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From Fordism to Flexibility: the place of retailing

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Introduction.

Over the past four years in Britain there has been a growing debate about the nature of the change in industrial system that has run alongside, some would say depended on, the electronic revolution. The French regulation school, through its most influential author in Britain Michael Aglietta, characterises the change as a move from Fordism to neo-Fordism, the electronic revolution allowing an extension of Fordist principles to accommodate new systems of labour organisation, management, and product flexibility. Some writers in this school refer to the new stage as flexible automation, (see Boyer and Coriat for example).

An alternative view is associated with the work of Charles Sabel from MIT and collaborators in the US and Western Europe. Sabel argues that the transition - or more correctly the potential transition - is from mass production to flexible specialisation, the latter characterised by a system centred on craft skill, small autonomous workgroups, continuous innovation and new forms of trans market co-operation. In his best known book, written with Michael Piore, (47) he argues that at the time of the second industrial revolution at the end of the 19th century, there was no determining economic reason for mass production to emerge as dominant over the traditions of craft production. It did so for a variety of political, historical and institutional reasons, strongest in the USA and the UK, which were then re-inforced. In the present period there is an equivalent choice because of the crisis of Fordism, and a number of developments both in consumption and production, which once more have allowed the craft tradition to re-emerge, (the historical argument is set out most fully in 57).

Flexible specialisation has run into a barrage of criticism, particularly from a trade union and labour process tradition, which characterises the new flexibility of the 1980's largely in terms of a strategy by capital to weaken labour, through new technology, sub-contracting, and an ever sharper division between a core and peripheral workforce (see for example 42, 43 and 53). This body of work puts much less emphasis on the technological changes of the present era (though contesting the Sabel/Piore/Zeitlin historical account of the first industrial divide), and indeed on the very notion of a shift from one industrial era to another. Rather they emphasise the crisis of Fordism from the mid 1960's, and ^{see} the strategy of 'flexibility as being one of a number adopted by capital to overcome that crisis'.

One axis of the debate then is the extent to which it is useful to talk about a new industrial era, and the second is - if it is useful - how should this change be described. My own view is that it is not enough to analyse the current period solely in terms of a classic Marxist crisis analysis, in which - as in all previous economic crises - capital re-establishes profitability by a mixture of capital devaluation, wage cuts, and productivity increases. This may be true of the current era, but it is insufficient to grasp the profound and widespread changes that are currently occurring, a number of which do stand the assumptions of mass production on their head. Whether we call these changes flexible automation, neo-Fordism, post-Fordism, flexible specialisation, just in time production (52) or disorganised capitalism (32) is for the moment less important than recognising the profundity of the change.

This applies in particular to industrial policy making, whether public, private or trade union. Both in Britain and the USA, industrial strategies towards restructuring have been locked in the categories of mass production - volume production, lower costs, deskilling technology, standardised output, managerial dictatorship, manufacturing dominance, antagonistic competition. Labour has for the most part resisted the attacks on skill, wages and organisation, but has had little to offer as an alternative except protection. There has been little

alternative productive strategy. What there has been has come largely from local authorities both in Europe and America, and it is in this context that the flexible specialisation ideas have been particularly suggestive. One example is the industrial policies pursued by the Greater London Council, (28) particularly in the furniture, clothing and cultural industries. Another would be the work of groups of local authorities in the UK on the clothing and motor industries. Massachusetts state, the Baden Wuerttemberg regional government, and many of the Italian municipalities have developed programmes which are based on a quite different approach to those associated with the mass production era. Currently the Cypriot government is discussing a national industrial policy explicitly modelled on the flexible specialisation argument, which Sabel himself has said may be particularly relevant for third world industrial policy.

It is not that the local government policies have been inspired by Sabel. If anything the opposite is the case, with Sabel identifying the importance of local government in the current industrial era in part on the basis of these examples. Rather each have been dealing with similar problems, which Sabel has theorised in a particular way. As so often happens, theory does not emerge from the abstract, but rather as a way of thinking about particular practises, and in doing so helps to shape those practises in turn. The importance of Sabel and the new era theorists is not that they are right, but that they are relevant, and in contemporary economics it is relevance which is at a premium.

In this paper I want to look at these issues in the context of one sector which has traditionally been resistant to mass production, but which has been transformed by the electronic revolution, namely retailing and distribution. In one of the less dynamic branches of retailing, the department store, labour productivity in the US rose by 2.8% per annum between 1967 and 1986, and by 4.5% p.a. between 1980 and 1986. The nature of the changes in retailing will, I hope, cast light on the characteristics of the wider third industrial revolution, and on the debate on the transition from mass production to some form of flexibility.

Retailing and distribution.

In 1980 it was estimated that nearly one third of the UK's GDP (32.5%) was produced in the distribution sector, (Childerley, 14). Some of this represents inter-firm transfers. But even if we exclude these, the physical distribution of goods from producers to final consumers is still a substantial proportion of national output. A US study around this time estimated final consumer distribution to be 20% of GNP, of which 21% was the costs of inventory carrying, 47% the cost of transport, 21% the cost of warehousing, and 11% other costs such as order processing and administration. (see Kearney, cited by Martin in 38, p.8).

