

WORKING PAPER 506

TEXTILES, THE NEW SUNRISE SECTOR :
EUPHORIA OR EUPHEMISM?

LOUISE J. CREWE AND CHRISTINE M. LEIGH

TEXTILES, THE NEW SUNRISE SECTOR: EUPHORIA OR EUPHEMISM?

ACKNOWLEDGEMENTS

ABSTRACT

LIST OF TABLES

LIST OF FIGURES

1. INTRODUCTION.

2. THEORETICAL APPROACHES.

2.1 INTRODUCTION.

2.2 DESCRIPTIVE MONITORING.

2.3 INDUSTRIAL SYSTEMS FRAMEWORK.

2.4 STRUCTURALIST APPROACHES.

2.5 THE ENTERPRISE APPROACH.

2.6 TOWARDS AN INTEGRATED FRAMEWORK FOR ANALYSIS.

3. THE TEXTILE INDUSTRY IN WEST YORKSHIRE.

3.1 INTRODUCTION.

3.2 EMPLOYMENT AND EMPLOYMENT CHANGE IN THE TEXTILE INDUSTRY.

3.3 DIFFERENTIAL SHIFT ANALYSIS.

3.4 EARNINGS AND WAGE RATES WITHIN THE TEXTILE INDUSTRY.

3.5 REDUNDANCIES WITHIN THE TEXTILE INDUSTRY.

4. THE DESIGN AND IMPLEMENTATION OF A SECTORALLY SPECIFIC ENTERPRISE DATABASE.

4.1 INTRODUCTION.

4.2 METHODOLOGICAL PROBLEMS AND PROCEDURE.

5. LOOM DUCKS? - A CROSS-CASE ANALYSIS OF THE RESTRUCTURING PROCESSES OPERATING WITHIN THE WEST YORKSHIRE TEXTILE INDUSTRY.

5.1 INTRODUCTION.

5.2 THEORETICAL UNDERPINNINGS.

5.3 DOMESTIC DISINVESTMENT.

5.4 INTERNATIONALISATION OF PRODUCTION.

5.5 CAPITAL INVESTMENT AND TECHNICAL CHANGE.

5.6 ORGANISATIONAL DEVOLUTION.

5.7 FLEXIBILITIES.

5.8 DIVERSIFICATION: SPECIALISED PRODUCTS, CUSTOMISED DESIGNS.

6. CONCLUSIONS.

APPENDICES.

BIBLIOGRAPHY.

ACKNOWLEDGEMENTS

The empirical work on the textile industry in West Yorkshire was undertaken entirely by Louise Crewe. The theoretical and contextual issues were developed jointly by both of the authors. We would like to thank the Department of Employment for granting permission to use the NOMIS system; to those personnel in the enterprises studied who offered their assistance and precious time; and to Profeser Wilson, Jill Aubrey and Colin Sage for their help and advice.

ABSTRACT

Occupying a pivotal position within the West Yorkshire economy, the textile sector has undergone profound and dramatic transformation over the last decade. Adopting a multiple case study research design, this paper focuses on the spatial and organizational changes occurring within the prime mover textile enterprises of the local economy. The intention of the paper is to make preliminary suggestions towards an ultimate reformulation of the theoretical insights that were generated in the 1960's and 1970's as they are being overtaken by the events and processes of the 1980's, the decade of reconfiguration.

LIST OF TABLES

- TABLE 1. Dominant Industrial Orders Within the West Yorkshire Economy.
- TABLE 2. The Most Rapidly Declining Sectors Within The West Yorkshire Economy 1978-81.
- TABLE 3. Ranking Of The Differential Component For Male Employment In West Yorkshire 1987-81.
- TABLE 4. Ranking Of The Differential Component For Female Employment In West Yorkshire 1987-81.
- TABLE 5. Low Paying Industrial Classes, 1985.
- TABLE 6. Major Job Loss Sectors In West Yorkshire.
- TABLE 7. The Employment Performance Of Allied Textile Company's West Yorkshire Subsidiaries.
- TABLE 8. Courtauld's Financial Statements Disaggregated Geographically.

LIST OF FIGURES.

- FIGURE 1. An Integrated And Interactive Conceptual Framework For Analysis.
- FIGURE 2. The Identification Of The Prime Mover Textile Enterprises Within West Yorkshire.

1. INTRODUCTION.

"Widely written off as a sunset industry in the late 1970's, the textile sector has revolutionised itself into a flexible, export oriented group of companies using the most modern manufacturing methods available."
(Sunday Times 29.3.87.)

This is just one example of the contemporary optimism surrounding the textile industry. In contrast to this, however, there are numerous examples of the way in which the sector has fallen prey to scathing criticism founded on a variety of misconceptions and poorly substantiated ideas:

"An industry written off by the economic planners of the 1970's."
(Daily Telegraph 23.3.87.)

Stimulated by the contradictory and paradoxical media coverage that the textile industry is currently generating, an attempt is made here to uncover the realities of an industrial sector witnessing an unprecedented and dynamic transformation.

2. THEORETICAL APPROACHES.

2.1 INTRODUCTION.

It is true to say that industrial geography has, over the last two decades, undergone a period of theoretical retooling, a period of elaboration and diversification. Now more than ever, explanatory frameworks are being scrutinised and criticised in the name of theoretical progress. However, many issues remain unanswered and the discipline continues to be strong in its diversity and challenging in its controversy. Undoubtedly, industrial geography is alive and kicking, and it is a useful prerequisite to the ensuing investigation to elaborate in a little more detail the variety of approaches which characterise contemporary industrial geography.

It must be emphasised at the outset that every attempt must be made to avoid the demarcation of rigid boundaries around the following modes of explanation: the approaches discussed below do not represent discrete, compartmentalised 'black boxes'; rather, they overlap extensively and have evolved simultaneously. There is no suggestion, therefore, that the following categories represent discrete chronological typologies. Rather, what follows is a necessarily brief expose of the diversity of modes of explanation currently discernible within contemporary industrial geography.

2.2 DESCRIPTIVE MONITORING.

Perhaps the earliest and certainly the most profound theoretical statements to emerge in the field of industrial geography can be ascribed to the (neo) classical theorists who, in effect, transformed the discipline from a spatially myopic description of regional economies into a theoretically informed approach to the study of the contemporary space economy.

However, this approach fell into disfavour due to its restrictive and rigid assumptions. Thus emerged a plea for the transferral of emphasis from the unrealistic overstatements of neoclassical economics towards a description of events on the ground. This heralded what might be termed the 'bottom up' descriptive monitoring approach, which evolved explicitly out of the identification of systematic trends in aggregate variables. In effect, this involves the description of pattern, the measurement of statistical and numerical association and the conjecturing of process. Cast in the positivist mould, this approach represents the recognition that aggregate descriptions of industrial phenomena are in fact the outcome of events occurring at more disaggregate levels.

Thus emerged the 'components of change' approach which explored the disaggregated 'events' which lead to aggregate shifts. In essence, this is a simple accounting system which decomposes the aggregate change into its constituent parts. However, while this approach goes some of the way towards the recognition of the complexity of the underlying processes producing change, the careful conceptualisation which this approach demands is all too often missing, and there is no underlying theory to inform this type of analysis. It thus came to be recognised that the mere disaggregation of broader shifts offered little in the way of explanation:

"Beyond establishing a more sophisticated accounting framework, the components of change approach can make little progress in informing the debate on causality." (Lloyd and Shutt, 1985).

Thus followed a period characterised by considerable disillusionment with the components of change approach:

"Perhaps the greatest conceptual inadequacies in descriptive monitoring studies occur in components of change analysis." (Taylor and Thrift 1983).

In response to this criticism of micro-level 'bottom-up' approaches, a variety of alternative, 'top-down' research foci have emerged within the field, which explicitly take cognisance of the fact that micro level approaches can be at best only partial, since they fail to recognise the complex set of relationships and interdependencies which exist between the events on the ground and the broader economic system of which they are inextricably a part.

2.3 INDUSTRIAL SYSTEMS FRAMEWORK.

Perhaps the broadest of these approaches is the industrial systems framework advocated by Hamilton and Linge (1979) which takes cognisance of the fact that there is an integrity within the contemporary economic system, and that the divorcing of supposedly component parts is ultimately a misrepresentation of reality: the firm is no longer a discrete entity but, rather, constitutes part of an integrated and interrelated whole. The framework thus examines the enterprise and its environment, and the relationship between the two. A systems analytical framework must be commended for its integration of macro and micro scales of resolution, and for its recognition of the complexity of the contemporary space economy. However, while it advances conceptual and theoretical understanding of the spatial distribution and interdependence of industrial activities, the approach falls short on a number of counts, principally, in its relegation of the social and the contradictory to the external environment of the system (Walker and Storper 1981). Moreover, Malecki noted that the framework is

"Perhaps best described as a very large umbrella since it concerns nearly any topic concerning firms to be within its purview; however, it does not provide an explicit structure for analysis." (Malecki 1982).

2.4 STRUCTURALIST APPROACHES.

A second identifiable research direction is what can be broadly referred to as 'structuralist' theory: a 'top-down' approach attempting to place changes in individual industries and companies within a wider context which takes account both of underlying capitalist social relations and of macro level shifts in the national and international economy. This approach, expounded by Massey and Meegan, has done much to stimulate theoretical thinking by drawing attention to the urgent need to consider the processes shaping industrial economies. Importantly, espousal of a structuralist theory of the space economy does not mean rejection of all or even most of the insights gained by other approaches. What it does offer is a comprehensive and integrating framework for analysis which establishes the basic priority of capital accumulation over the location problem. 'Capital accumulation', in definitional terms, is taken to mean the conversion of a portion of the surplus value expropriated by the capitalist from the workers, into additional capital, which in turn, permits that appropriation of even larger portions of surplus value, in a never-ending process. The ultimate argument is, then, that the structural requirement of capitalist society is the expanded reproduction of capital. Where the framework must be commended is in its recognition that the geography of industry unfolds principally as a consequence of the dynamics of accumulation rather than as a result of the static allocation of activities to their optimum location with respect to labour, materials and markets.

