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# Not flexible accumulation—contradictions of value in contemporary economic geography:

## 1. Workplace and interfirm relations

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**Abstract.** In this and a subsequent paper, work by geographers that is based on the idea that we are in a period of transition to an epoch of flexible accumulation, or post-Fordism, is examined. It is argued that this thesis relies on abstracting the technical and organisational aspects of current restructuring from its value relations. An account which includes value relations shows that the phenomena said to characterise flexible accumulation are more contradictory and unstable, more varied, and more open to struggle than is supposed in work in which a new epoch is assumed. An approach based on value relations can give a richer account of current spatial-economic change. In this first paper, capital-labour relations within production, and the relations between firms are discussed.

### 1 Introduction

The idea that we are in a period of transition from “an epoch of Fordism” to one of “flexible specialisation”, “post-Fordism”, or “flexible accumulation” has been very influential in radical geography of the past ten years. There are many important differences among those who espouse this approach, most significantly between those who take a regulation approach (Dunford, 1990; Leborgne and Lipietz, 1988; Moulaert and Swyngedouw, 1989; Schoenberger, 1988; Tickell and Peck, 1992), institutionalists who perceive an emerging model based on flexible specialisation (Best, 1990; Hirst and Zeitlin, 1989; 1991; Piore and Sabel, 1984), and the ‘Californian school’, whose approach lies somewhere between the regulationists and the institutionalists (Scott, 1988a; 1988b; 1991; 1992; Storper, 1989; Storper and Scott, 1989). What these approaches share, despite their variety, is an underestimation of some contradictions characteristic of the capitalist mode of production, or, more precisely, the particular form that these contradictions are taking in the present period. The theorists of ‘flexibility’ posit an *epochal, durable* shift to a new model of production and, in some theorisations, to new models of social reproduction and politics. I shall argue this can only be maintained by ignoring contradictions of the mode of production which are in part spatial contradictions; these are preventing the emergence of a stable new mode of development.

The criticisms I make apply to the thesis of a new epoch, whether specified as ‘flexible specialisation’, ‘post-Fordism’, or ‘flexible accumulation’; I shall refer to these collectively by the more inclusive term ‘flexible accumulation’ (FA). The hypothesis of FA has been extensively criticised by geographers (Amin, 1989; Amin and Robins, 1990; Gertler, 1988; 1989; Gough, 1986; Hudson, 1989; Lovering, 1990; Murray, 1987; Penn, 1992; Sayer, 1989; Webber, 1991) and others (Bonefeld, 1993; Bonefeld and Holloway, 1991; Clarke, 1990; Gilbert et al, 1992; Pollert, 1990; Solo, 1985; Williams et al, 1987). These critics have pointed out that current trends in particular aspects of economic organisation (labour processes, employment relations, interfirm relations, and so on) are more varied and have greater continuity with earlier periods than FA accounts allow. They have shown

that flexibility in one dimension often implies inflexibility in others. Critics have also argued that FA theory tends to gloss over relations of power, whether between firms (Amin and Robins, 1990; Murray, 1987; Walsh, 1991) or between capital and labour (Elger, 1990; Fairbrother, 1988; Gertler, 1988; Hudson, 1989; Pollert, 1988; Rustin, 1989; Walsh, 1991). Frequent slippages in the FA literature between analysis and prescription have been pointed out (Clarke, 1990; Hampson, 1991; Pollert, 1988). Although I agree with these lines of criticism, in this paper and in part 2 (Gough, 1996) I develop a distinct argument:

(1) I take as a starting point some of the patterns of development proposed by FA theorists:

(2) I argue that the value relations of these patterns of development produce contradictions which tend to disrupt them; and thus

(3) that these patterns of development are unstable, so that spatial economies are developing in diverse paths which do not fit FA models.

(4) I argue that value theory can provide a more coherent account of some current areas of change, and a better guide to political choices, than can FA theory.

The results described in point (3) chime with the critics mentioned above; the distinctive contribution of this two-part study is to show how value analysis leads to these results.

Instances can be found of most of the phenomena described as part of FA. But if 'Fordism' is being replaced by a *regime* of FA, then FA must be coherent and stable, whether as a 'mode of development' or, more narrowly, as a form of production organisation; this is what I shall question. The notion of a coherent regime of FA is sustained by focusing on technical and organisational questions and neglecting capitalist value relations. I have outlined some aspatial aspects of this critique elsewhere (Gough, 1992); in this study, I develop some specifically geographical aspects. One of the weaknesses of much of the literature on FA is a separation in the treatment of different spatial scales (firm, region, nation); yet, as we shall see, part of the instability of FA lies in the problematical relation between these levels. In these papers, then, I link the analysis of these different scales. Value theory underpins this project, as value relations are both (and neither) micro and macro.

In this paper I first set out the propositions of geographical FA theory which I wish to criticise and the elements of value theory I shall draw on (section 2). The direct capital-labour relation in production (section 3), and interfirm relations (section 4) are then discussed. In part 2 of this study (Gough, 1996) I examine the internal regulation of core regions, the relations between regions, and national regulation of the space economy.