Distribution does not transform goods. It is not production in that sense. Rather it a) shifts the location of goods; b) assembles and disassembles bundles of goods; c) transfers the ownership of goods; d) stores them. It is an intermediary between a large number of suppliers, and a much larger number of consumers, and the latter will be distinguished by the fact that each of them will want a different end product, that is to say no one final consumer basket of goods is likely to be identical to another.

The limiting case would be a producer who supplied all goods from a single factory, and sold them in standardised bundles to consumers who came to the factory in time to receive them from the end of the assembly line. Because of the spatial dispersion of producers and consumers the distribution process is established. It consists of a succession of the following functions: stockholding; assembly and break up of loads; transport; purchase and sale. In each case the drive is to maximise the speed up each of these operations upto the point of final consumption, in other words to increase the turnover time of capital. Stockholding time would be minimised on just in time principles. Transport would operate according to volume economies, and on the minimum number of routes. Assembly and break up of loads would be as standardised as possible. The sale of goods should not be interrupted by the time taken on a transaction, nor indeed by the purchasers immediate possession of cash.

The problems arise not just because of the geographical dispersion of producers and consumers, nor just because each consumer's final basket load of goods is likely to be unique, but also because of the uncertainties of final consumption. The consumer may make many purchasing decisions on the spot while comparing alternatives. Manufacturer and retailer will never be certain whether a particular item will sell or sell out. An item may do well in one place and not in another. While consumer behaviour can be and is forecasted, the nature of consumer purchasing is qualitatively different from the purchasing by firms from other firms. Variations in final consumption from forecast will work their way down the line back to the manufacturer.

The history of distribution is one of innumerable different ways of organising these processes. In general the manufacturers will aim to shift the cost of stockholding and the market risks down the line to distributors. The retailer will aim to shift transport costs and final bundle assembly on to the customer (self service), and to purchase on sale or return from the manufacturer. The retailer's interest will be in the centralisation of shops and minimisation of stocks and lines. They work on the knife edge of turnover and variety.

Initially there was the local, general store; then in towns and town centres speciality stores (greengrocers, bakers, fishmongers, hardware merchants, clothes shops, furniture stores). In the first, the customer assembled their goods from a restricted choice in a single shop (such as one found in a village). In the second, the customer moves around speciality stores along the high street. The innovation of the department store was to put speciality stores into the same building - to spatially concentrate the specialisms. The discount store aimed to undercut the department store by stocking fewer lines, having less service, and cutting prices to increase turnover on the lower margins. (see Bluestone et al 9, on the history of the department store, and also 25 and 30). Supermarkets and superstores are in part based on expanded choice in speciality goods (groceries, clothing, toys) in a centralised location. Hypermarkets, shopping malls and gallerias, like the earlier department stores concentrate specialists shops in single locations.

Within the store the crucial change was from nodal assembly by a shop assistant behind a counter acting on the orders of the customer, to a semi-flow line self service system which characterises most modern shopping.

Between the stores, the economies of bulk purchasing, specialised store planning, & integrated distribution and warehousing systems lay behind the growth of the

multiples, and the concentration of the industry. In the UK, the share of the multiples in the grocery trade has risen from 42% to 70% between 1970 and 1985, while the independents have fallen from 43% to 18% over the same period, (36, p.56). There is also multiple dominance in other fields such as clothing, footwear, and furniture, as well as in the so called cultural industries, books, records, TV, and associated hardware.

Until the 1960's the main innovations in retailing concerned strategic concepts and their associated economies (the department store for example), the introduction of self service, and a number of labour saving innovations for particular processes (e.g. at the point of sale). Since then electronic data processing has transformed almost every point of the retailing process.

Distribution and electronics.

The following are the main areas of significance in the application of electronics to distribution and retailing:

- a) substituting just in time for just in case. As in the manufacturing process, so electronics is transforming the position of stocks in distribution. Electronic Points of Sale (EPOS) systems give retailers immediate information on sales by store and can automatically re-order subject to a managerial override. In the UK many stores have dispensed with direct store delivery (DSD) by manufacturers and with behind the shop stock rooms. Instead they have built their own centralised and automated warehouses, to which manufacturers deliver, and from which bespoke lorry loads are dispatched to each store or group of stores. In the food industry, orders to manufacturers can be varied daily according to sales outturns and forecasts. Thus J.Sainsbury, the UK food multiple, which stocks upto 12,000 items in its largest stores, receives details of sales from all stores at its head office shortly after closing time, and schedules its orders to manufacturers and the distribution system on this basis. The clothing firm Next operates a low stock in store system and aims to replace stock sold in 2-3 days. Another major clothing retailer, Burtons, has used a tag method rather than EPOS for the last twenty years. The tags from each sale are sent for central computer processing, the sales information is then passed to the buying department, and to the distribution centre for orders on the dispatch from a central warehouse using Burton's own fleet. The system allows for stocks to be moved from one shop to another, and most important for rapid repeat orders to be made. The major gains from this system they see as maximising sales in the short life of a fashion garment, and quickly cutting losses .
- b) automating the handling of stocks, notably in the make up of loads for specific stores, as well as receipt of goods from DSD systems (in the US notably) in the stores themselves. Products arrive at the store with outer packaging codes which are read automatically, and the load is then checked as to the number due for delivery, product type and price.
- c) reduction in transport costs; for some firms there is a question of deciding on the optimum transport mode, information for which is provided rapidly and already processed through computer; computers also assist in scheduling, route planning, and optimum loading, as well as store and warehouse location decisions to minimise transport costs.
- d) optimising store use, in lay out planning, and product profitability analysis, known as DPP (Direct Product Profitability). The latter aims to maximise profitability (rather than sales) per cubic foot, and involves not simply the location of a particular product in the store, but also lead to a re-assessment of lot size, bottle shape and so on. As Dawson and Sparks put it,