What this structuralist model of economic development crucially offers is an explanation of cyclical instability and stress: briefly stated, capital accumulation periodically runs into barriers which, if not overcome, force the economy off a sustainable growth path and ultimately into open crisis or recession (Harvey, 1975). The effect of such crisis, it can be argued, is to devalue excess capital and to stimulate attempts to renew profitability through a variety or restructuring processes.

Such theoretical ideas owe much to the work of Doreen Massey, who advocates an approach which begins from the process of capital accumulation, producing concepts of geographic organisation in terms of a spatial division of labour, which can be conceived as the way in which economic activity responds to geographical inequality in the conditions of accumulation. Massey recognises that capital accumulation does not take place in a vacuum, but in regions with specific histories of economic and social development. One schematic way of approaching this is to conceive of it as a series of rounds of investment, in each of which, a new form of spatial division of labour evolves. New distributions of activity are thus overlain on and combined with the pattern produced in previous periods to form a deep palimpsest.

Crucially, what this approach recognises is that economic change is the surface manifestation, the outcome of the action of capitalists as they attempt to maintain profitability and the control of production.

The consequence of this is that it becomes crucial to understand the restructuring processes adopted by organisations, who, in effect, represent the agents of capital, since these represent a way-in, a pointer to understanding the complexity of the contemporary space economy.

However, while the structuralist approach has done much to stimulate theoretical thinking in industrial geography and acts to integrate material and analysis at a number of levels, particularly that of the political economy, with factors which directly affect the organisation, it can be criticised on the grounds that its foundations are empirically weak. Moreover, many of the mechanisms and processes identified by the structuralist school of thought are very vague and imprecise, representing idiosyncratic conceptualisations which are inadequately spelled out. Thus, Massey identifies only three forms of restructuring process, namely intensification, rationalisation and investment and technical change, and fails to explore precisely how these occur across a wide range of specific cases. The argument presented here, then, is that a typology of only three mechanisms is identified, that the precise specification of these processes is weak, and finally, that many other mechanisms and issues are not even considered. In effect, structuralist approaches are plagued by their seeming inability to translate notions of capital into specific and testable terms, and by the gulf that persists between theory and empiricism.

Moreover, this paradigm has a tendency towards abstraction and the adoption of stereotyped terminologies: such (albeit graphic and appealing) conceptualisations as 'restructuring' and 'new international division of labour' have passed through the pages of the press and academic texts alike, without, it appears, rigid specification or explanation, such that they now represent little more than clichéd caricatures.

2.5 ENTERPRISE APPROACH.

Running alongside these modes of explanation is the 'enterprise approach', which is perhaps most lucidly described as a 'sideways in' research methodology. Adopted by a variety of authors such as Watts (1980), the approach takes as its main focus the behaviour and spatial ramifications of corporate activity. In this respect, the approach can be situated at the meso level of the economy, taking as its focus the corporate interface, the arena in which both macro and micro forces meet and are played out.

In its earliest and simplest form, the approach has been criticised for its tendency towards purely empirical studies of individual corporations which, although interesting, ultimately lack the necessary supporting theoretical structure, they become 'empiricist narratives' (A. Sayer, Birkbeck College), idiosyncratic 'stories' lacking rigorous conceptualisation and coherence.

However, it can be argued that, despite these limitations, the enterprise approach has much to commend it and, if allied with certain elements of other disparate approaches, constitutes a firm foundation for the ensuing discussion. What follows, then, represents a plea for eclecticism.

2.6 TOWARDS AN INTEGRATED FRAMEWORK FOR ANALYSIS.

This investigation represents an attempt to develop a preliminary framework within which the processes of corporate reorganisation in space can be described and evaluated. The approach can perhaps be most lucidly conceptualised as an integrated, interactive framework focusing on the enterprise which is envisaged as the fundamental unit of the economy, the nexus within which macro and micro processes are played out. However, the framework is not simply an extension of the 'enterprise' tradition, for it crucially takes cognisance of both macro and micro scales of resolution, recognising that it is necessary to simultaneously consider both the wider national/international context which impacts upon the enterprise, and also the network of subsidiaries and associates which comprise the micro level of the economy. Such a framework can be perhaps be most simply conceptualised in diagrammatical form (see Figure 1).

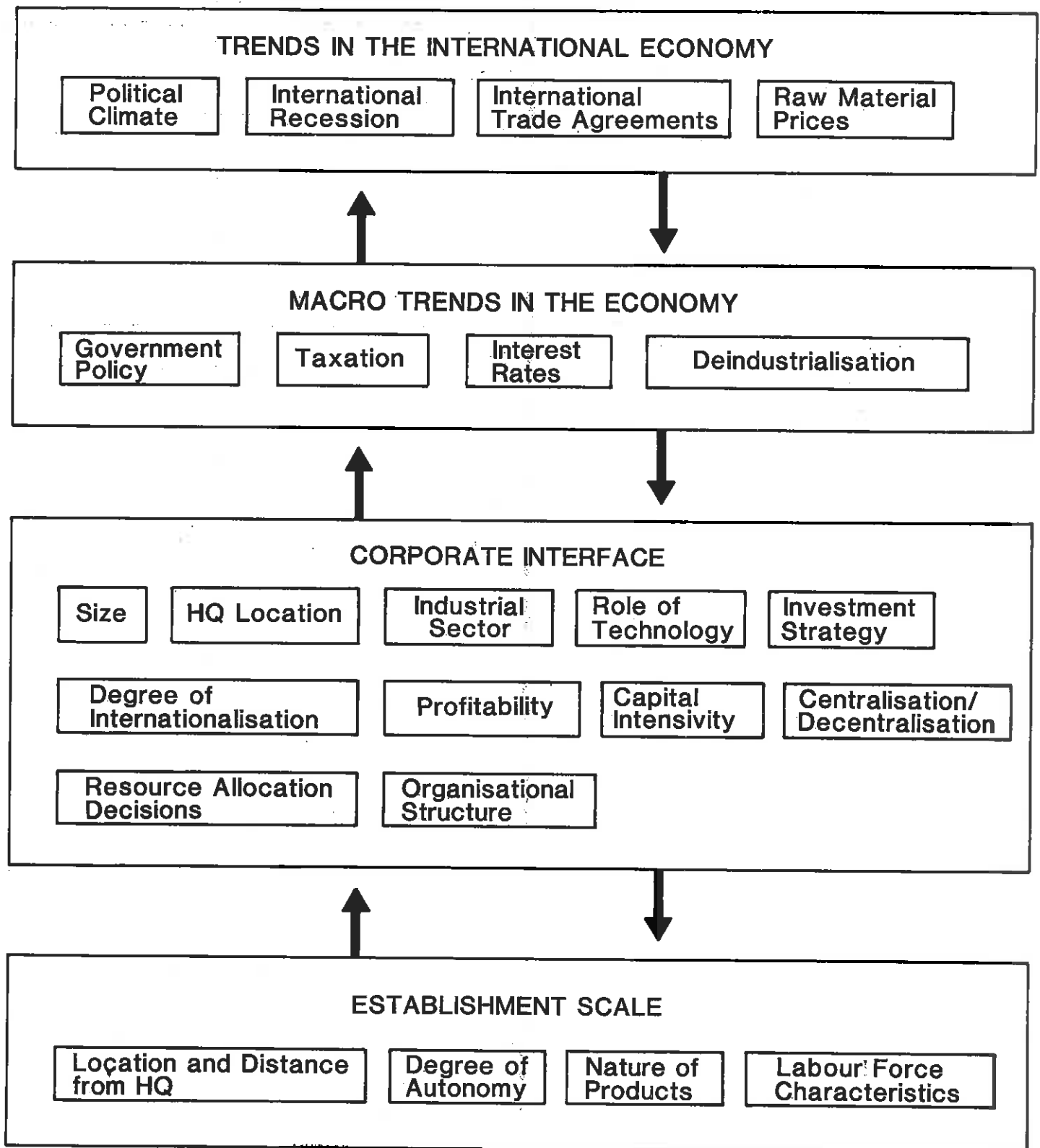
It is useful at this stage to elaborate in a little more detail the analytical advantages of such a synthesis. The argument presented here is that one cannot begin to understand many of the sub-national changes in the West Yorkshire economy without placing them in their national/international context: without an understanding of wider processes affecting particular firms in particular enterprises, there can be little understanding of the industrial restructuring process. Crucially, however, while such systemic level processes constitute the analytical backcloth to sub-national analyses, they must not be conceived of as causal factors in any mechanistic or deterministic way. Moreover, such a theoretical framework must be formulated and indeed measured against empiricism if it is not to become analytically impotent.

In recognition of this implicit tendency towards abstraction, such a structuralist perspective must be grounded in reality and thus it is envisaged as constituting the upper tier in a conceptual hierarchy (see Figure 1), which has as its focus the enterprise. This consideration of regional events from the perspective of corporate case studies represents an attempt to understand the significance and behaviour of large corporations through the identification of those corporate actors whose decisions are crucial to evolving employment trends and to restructuring processes more generally. The aim, then, is to undertake an investigation of those companies whose branches and subsidiaries are vital for the future well-being of the local economy, and whose future behaviour has potentially pronounced local spatial and structural impacts.