## 2 Flexible accumulation theory and the contradictions of value

My starting point is a number of elements of FA which are fairly widely agreed by FA theorists. Although I do not consider all variations, the account is sufficient to show problems of method in FA theory and its characteristic silences. The elements of the geography of FA which I consider in this first paper are as follows.

*The organisation of production.* The labour process is evolving towards task-flexible computer-controlled or computer-aided machinery, and towards a task-flexible work force, in order to produce more varied and rapidly changing goods and services. The employment relation is taking forms which are more numerically flexible. Coordination between design, production, and sales and between stages of these is being deepened, facilitated by new information and communication technologies. At the same time the division of labour is becoming more flexible through increased

specialisation of workplaces and firms, by subcontracting and networking, by alliances, and by making units of large firms into semiautonomous operating and profit centres.

*New regional production complexes.* These changes are bound up with the intensifying linkages *within* regions and localities and the increasing specialisation and differentiation *between* them. Integrated but flexible relations between enterprises produce spatial concentrations of linked activities. As the work force generally has higher levels of skills than it did under Fordism, the work force provides a further force of agglomeration. Innovation in regional complexes is promoted by the local circulation of knowledge and accumulation of experience. These linkages may be promoted by a local business culture which encourages relations of trust and cooperation between firms and between management and labour. There has been a growth of regional initiatives to strengthen these types of coherence. However, some FA theorists have emphasised that networking by firms often extends between regional agglomerations rather than merely within them (Cooke, 1988; Sabel, 1989).

*Dual production systems, dual labour markets, and the spatial division of labour.* Most FA theorists acknowledge that there is (still) much production of standardised and strongly cost-competitive products, production using low-skilled labour in repetitive tasks, production in which management-labour relations are authoritarian, and production with few local linkages; this neo-Fordist or Taylorist production is most obvious in consumer services and the manufacture of standardised components. At this point a number of divergences emerge. Some FA theorists envisage a withering away of neo-Fordist production as the productivity and quality advantages of FA are realised in ever more numerous sectors (Hall and Jacques, 1989; Sabel, 1989; Schoenberger, 1988; Storper, 1991). A more common view is that sections of capital may pursue neo-Fordist paths in the absence of appropriate institutional responses (Hirst and Zeitlin, 1991) or unless prevented from doing so by the left (Badham and Mathews, 1989; Lipietz, 1992). There is considerable lack of clarity as to the *theoretical* status of the latter strategy in relation to FA. Some authors propose a dual regime model, with post-Fordist and neo-Fordist production coexisting, a division corresponding to sectors but also possibly running through them (Albertsen, 1988; Badham and Mathews, 1989; Benko and Dunford, 1991; Leborgne and Lipietz, 1988). Others portray a dual work force as existing *within* flexible industrial districts themselves (Brusco, 1982; Harvey, 1989; Moulaert and Swyngedouw, 1991; Solinas, 1982; Storper and Scott, 1989), the division being in degree of skill and numerical flexibility.

For those who envisage a dual economy, there are differences in the geographical forms of the divide. Flexible production is usually seen as particular to the advanced countries, and possibly the newly industrialising countries (Schoenberger, 1988), with the rest of the world restricted to neo-Fordist work (Lipietz, 1987; Moulaert and Swyngedouw, 1989; Piore and Sabel, 1984; but see Storper, 1991). The position *within* the advanced countries is less clear. Some proponents of flexible specialisation imply that their model can be dominant for all sectors and areas of the advanced countries, thus avoiding an internal dual economy (Best, 1990; Hirst and Zeitlin, 1989; Murray, 1990). Other FA theorists envisage a division between flexible core regions with strong internal integration, and peripheral regions with standardised production and mostly external linkages (Tickell and Peck, 1992; compare Hudson, 1989). Others see dual production as internal to cities, with an 'internal periphery', particularly in consumer and public services (Christopherson, 1989). In this paper I will discuss the proposed dualisms within the advanced countries.

*National and international regulation.* Some FA theorists argue that processes at the national and international levels also play essential roles in the regime of FA. These arguments are considered in part 2.

The value relations which form the basis of my analysis can be summarised as a number of linked *contradictions* (Harvey, 1982; Marx, 1972a; 1972b).

**Contradiction A.** The concrete labours performed under capitalist control are abstracted from by the act of market exchange and are thus rendered as 'abstract labour', represented as value. There is consequently a tension between the pressures of value production and realisation on the one hand, and considerations arising from particular use values on the other, including those of the material, technical, and organisational aspects of production.

**Contradiction B.** Correspondingly, labour power has two inseparable but conflicting aspects, the concrete, individual characteristics of the worker, and anonymous, abstract, labour power created by the market. Capital has not only to use the particular capacities of the worker *but also* to maintain the worker as replaceable and abstract, both to use the initiative of workers *and* to maintain discipline over them (Friedman, 1977; Hyman and Elger, 1981).