"the widespread use of DPP will allow major changes to take place in stores with a probable movement away from the concept of identical shop formats to a much greater, but controlled, variety of shop lay-outs, product merchandising, etc." (21, p.19)

- e) scheduling and control of labour. Retailing has traditionally been a labour intensive industry, and in spite of increased capital investment, is still a large user of semi skilled and unskilled labour. In the US in 1986 retail employment reached 16.9 million, of which 2 million were in department stores, and 1 million in clothing and accessories stores. Large superstores will employ 100's of people (Wal-Mart's new hypermarket in Texas opened in December 1987 has 800 staff in the store together with additional support staff), many of them part time. One industry estimate puts the number of part timers in department stores at 60%, Bluestone et al. quote industry sources at the end of the 1970's which put the figure at 75%. In the UK the proportions are lower but rising. Part of the reason is that firms can avoid much of the employment legislation, as well as sick pay and maternity pay, by employing part timers. But they can also schedule labour into peak working, whether during the day (and night), the week, or the season. With turnover also high, firms have significant logistical problems in following such a labour strategy. Tesco, the British grocery store, has over 130 combinations of basic hours for example. Computers, initially introduced for payroll purposes are now used for scheduling and the maintenance of personnel records. 20% of US food stores using EPOS in 1984 applied it to labour scheduling according to an Arthur Young survey.

The new equipment is also used for labour monitoring (notably of check out operators) and for control of pilferage. It has played a part in the increasing Taylorisation of shop work.

- f) speed up of purchase. The act of sale involves pricing and labelling of goods, price checking at the point of sale, the registration of price on the till, and the payment of money. Among the innovations applied here are automatic labelling, barcoding and laser reading, electronic weighing, automatic cheque writing and credit card reading, and computerised pricing systems.
- g) extended credit systems. In the past few years there has been an explosion of retailer credit cards. In the US there are over 300 million retailer credit cards, with over half department store sales sold by credit card. In the UK there are 10 million people holding retailer credit cards, the largest being the Burton group with 2½ million cardholders. The Burton Group use a computer programme to award points to credit card applicants (based on statistical analysis) and are part of an on line credit reference system. They have their own financial subsidiary to operate the credit card system (as well as the personalised credit cards of 60 other retailers) including the raising of finance.
- h) improved management and marketing information systems. This is seen by advanced retailers as a key to the systemic co-ordination of the whole distribution process. It covers automatic order processing, stock monitoring, supplier paying, management and financial accounting, market forecasting as well as the route planning, location planning, shop layout, labour scheduling and stock control that we have already mentioned. In the marketing field, retailers see credit cards as particularly important for the information they provide on individuals and classes of customers, allowing for marketing experiments, and targetted promotions. As Rudd summed it up in an article on modern distribution, distributors should "concentrate their efforts on moving data not lorries." (36.p.85)

- i) distance shopping. Home shopping has traditionally been done through mail order, but there are now approximately 100 experimental schemes in the US for electronic home shopping, catering both for less mobile consumers, and for high income groups. Widespread use will depend on reduced terminal costs and improved forms on the screen, as well as the development of local delivery systems to overcome one of the major long term obstacles to this form of retailing, namely that the transport of goods from the shop to home will be shifted from consumer to retailer.

The above developments underpin the current retailing revolution. I have distinguished them not by the specific item of technology (EPOS, EFTPOS, DSD, DPP, retailer cards) but by their function. Some are directed at speeding up what we can call the production processes of the distribution system, the acts of load making and load breaking, of loading and unloading, of shelf filling, and labelling, of checking out and payment. Others speed up the circulation of capital, by improved routing and logistic systems, store siting and lay out, matching stocks to demand, and so on.

They have been adopted at different rates in different countries and different sectors. In 1984 industry figures suggested that 30% of supermarkets operated scanning systems in the US. An early 1985 survey showed that just under half retail buyers in the food sectors had PC's available to them (21). A 1987 estimate puts the penetration rate of EPOS systems in British retailing at 10% of cash points that could be seen as open to EPOS. Electronic shopping is still largely at an experimental stage. The innovations tend to be adopted first by the large retailers, but many are diffusing rapidly. They are at the basis of changes in the structure of the industry, the nature of the retailing labour process and to an extent the labour market, and in the relationship between retailing, pre-retailing parts of the distribution system and manufacturing itself.

Retailing and flexible production.