Variously referred to as 'centre firms' (R.T. Averitt 1968),

FIGURE 1

An Integrated and Interactive Conceptual Framework for Analysis



'giant firms' (Prais 1976) and 'prime movers' (Lloyd and Shutt 1985) these large corporations play an undeniably significant role in shaping contemporary local economies: not only do they produce their own spatial patterns in the provision of employment, in the location of production and commercial capacity and in linkages and flows of materials and information, but they also may indirectly influence, through these, the spatial characteristics of the economic environment in which they operate. The case for focusing on large corporations, then, is a strong one, and can be justified on a number of grounds. Of particular significance is the fact that corporate case studies can begin to overcome one of the most thorny issues which plagues locational analysis: that of bridging the gap between aggregate, macro statistics and specific local events such as large-scale redundancies. One way of building this bridge is to focus on the complex array of changes which take place at a 'meso-economic' level within large corporations and to observe the behaviour and activities of the major corporations whose decisions have a significant impact on national, regional and local employment trends, including major impacts on labour turnover at particular locations. Corporate restructuring, then, provides an intermediate link between the micro-level components of local employment change and broader changes in the national and international economy.

Furthermore, the case, for focussing on major corporations is not simply their empirical importance in employment terms, but the fact that they are the driving force behind major employment changes within the contemporary space economy. Moreover, it can be argued that these companies represent the chief agents for the articulation of new and replacement investment and labour demand, and

"Their strategic investment decisions and day to day policies on sourcing and sub-contracting have a profound effect on the nature of current and prospective future industrial activity in the region".

(Lloyd and Shutt 1985)

The practice of concentrating on particular large corporations is further validated by the fact that many small and medium sized firms are functionally related to larger corporations: it is only through an integrated analysis at a variety of scales that such complex relationships and interdependencies can be investigated.

Finally, evidence suggests that employment at the national level is dominated by a decreasing number of very large multi-plant, multi-locational and increasingly multinational corporations, and it must surely be an interesting research question to determine the extent to which these trends, now well documented, are evident within the West Yorkshire economy: to what extent are these 'prime movers' directing, or even controlling, employment activity and economic restructuring processes more generally within the local economy?

This approach, then, recognises the (now well-documented) process

of capital concentration into fewer and fewer corporate hands and represents an attempt to sketch some of the main organisational dimensions of corporate space into which otherwise disparate and disaggregated spatial events can be integrated. The overriding utility of the framework is perhaps that it cuts the spatial divide, since it considers the interdependence of the large corporation with a potentially wide network of small and medium-sized firms. Moreover, being an interactive framework, the approach recognises that the 'prime mover' enterprises are not simply reactive cogs in an international system, but are generators of powerful and potent feedback mechanisms, interacting with the macro-economy and perhaps now representing initiators of the restructuring of the space economy. Finally, the framework recognises that any progressive and realistic approach to the study of the dynamics of the contemporary space economy must discard the inappropriate boundaries of manufacturing, and must reintegrate certain areas which have traditionally been beyond the realm of industrial geography. The applicability of the framework to all types of business organisation, within both the productive and the tertiary sphere, must surely be advantageous in this respect.

3. THE TEXTILE INDUSTRY IN WEST YORKSHIRE.

3.1 INTRODUCTION.

The heterogenous textile sector (defined as Order 13, MLH 411-429 of the Standard Industrial Classification (HMSO, 1968)) occupies a pivotal and strategic position in the West Yorkshire economy. Historically, it has been one of the most buoyant sectors in the county, and certainly one of the dominant employers. Formerly characterised by a large number of enterprises, both large and small, the sector has recently undergone profound and dramatic changes.

Throughout the following section, the primary source of employment data used is the Annual Census of Employment (1978 and 1981). Information available includes a definition of business activity in accordance with the Standard Industrial Classification (H.M.S.O. 1968), and a full-time/part-time breakdown of employees, disaggregated by gender. It is regarded as the most comprehensive source of employment information available, and its use is further supported by its flexibility and accessibility: the ACE data is currently available via the NOMIS system, an on-line geographical information system which provides the prime source of information used in this paper.

3.2 EMPLOYMENT AND EMPLOYMENT CHANGE IN THE TEXTILE INDUSTRY.

Detailed investigation of the textile sector of the West Yorkshire local economy can be justified on a number of grounds, perhaps the most important of which is the fact that it is one of the major employers for males and females within the county. Reference to Table 1 reveals that the order was the fourth largest total employer in 1981 and the largest manufacturing sector employer, incorporating some 55880 employees.

When disaggregated by gender, the figures reveal that the textile industry was the fourth largest order in employment terms for full-time males (34 622 employees) and females (15 939 employees), and the fifth largest employer of part-time females (4 654 workers).

In tabulated form, the local dominance of the textile industry in terms of manufacturing is indisputable: the sector is amongst the top five dominant orders for all employment types, and only professional services and distribution appear with the same consistency as major employment sectors within the West Yorkshire economy (See Table 1).

TABLE 1

DOMINANT INDUSTRIAL ORDERS WITHIN THE WEST YORKSHIRE ECONOMY, (1981)

| | ORDER | DESCRIPTION | RANK | EMP 1981 |
|---------------------|-------|------------------------|------|----------|
| TOTAL EMPLOYEES | 25 | PROFESSIONAL SERVICES | 1 | 132 040 |
| | 23 | DISTRIBUTIVE TRADES | 2 | 102 144 |
| | 26 | MISCELLANEOUS SERVICES | 3 | 80 441 |
| | 13 | TEXTILES | 4 | 55 880 |
| FULL TIME MALE | 23 | DISTRIBUTIVE TRADES | 1 | 41 417 |
| | 07 | MECHANICAL ENG. | 2 | 40 343 |
| | 25 | PROFESSIONAL SERVICES | 3 | 36 042 |
| | 13 | TEXTILES | 4 | 34 622 |
| PART TIME MALE | 26 | MISC. SERVICES | 1 | 7 038 |
| | 23 | DISTRIBUTIVE TRADES | 2 | 4 608 |
| | 25 | PROFESSIONAL SERVICES | 3 | 4 541 |
| | 24 | INSURANCE ETC | 4 | 1 318 |
| | 22 | TRANSPORT | 5 | 679 |
| | 13 | TEXTILES | 6 | 665 |
| FULL TIME FEMALE | 25 | PROFESSIONAL SERVICES | 1 | 46 310 |
| | 23 | DISTRIBUTIVE TRADES | 2 | 28 069 |
| | 26 | MISCELLANEOUS SERVICES | 3 | 17 125 |
| | 13 | TEXTILES | 4 | 15 939 |
| PART TIME FEMALE | 25 | PROFESSIONAL SERVICES | 1 | 45 147 |
| | 26 | MISCELLANEOUS SERVICES | 2 | 30 349 |
| | 23 | DISTRIBUTIVE TRADES | 3 | 28 050 |
| | 03 | FOOD, DRINK ETC | 4 | 7 476 |
| | 13 | TEXTILES | 5 | 4 654 |

SOURCE: DOE Statistics (NOMIS)

The importance of the textile industry as a generator of employment change within West Yorkshire is immediately apparent when attention is focused upon employment change (see Table 2): the industry was the most rapidly declining sector in absolute terms between 1978 and 1981 both for full-time male employment, shedding some 15 710 jobs, which represents a 31% decline, and for full-time female employment, which recorded a loss of 8 434 jobs, representing a fall of 36%. Similarly, textiles is the most rapidly declining sector for female part-time employment, shedding some 3 734 jobs between 1978 and 1981, and was second in the 'job loss league' for male part-time employment, which declined by a marked 54%. (see Appendix 1).

TABLE 2

THE MOST RAPIDLY DECLINING SECTORS WITHIN
THE WEST YORKSHIRE ECONOMY '1978-81.

| | ORDER | DESCRIPTION | RANK | ABS CHANGE | % CHANGE |
|---------------------|----------|-----------------------------------|--------|----------------|----------------|
| | | | | | |
| FULL TIME MALE | 13 | TEXTILES | 1 | -15 710 | -31.2 |
| PART TIME MALE | 25 13 | PROFESSIONAL SERVICES TEXTILES | 1 2 | -1 501 -794 | -24.8 -54.4 |
| FULL TIME FEMALE | 13 | TEXTILES | 1 | -8 434 | -34.6 |
| PART TIME FEMALE | 13 | TEXTILES | 1 | -3 734 | -44.5 |

Source: DOE Statistics (NOMIS)

3.3 DIFFERENTIAL SHIFT ANALYSIS OF WEST YORKSHIRE.

While the above employment analysis provides a useful indicator of aggregate sectoral trends, it fails to highlight areas of growth or decline which are peculiar to the West Yorkshire economy: the investigation gives no indication as to whether this putative employment performance is the national norm, or is, in fact, unique in some way to West Yorkshire. In an attempt to overcome such limitations, a differential shift analysis of the local economy was undertaken.

In conceptual terms, the shift share technique can be perceived as a means to

"Analyse how employment in a particular sub-region of the economy has performed over a specified time period in comparison with the regional or national economy within which it is situated."
(Palmer 1986).