**Contradiction C.** Private decisions about the use of the means of production by firms, and about the disposal of their labour power by workers, are exposed to the discipline of value through exchange. However, the efficient organisation of production as concrete material processes (use values) is often enhanced by forms of coordination other than markets, such as coordination within large firms, collaboration between firms, institutional coordination between capital and labour, and actions of the state; I shall refer to these as 'the socialisation of production' (Gough, 1991; compare with Sayer and Walker, 1992, chapter 3). But these institutional arrangements may interfere with, as well as enhance, the production of value, its private appropriation, and the discipline that value imposes on capital and labour (Eisenschitz and Gough, 1993, chapters 5, 6, and 10; Habermas, 1976). In particular, a strongly socialised economy gives labour levers with which to combat its subordination as abstract labour power.

**Contradiction D.** Competition and the impulse to expand capital force each firm to invest irrespective of the plans of others. The aggregate result is a constant tendency to overproduction of capacity. In the long term, capital forwarded increases relative to labour power exploited, tending to reduce the rate of profit. Thus overaccumulation operates both in short-term and in long-term cycles.

**Contradiction E.** By virtue of private ownership, some firms appropriate streams of value they have not created, through oligopolistic prices, technical rents, and ground rents. These flows of value and their spatial pattern (Forbes and Rimmer, 1984; Sheppard and Barnes, 1990) can have important effects on the overall pace of accumulation, effects which may be positive (Mandel, 1978) or negative (Eisenschitz and Gough, 1993, pages 268–269).

**Contradiction F.** In its basic form, capital does not organise the reproduction of labour; this is done by non-value-producing work within households, with use of commodities purchased with wages, and is organised by gender relations. There is thus the possibility of a reproduction of labour power inadequate for capital's demands. This is partly overcome by socialisation of reproduction by the state; but this is always in tension with the private responsibility of firms and workers.

I should underline some often-misunderstood points. In each of these contradictions the two poles not only conflict with but also construct each other. Value relations are not merely 'economic' but are already political: although they involve the fetishisation of human capacities as value, they also involve power and consciousness.

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Value relations are ubiquitous, operating at all spatial scales; but their abstract and aspatial forms may be developed into more concrete and spatial forms (Gough, 1991).<sup>(1)</sup>

The essence of my argument is that *FA theory tends to focus on one side of these contradictory unities, ignoring the other*. It focuses on the use values of production and consumption, the skills and initiative of workers, and the productive logic of socialisation, and ignores or plays down value in exchange, value as capital, the abstraction of labour, and the discipline of capital over labour. FA theory focuses on the competitiveness of individual firms and their appropriation of value but ignores the resultant aggregate effects such as overproduction of capital and inter-sectoral and spatial transfers of value. In this way it ignores the ways in which technical-organisational rationality is undermined by value processes.

My aim of showing what is abstracted from and repressed by FA theory determines my approach, which is to take the FA account as the starting point and show how value relations disrupt it. This theoretical deconstruction corresponds to the way in which value relations in reality deconstruct capital's projects of flexibility.

There are important differences among FA theorists in the way in which they abstract from value relations. Early regulation theory, particularly Aglietta's *A Theory of Capitalist Regulation* (1979), was centrally concerned with value relations, and sought to show how capitalist contradictions are mediated, but not finally suppressed, by specific modes of development. In practice, Aglietta's regimes of accumulation and modes of regulation are substantially detached from the fundamental contradictions (Bonefeld and Holloway, 1991; Brenner and Glick, 1991; Clarke, 1988; 1992). This weakness has been exacerbated in the subsequent evolution of regulationism, including in its use by geographers, in which value relations have played a declining role. Most clearly in the case of the 'Californian school', this has produced a convergence of theorists who use regulationist language with institutional theorists who reject Marxist value theory outright. I shall be concerned with these differences within FA theory; however, the commonalities justify a general critique.

### 3 The capital-labour relation within production

The FA view of a new dual labour market depicts two supposedly coherent structures, a core and periphery work force linked to corresponding forms of production. This view, however, is static: it misses the tension within these forms and the constant shifts between them. These are expressions of some of the value contradictions outlined above, such as the tension between autonomy and discipline of workers, the power which workers gain from strong socialisation of production, and the way in which overaccumulation compels capital to abandon cooperation with labour. I investigate these by looking in turn at the core and at the periphery.

#### 3.1 The core work force

The complexes termed 'core' involve a strong local socialisation of production (Cox and Mair, 1989; Eisenschitz and Gough, 1993, chapter 5; Gough, 1991; Harvey, 1985). The production and appropriation of knowledge are crucial. The appropriation of knowledge is highly social because of its low-cost reproduction and the

<sup>(1)</sup> This approach to value spans the 'labour theory of value', the moment of socially necessary labour time and the capitalist labour process (including knowledge production), and 'the value theory of labour', in which the constitution of value through exchange and money is emphasised. Neither side of value is prior to the other (Elson, 1979); in the two papers of this study, I am concerned with precisely this unity of production, exchange, and money.

possibilities for dissemination. More importantly, the production of knowledge by firms is problematic to the extent that it is irreducibly risky (the results, by definition, cannot be known beforehand) and because the development of knowledge tends to cut across firm and institutional boundaries. Sectors of high knowledge intensity tend to be geographically concentrated in order to tap into pools of appropriate skilled labour power (including particular individuals), to exploit knowledge linkages, and to access sectoral know-how; these sectors therefore tend to generate a work force which is socially and spatially 'core'.<sup>(2)</sup> The high socialisation of the core produces a dependence of capital on particular workers and particular locations, a spatial inflexibility, potentially weakening the subordination of labour.

