive flexibility'.

Justification for this distinction would require forays into the fields of political science, the social sciences, law, history, etc. and, as well as a multidisciplinary inquiry, would call for further conceptual developments. Above all the distinction is a hypothesis which clarifies some recorded facts to which we shall refer in note form.

The defensive option

The (labour) 'flexibility' gained is used negatively, or the 'removal of rigidities' is imposed to defend threatened markets.

It is a short-term view of 'adaptation to the constraints of competition and to the new technologies'.

Its goal is the formation or maintenance of a bloc of entrepreneurs and asset owners.

The offensive option

A capacity to develop new technologies in accordance with prospects for the development of new markets is implemented through negotiation.

It is a medium- to long-term view of the collective interests of a large proportion of the territorial community.

Its goal is the formation or maintenance of the hegemony of a bloc of entrepreneurs and productive groups.

The implications for the workers are:⁵

The destruction of the social gains that made the wage contract more rigid through the development of temporary contracts, the weakening of labour law, and so on:

The development of training, of multi-skilling, and of the initiative of workers in a context of stable wage contracts:

neo-Taylorist model.

Kalmarian model

. . . for capital are:⁶

Non-involvement of financial capital of local origin with local industrial capital.

Significant investment of local savings in local productive enterprises.

Opportunistic (short-sighted) rela-

Partnership between large firms and

tions between large firms and small subcontractors.

specialised firms.

weak VNI

strong VNI

... for institutions are:⁷

Tense and unstable relations between a central state which makes the major macroeconomic decisions and delegates the management of the social consequences to the regions, and regions which constantly demand central state support. Central state support assumes the form of *ad hoc* plans which are reviewed when there is a change in political control.

Stable agreements (even if their implementation is conflictual) at appropriate territorial levels for the establishment of networks for the exchange of information and discussions between the state, trade unions and firms about research, the definition and constant adaptation of the territorial project, and so on.

... at the ideological level are:⁸

'The imperative of modernisation' is proclaimed, and the defence of former social gains is called 'archaic'.

Modernisation is implemented, and the social problems it creates are discussed.

The existence of differences in the interests of capital and labour is denied ('everyone is in the same boat in the face of international competition').

Differences in interests are taken into account, and mutually advantageous compromises are negotiated (sometimes after long conflicts).

... at the legal level:⁹

Earlier territorial agreements that disallowed 'social dumping' are torn up, competition among workers, subcontractors and sites (inside and outside of the spatial area) increases.

The rules of the game are decided at the highest territorial level (national or continental) in bipartite or tripartite agreements, (involving employers, trade unions, and political administrations), outline laws, and sectoral collective agreements. Within this context enterprise and local agreements mobilise existing human resources.

Enterprise or establishment agreements are negotiated on an *ad hoc* basis.

These attitudes take root in the Fordist traditions that are on their way out

A Fordism which gave greater importance to low labour costs,

A Fordism which gave greater importance to know-how in engi-

ments of form' in the training of personnel, the negotiation of compromises, research and development, and so on. It encourages the cooperation of firms in the same region, a sharing of the costs of technological research, strategic alliances, and so on. This result (in which contradictory class interests and inter-firm competition seem to disappear) seems doubly paradoxical in relation to neo-classical theory and also to Marxist theory (Scherer 1970). It ceases to be so if one considers these alliances and territorial compromises as both the condition and result of a quasi-rent situation in world competition. In other words, in the absence of a global policy for the growth of demand (or for a reduction in working hours), social policies on the supply side (Kalmarian) that are based on explicit agreements among private actors but that are *not generalised at the political level* are as a matter of course confined to a minimal number of participants (firms, wage earners and territories). It is possible to guarantee full employment for a 'core group of wage earners' but on the condition that all the new jobs generated by the technical and commercial dynamism of the firm or of the firms grouped in a strategic alliance are reserved for them.

'Offensive flexibility', in the absence of a more general political agreement, can thus lead to a 'yeoman democracy', a wage earners' democracy for skilled workers of the kind that Piore and Sabel (1984) commend, but that will leave, for example, 'women slaves' in the shadows, a dual society divided on the basis of differences in gender, race or age. Already in Japan there is a tendency, which is typical of trade unionism in hegemonic countries (formerly Britain, followed by the United States), for workers to behave as 'labour aristocracies'.

2.4 Conclusion

On the basis of a crisis of the Fordist wage relation, monetarist policies have amplified international macroeconomic disorder. Two groups of territories stand out due to the differences in their results. In these two groups, two conceptions of flexibility have been implemented in the areas of capital-labour relations and capital-capital relations.