TABLE 3

RANKING OF THE DIFFERENTIAL COMPONENT FOR MALE EMPLOYMENT
IN WEST YORKSHIRE, (1978-1981).

| RANK | MALE FULL TIME | | MALE PART TIME | |
|------|-----------------|--------------|------------------------|--------------|
| | DESCRIPTION | DIFFERENTIAL | DESCRIPTION | DIFFERENTIAL |
| 1 | MECHANICAL ENG. | -3 709 | PROF. SERVICES | -1 484 |
| 2 | VEHICLES | -1 772 | PUBLIC ADMIN. | - 315 |
| 3 | CHEMICALS | -1 361 | MISC. SERVICES | - 204 |
| 4 | MISC. SERVICES | - 506 | MECHANICAL ENG. | - 203 |
| 5 | DISTRIBUTION | - 368 | METALS NES | - 106 |
| 6 | UTILITIES | - 253 | TEXTILES | - 86 |
| 7 | TEXTILES | - 232 | CONSTRUCTION | - 32 |
| 8 | LEATHER | - 55 | OTHER MANUF | - 30 |
| 9 | SHIPBLDG | - 54 | PAPER | - 28 |
| 10 | TIMBER | - 43 | BRICKS | - 20 |
| 11 | COAL | 5 | VEHICLES | - 14 |
| 12 | AGRICULTURE | 19 | TIMBER | - 11 |
| 13 | ELECTRICAL ENG. | 47 | UTILITIES | - 6 |
| 14 | CONSTRUCTION | 125 | COAL | - 5 |
| 15 | MINING | 215 | LEATHER | - 3 |
| 16 | CLOTHING | 241 | MINING | - 2 |
| 17 | PROF SERVICES | 370 | CHEMICALS | - 1 |
| 18 | INSTRUMENT ENG. | 389 | SHIPBUILDING | 1 |
| 19 | PAPER | 566 | AGRICULTURE | 8 |
| 20 | TRANSPORT | 688 | METAL MANUF | 12 |
| 21 | OTHER MANUF | 664 | CLOTHING | 17 |
| 22 | PUBLIC ADMIN | 695 | INSTRUMENT ENGINEERING | 19 |
| 23 | INSURANCE | 726 | TRANSPORT | 36 |
| 24 | METALS NES | 734 | FOOD | 50 |
| 25 | BRICKS | 828 | ELECTRICAL ENG. | 68 |
| 26 | FOOD | 1 522 | INSURANCE | 125 |
| 27 | METAL MANUF | 1 872 | DISTRIBUTION | 673 |

Source: DOE Statistics (NOMIS).

TABLE 4

RANKING OF THE DIFFERENTIAL COMPONENT FOR FEMALE EMPLOYMENT
IN WEST YORKSHIRE, (1978-1981).

| RANK | FEMALE FULL TIME | | FEMALE PART TIME | |
|------|------------------|--------------|-------------------|--------------|
| | DESCRIPTION | DIFFERENTIAL | DESCRIPTION | DIFFERENTIAL |
| 1 | TEXTILES | -2 128 | MISC. SERVICES | -5 991 |
| 2 | ELECTRICAL ENG. | -1 545 | PROF. SERVICES | -2 705 |
| 3 | DISTRIBUTION | - 887 | TEXTILES | - 814 |
| 4 | LEATHER | - 520 | CLOTHING | - 484 |
| 5 | MECHANICAL ENG. | - 385 | LEATHER | - 286 |
| 6 | MISC. SERVICES | - 175 | TRANSPORT | - 245 |
| 7 | METAL MANUF. | - 65 | CHEMICALS | - 210 |
| 8 | CONSTRUCTION | - 16 | MECHANICAL ENG. | - 204 |
| 9 | SHIPBUILDING | - 13 | ELECTRICAL ENG. | - 77 |
| 10 | TIMBER | - 11 | MINING | - 53 |
| 11 | OTHER MANUF. | 7 | PAPER | - 33 |
| 12 | AGRICULTURE | 23 | SHIPBUILDING | - 14 |
| 13 | COAL | 28 | AGRICULTURE | - 8 |
| 14 | METAL NES | 33 | COAL | 3 |
| 15 | MINING | 61 | UTILITIES | 7 |
| 16 | BRICKS | 97 | OTHER MANUF | 8 |
| 17 | UTILITIES | 102 | METAL NES | 29 |
| 18 | PAPER | 153 | TIMBER | 36 |
| 19 | CHEMICALS | 205 | METAL MANUFACTURE | 52 |
| 20 | VEHICLES | 206 | CONSTRUCTION | 62 |
| 21 | TRANSPORT | 232 | BRICKS | 96 |
| 22 | INSURANCE | 255 | VEHICLES | 104 |
| 23 | INSTRUMENT ENG. | 320 | INSTRUMENT ENG. | 116 |
| 24 | CLOTHING | 687 | DISTRIBUTION | 195 |
| 25 | PROF. SERVICES | 758 | INSURANCE | 352 |
| 26 | PUBLIC ADMIN | 987 | PUBLIC ADMIN | 1 142 |
| 27 | FOOD | 996 | FOOD | 1 183 |

Source: DOE Statistics (NOMIS).

The technique is used in this paper to assess how individual industrial orders within West Yorkshire have contributed to the employment performance of the local economy. The differential shift can be defined as that employment change which is not explained by either national trends or by the regional structure. In effect, it refers to the difference between actual and expected employment change. Regarding interpretation of results, a negative differential component indicates that the observed employment change in a particular industry is below the level that one would expect, while a positive result suggests that employment has performed better than might be expected.

While the technique has been criticised on a number of grounds (for a comprehensive evaluation see Palmer 1986), it can nevertheless be a useful analytical tool, an indicator of potentially interesting areas of enquiry. Since it exposes anomalous and peculiar industrial performance, the technique thus serves to direct the research effort towards areas of the economy which require further investigation.

Reference to Table 3 reveals that between 1978 and 1981 the textile industry had the highest negative differential component for full-time female employees (-2 188) and the third highest differential component for part-time female employees (-814) (See Tables 3 and 4). Yet, in contrast to this, the differential shift is not strongly negative for male full-time or part-time employment. This is a particularly significant revelation, and is suggestive of the existence of gender-specific processes at work within the textile industry of West Yorkshire. Clearly, the fact that female employment within the industry performs markedly worse than expected, while male employment does not, merits further enquiry.

3.4 EARNINGS AND WAGE RATES WITHIN THE TEXTILE INDUSTRY.

It is also useful context to examine the earnings profile of the textile industry, and to assess the contribution that this may have upon the earnings structure of the local economy. Such an investigation further reinforces the argument that there is an urgent need to understand the dynamic processes which drive this crucial sector.

The influence of industrial structure is undeniably important when attempting to explain and understand the problem of low pay, and this is perhaps nowhere more evident than in the textile sector. Although virtually every industry has some employees working for low wages, it is possible to identify concentrations of the problem in certain industries: there is a particularly high incidence of low pay amongst men in hotels and catering (53%), and textiles (41%). In the case of women, what is perhaps most alarming is the fact that only one-seventh of female workers in textiles, footwear and clothing manufacture are NOT low paid. This can perhaps be most succinctly expressed by reference to Table 5:

TABLE 5

LOW PAYING INDUSTRIAL CLASSES, 1985.

| CLASS | DESCRIPTION | EARNING < £115 PER WEEK. | |
|-------|-------------------|--------------------------|-----------------|
| | | FULL TIME MEN | FULL TIME WOMEN |
| 43 | TEXTILES | 41% | 84% |
| 66 | HOTELS & CATERING | 53% | 86% |

Source: Low Pay Unit Calculations, April 1985, from unpublished New Earnings Survey.

Notes: Based on the Revised SIC 1980.

£115 is defined as a minimum 'living wage', as defined by the European Social Charter.

The Royal Commission on the Distribution of Income and Wealth, point out in their report that regional differences in earnings are attributable primarily to differences in their industrial and occupational structure. (Diamond Commission 1978, Cmnd 7175, HMSO). Clearly if the textile industry is indeed perpetuating such gross distortions of the earnings structure of the local economy, it represents a sector worthy of rigorous investigation, in order that one can begin to understand the mechanisms which generate and sustain such a situation.

3.5 REDUNDANCIES WITHIN THE TEXTILE INDUSTRY.

Finally, it is useful to focus on the issue of redundancies within the textile sector, since this gives an indication of the performance and buoyancy of the industry. Particularly interesting in this respect is a paper by Foley and Green (mimeo) which puts the redundancy issue in West Yorkshire under the microscope. What the paper reveals is that the textile industry is the major job loss sector within the local economy, being responsible for some 34% of all job losses within the region between 1975 and 1981 (see Table 6):

TABLE 6

MAJOR JOB LOSS SECTORS IN WEST YORKSHIRE 1975-1981.

| RANK | DESCRIPTION | LOSSES AS A % OF ALL LOSSES |
|------|-----------------|--------------------------------|
| 1 | TEXTILES | 34 |
| 2 | MECHANICAL ENG. | 15 |
| 3 | CLOTHING | 9 |
| 4 | ELECTRICAL ENG. | 8 |
| 5 | VEHICLES | 4 |
| 6 | MINING | 4 |

Source: adapted from Foley and Green (mimeo).

Notes: Described according to 1968 Standard Industrial Classification
All other industries account for <4%

Clearly, then, while the textile industry is one of the major employers within the region, it is also a sector undergoing particularly dramatic and dynamic changes.

4. THE DESIGN AND IMPLEMENTATION OF A SECTORALLY SPECIFIC ENTERPRISE DATABASE.

4.1 INTRODUCTION.

Having established a preliminary framework for analysis, it is necessary to move on to a consideration of the methodology adopted, or, more precisely, to the specifics of the research design, since this represents the logic which links the data to be collected to the initial questions of the study.

The ultimate intention is to explore the variety of enterprise behaviour within the textile industry in West Yorkshire, and to present a detailed, case-oriented analysis of the behaviour of individual companies as they struggle to confront the hostile economic climate.

4.2 METHODOLOGICAL PROBLEMS AND PROCEDURE.

The importance of empirical verification of more generalised theoretical constructs is recognised throughout the research process:

"It is not that empirical work can be expected necessarily to establish the validity of the conceptual framework, but that the findings of the one should enrich the understanding of the other."
(Lloyd and Shutt 1985).

The logistical problems associated with engineering an enterprise-based, multiple case study research programme are many and varied.

Firstly, the definition of a 'large' industrial enterprise is beset with problems: size can be variously measured according to criteria such as number of employees, net assets, or number of subsidiaries, and an enterprise scoring highly on one parameter may not necessarily score highly on another. Furthermore, large is both an absolute and a relative concept: an enterprise may be absolutely small when compared to all enterprises but large when compared to other corporations in the industrial sector in which it operates. Whatever criteria is used, the definition of large is necessarily arbitrary.