How do these changes relate to the wider debate about the nature of the third industrial revolution? I want first to consider this in terms of the part that retailing is playing in industrial change as a whole rather than as a separate sector. From this point of view, the revolution in retailing and distribution is playing a central role in making Fordism flexible.

To substantiate this argument we need to recall the difficulties in which Fordism has found itself from the mid 1960's onwards. Figure 2 summarises the main characteristics of Fordist production. It was a system producing standardised goods, with purpose built and dedicated machinery, and where the main economies came from keeping the production line working. This meant ample supplies of inputs. It meant producing for stock when the final market went down. It involved micro and macro policies for maintaining the level of demand, from social welfare systems, Keynesian economic management, and extended consumer credit. It employed semi-skilled labour, paid the rate for the job, and bargained with through centralised off-shop floor industrial relations structures. It used long term market forecasting as part of its new model development, and advertising to maintain demand upto forecasts. Its features were scale, centralisation, & producer domination. As Aglietta has argued this new mode of production produced its own distinctive mode of consumption (mass consumption), mode of reproduction, mode of regulation, and form of international economy, (1).

It faced, however, a number of problems. Its dedicated machinery presupposed a capital goods industry which was not Fordist. It was a stock intensive form of production, and we should add a material and energy intensive form as well. It generated a particular form of industrial relations, frequently antagonistic, in which the so-called 'mass worker' contested the control in production which Fordism, like Taylorism, required. Its distinct national spaces posed problems for transnationalisation as distinct from multinationalisation of production. Within those national spaces it was heavily dependent on stable and expanding demand. Finally, there were many branches of the economy, particularly in the service industries for example in retailing, where the principles of Fordism were difficult to apply.

From the mid 1960's many of these inherent characteristics of Fordism became serious barriers. The movements of labour resistance were one. Markets for many products were approaching saturation while others showed increasing volatility. Overall levels of demand both slowed and became less stable. The increasing oil price punished energy intensive production. The international economy with now floating exchange rates also became less stable.

It was in relation to the market changes that retailing had a particular importance. For it occupies a mediating position between industrial production and demand. In many branches it had long occupied a subordinate position to manufacturers, being much less concentrated as an industry than the manufacturing branches. In 1950 in the UK for example, the multiple food and household store retailers - in spite of a doubling in importance since the 1920's - still only accounted for less than one fifth of retail sales, and there was strong competition among them. The risk of overproduction with respect to the market inherent in mass production tended to be passed down the line to the retailers. The mass producers branded their own goods, and advertised them as such, with the result that they could sell at a premium. Some short circuited the distribution chain through mail order and door to door selling. There were some smaller manufacturing/retailing firms. But for the most part the mass producers relied on the retailing (and decreasingly) the wholesale sector for their sales.

The changes of the last twenty years have transformed the situation in the UK and some other European countries. The increased capacity of retailers to handle the large quantities of stock and sales information by computer, coupled with major changes in transportation - increased private car ownership, containerisation and motorway development - opened up the possibilities of new retailing strategies and concentration within the sector. Take the furniture branch. The Swedish firm IKEA pioneered the showroom/warehouse concept which substituted consumer participation for dealer expertise in the sales process. As Michael Best put it, IKEA "eliminated the salesperson much as interchangeable parts eliminated the fitter in the metal working industry a century before". (29, vol. 2, section 4, p.6). By 1979 it had 14 megastores in Europe outside Sweden (over 200,000 square feet plus huge parking lots) and by 1984 was printing 44 million catalogues a year. The same model was followed by MFI in the UK, which grew from being a small mail order firm in the early 1970's to controlling 13% of the UK market by 1983. In both cases market power shifted from the manufacturers to the retailers. IKEA produces its own designs and sends the same specifications to manufacturers throughout the world. With instantly updated sales data at the centre, shifts in demand are handed on in the form of changed orders to the manufacturers. With minimised stockholdings, it is the manufacturers who bear the cost of fluctuations and face the direct pressure for increasing flexibility.

There is a similar picture in the grocery sector, the clothing and footwear sectors, and the cultural industries as we indicated above. In each case concentration in retailing has led to a dominance over manufacturing, with the cost of demand fluctuations shifted back to the industrial producers. In the grocery sector Sainsburys (which with Tesco's controls 55% of all grocery retailing in London) has so much power that it does not even provide its suppliers with a contract. The exception has been the multinational producers of branded goods, the Fordist food processors, but here, too, the retailers appear to be winning out, the share of own label goods rising from 23% in 1978 to 30% in 1985 (36, p.62) and the large scale processors increasingly diversifying into the catering and hotel trades in order to by-pass the retailers.

These developments have paradoxically extended the scope for mass production, albeit a mass production dominated by the retailers. They have established a much improved market information system, providing rapid response to producers of sales and demand. It is the retailers rather than the manufacturers who now know most about the market, and instruct the manufacturers accordingly.