The ruling social blocs in the first group (Britain, the United States, France . . .) have practised a 'defensive flexibility', giving priority to a deregulation of the wage relation, an accentuation of the division between 'designers' and 'manual workers', the most modest forms of subcontracting, and the development of urban areas with narrow specialisations existing alongside a few metropolises where high-level tertiary activities contrast with small service trades that have no social protection.

The ruling social blocs in the second group (Scandinavia, Germany, Japan, and Northern Italy) have practised, in different degrees and leaving on one side a varying proportion of the population, offensive flexibility. They have accepted a new compromise in workplaces, exchanging the involvement of workers in the struggle for quality and productivity for various social guarantees and advantages. They have managed to organise forms of partnership between enterprises, trade unions, educational institutions, and local administrations. The increase in the density of inter-firm relations has allowed

increase in the density of relations of partnership between firms, universities and administrations.

2.3.3 The limits and risks of 'offensive flexibility'

The results of territorial projects based on 'defensive flexibility' are, in France as in Britain or in the United States, only too well known.¹⁰ The industrial success of Japan, Germany, Sweden and Northern Italy must not, however, lead us to overlook their limits.

First of all offensive flexibility covers without doubt a variety of models. There are already important differences in the areas (regional or national) in which 'flexible-offensive' social blocs have been formed. A 'national' offensive flexibility is more consistent than a 'regional' one. Neither German nor Japanese regions are homogeneous, but the regional differences between Emilia-Romagna and, for example, Sicily may in the end undermine Italy's growth. More generally the heterogeneity of the positions on modernisation of Europe's social blocs and, in practice, the absence of a 'European social space' have hampered the European Economic Community for years (Leborgne and Lipietz 1990).

Second, within a single territory the scope of Kalmarian agreements may be more or less wide. There is not a great difference between Sweden and Japan when one confines oneself to large firms and the inner circle of suppliers in VNI networks. But differences in living standards, which are already significant for wage earners as a whole, become glaring when one moves outside this inner circle. Sweden and Japan have the same (very low) rates of unemployment, but in Sweden women have a social independence which makes them look for permanent full-time work, whereas in Japan they disappear from the labour market upon marriage. Similarly old people are forced into the 'marginalised side' of Japan's dual society, whereas Sweden is an extremely homogeneous society.

This difference in the models of development rests in part on a profound macroeconomic difference, and reinforces it. It is what Aoki (1990) calls the 'dilemma of a workers' democracy'. In Fordist models, in fact, we saw that the state and/or bipartite national agreements ensured that the size of the domestic market increased in line with productivity gains. The compensation offered to workers in exchange for their acceptance of Taylorism, in the form of increases in purchasing power, involved a *division* of the fruits of the growth of aggregate productivity (or, in Marxist terms, of *relative* surplus-value).

On the contrary a firm or a region which, due to superior social organisation, produces more or produces less dearly than the rest of the world (or, in the extreme, produces what the rest of the world does not produce), and which as a result increases its market share, can guarantee its workers full employment, and even can give them wage increases.¹¹ In this case all it is doing is handing over quasi-rents, profits based on the difference between its costs of production and those of the world market (which, in Marxist terms, are extra surplus-value). The reproduction of these quasi-rents occurs through 'invest-

unskilled work, unskilled juvenile and female workers, and immigration.

neering and in skilled manufacture.

. . . in the balance of social forces

A trade unionism that is defeated after a state of tension over the former compromises or that allows employers to direct 'redeployment'. Employers relocate to circumvent social gains.

A trade unionism which mobilises the relation of strength established in the past to influence the new model of development. Employers seek to compensate for social gains by negotiating over the involvement of workers.

Their effects

The destruction of obsolescent industrial sites, and the loss of existing technical culture and know-how. Increasing dependence of the regional productive system on imports. Loss of control of the domestic market. A polarisation of the productive system around certain niches or 'competitive poles', and the abandonment of some sectors because they are 'archaic'.

Negotiations anticipating reconversions. The mobilisation, adaptation and reuse of existing know-how. An increase in the density of intra-regional, intersectoral and intra-sectoral relations. Control of the home market for certain filières. An inter-sectoral diffusion of know-how, of applied research, and of growth.

. . . and in the forms of urban growth

A specialisation of metropolitan system areas in high-level tertiary activities, with a dual social structure in these areas. The survival or development of specialised productive zones in low-skilled industrial or tertiary activities.

The development of system areas with industrial and tertiary activities.

The transition of specialised productive zones to local productive systems.

Some symptoms

The mythology of the 'small firm'. A multiplication of projects for the creation by administrations of 'technopoles'.

An increase in the density of networks of specialised firms around emerging multinationals. The formation of system areas or local productive systems through an

the consolidation of urban areas forming flexible and diversified productive systems.