Secondly, much confusion surrounds the terms 'enterprise', 'firm', 'establishment', 'subsidiary' and 'corporation', amongst others. Frequently alluded to in a variety of contexts, such terms are often synonymously used without precise specification or definition. For the purposes of the present investigation, the focus is upon the ENTERPRISE, comprising one or more sites under common ownership or control. To quote Penrose,

"It is an autonomous administrative planning unit, the activities of which are inter-related and co-ordinated by policies which are framed in the light of their effect on the enterprise as a whole." (Penrose 1959).

The notion of the enterprise, then, refers to a unit of ownership, and in this context is taken to be synonymous with the corporation. In contrast to this, the ESTABLISHMENT is taken to be a single operational unit within the economy, a unique entity which may be either independent or a subsidiary of a larger enterprise. The notion of 'organisation' is taken in this context as a generic term for corporate enterprises generally.

A further operational difficulty relates to the fact that many corporations are now becoming increasingly multi-divisional, operating in more than one product area, with their activities often overlapping into sectors other than their main activity. Such increasing diversification makes the concept of the single product, sectorally specific enterprise ultimately erroneous. Moreover, this throws into question the validity and utility of the Standard Industrial Classification for the study of large corporations, whose outputs increasingly transcend the rigid boundaries of the SIC and, if accurately categorised, appear in a diverse amalgam of sectors. For the purposes of this investigation, enterprises are identified according to their principal activity, with all those subsidiaries in West Yorkshire which are recorded as MLH 411-429 (1968 SIC) being included.

More particularly, the notorious difficulty in obtaining enterprise data remains a perennial problem. Indeed, it can be suggested that the hitherto lack of substantive research into named corporations can be in large measure attributed to practical difficulties: published enterprise-level information invariably tends towards either superficiality, as is the case with company reports, or towards self congratulatory rhetoric, as with glossy promotional publications, which remain resolutely propagandist in their appraisals.

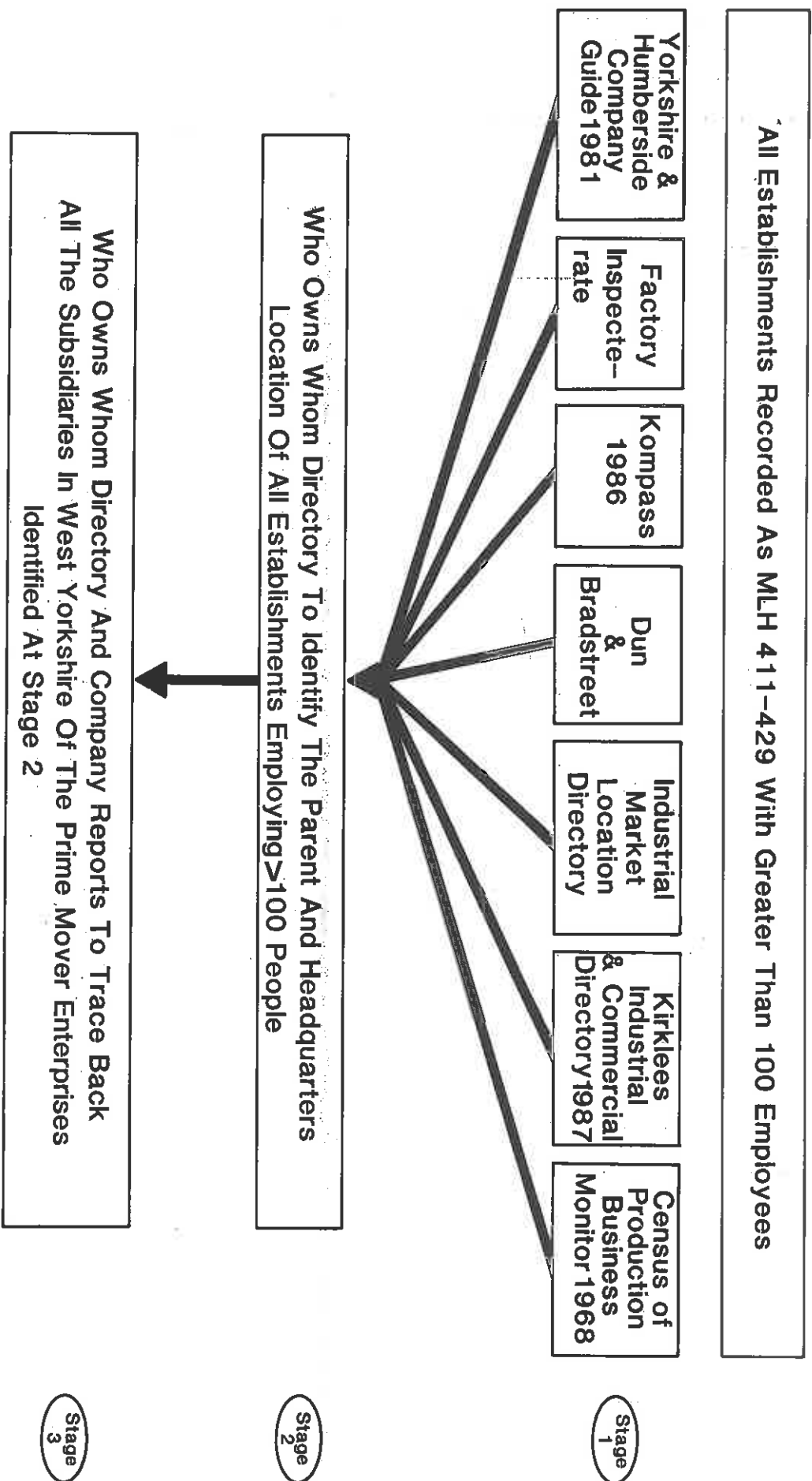
Similarly, the use of media documentation is hampered by it being inevitably unsystematic and tending to record only the most significant and dramatic corporate events: other gradual, evolutionary changes, while being undoubtedly crucial to any comprehensive understanding of contemporary restructuring processes, are so often not deemed 'of public interest'.

Finally, the appropriate survey methodology is itself problematic: questionnaires are hampered by depressingly low response rates, while interview techniques remain an art in themselves, relying on the goodwill of top level management, and may be limited by confidentiality constraints. At a more pragmatic level, there exists the sheer problem of trying to locate the appropriate individual who has an overall purview of the enterprises corporate strategy, if indeed there is such a person.

In the event, the research process reported here comprised a complicated procedure of data collection and analysis from a diverse range of sources. The ultimate intention was to develop a formal, retrievable enterprise database which recorded all enterprises in the textile sector (MLH 411-429, SIC 1968) with at least one subsidiary in West Yorkshire employing more than 100 people.

A major strength of such a research design is that it presents the opportunity to utilise a diverse range of sources of evidence. This in turn permits the corroboration and augmentation of evidence and the development of converging lines of enquiry. The results thus emerge from a diverse amalgamation of information, both quantitative and qualitative, published and unpublished, official and incidental, to give a rich insight into the contemporary dynamics of textile enterprises within the West Yorkshire economy.

FIGURE 2 The Identification of the Prime Mover Textile Enterprises within West Yorkshire



5. LOOM DUCKS: A CROSS CASE ANALYSIS OF THE RESTRUCTURING PROCESSES OPERATING WITHIN THE WEST YORKSHIRE TEXTILE INDUSTRY.

5.1 INTRODUCTION.

This section of the paper comprises an investigation into the restructuring processes at work within the contemporary space economy. Reference is made throughout to the textile industry within West Yorkshire, although the ultimate intention is to offer an expose of the motive forces for change within a regional economy, and to explore the corporate response to changing economic conditions at a sufficiently generalised level, in order that the mechanisms identified can be translated and evaluated in the context of other sectors within the economy, thus building up a broad picture of corporate restructuring.

The procedure adopted throughout this section is a cross-case analysis, with information from individual cases being dispersed throughout the investigation, which comprises a series of sections, each section being devoted to a separate and identifiable cross-case issue. In effect, then, individual cases serve as the evidentiary base for the study, representing pertinent examples of the broader processes under discussion. The ultimate intention is to synthesise a collection of case study material, to move beyond individual cases to a more general interpretation of processes at work in order to identify certain general principles which can hopefully be re-applied in analyses of wider collections of corporate enterprises in the economy.

5.2 THEORETICAL UNDERPINNINGS.

The theoretical stance adopted is rooted in the structuralist tradition, recognising that particular forms of organisation may be the micro-level manifestations of wider processes occurring at the national/international economic scale. The overriding concern is to identify the mechanisms by which the process of capital accumulation generates uneven spatial development, and to understand how such external exigencies are translated through the spatial hierarchy, ultimately generating particular spatial and organisational changes.

The approach adopted explicitly links all scales of analysis, recognising that the organisation of economic space comprises a functionally interrelated and integrated system involving complex feedback mechanisms. In this way, the following approach simultaneously considers the interactive processes of change which filter through the economic system, from the international/national economy, to the corporate interface and ultimately, to those establishments which form the bottom tier of the conceptual hierarchy.

Having previously alluded to the concept of 'restructuring' it is appropriate at this stage to attempt to define and explain the ubiquitous yet curiously indeterminate concept of 'economic restructuring', since this theoretical body informs much of the following discussion. The notion comprises a bundle of ideas which, since 'gatecrashing' the literature (Blackaby 1981), has been variously referred to in a variety of contexts without, it appears, rigid specification or explanation: while it is by no means a word bereft of meaning, its precise definition has apparently become infinitely extensible.

In essence, the process of restructuring can perhaps be most easily conceptualised as the reorganisation processes which enterprises undergo in response to the dynamic changes confronting them within the contemporary space economy. In effect, then, restructuring comprises a variety of processes which involve reorganisation and realignment, in spatial and organisational terms, in an attempt to improve profitability and competitiveness.