The relation of capital to core labour is problematic in a number of dimensions—the labour process, the employment relation, and workers' collective organisation. *Within the labour process* the role of core labour is portrayed by FA theorists as one of 'responsible autonomy' (Friedman, 1977), in essence a recreation of the power of traditional craft labour. But this neglects the impact of capital's increasing coordination and synchronisation of labour in the core as well as in the periphery, within workplaces as well as between them. This necessarily reduces workers' autonomy over the content of their work (Hayter, 1993; Palloix, 1976) and imposes work pace and deadlines more sharply (see the example of designers, in Schoenberger, 1988). The Fordist innovation of enforcing pace of work mechanically through the production line is now being applied far more widely by using computer-controlled coordination, monitoring, and rewards. Capital is not giving up the real subordination of labour for a return to 19th-century craft autonomy (Gertler, 1988).

Moreover competition on the basis of product quality and service does not mean that cost becomes irrelevant. Core local sectors are driven from time to time variously to casualise contracts, to put downward pressure on wages, and to attempt to deskill (Boreham, 1991). For example, television production companies, a core industrial district par excellence (Storper and Christopherson, 1987), during the 1980s and 1990s in Britain have made severe attacks both on security of employment and on wages. Large software houses have instituted an increasing division of labour in order to lower the skill requirements of some jobs (GLC, 1985). Though core sectors tend to have higher rates of profit than do peripheral sectors, they nevertheless experience periods of overaccumulation locally or internationally which force management to reduce risks and costs.

Attempts to relate wages more closely to productivity conflict with the high socialisation characteristic of the core. The strongly collective nature of core production and its high knowledge content cause difficulties in devising convincing productivity indicators for small groups and individual workers (Aglietta, 1979, pages 147–150). FA theorists highlight the contribution which the commitment of core workers makes to continuous innovation; but this is reduced by intensification and casualisation.

Thus the impulse to subordinate labour in order to achieve stronger coordination, speed of work, and reduction of skill conflicts with the maintenance of workers' commitment, just as it has within the Fordist labour process (contradictions A and B). This subordination occurs even in core sectors because of the pressures of overaccumulation (contradiction D).

<sup>(2)</sup> This account implies that the core is not essentially a result of new practices of flexibility but rather reflects the central role played by the socialisation of knowledge throughout the history of industrial capitalism (Storper and Walker, 1989).

Further problems arise from *the stability of the employment contract*. On the one hand, flexible specialisation theorists usually portray flexible industrial districts as having a high turnover of labour because of workers moving between firms to improve their jobs. On the other hand, Scott (1988a) and Storper and Scott (1989) see the new industrial districts as marked by high labour turnover arising in the first place from employers' use of short-term contracts. Such contracts enable employers to respond to qualitative changes in their production, quantitative fluctuations, and poor individual worker performance; replacement of workers poses no major problems because of the skilled labour pool reproduced by spatial agglomeration of the industry. Both these accounts abstract from the profitability of the local sector. In times of prosperity, high turnover of labour generally arises from workers' choices. Employers tend to hang on to labour, not merely because of difficulties of recruitment in a tight market but also because in knowledge-intensive sectors continuity of individual and group experience is crucial. Conversely, in times of pressure on profits high turnover of labour can arise from employers' increased use of short-term contracts and redundancies. Thus a 'flexible' high-turnover labour market in industrial districts can arise from quite different, even contrary, processes, based on the conditions of valorisation.

Whichever the source of high turnover of labour, there are penalties for capital. Accumulated experience is lost. The commitment of the workers to their employer is reduced. Scott (1988a) argues that large labour markets produced by agglomeration benefit employers' use of short-term contracts, because search costs are lowered and workers have other alternatives to fall back on. But, when labour markets are tight, such markets increase the autonomy and lack of commitment of workers; in this sense they are *less* controllable by employers than are small labour markets (Eisenschitz and Gough, 1993, pages 155–158). Core labour markets are thus more problematic for capital than FA theory allows. Both in labour processes and in labour markets pressures of value lead employers to undermine the bases of competitive success. This is missed by FA theorists because of their focus on productivity in abstraction from value.

These problems for capital arise even in the absence of unions; contrary to arguments of Schoenberger (1989) and Scott (1988a), workers' resistance can be important even in ununionised small firms in disintegrated districts. But there are also strong bases for *collective organisation* in the core—the difficulties for employers of replacing strikers, the timeliness of much knowledge-intensive production, and intricate vertical linkages which mean that disruptions multiply rapidly. In industrial districts the geographical concentration of workers of the same industry facilitates union organisation. This is why there has often been strong union organisation in traditional industrial districts in such sectors as small batch engineering, printing, and furnituremaking. Recent developments in just-in-time production and the increasing coordination of flows between numerous workplaces tend to increase the vulnerability of employers to industrial action (Gertler, 1988; 1989). Just as the coordination of labour by a production line is vulnerable to action (Aglietta, 1979), so is the new coordination of networked firms. It should not surprise us to find these continuities with the classic Fordist labour process: the elaboration and coordination of the social division of labour by capital remains its method of increasing relative surplus value *and* at the same time is the source of its vulnerability to labour (contradiction C).