With regard to these successes, people often speak of the 'cultural context' and of 'social effects'. We have tried to go a little deeper into the *policies* that are based on this culture and that further it. But it is necessary to keep in mind the fact that, in many cases, the policies of 'offensive flexibility' exclude large sections of the working classes. In every case they operate at present as a strategy for strengthening some territories *vis-à-vis* other territories and other nations. If they indicate directions for a progressive solution to the crisis, they are not in themselves sufficient. New conceptions of solidarity and democracy in urban societies and in the international economic order still remain to be defined.

Notes

1. An earlier version of this chapter was presented at the International Sociological Association Conference, Rio de Janeiro, 26-30 September 1988.
2. The basic concepts of the regulation approach used here were put forward in Aglietta (1976), Boyer (1986), Boyer and Mistral (1978), Coriat (1979), Delorme and André (1983), Lafont, Leborgne and Lipietz (1980), and Lipietz (1979, 1983, 1985b and 1985c).
3. In our 1987 paper we took up the terminology of Messine (1987): neo-Taylorist, Californian and Saturnian. The inability of General Motors to develop the 'Saturn Project' in largely neo-Taylorist geographical surroundings led us to choose the term 'Kalmarian' inspired by Rianne Mahon (1987).
4. The contrast between these two forms of spatial deployment of VNI is very striking in the industrial equipment goods sector (numerically controlled machine tools, robotics). It is true that this sector can itself be considered as a 'microcosm and the core element' of industry as a whole (Leborgne 1987): a core element because in it are developed new norms of production, and a microcosm because the sector itself becomes a scale model of the dominant principles of industrial organisation.
5. In the offensive option the imperative of modernisation and/or the introduction of new technologies provide trade unions with an opportunity to engage in protest actions aimed at securing from employers a reduction in working hours, the maintenance of employment, and compensation for the reorganisation of worktime, and at countering employers' offensives aimed at making the employment contract more flexible. This case applies in West Germany, Italy and Sweden. In the case of West Germany reference can be made to the strikes and actions of IG Metall in metal manufacturing, and to the collective agreements signed in the chemical industry (*La Note de l'IREs*, no. 12, 1988). Zachert (1988) indicates in particular that with the new technologies many workers 'fell without a parachute' (with respect to the system of job classification). Consequent trade-union action resulted in the signing of a collective agreement on 'the security of the level of wages'. A collective agreement, which is also of interest for its consequences for the areas of know-how and training, was signed on 3 March 1978 and which applies to the region of Baden-Württemberg, protects workers (in all sectors) aged 50 to 55 with a certain length of service in an enterprise. The latter received guarantees that their wage would not fall, even in the case of transfer, and that they would keep their job. They can only be made redundant for misconduct.

As far as Italy is concerned reference can be made to the negotiation (in the 1983

textiles agreement) of flexible working hours which accompanied a reduction in worktime without a proportional reduction in wages (Chiesi cited in Bachet 1986) and, more generally, to the draft agreement with IRI (Industrial Reconstruction Institute), the main management body of the largest of the state holding companies. Through this agreement signed in December 1984 the trade unions obtained the right to intervene in the preparation of modernisation projects in the framework of joint consultative committees. This agreement opened the possibility (in principle) of examining alternative courses of action and of involvement in the management of employment (training, redeployment, organisation of worktime, organisation of work . . .). In 1986 ENI and EFIM (the other two nationalised groups) adopted this same agreement (*La Note de l'IREC*, no. 11, 1988), whose aim was, through a policy on information, to promote a 'new culture' in the enterprise. If practice falls short of what is envisaged on paper, it is nonetheless the case that new spaces have opened for trade unions and that this type of agreement is spreading to the private sector. Overall in the private sector, sector-level collective bargaining, far from being abandoned in favour of plant-level bargaining, is being strengthened.

In the case of Sweden recall the Progress Agreement of the employers' organisations, trade unions and executives' organisations (SAF, LO and PTK respectively) which was signed in April 1982 and which is discussed in Mahon (1987).

In the countries that are instances of the 'defensive strategy' (the United States, Britain and France), on the contrary, employers successfully used the introduction of new technologies to worsen the employment contract. In France the February 1986 Delebarre Law, stripped of its 'constraints' (sector-level negotiation and reduced worktime), became the 1987 Seguin Law. These laws are concerned with easing restrictions on redundancies, authorising womens' night work (and, as everyone knows, this legislation was to apply essentially to the textile and food-processing industries in which conditions of work are the most unpleasant and wages the lowest), and authorising irregular hours of work.

If, with respect to the Auroux Law of 1982 on the rights of workers in the enterprise, one can agree with Jeammaud and Lyon-Caen (1987) that 'the project of democratising labour relations drew its legitimacy from a value whose restoration was spectacular and which was made more sovereign than ever: productivity', which is not specific to France, these laws did not have the repercussions intended by their proponent (Borzeix and Linhart 1988).