Perhaps the most comprehensive and coherent investigation of the restructuring phenomenon is to be found in Massey and Meegan's 'The Anatomy Of Job Loss' (1982). Shrouded in a theoretical conceptualisation of spatial development as an outcome of the process of capital accumulation, the argument continues with the identification of a typology of three processes of restructuring, namely,

RATIONALISATION: reduction of the labour force as a means of keeping up profits throughout the economy.

INTENSIFICATION: the reorganisation of an existing production process in an attempt to increase labour productivity. It is essentially a cost cutting measure intended to improve profitability or increase competitiveness.

INVESTMENT AND TECHNICAL CHANGE: significant investment, which stems from competition and the requirements of profitability.

Such investment strategies, it is argued, can produce quite dramatic changes in the arrangement of the production process over time, and much progress has been made regarding our understanding of the restructuring of the space economy. What we have witnessed is a series of phases of capitalist development, each with their own spatial repercussions and implications:

The first phase of capitalist development during the nineteenth century resulted in accumulation centres being polarised on the basis of sectoral specialisation. These industries were not faced with an undifferentiated geographical surface, and concentrated capacity in areas most propitious in terms of their requirements of production. This heralded the era of the textile industry in West Yorkshire, which, because of abundant water supplies, steel to make new machinery and rich coal deposits to provide steam power, came to occupy a pivotal and strategic position in the local economy: dominant in terms of new investment and growth in output and employment, the industry was a influential element in the emerging pattern of regional differentiation.

A later phase of accumulation brought further concentrated sectoral specialisation in previously underindustrialised regions, involving cars and domestic appliances to name but two. However, external conditions inevitably changed and accumulation imperatives altered: a new cycle of accumulation was ushered in and

"Sectoral decline brought with it specifically regional decline."
(D. Massey, 1979).

In recent decades, the former sectoral division of labour has gone into accelerated decline, and in its place emerged a new and unprecedented spatial inequality and division of labour resulting from spatial restructuring in individual industries. This phase was signified by the concentration of capital into fewer and fewer hands, by increasing external control and by the decentralisation of routine production functions. This was the era when the 'branch plant' enjoyed (or perhaps endured?) a hegemonic position in the economy, the era of the 'cathedral in the desert' phenomenon, when organisations divorced their production activities from their higher level management functions, and decanted the former into previously underindustrialised peripheries which became economic outposts satisfying corporate demands for non-militant, un-unionised labour forces. Feminisation of manufacturing activities producing standard products and services was the corporate response, rigid organisational hierarchies were the rule, profitability was the name of the game.

However, while significant progress has been made over the last decade in our understanding of the processes underlying the rearrangement of the U.K. space economy, it must be recognised that some of the processes identified above are perhaps not in evidence today, or are undergoing substantial transformations. What this paper is arguing is that the current phase of restructuring within advanced industrial capitalism is not yet well understood, and requires considerable elucidation and respecification. It appears that a new phase of restructuring is taking place which is starkly different from the spatial division outlined above. This new kind of restructuring differs markedly from that of a decade ago, such that it may now be perhaps more appropriate to allude to the notion of a 'second restructuring', which is quantitatively and qualitatively different from earlier decades, and is being imposed by a combination of heightened foreign competition, and a monetarist government fundamentally based on a belief in the regenerative powers of the free market economy and driven by a 'leaner but fitter' ideology, which envisages that the slimming down of capital and the shake out of labour during the most recent recession represents the short term costs necessary to achieve the long term gains of a more efficient and productive economy.

It can be argued that this new phase of restructuring represents a unique and unprecedented realignment and reorganisation of the contemporary space economy and

"Constitutes a new and starkly different paradigm from that associated with the 1945-75 period."
(P. Cooke 1986b).

Ultimately, then, what this paper is advocating is a reformulation of the theoretical insights generated in the 1960's and 1970's, as they are being overtaken by the events and processes of the 1980's, the decade of reconfiguration.

5.3 DOMESTIC DISINVESTMENT.

What we are witnessing in the West Yorkshire textile industry is the selective denudation of former patterns of development as a period of accelerating disinvestment gains momentum. What this implies in the specific case of textile enterprises is the RATIONALISATION of indigenous production, the spatially selective disposal of local (and more generally, domestic) capacity, and the concomitant erosion of the labour force. In effect, such rationalisation policies are the result of relative lack of profitability in comparison with alternative investments: the profit motive is again the dictator of corporate strategy, massive labour shedding is the inevitable and unfortunate by-product.

While the precise nature of corporate response to recession conditions is predictably variable and idiosyncratic, one overwhelming feature common to all the prime mover textile companies is the rationalisation of domestic operations, the pruning back or indeed closure of selected establishments. The recent history of the John Crowther Group gives an insight into the scale of contemporary local disinvestment: in January 1982, Crossley Carpets Ltd of Halifax announced its closure, with the loss of 500 jobs. This was soon followed by the closure of Joseph Lumb Ltd, a subsidiary operation again located in Halifax, and the Company announced yet another closure in the same year, this time the victim of this disinvestment strategy was David Dixon and Son Holdings, a woollen cloth mill in Leeds which formerly employed 148 people, all of whom lost their jobs. The events at Carpets International in Halifax represent the latest blow in this tragic saga: in 1980, 50 jobs were lost through natural wastage and the remainder of the workers were put on a two day week, 360 redundancies were announced by the firm in December 1980, followed by a further 117 in April 1981. The obituary was finally written in January 1982, when the plant announced its closure and the associated loss of 500 jobs.

In a similar manner, the events at Readicut International epitomise the scale of recent local disinvestment strategies, as 100 jobs were axed with the closure of Plasticisers Ltd, a local woollen and worsted manufacturer. Again, the ruthless disposal by Allied Textile Companies of Joseph Lumb and Sons in 1983, and the closure of British Furtex Fabrics in 1986 where 105 jobs were lost, reveal the extent of local reductions in capacity. The list is endless, the events speak for themselves.

The focus for such defensive rationalisation and retrenchment has typically been on those labour intensive areas of production where manpower could be rapidly reduced, and in this way, many textile enterprises have shaken out labour on a colossal scale, by as much as 50% in the case of Courtaulds (Ron Martin 1986). Indeed, Courtaulds is in the unenviable position of being 'top of the job loss league table' of private corporations in the UK, having shed 23 200 jobs at 49 locations throughout the country between 1976 and 1981 (Financial Times Reports). As Mr. Mike Parker, Managing Director of Courtauld's Northern Spinning Division, recognises:

"The scale of rationalisation in the past six years has been heavy. In 1979 this division produced about 1 800 tonnes of yarn a week and employed about 11 000 people in at 42 factories. Output is now running at 1 100 tonnes and only 4 00 people are now employed on 28 sites...The choice is between fewer jobs and a future, or no future at all."
(Financial Times 13.3.86).

The disastrous impacts of such disinvestment strategies upon employment opportunities in the local economy can be graphically exemplified with reference to the specific case of Allied Textile Companies, whose recent performance is typical of textile corporate behaviour in West Yorkshire during the 'decade of organisational reconstitution': an enterprise indigenously headquartered from Huddersfield, the Group comprises some 16 subsidiaries within West Yorkshire. The company is in the vanguard of the 'leaner but fitter' movement, brutally scrapping the least profitable elements of the enterprise:

"As the British Furtex disposal proves, ATC is as ruthless as ever at weeding out poor performers".
(Financial Times 23.7.87.).

Efficiency not equity is clearly the motive force behind the Group's corporate strategy, and that profitability is the name of the game is lucidly emphasised by the assertion that

"Trimming back lower margin activities and bolstering more successful lines has been the driving force behind a 16% increase in ATC's half time profits from £3.10 to £3.62 million".
(Daily Telegraph 23.7.87)

"(Clearly) Allied is not a company which thinks big is beautiful. It thinks profitability is beautiful."
(Financial Weekly 10.7.86).

Reference to Table 7 reveals the unfortunate yet inevitable implications of such a disinvestment strategy: wholesale job loss.

TABLE 7

THE EMPLOYMENT PERFORMANCE OF ALLIED TEXTILE COMPANY'S WEST YORKSHIRE
SUBSIDIARIES, 1981-86.

| SUBSIDIARY | 1981 EMPLOYMENT | | | | | 1986 EMPLOYMENT | | | | |
|---------------------------|-----------------|-------------|---------------|---------------|-------|-----------------|-------------|---------------|---------------|-------|
| | MALE F/T | MALE P/T | FEMALE F/T | FEMALE P/T | TOTAL | MALE F/T | MALE P/T | FEMALE F/T | FEMALE P/T | TOTAL |
| BULMER & LUMB | 474 | 3 | 78 | 130 | 685 | 284 | 3 | 49 | 73 | 409 |
| WILLEY & PEARSON | 172 | 4 | 45 | 5 | 226 | 142 | 2 | 36 | 3 | 183 |
| S.H. RAWNSLEY | 102 | 5 | 39 | 8 | 154 | 111 | 4 | 37 | 6 | 158 |
| WALTER WALKER & SONS | 102 | 4 | 28 | 7 | 141 | 89 | 3 | 23 | 4 | 119 |
| WALSHAW DRAKE | 108 | 0 | 31 | 2 | 141 | 85 | 0 | 29 | 2 | 116 |
| BOARDMAN & SMITH | 102 | 0 | 29 | 7 | 138 | 80 | 0 | 21 | 3 | 104 |
| MOXON LTD. | 61 | 4 | 40 | 6 | 111 | 49 | 2 | 27 | 3 | 81 |
| BLACKBURN & SUTCLIFFE | 61 | 0 | 9 | 4 | 74 | 47 | 0 | 7 | 3 | 57 |
| CENTURY DYEING CO. | 46 | 2 | 10 | 2 | 60 | 41 | 1 | 8 | 1 | 51 |
| ATC DYERS | 21 | 0 | 11 | 0 | 32 | 22 | 0 | 12 | 0 | 34 |
| H.F. HARTLEY LTD. | 20 | 0 | 8 | 0 | 28 | 21 | 0 | 9 | 0 | 30 |
| JAMES HAIGH | 40 | 4 | 13 | 5 | 62 | 18 | 1 | 8 | 1 | 28 |
| W WHITEHEAD | 31 | 3 | 12 | 2 | 48 | 13 | 1 | 5 | 1 | 20 |
| REDMAN & SMITH | 8 | 0 | 4 | 0 | 12 | 7 | 0 | 4 | 0 | 11 |
| K.M. FEATHER | 10 | 0 | 5 | 0 | 15 | 5 | 0 | 3 | 0 | 8 |
| JOSEPH LUMB | 12 | 0 | 4 | 0 | 16 | 0 | 0 | 0 | 0 | 0 |
| BRITISH FURTEX FABRICS | | | | | 105 | 0 | 0 | 0 | 0 | 0 |
| TOTALS | 1370 | 29 | 366 | 178 | 2048 | 1014 | 17 | 278 | 100 | 1409 |
| CHANGE | | | | | | -356 | -12 | -88 | -78 | -639 |

Notes: All figures from direct contact with the enterprise.