In some instances the problems of flexibility are shifted back to the producers and that is that - as is the case in the furniture sector. But in others there has been a closer integration of the whole manufacturing and distribution systems to provide systemic flexibility. This has led to new developments in production. The capacity to monitor markets so closely means that new products can be tried out, and those that are successful are then mass produced. What this requires is a system that generates many product and design innovations, that can call upon skilled prototypers, and can then mass produce rapidly. Marks and Spencer, the British garment retailer, operates such a system with independent clothing suppliers, like S.R.Gent, who maintain a core of skilled clothing workers to this end. In the food processing sector and the record industry where there is a low rate of new product success (in the UK there are fifteen records which fail for every one that succeeds) the capacity to cut losses and respond to success early have both been important results of the new technology. Revealed preference can increasingly take the place of the market forecasting on which mass production depended.

Second, there has been the demand for flexible mass production systems. In the clothing industry the problem is in part one of fabric ordering. The mass production of a successful garment requires that the fabric is readily available. Benneton's strategy of colour differentiation is one of the best known ways of overcoming this problem, programming its automatic dyeing plant according to sales returns from its controlled retail network.

Third, a new emphasis is given to the capacity for new product design. Some retailers, like IKEA, maintain their own design staff. The Storehouse group has centralised design for its Habitat, Mothercare, BHS, Richards, and Heals chain of shops. Burtons, who used to rely on suppliers for design, have built up an in house design staff of 120 over the past two years. Marks and Spencer still have only a skeleton staff, relying on their suppliers, with whom they have weekly interaction at their Baker Street headquarters. Overall, there has been an explosion of the design industry in Britain in the 1980's. Between 1980 and 1985 the turnover of the design consultancy industry trebled to £1.1 b, rose to an estimated £1.65 in 1987, produced by 29,600 staff working in 2,726 consultancies, nearly two fifths of them in consumer products, (see 34, and also 33 and 46 for the importance of the design industry).

Fourth, improved marketing information has allowed the large retailers to disaggregate the demand into distinct segments or niches. What Sloane did for the

early motor car, retailers are doing systematically sector by sector. Markets are identified by age (the youth market, grey power, young adults), by household types (dinkis, single gender couples, one parent families,) by income and occupation (including the Henley Centre's insider/outside distinction referring to the growing duality in the labour force) and increasingly by locality. Thus Burtons - from being a mass producer with retail outlets throughout this century - has changed in the 80's to being a niche market retailer with stores aimed at different segments - Top Shop, Top Man, Dorothy Perkins, Principles, and Burtons itself- and now fully divested of its manufacturing plants.

Such segmentation, when linked in to design, is leading to retailers designing a whole range of commodities within distinct lifestyle categories. Storehouse which has its own subsidiary Conran Designs, with a design factory of 150 designers, will design plates, tables, wallpaper, clothing, bedspreads, within such categories as 'cottage garden', 'transatlantic', 'orchid', 'bold primary' and such like. Lifestyling gradually envelops all that is within a house, so that IKEA now have 60% of their sales from accessories to furniture, and the furniture sector itself is rapidly extending to becoming the furnishings sector. The NEXT chain of clothes stores has diversified into furnishings, linking what is worn to where you wear it. Laura Ashley likewise links clothing to furnishing, and adds perfumes into the lifestyle effect. Lifestyle research - so called - began in the US in the mid 1960's, and is now being used by retailers (and advertisers) as a way of binding in consumers to a range of products just as the Department store and the superstores do by space.

The capacity to launch such lifestyle ranges is centred firmly with the retailers. Individual producers still sell ranges of particular products through stores - Harrods for example has more than 50% of its floorspace franchised, often to individual branded product producers, as in perfumery - but find it more difficult to offer such cross product ranges as the retailers. This is compounded by the change in shop design and the function of shopping itself. Not only is shop design and redesign becoming more important, the redesigns becoming more rapid in accord with fashion change, but shopping is increasingly being seen as entertainment, independent of the purchasing involved. Anita Roddick - the founder of the successful Bodyshop chain - talks of shops as theatres, and the shopfloor as a stage on which both shop assistants and customers are acting, where the look, the smell, the spaces, the backdrops are all important, where people should come to feel good as well as to buy. Out of town shopping centres are adding leisure facilities to their complexes. Part of Conran's success has been due to his emphasis on shop design and product display as of value in itself, a reflection of his aesthetic militancy for modernist design. The link between the range of products, the shop itself and the act of shopping puts retailers at a further advantage relative to the manufacturers as organisers of the chain of production.

This is one important point to arise from the above examples, that just as new technology has led the whole retail/distribution system to be organised as a unified 'logistic' package (with the wholesaler often disappearing in the process) so it is now going further and requiring the production chain to be linked in as well. The whole chain can now be organised as a single system, permitting co-ordinated flexibility in the face of market changes. Benneton is one of the clearest examples of such systemic co-ordination. It is now the largest Italian fashion firm, with 3,200 shops in 57 countries. The great majority of these shops are franchised, and the bulk of production is undertaken by independent sub-contractors, some 200 firms employ between 15,000 and 20,000 workers. Benneton controls the clothes design, the shop design, the distribution and information systems, the automatic warehouse and the dyeing plant, and some elements of the production process, particularly those requiring capital investment.