In so far as Britain is concerned reference can be made to the works of Maurau (1988) and Okba (1988) which highlight the growing importance of temporary work, the destabilisation of the trade unions through the attacks of Mrs Thatcher's governments, and the current development, under the aegis of Japanese capitals, of single union deals beyond the sphere of influence of the Trades Unions Congress.

6. The same dichotomy between West Germany, Italy, Japan and Sweden on the one hand and France, Britain and the United States on the other is also found when one examines the density of relations between finance capital and industrial capital and the content of different forms of partnership. To cite just the case of Japan, the financial environment of firms is as follows. Interest rates are very low, large groups are industrial, financial and commercial conglomerates, and small and medium-size firms can obtain credit from sixty-four regional and local banks that specialise in this type of lending. To these banks it is necessary to add numerous, exclusively local mutual and co-operative credit associations. In Germany the closeness of local banks and small and medium-size firms in the framework of the Länder is emphasised in many studies. In Sweden the development of industry was a result of the diversification of the banks. In Italy, if the relations between industrial capital and finance capital are not as organised as in Japan or West Germany, it is

nonetheless necessary to point out that local savings banks have close relations with small and medium-size firms and that they play a part in the creation of regional centres whose role is to provide services (research, marketing, advice) to small and medium-size firms: it is the case in Emilia-Romagna in particular.

In the second group of countries, outside of the large firms which have 'the confidence' of the banks, small and medium-size enterprises (SME) have difficulties in finding finance. In the end this finance assumes the form of 'venture capital'. In France small and medium-size enterprises have difficulties in recovering money that is owed to them: a factor in very many bankruptcies. Mayer (1988) eloquently sets out the disadvantages that small and medium-size industries (SMI) suffer and that are due to the functioning of the financial system itself. As for the content of partnerships, in France for example, in the best of cases it is a matter of large firms selling services to SME. 'It is the contribution of the group to the national effort which avoids social tensions and eases consciences . . . Our research centres can work on the margin for some SME, bring their knowledge to those who want it'. These remarks were taken from an article in the May/June 1987 issue of the journal *PME-PMI Magazine* which under the title 'PME: profitez de l'aide des grandes' ('SME: take advantage of the assistance of large enterprises') compiles a list of the different kinds of partnership. The latter are pure market relations, and have nothing to do with the non-market relations which underpin exchanges under vertical near integration and which resemble those that Renault has introduced (*La Lettre de Machine Moderne*, 4 April 1985), and that FIAT has used for a number of years (Enrietti 1983).

7. In the regions that are typical of offensive flexibility, employers' associations make use of the region to further their strategy and develop, through their initiatives, bipartite or tripartite cooperation with banks and local and regional authorities. This case applies in Italy, in West Germany and in Japan. In the case of Japan one can cite the 1978 'law for the stabilisation of sectors in crisis' which was renewed in 1983 (Laumer and Ochel 1986). This law, which was exemplary in its formulation and implementation, dealt simultaneously with the problems of excess capacity, modernisation of the whole of the industrial fabric, and retraining of wage earners.

In the regions in which defensive flexibility prevails, policies directed at firms are developed, mainly on the initiative of the administrative authorities. It is frequently the case in the United States with the renewal of 'regional policies' implemented at state level, and it is the case in France with the creation of technopoles and with the policy of 'contrats de plan' (planning agreements) and 'contrats Etat-Région' (government-region agreements) (whose application is heavily dependent on fluctuations in political control). In addition it is necessary to point out that difficulties stand in the way of the process of decentralisation in France, which stems from the laws of 1982, and that it is more a matter of deconcentration — in practice the role of the Prefect remains paramount — than decentralisation.

8. In West Germany the trade union IG Metall launched its manifesto 'Der Mensch muss bleiben' (People must remain) in 1984, and adopted a position on the role of people in the modernisation process. Later it started a poster campaign against the inauguration of Saturday work (a child said 'On Saturday, Daddy is mine!'). In France, in the face of the extent of the deregulation of the labour market, and realising the extent of the constraint that it places on the processes of modernisation, a group of modernist employers reacted and addressed other employers in the report 'Modernisation mode d'emploi' (Modernisation as a method of employment). In Britain 1986 was declared 'Industry Year' in order, it was said, to reconcile society and industry, as if the idea that 'manufacturing matters' merited interest for just one year.

9. See note 5.
10. In our study (Lafont, Leborgne and Lipietz 1980) we had already noted this divergence in the development of relationships between car manufacturers and equipment suppliers and between customers and machine-tool firms in several European countries.
11. One can see at present that countries whose superior productive efficiency ensures a trade surplus (Japan and South Korea) can implement a policy of increasing domestic demand without risk.