Disaggregated column totals do not add up to total for column 5
due to absence of employment figures for British Furtex Fabrics.

F/T refers to full-time employment. P/T refers to part-time employment

Clearly, disinvestment has resulted in large-scale job loss: the workforce has been reduced by 31%, representing an absolute loss of 639 jobs over only five years. Of the 16 subsidiaries, only three recorded any employment growth over the period, namely S.H. Rawnsley, H.F. Hartley and K.M. Feather, and this growth amounted to only 9 jobs in total which, when compared with the loss of 639 jobs across the county as a whole is trivial indeed. Of this aggregate loss, 26% (356) of the jobs were lost to full time males, and 24% (88 jobs) were lost to full time females: evidently, such retrenchment strategies are resulting in the permanent loss of full time employment opportunities for both males and females: the figures here suggest that there can be little prospect of a return to the halcyon days of a labour-intensive, buoyant textile industry within West Yorkshire. Even more disturbing perhaps, is the fact that part-time employment is suffering an absolute decline and thus can no longer be heralded as the saviour of the employment fortunes of the industry: within the ATC Group male part time employment declined by 41%, while female part time employment was slashed by 44%.

This erosion of employment opportunities as a result of domestic disinvestment is also evident in the case of Courtaulds, where more than 200 workers lost their jobs when the decision to close the Worsted Spinning Division at Bradford was announced in 1981. Such rationalisation is rendered all the more baffling when set in the corporate rather than the company context: that an entire plant should be indiscriminately closed is tragic enough, but when this closure occurs in an enterprise enjoying aggregate profits amounting to £200 million, with profits per employee of £2 103 (a 3 794% rise over 1980 figures), and is set alongside substantial investment abroad in such countries as Morocco and Portugal, an accusing finger must surely be pointed towards the ethical issues surrounding such a (dis)investment decision. Yet as Massey and Meegan recognise:

"It is excellent capitalist rationality to close down profitable plants if higher profits can be made elsewhere".
(Massey and Meegan 1985).

Courtauld's decision to close its Bradford plant is far less puzzling when viewed in the context of the Company's current expansion strategy, which is towards high technology products and away from traditional products such as worsted spun yarns. This continuing run-down of plant and closure of mills has varying spatial repercussions as a consequence of differing geographical specialisations. Unfortunately, it would appear that absolutely and over the long-term, the local economy is on the losing end of this concerted thrust towards localised disinvestment and the destruction of inappropriate industry.

The reality of the 'slim down and shake out', then, appears to be the wholesale scrapping of productive capacity and the concomitant contraction of employment within the region. Such effects are construed by some to be economically advantageous in the long-run, since they are vital indicators that a more efficient and competitive industry is emerging:

"The destruction of unadaptable industry in a deep recession can be a major benefit, if not an essential pre-requisite for change...It is probable that the deeper the recession, the better the long-run health of the economy."
(Stapleton 1983).

To no small extent, then, the employment decline here documented is the localised disinvestment result of the thrust towards increasing corporate internationalisation of the large textile concerns. The basic point is that the recession has prompted the internationalisation of the county's textile industry and the flight of its capital in search of more profitable locations. The dismantling of activities within the region, whilst simultaneously investing in related activities abroad, is part of an international reconfiguration and realignment according to profitability criteria, a process which is unquestionably and irreparably damaging in its impact upon the local economy. It is to this process of internationalisation that the paper now turns its focus.

5.4 INTERNATIONALISATION OF PRODUCTION.

Within the large enterprise sector, where much of the job shedding in the textile industry has occurred, the rationalisation and retrenchment of plant in the region has been accompanied by an expansion of productive capacity overseas. Against a background of falling domestic investment, many of the region's textile enterprises have streamlined their indigenous operations whilst simultaneously acquiring or building new ones abroad. What we are currently witnessing, then, is a new phase in the internationalisation of capital, a new era of capital restructuring, which is producing a transnational reconfiguration of production. In effect, what is in evidence is a newly emerging international division of labour in textile manufacturing, as capital scours the globe in search of locations that will offer potentially greater profitability. In this context, it becomes crucial to understand where the West Yorkshire textile industry, and the firms within it, fit into this new spatial division of labour which, if not actively engineered by large enterprises, has been orchestrated and utilised by them.

In effect, a process of capital investment overseas is rapidly gaining momentum: the large textile concerns within the local economy are coming to the realisation that over-reliance on the precarious British economy has become too much of a risk, and a new spirit is being fostered as the global potential is quickly being embraced. Thus Dawson International have consciously inaugurated a switch from UK dependence:

"I decided we should look at the global village and ask where we should be in the world. With approximately 30% of turnover originating abroad. Future relationships will...almost certainly be outside the UK."

(Mr. R. Miller, Chief Executive of Dawson International, Financial Times 4.6.86.)

Similarly, this drive towards multinationalisation is evident in the case of the aggressively expansionist John Crowther Group:

"The shape of the Group will become increasingly international as they embark on strategic overseas acquisitions."

(Company Statement, John Crowther Group 1987).

Again, Courtaulds are following a spatial expansion strategy and are actively hunting abroad for new opportunities:

"With Europe virtually a closed book, because there are so many strong competitors, and the US a missed opportunity for Europeans, the logic of the Chairman's thinking leads to Latin America."

(Financial Times 24.9.86.)

The rationale of this strategy of internationalisation is to capture and capitalise on lower labour costs offshore, and in this context, Courtaulds already manufactures underwear in Morocco and knitwear in Portugal. Indeed,

"Courtaulds generated 55% of its 1985-86 sales of £2.1 billion from abroad. Exports of goods from Britain accounts for only a part of the group's overseas sales: much now comes from production in America and Europe".

(The Economist 14.2.87).

The Group now operates in 25 countries, and has 75% of its production plants outside the UK. As the Report to Employees in 1987 stated:

"A key objective is to become stronger internationally. We are making strong progress in running our businesses according to the international standards to which we aspire".

The impact of this internationalisation strategy can be appreciated with reference to a geographical breakdown of turnover by Courtaulds:

TABLE 8

FINANCIAL STATEMENTS DISAGGREGATED GEOGRAPHICALLY.

| | TURNOVER £ million | |
|-----------------|--------------------|-------|
| | 1986 | 1987 |
| UK | 1 363 | 1 394 |
| UK PERCENTAGE | 60 | 58 |
| REST OF EUROPE | 405 | 440 |
| NORTH AMERICA | 282 | 264 |
| AFRICA | 94 | 127 |
| REST OF WORLD | 130 | 152 |
| REST PERCENTAGE | 40 | 42 |

Source: Company Reports.

While an increase of only 2% in the percentage of turnover accounted for by the 'rest of the world' may not seem large, this in fact represents an increase of £44 million in one year.

The implications of this for regional development are grave indeed: while this arm of the restructuring process may well promote corporate profitability, the regional costs incurred have been substantial, as the focus of production has pivoted away from the UK, and a former geographical centre of gravity for the textile industry has been progressively eroded. This hypermobility of capital is but one repercussion of the emergence of the global textile corporation with its complex labyrinth of international affiliates and subsidiaries. In effect, such giant enterprises are coming to realise that old methods of hierarchical control are no longer relevant, and are thus actively pursuing organisational strategies which allow the requisite decentralisation of control to contend with the hostile economic climate, but which are still cohesive enough to cope with the continuous monitoring necessary for such a complicated structure. Such a strategy comprises simple tactics facilitated by the manner in which such organisations can move from one unprofitable market place or product to another with relative ease, with relocation of production overseas being a clear manifestation of the case in point.

As Courtaulds so lucidly exemplify:

"The domestic industry knows that it must go on the offensive and push for import substitution. To achieve this, the company is considering 'doing an Amstrad' and producing items with a high labour cost component offshore."
(Financial Weekly 3.7.86.)

What is perhaps most disturbing about such trends is that while the West Yorkshire economy struggles, plagued by de-industrialisation, mass redundancy and economic stagnation, British capital relentlessly surges ahead with its foreign investment strategies, evaluating success in terms of overall corporate objectives, seemingly oblivious to the adverse regional repercussions of its activities. One of the great paradoxes of contemporary British decline, it seems, is how an economy performing so badly across a wide range of indicators, can nevertheless still be the

"Biggest agent of external direct investment in the whole world. In few countries of the First World are national capital and national economy so lacking in equivalence and so un-consonant."
(Doreen Massey, 1986).