Over the past twenty years, collective action by labour in core districts, both traditional and 'sunrise', has been uneven: although there has been action in sectors such as printing, television, and clearing banks, labour has been fairly passive in

sectors such as batch electronics, software, and business services. But such inactivity cannot be read as a new, permanent regime of collaborative industrial relations in flexible complexes (Lovering, 1990). First, the conditions of stagnation, reinforced by neoliberalism, have been rather successful in imposing the discipline of value on the trade-union movement. Second, in the case of the new, expanding, industrial districts, employers have benefited from labour with a temporary lack of local-sectoral traditions of organisation (Friedman, 1977; Massey and Meegan, 1978). This process has been portrayed by some FA theorists as a shift from conflictual Fordist localities to consensual post-Fordist ones (Moulaert and Swyngedouw, 1989; Storper and Scott, 1989). But one does not have to go through the dubious process of identifying localities with regimes of accumulation<sup>(3)</sup> in order to understand how employers can obtain compliant labour in new core districts: the novelty of the sector and the weakness of union traditions are sufficient explanation. Weak union organisation may, anyway, be only temporary, as core sectors, once established, tend to be strongly spatially rooted: they are usually able to shift only through wholesale restructuring (Storper and Walker, 1989).<sup>(4)</sup> In other words, the immobility of core sectors, necessary for their 'flexibility', makes them vulnerable to labour's collective organisation (contradictions A and C).

Accumulation in core regions is thus vulnerable to the effects of casualised and individualised employment contracts, wage restraint, deskilling, and to industrial action. These pressures are intensified in the current period by a low average rate of profit. FA theorists focus on the strength of the core deriving from its high socialisation of production; but this characteristic tends to undermine the real subordination of labour. Scott's (1988a, page 181) assertion that there is a "dissolution of labour market rigidities" within the core is the opposite of the case.

### 3.2 Peripheral work forces

Sectors and areas in which a low-skill, low-wage, numerically flexible work force is used have their own contradictions. The most obvious is the danger of political revolt against dictatorship in the workplace, job losses, and poverty, often sharpened by the racialised and gendered construction of these conditions. The job insecurity of peripheral localities tends to discipline labour, but this has limitations: in the absence of institutions of collaboration, militancy can reemerge during local economic upturns, and high unemployment can stimulate stronger resistance to redundancies and closures.<sup>(5)</sup> Moreover, to the extent that the stability of employment relations in parts of the periphery has been dependent on precapitalist social relations (for example, in southern Europe), this is being eroded in the very long term by capitalist cultural development (Hadjimichalis and Vaiou, 1989): the proletarianisation of the periphery makes it more volatile. Since the late 1960s there have been many revolts, both production based and community based, in

<sup>(3)</sup> To explain the industrial relations of the steel, coal, and clothing industries, Storper and Scott (1989) dub steel and coal areas 'Fordist' and clothing areas 'post-Fordist' (see also Esser and Hirsch, 1989). This has no basis in the labour processes of these industries (Hudson, 1989). It involves circular and tautologous reasoning: militant trade unions are Fordist, hence industrial harmony is a feature of post-Fordism. The assignment of strings of characteristics to Fordism and post-Fordism, which are then presented as being explanatory, is a structuralist method found in much of the literature.

<sup>(4)</sup> Storper and Walker's argument, although overgeneralised, is valid for many core sectors.

<sup>(5)</sup> FA authors often assume high unemployment to be a permanent feature of FA (for example, Esser and Hirsch, 1989; Schoenberger, 1989). But this belief is contradicted by the notion of a renewed phase of strong accumulation through FA.



peripheral localities of advanced countries, revolts which have posed major problems for capital. These struggles have been attenuated by high unemployment, successive defeats of the trade-union and black movements, and the swing of these movements to the right; but it would be economistic to assume that this political weakness is permanent (Painter, 1991). The stepping up in recent years of police repression of the urban poor (Davis, 1990; Esser and Hirsch, 1989) suggests that the state is not confident that discontent can be contained.

Much of the numerical flexibility of labour on the periphery is associated with *inflexible*, standardised labour processes. Deskilling is achieved through capital-intensive machinery which requires shift working to valorise it sufficiently rapidly, a logic which is now spreading from manufacturing to consumer services. This high capital intensity of much peripheral work renders it vulnerable to collective action. There is also rigidity in the quality of peripheral economies. The difficulty of earning surplus profits from neo-Fordist production means that firms may seek to move into less-standardised production; but the possibility of doing this in situ is inhibited by the attitudes and skills of local labour (contradictions A and B). Thus the periphery does not escape the problems of labour subordination.