Its systemic control allows it to decentralise the labour intensive processes (assembly, finishing, ironing and retailing) to independent enterprises. Some of Benneton's flexibility is achieved at the expense of these independents and their workers. For example the retailers are required to place firm orders after the quarterly fashion presentations, and 7 months before the selling season, so that the retailers take the risk (which is why Benneton shops unlike fully flexible chains have periodic sales.) But Benneton's success has come not simply from offloading risk to sub-contractors, or fragmenting labour. For it has undertaken a systematic investment programme to increase its overall flexibility in knitting (1979), design (1980) in its information network (1980/5) in office functions and clerical work (1980/4), in the spreading out of fabrics prior to cutting (1982) in dyeing (1982), in cutting (1980/5) and in warehousing (1984). (see Belossi, 8, for an excellent account of the Benneton system)

The Body Shop has grown on a similar model of franchised outlets, and closely integrated suppliers. Laura Ashley has maintained a vertical integration, with fully owned manufacturing plants in Wales. Marks and Spencer on the other hand do not engage in production, though for many years they had a large technical department to give advice to suppliers. Sainsbury's similarly have only one manufacturing plant, a meat processing plant in Haverhill for reasons of quality of supply. The precise ownership structures are not important. What unifies all these examples is that they are integrating the production and distribution processes - they are planning a whole sectoral chain. In doing so, they are able to extend the scope of mass production by ensuring flexibility. In the motor industry this systemic planning is undertaken by the assembly manufacturers. In the light consumer sectors it is rather through the controllers of the distribution/design/retailing functions.

Retailing alternatives.

The systemic distributors we have been discussing would describe themselves like Terence Conran does as promoting mass production. This indeed is the explicit aim of the modernist design movement, so forcefully expressed in the now defunct German Ulm school. Burtons see their business in part as the volume production of branded shops - so that a Burtons in Scotland will be the same product as a Burtons in London. Stores are now advertised as a brand name, just as particular mass produced products are.

Yet while they are concerned with developing flexible production systems whose dynamic is volume, nevertheless this extension of Fordism has changed many of the basic characteristics of Fordism. If we turn to diagram 2, we can see that the column headed flexible production describes many of the elements that I have been talking about. There is product variety geared to niche markets; there is more intensive and regular innovations (with shortening fashion seasons for example); economies are gained through working capital productivity and the integration of stages of production and distribution, and not merely by improved productivity in particular production processes, let alone by wage cuts (sweating does exist in the new systemic complexes, but so does skilled and better paid labour in parallel processes); there is extensive use of sub-contracting, networking, and franchising, and a tendency away from vertical integration; just in time principles replace just in case stock holding; head offices tend to be slim; machinery increasingly flexible. In this sense I do think it makes sense to talk about a new industrial era - albeit an era based on, indeed developing the era of Fordism. It can be adequately called 'post Fordism'.

The post Fordist retailers need to be distinguished from two other groups. The first are the Fordists. MFI and Harris Queensway in furniture retailing are examples: low on design and quality, their drive comes from volume, and their profits in part from severe downward pressure on their suppliers. The relationship between MFI and both suppliers and customers is one way rather than two way. They are typical of the discount warehouses, & cut price chain stores. They operate from bare premises, and concentrate on a limited number of fast selling lines. They have adopted many of the modern retailing innovations, but have used them to extend the mass production line into distribution rather than re-organising it within a more flexible system. While the tendency of these stores is to size - ever larger emporia attracting greater through flow - the same principle has been applied in the small shop sector through local shops stocking 60 or so necessary items, and open beyond normal shop hours. These may be called neo-Fordist retailers.

The second group I will call the flexibly specialised retailers. Sabel distinguishes flexibly specialised firms in the following way:

- they are concentrated in industrial districts, and produce close to the market, with which they interact in a constant way, altering products, developing new products in response to particular local tastes and changes in demand
- they make use of up to date technology which they use in a flexible way, since it has to allow them to move from product to product, and use a wide range of materials
- they develop inter firm institutions which allow for the sharing of skills and capital equipment, and the enjoyment of common services.
- they may be small firms but are not necessarily so, for in addition to the industrial districts of small interdependent firms, there are federated enterprises such as those involved in the 'systeme Motte', solar firms and workshop factories. The latter two appear as large firms but their size is the result of high capital equipment requirements not economies of scale. The solar firms and the workshop factories are internally organised like a collection of workshops, using highly skilled labour, and frequently treat their external suppliers as collaborators not subordinates, relying on them for advice on design and solutions to production problems

It is characteristic of these firms that they compete within a framework of co-operation, the competition centreing on design and quality rather than price. This allows them to specialise yet at the same time to gain the benefits of larger firms with full product lines, while maintaining their flexibility, (see 47, pp 28-35, and 258-77).

None of the post Fordist firms we have described fit adequately under this heading. Conran for example insists on centralising design, and does not encourage innovations from his suppliers. Marks and Spencer at one time had a two way relation with its suppliers, in the manner of a polar firm, but has moved away from this under the pressure of the post Fordist competition of the 1980's, cutting its team of production specialists right down, and increasingly squeezing its suppliers. IKEA centralises design, as does NEXT, and increasingly Burtons.

Where might we find examples of flexible specialised retailers? One would be L.L.Bean, a US mail order firm with a single retail outlet in a small town in Maine.

It responded to competition from the Far East, particularly in footwear, by moving into speciality markets where production depends on traditional sewing and leather cutting skills as well as offering a whole range of outdoor activity garments. It uses modern retailing electronics, but emphasises the specialist knowledge of its staff, and the quality of its product.

Another example would be those networks of shops linked into retail buying groups and voluntary wholesaling chains, into networks of co-operatives, and trader associations. These are significantly much stronger on the continent, particularly in Germany.

A third would be retail districts of small shops - some in municipally provided streets and squares - with easy access and exit from their shops, often linked in to local producers.

Whether such retailers can survive and expand as such firms have in a number of production sectors is unclear, and will part depend on public policy.

Technology, consumption, and alternative prospects.

One of the arguments of the flexible specialisation writers is that there is no technological necessity for mass production, whether in a neo-Fordist or post-Fordist form, to win out against flexible specialisation. The evidence for this argument is not only historical, but draws also on the experience of a number of industries in the current period, from the German machine tools industry, to the range of consumer and capital goods found in the Third Italy. In each case the reason for the success of flexible specialisation was its capacity to innovate more effectively than the mass producers, at the same time finding ways of counteracting the disadvantages of small scale production, usually through a formal or informal means of association. What are the prospects with respect to retailing?

The first point to make is that the answer is not independent of developments in manufacturing. Mass production in manufacturing will tend to reinforce mass retailing. The case is clearest in what the marketing profession refer to as low involvement goods, utilitarian items such as washing powder, TV sets, calculators, or VCR's. These are branded goods, produced in scale, advertised in scale, and sold in scale. Even if we move to toys, a more personal commodity than washing powder, the mass producers and mass retailers present formidable competition. Take an architypal mass retailer, the US firm Toys R Us. They currently operate 313 stores in the USA, and 37 stores internationally. Each store is virtually the same, 45,000 square feet, 28 registers, scanning, 4,000 linear feet of product, 400 car parking spaces, self service, conveniently located. Their policy is to stock the entire lines of all major toy manufacturers and as many lesser ones as they can find, simply adjusting orders of each item according to sales. This could be seen as the ultimate in retailing: all choices under the same roof, low stock, high turnover, advanced distribution, bulk purchased. The only disadvantage is geographical concentration. There seems no way in which a model such as this can fail to dominate the industry, leading to industrial and geographic concentration.

The success of the main grocery multiples suggests a similar pattern, with the multiples increasing their share, with a fewer number of shops. They have concentrated their expansion on superstores (in excess of 25,000 square feet, with

an average in the UK of 38,250 sq ft) of which there are now 457 in Britain, most of them being developed in the 1980's, and on large supermarkets of between 10,000 and 25,000 square feet on edge of town or redevelopment sites and concentrating on food. Meanwhile they were closing their smaller stores. In 1985-6 alone, three of the large multiples opened 70 new stores, and closed 232 existing ones, (40 and 41). There are parallel trends with the furnishings and DIY sector, the number of large scale DIY warehouses rising from 30 to 600 in the UK in 10 years.

Even in the post Fordist sectors - the so-called comparison goods like clothing - the trend towards industrial and geographic concentration appears to hold, through the development of malls, gallerias and out of town shopping centres, each containing the national chains.

The losers have been small, independent self employed traders, grocers, greengrocers, corner shops, smaller high street and local centre supermarkets, and latterly butchers and bakers. In 1961 there were 580,000 shops in Britain. Twenty years later there were 332,000 (1982 figures), a fall of 43%. In food stores the loss was 60%.

Yet the new technology does not necessarily lead to either geographical or industrial concentration. Take geographic concentration first. We have already noted the existence of networks of shops using a variety of forms of collective purchasing and distribution arrangements. Some of these are on the increase, indeed commentators both on UK and North American retailing point to the polarisation of the market.

The most notable examples are the convenience stores, self service stores of 1,000 - 3,000 sq. ft, located close to housing and offering a wide variety of goods including grocery and CTN products, some chemist products, alcohol, and varied other lines. In the US the number of such stores rose from 2,500 in 1960, to 22,700 in 1974, and an estimated 60,000 now. In Britain there are still only just over 2,000, but they are well established in Australia, Japan, Sweden, Denmark and France, (36, p.97).

Another variant for these chains of convenience stores has been provided by the recent takeover of two of the CTN chains by NEXT. Next's strategy is to incorporate them into a mail order network for fashion goods, which will permit ordered goods to be picked up within two days from the local shop. This is a modification of home shopping, running right against the trend of geographical concentration, and not making use of videotext in the home.

There are also local centre schemes which have fought back against the out of town and edge of town complexes. A notable example is the Greater London Council's Covent Garden development in London, built around speciality shops and including small shops like fishmongers and greengrocers at subsidised rents. Including also cafes and street theatre, in a converted former wholesale fruit market, it has succeeded in creating a thriving shopping and entertainment centre from which the multiples are notably absent.