### 3.3 An unstable dualism

The models of core and periphery proposed by FA theory are thus continually broken up, from opposite 'directions', by the contradictory unities of worker's initiative and discipline, particular skills and the abstract worker, and of socialisation and valorisation. Moreover, the shifts between core and peripheral forms take place unevenly in different dimensions of the capital-labour relation—skill, worker initiative, wages, job security—which do not map simply onto each other to form a single core-periphery dualism or continuum. I argue in part 2 of this study that social reproduction outside the workplace deepens these problems. Thus neither a pure FA core nor a core-periphery dualism is convincing as a new stable and generalisable model of the capital-labour relation. What the above discussion suggests, rather, are ever-shifting forms (Bramble and Fieldes, 1991), resting on value contradictions 'developed' by, amongst other things, the particular technical characteristics of production, the conditions of profitability, and the resources these give to the two classes.

Hirst and Zeitlin's (1991) representation of the flexible specialisation approach might appear to escape these criticisms. They argue for an open view of the relation between flexible specialisation and mass production (and hence of core and periphery), free from rigid historical periodisations, in which all real cases are particular mixtures of the two forms.<sup>(6)</sup> Each of the production forms has particular regulatory requirements: in flexible specialisation the requirements are to balance cooperation and competition among productive units, in mass production they are to balance the different stages of production and to match demand to output. Social and political institutions can meet these requirements in various ways; when they do so we have noncontradictory systems. It is true that this is not always achieved: instability can occur from mismatches between the requirements of economic-production paradigms and the social-political system. But this pictures the problems as arising from a mismatch of two distinct systems rather than from the contradictions of unitary processes.

<sup>(6)</sup> Hirst and Zeitlin thereby contradict the claim of most other flexible specialisation theorists, that Fordism will largely be replaced by flexible specialisation, a claim based purely on considerations of technical-organisational efficiency (Badham and Mathews, 1989; Piore and Sabel, 1984; Sabel, 1989).

Moreover, it constructs a duality between a social-political realm where there is choice *and* a realm of production which is determined technologically and (in the conventional sense) 'economically' (even if it varies on a continuum from flexible specialisation to mass production). This depoliticises the economic-production realm and underdetermines the social-political sphere. Hirst and Zeitlin miss the series of (contradictory) processes, at once economic, social, and political, which both structure and undermine their ideal-type forms.

#### 4 Interfirm relations

FA theorists have focused on contemporary trends towards vertical disintegration and towards workplace and firm specialisation (Leborgne and Lipietz, 1988; 1992; Scott, 1988a; 1988b). These developments are seen as powered by the productivity of flexible specialisation and economies of scope and by the application of new technologies to coordination. Once again, I want to question not so much the empirical pattern but rather the view of FA theorists that the emergent forms are more flexible than the old and that they are part of an emergent stable model of interfirm relations. The latter view rests either on technological determination, as when Leborgne and Lipietz (1988, page 277) claim that the new interfirm relations are "induced by new technologies", or on organisational determination, as when Storper and Scott (1989) portray "system-wide coordinating institutions" of the industrial districts as capable of suppressing tensions in interfirm relations.

An alternative approach to these interfirm relations is to see them as being shaped not only by the mutual dependence of, but also by tensions between, markets and the socialisation of production (contradiction C). Vertical disintegration of production enables concentration of particular stages of production into specialist firms, where it benefits from economies of scale, economies of scope, and learning-by-doing, that is, from enhanced socialisation within the firm. This process has been a powerful one throughout the history of capitalist industrialisation: development of technique in particular stages of production, and widening of the market for these stages, leads to a splitting off of those stages and an elaboration of the social division of labour (Sayer and Walker, 1992). The growing specialist enterprises are then free to sell to a variety of downstream firms, creating a market. There is thus a mutual construction of *intrafirm socialisation* and *markets* in intermediate products. This process combines increasing flexibility—through externalised purchase with choice of buyers and sellers—with increasing inflexibility arising from narrower specialisation by firms (Sayer, 1989) and increasing inflexibility in the capital-labour relation as a result of concentration of production and centralisation of ownership. Thus, for example, privatisation of local government services is not simply a trend towards flexibility and fragmentation but serves to create large specialist firms embodying new forms of socialisation.

But while socialisation and markets are mutually constructing they are also in tension. Vertical disintegration is marked by tensions between market and non-market coordination and between productive efficiency and value production (contradictions A and C). One can see these tensions in a number of areas, as outlined in the next three sections.

##### 4.1 Close versus loose subcontracting

FA theory highlights two increasingly used models of subcontracting: one which may be called 'close subcontracting', involving long-term contracts, possibly financial and technical aid from the contractor, and collaboration over product design and technologies; one which may be termed 'loose subcontracting', involving minimal ties

and commitments (Cooke, 1988; Leborgne and Lipietz, 1992).<sup>(7)</sup> These arrangements are often described, without distinction, as 'flexible'; but, as with the 'flexibilities' of core and periphery, they are flexible in opposite senses. Close subcontracting facilitates flexibility with respect to product delivery, quality, and design, whereas loose subcontracting enables costs and volume fluctuations to be externalised.