Indeed there is now emerging in Britain a new city centre strategy which could be described as a one aiming to create a flexibly specialised retailing and cultural district. Drawing on examples from London, Glasgow, and Rome, it seeks to rebuild city centres as cultural districts, with live performance, cinemas, museums, eating places, housing, and retailing seen in its cultural and entertainment aspect. Good lighting and public transport services are components of the strategy, as well as a town centre association of retailers and cultural providers, including the local council, to provide the same forms of

co-ordination and management as provided by the managers of the out of town shopping centres. The initiative has come in part as a response to the doughnut effects of the out of town developments on city centres (most evident in the United States) and in part as a reaction to the failure of the modernist City Centres built round the needs of the multiples in the 60's and 70's. One of the most striking recent developments in this field is the announcement by Birmingham City Council that it intends to demolish the Bull Ring (a city centre of this latter kind) and replace it with a scheme founded on the flexible specialisation approach, (see 41 and 55 for details of these alternatives).

Furthermore, just as mass production re-enforces mass retailing, and vice versa, so flexibly specialised shopping districts encourage flexibly specialised manufacturing. This parallel is important for industrial policy. It has been observed that the relatively fragmented retailing system in Japan acted as a form of protection against imports, in contrast to Britain. In Britain an importer of shoes for example can visit three areas and talk to the buyers of the major part of the industry within a week. This is impossible where wholesaling and retailing are more fragmented. It may be that this link holds in a positive sense in the case of Italy, with a flexibly specialised group of industries in the third Italy working in parallel with a fragmented retailing structure. Certainly in the UK the mass retailers like MFI and Harris Queensway have played a major part in the destruction of the British furniture industry, driving down prices and off loading risk onto the manufacturers, then turning to overseas mass producers when the UK manufacturers had disappeared, (see 28, chapter 3 for details of the furniture case).

A further factor affecting the prospects of decentralised shopping and flexible districts is trends in consumption. The flexible specialisation argument emphasises the significance of changes in consumption for the decline of mass production. The segmentation of consumption, and its growing unpredictability have, as we suggested earlier, challenged the rigidities of traditional mass production. The post Fordist firms have been one response to these changes - and it is interesting that at least one of the major clothing multiples in the UK employs not only market research, with its social psychology dimensions, but also anthropologists to make sense of the fashion market. Whether these attempts to manage contemporary demand ^{are successful} is another matter. What Lash and Urry have characterised as post modern culture, rooted in oppositional groups and an expanding service class, may prove resistant to modernist designers. Quite apart from that, market researchers have found a growing emphasis on convenience as against price as a reason for shopping (those citing convenience as the reason for shopping choice in the UK rising from 30% in 1980 to 59% in 1985, while those citing price fell from 55% to 35% over the same period, (36, p.96).) They have also noted increased importance being attached to quality, variety, and customer service, which they see becoming major factors in the 1990's. Each of these offers scope to decentralised retailers.

Some authors see the decentralised retailers as complementary to the mass retailers, allowing shoppers to top up their main store shopping, to buy perishables (like newspapers), or to shop in emergencies. Others see them as potential competitors. In as much as there is competition - which I think there is - it will be present in some sectors rather than others, particularly those we may call the cultural sectors. In those, the outcome of this competition will depend in part on the development of successful inter-enterprise co-operation, and in part on the successful adoption of modern retailing technology by the flexible retailers. There is nothing inherent in the technology itself - particularly when it is fully developed - which militates against smaller operators, working in association or in some cases individually. Already for example town cards are

developing providing small shops with similar advantages to those enjoyed by the larger retailers with their own credit card. Retail management packages are being developed for use on PC's in smaller shops. Joint purchasing associations can use similar technology in buying, transport and stock control to that used by the large chains. The smaller operators do face disadvantages, but they are not primarily to do with electronic technology.

Implications for policy.

Though there are clear trends towards concentration, retailing is striking for the variability of its forms across sectors and countries. There are alternative paths of development possible which public policy can seek to influence and not be faced with attempting to dam a seemingly inexorable tide. That public policy is necessary is clear for at least three reasons. First, the unhindered removal of shops to out of town centres has served to weaken town centre economies, and militate against the interests of the less mobile, and all those without car. Second, the structure of retailing has important implications for industrial policy. On the one hand retailers can play an important part as sectoral planning agencies, as strategic advisers, and production/quality control consultants. On the other they can weaken indigenous industry for short run interest. Third, the payment and conditions of labour in retailing continues to be low and in many instances is getting lower. Not only is this insupportable from a social point of view, there is also a clear functional need within shops in the field of advice and customer service which requires a more permanent and better trained labour force. It is an interesting feature of British retailing, that although the co-operative shops have long lost their leading productive position that they held in retailing for the first half of the 20th century, they have nevertheless continued to operate markedly better labour practises than their non-co-operative competitors.

In terms of policy instruments, the most powerful has been land use planning controls. The argument I have presented in this paper suggests that these need to be complemented by an active policy of retail district co-ordination, technological support to retail associations, user legislation covering social facilities in shopping areas, access requirements for the less mobile, and consumer information, plus labour legislation and training support for workers in the industry. These will help ensure the development of a retail system adequate for these post modern times.

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