As with the models of core and periphery work forces, each of these forms of subcontracting is pulled towards the other, as each contains the tension between socialisation and value: close subcontracting is weakened by private ownership, whereas loose subcontracting suffers from insufficient socialisation. To consider, first, close subcontracting, its coordination of production can come close to the internal planning of vertically integrated firms (Chandler, 1977; Walsh, 1991); yet the lack of single ownership creates difficulties. Contract prices are not determined to any great degree by a market: the product or service is, in significant respects, unique, and other benefits and resources are often transferred between the firms. Like transfer prices within firms, these contract prices therefore lack transparency; unlike transfer prices, their determination is hindered by the different interests of the two firms (contradiction E). Moreover, the subcontractors have substantial bargaining power over contractors, especially if the former are strongly innovative. Where major firms use nearby subcontractors in order to shorten delivery times or to maintain close liaison, the unique geographical position of the subcontractor gives it further bargaining power. In short, in close subcontracting the productive benefits of intimate coordination cut across the still-distinct interests of the two firms: socialisation conflicts with private ownership. Thus, although Sayer (1989) is right to emphasise the benefits of integration across firms, he is wrong to say that their separate ownership thereby becomes unimportant.

Loose subcontracting, on the other hand, suffers from problems of reliability of supply, quality control, and product innovation; the advantages for the contractor of cost and risk reduction often have the downside of insufficient socialisation. The problems of both models mean that subcontracting is actually very varied and shifting in its forms (Amin and Thrift, 1992; Holmes, 1986) as firms attempt to find balances between these conflicting considerations.

#### 4.2 Efficiency versus capital accumulation

The moment of capital as money is a neglected element in the construction of both vertical and horizontal firm structure; yet it often contradicts considerations of productive efficiency (Bryan, 1988; Fagan and Le Heron, 1994). The fundamental dynamic of firms is not merely to increase their rate or mass of profit, but to expand their capital value (Marx, 1972a). If they are to avoid holding money assets, with their low rate of return, firms need continually to find fields where their profits can be invested productively. Alternative trajectories towards specialisation, concentration on core activities, or diversification depend not merely on their respective productive logics but also on the quantity of profits to be accumulated. The increased use of subcontracting in the 1980s in Europe and the USA was partly based on the low profitability of many large firms and their consequent lack of resources to maintain a competitive position in all their fields of operation; in contrast, in Japan the major firms pursued diversification even into quite heterogeneous fields in order to absorb their funds (Thomson, 1992). Thus in profitable firms the pressure to accumulate inclines the firm to keep direct control over its

<sup>(7)</sup> Leborgne and Lipietz (1992) refer to close and loose subcontracting as, respectively, 'horizontal quasi-integration' and 'vertical quasi-integration', whereas Cooke (1988) refers to close subcontracting as 'vertical quasi-integration' or 'diagonal integration'.

existing operations and the fruits of its research; the higher the rate of accumulation the less propensity there is to subcontract. This partly accounts for the way in which the 'core businesses' of large firms, highlighted by FA theorists, have a tendency to ripple outwards irrespective of production considerations.

The converse of this is the shortage of money capital experienced by many dynamic small firms. They have difficulty in internalising—that is, socialising—the link between money and productive capital. In countries with relatively free markets in ownership, the result is a propensity for these firms to be taken over. Both for large and for small firms, then, the tension between money and productive capital, asset value and productive efficiency, creates problems in defining firms' specialisation.

#### 4.3 Knowledge, ownership, and inflexibility

The contradictions of subcontracting and of diversification—specialisation are the more acute the more knowledge-intensive the industry. The costs and the risks of research and development (R&D) and retooling in many fields are leading to new forms of partial centralisation of capital: alliances between transnational corporations, and constellations of close subcontracting firms formed by large companies (Amin and Robins, 1990; Amin and Thrift, 1992). These arrangements may be said to be 'flexible' in that there is an initial choice of partner, and the synergies are not all determined *a priori*. But there are acute problems in the ownership of knowledge (Cooke, 1988) and the coordination of fixed investments; these problems are minimised by long-term partnerships, but such partnerships are then inflexible and impose obligations. Although collaborations in R&D may be motivated by a wish to minimise risks (Leborgne and Lipietz, 1988), the separation of control also increases those risks. Indeed, one resolution of these tensions is a straightforward centralisation of capital (Amin and Robins, 1990; Bianchi, 1992; Hilpert, 1991; Martinelli and Schoenberger, 1989). Thus economies of scale and scope in the generation and mobilisation of knowledge produce tensions between the logics of socialisation and markets, just as they have in material production.<sup>(8)</sup>

These three types of tension may explain the different geographies of networking proposed by various authors. Flexible specialisation theorists picture close subcontracting as being associated with proximity; loose subcontracting tends to be far-flung. Cooke (1988), however, reverses this geography, with close subcontracting far-flung and loose subcontracting proximate. Leborgne and Lipietz (1988) see the first pattern as characteristic of Germany and Japan, and the second as characteristic of the USA. These different accounts arise because of emphases on different sides of the contrary processes shaping each type of subcontracting. In loose subcontracting, the just-in-time system leads to proximate location (Cooke, 1988) whereas cost tends to lead to dispersal. In close subcontracting, face-to-face contacts and the building of trust lead to proximity (Brusco, 1982; Hirst and Zeitlin, 1989; Scott, 1988a), whereas the need to access new sources of knowledge, problems of private appropriation of knowledge, and shortages of technical labour power tend to lead to far-flung relations (Cooke, 1988). These different accounts, and the variety of the geography of interfirm relations in reality, can be understood, then, as expressions of the contradictions I have outlined.

<sup>(8)</sup> The notion in much of the 'looser' writing on FA (Hall and Jacques, 1989) that increasing knowledge intensity produces increasing flexibility in interfirm relations and in the capital-labour relation rests on no more than the metaphor 'material = rigid, ideas = fluid'; knowledge generation as a labour process is not examined.

FA theory thus misses the ways in which the new forms of interfirm relations contain tensions between socialisation and productive logics on the one hand and private ownership, appropriation, and accumulation on the other.<sup>(9)</sup>

## 5 First conclusions

The critique will be continued in part 2 of the study (Gough, 1996), but some conclusions may be drawn at this stage.

### 5.1 Abstraction and contradiction

FA theory is built up from what are claimed to be coherent models; although the present period is acknowledged as one of transition and complexity, it is nevertheless seen as a transition from one model to another or to a combination of models. In the case of flexible specialisation theory these models are constructed as ideal types (Hirst and Zeitlin, 1991), in regulationism as structural-functionalist forms of social coherence. In both these approaches, in order to construct the coherence and noncontradictory quality of the model, various forms of abstraction are made: of technical-organisational processes from value processes; of flexibilities from inflexibilities; of particular forms of capitalist organisation from the capitalist mode of production.<sup>(10)</sup> These abstractions have had a particular attraction for the geography of the past fifteen or so years, which has been focused one-sidedly on production and on the concrete, material features of particular territories; this is one reason for the popularity of FA amongst geographers. However, the abstractions of value are not arbitrary, but are 'determinate abstractions', that is, abstractions created by social processes themselves. Market exchange *produces* the abstraction of abstract labour from concrete labour; the circulation and competition of capital *produces* the abstraction of the value of capital (fictitious capital) from productive use values; and so on (Gunn, 1989). The abstractions of value are therefore unavoidable parts of the social processes analysed by FA theory.

If value processes are included, the patterns highlighted by FA theory are seen to be more unstable than is claimed. The form of abstraction used in FA theory leads to dynamics being external to the production models (Webber, 1991). If there are serious contradictions, they were in the past (Fordism). Dynamics are then reduced to the overcoming of the inertia of old habits, and, through open-ended experiment, moving towards a new stable structure to replace one which has definitively ended. In contrast, the approach adopted here puts contradictions centre stage, so that dynamics are contained within the basic concepts themselves (Ollman, 1993).<sup>(11)</sup>

### 5.2 Political implications

The view in FA theory that a new form of capitalist production organisation is in the offing which can recreate conditions of sustained growth (even if there are disagreements about its preconditions) leads to a strategy for labour at the workplace level to accept the adoption of, or to pressure management to adopt, an FA model.

<sup>(9)</sup> Scott (1988a; 1988b) argues that FA has been powered, in part, by turbulent conditions in final markets and by management's attempts to discipline sections of labour. But these market conditions are not understood within a marxist theory of crisis tendencies and are therefore reduced to a *given 'context'* within which a new stable model is being formed. My argument is that FA contains and propagates the crisis tendencies.

<sup>(10)</sup> The same abstractions are made by regulationist analysts of the Fordist regime of accumulation (Brenner and Glick, 1991; Clarke, 1988; 1992). Tickell and Peck (1992, page 190) are wrong to say that there is general agreement on the character of Fordism.

<sup>(11)</sup> The weak treatment of dynamics within regulation approaches has its antecedents in French structuralism, particularly Althusserian Marxism (Clarke, 1990; Clarke et al, 1980).

Core workers are regarded as 'well-to-do' (Moulaert and Swyngedouw, 1989, page 339) and therefore as being inclined to this kind of collaborative politics. It is the lot of workers and communities in the periphery which is the problem; but as they are said to be a minority in the advanced countries, their political clout is small. They will at best be the objects rather than the subjects of progressive policies (Moulaert and Swyngedouw, 1989, page 339; also, see Galbraith, 1992), such policies thus being reduced to a redistribution towards the disadvantaged by the state. But we have seen that capital-labour relations and interfirm relations do not have the stability which FA theory proposes. Core workers and core firms may be subjected to processes said to characterise the periphery (Marcuse, 1989) and may not find themselves in the politically quiescent state which FA theory expects.

The thread running through current capital-labour relations is not abstract numerical or task flexibility but is class struggle subject to a long-period crisis of accumulation and to varied sectoral and geographical conditions. This theorisation is better able to explain the great contemporary variety in capital-labour relations (Webber, 1991). Some FA theorists do acknowledge a role of intensified class conflict in shaping 'flexible' labour relations (Moulaert and Swyngedouw, 1989; Rustin, 1989; Scott, 1988a; 1988b). But this insight is contradicted by the view that we are entering a new *epoch* of FA industrial relations, which would therefore endure beyond the current conjuncture of class relations. Thus despite a nod towards class conflict, the essential political perspective is fatalistic. I develop this theme further in part 2.

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