As Massey so lucidly recognises:

"In a range of sectors such as textiles and clothing, with fairly straightforward international structures, the UK (domestic industry) is quite simply and over the long-term, losing out".
(Massey, 1986).

The realities of this, it appears, are precisely borne out in the case of the West Yorkshire textile industry.

5.6 CAPITAL INVESTMENT AND TECHNICAL CHANGE.

In examining the role of large textile enterprises as agents of structural change, a consideration of the role of capital investment and technical change is fundamental. While large scale rationalisation is relentlessly taking place in certain plants, there is widespread evidence that the simultaneous yet contrary process of capital investment is occurring within the West Yorkshire textile industry. What technical change and investment enable, is the maintenance of profitability and competitiveness through lower costs and increased labour productivity. Paradoxically, then, investment in new productive capacity goes alongside absolute disinvestment and job loss. In effect, rationalisation and investment are the corollary of one another, different sides of the same coin.

It is crucial to recognise that technology is not an objective, neutral concept: replacement investment and new technology is being ushered in not simply by virtue of its intrinsic merit, but because it aids the accumulation process, and in this context, it is an instrumental tool in the drive for profitable production. The significance and scale of new capital investment and associated technical change is now widely recognised:

"Considerable investment is taking place in traditional textile regions and large groups are becoming highly capital intensive and are spending in the region of £250 000 on machinery for every shopfloor worker they employ."

(Mr. Mike Cannell, Secretary of NEDO's Cotton and Allied Textiles Economic Development Committee, Financial Times 30.12.85).

"Modern, electronically-controlled, ultra high-speed equipment and a greatly improved working environment are transforming conditions in the industry."

(Mr. Leach, President of the British Textile Confederation, Financial Times 22.4.86).

Such developments are readily identifiable within the large textile enterprises of West Yorkshire:

"The Company has a strong capital expenditure programme, including improvements in manufacturing technology and automated processes".

(Readicut International, Glasgow Herald 20.11.85).

"Viyella has invested heavily in new technology, and the 1985 results show a 23% boost in operating profits to £48.4 million".

(Sunday Times 16.2.86).

"During the year, capital investment by the Company was in excess of £3.2 million, which has ensured greater efficiency in production".

(Illingworth Morris Company Statement 30.6.87).

"The Group approach is very positive towards new technology: an ongoing determination to update existing plant and invest in new machinery as it becomes available".

(Market Place Summer 1986).

However, such optimistic enthusiasm conceals the very real implications of such technological developments: wholesale job loss and the substitution of capital for labour:

"£3.25 million was invested in new plant and machinery at Bradford. A new dyeing and printing plant has been installed, but there is a price to be paid in jobs: approximately 250 will go."

(John Crowther Group, Yorkshire Post 4.9.86).

"Alliance reckons that heavy investment in new technology has so reduced the labour content that cheap labour Third World countries no longer have the cost advantage."

(The Scotsman, 29.9.86).

"The commitment to new technology is high, and this lessens the labour requirement. For example, whereas at used to take 150 hours to programme a power knitting machine, this can now be done in 8 hours".

(Market Place 1986).

Clearly, then, investment in new forms of technology is proceeding apace. Within the specific case of West Yorkshire, the most frequently cited technological developments aimed at increasing productivity and efficiency are in the fields of information handling and materials manufacture. Particularly important are automatic weaving looms, computerised lay planning and cutting machines, and CAD/CAM machines (computer aided design/computer aided manufacture), (Computer Aided Local Labour Market Information [CALLMI], MSC Vocational Education and Training Group 1987). All will have significant implications for the associated workforce, as Lloyd and Shutt recognise:

"One clear feature of recent industrial change has been an increase in the speed of technological change in ways which accelerate the turnover time of capital stock and, at the same time, both revalue and lower the demand for certain occupational skills".

(Lloyd and Shutt 1985).

This issue of increasing capital intensity and technical change raises some important social and political issues, the real question being not whether to introduce technical change or not, but, rather, one must question the motives underlying such investment decisions: ostensibly, the aim of technical change is an attempt to fight damaging competition:

"To meet our customers needs, we have developed a system called Neochrome, by which we impart colour to the fibres when still wet. This gives enormous advantage over conventional batch dyeing".

(Mr. Beaufoy, Chairman of Courtauld's Acrylic Division, Financial Times 24.9.86).

However, in many cases, such investment serves the purpose of increasing managerial control over the production process and, by increasing the capital:labour ratio, commonly implies job loss. The recent investment decision by Courtaulds to invest in high technology Schlaforst Autocoro Machinery provides a good insight into this trend towards higher investment but lower employment: labour productivity will rise by more than half, but employment will fall by more than half.

Courtaulds are, predictably perhaps, eager to put this new investment in perspective, arguing that it is a neutral technological decision, necessitated by falling order books and foreign competition. While the new technology would undeniably save labour, it is argued that this was not its principle purpose. The thrust of the argument is clear enough:

"If Courtaulds does not invest in new technology, it will not be able to meet its customers needs. They will go elsewhere and another section of the Company's market will be lost to importers. The choice is between fewer jobs and a future, and no future at all".

(Financial Times 13.3.86).

While these new machines are the proud symbols of progress, in the longer run, any investment which more than doubles labour productivity must have serious consequences for employment. While Courtauld's decision may be in the best interest of the Company according to strict profitability criteria, it can hardly be desirable for the region as a whole.

5.6 ORGANISATIONAL DEVOLUTION.

The restructuring phenomenon is also manifesting itself through various processes of organisational reconfiguration, chief amongst which is an identifiable strategy of corporate integration. In effect, there is a widespread tendency amongst large textile enterprises in West Yorkshire to actively pursue a policy of operational autonomy amongst subsidiaries. The case of Dawson International epitomises such a philosophy: at Dawson's present headquarters, a lean workforce of just 16 people oversee an empire employing more than 9000:

"We are going to be pushing things out to the people all the time, saying get on with it, it's your business".
(R. Miller, The Scotsman 10.2.86).

The Company had become over-centralised in the 1960's, and has therefore been pursuing a policy of decentralisation since the mid-1970's. This entailed each of operating subsidiary having its own Managing Director who is responsible for performance and profits. All budgets are calculated in consultation with these subsidiaries, and all subsidiaries in effect operate as independent profit centres.

Similarly, Coats Viyella now has a far more decentralised operating structure following its policy of devolving management and decentralising the organisation:

"Alliance's strategy is to build up a broad combine broken up into profit centres".
(Sunday Telegraph 16.2.86).

Again, the John Crowther Group reveal a commitment to operating autonomy, the devolution of day-to-day management, and the setting up of realistic targets and budgets in each operating subsidiary:

"Both new acquisitions will become autonomous units within the Crowther Group, with their own managements".
(Yorkshire Post 12.3.86).

The extent of divisional autonomy within this organisation is exemplified by the fact that the headquarters location holds little information on its operating subsidiaries, and indeed all employment information, whether contemporary or historical, is kept in disaggregated form by each subsidiary: there is no central information headquarters.

Similarly, Courtaulds have undergone profound organisational changes which are having important ramifications in terms of the spatial reconfiguration of administrative and control centres: beneath Courtauld's apparent strength at the end of the 1960's were inherent weaknesses extending beyond the problems of concentrating too much power at the top. Centrally determined pricing policies and divisional cross-subsidisation were making much of the Group uncompetitive and inflexible. Recently, however, management has been devolved and the Company now runs

"Along more decentralised lines, where different parts trade independently...and the best decisions are taken at the lowest level".

(London Daily News 29.5.87).

The Group is now divided into about 300 profit centres, which report to over 20 full reporting businesses (FRB's). The headquarters staff are merely overseers of the empire, and each subsidiary has considerable corporate power and responsibility:

"Each unit has its own Chief Executive and is responsible for its own balance sheet. Courtaulds has no centralised production or marketing network and only an advisory central personnel function".

(Financial Weekly 25.6.87).

Clearly, such organisational devolution constitutes a new and markedly different corporate strategy from that which was identified and exhaustively documented during the 1970's: what we are here witnessing is sub-corporate autonomy, rather than the disintegration and resultant 'branch plant' phenomenon that was so typical of the last decade. In contrast to such spatial and organisational disintegration, involving the decanting of operating units into the periphery and the associated emergence of a rigid spatial division of labour, in which routineised productive processes are functionally and spatially divorced from higher level managerial and control functions at the headquarters, thus producing a polarised workforce, what is increasingly in evidence is a new 'management method', comprising decentralisation and autonomy for all operating subsidiaries. This must surely have important implications for those production units located in West Yorkshire: such organisational reconfiguration processes are bestowing responsibilities upon local units, implying an increase in control over the production process within the local economy, and the demise of the ubiquitous 'headquarters versus branch plant' dichotomy. In terms of regional development, then, such a trend is significant indeed, for it suggests a reversal of many of the trends which were gaining momentum during the 1970's, and offers the potential for the devolution and decentralisation of control to regions hitherto constituting little more than economic outposts, peripheral outcasts of the space economy.

5.7 FLEXIBILITIES.

In various ways, the restructuring process has been extended into the sphere of work organisation through the pursuit of increased flexibility and the de-rigidifying of work practices. This is manifested in a variety of ways within the textile industry, and has a variety of dimensions and implications. Of particular importance is the recent recognition of the need to respond quickly to changes in fashion: the traditional two-season fashion calendar has been replaced by four, or even five, shorter seasons, such that rapid response and productive flexibility has become paramount: predictable products are 'out', a varied host of ever-changing products is 'in'. Such changing demands are clearly recognised by Coats Viyella, who are actively pursuing a strategy of productive flexibility:

"The new strategy, a key element, is to secure closer links with the retailer, enabling Coats to respond more quickly to changes in fashion. This 'quick response' attitude is underpinned by investment in machinery capable of more flexible production patterns".

(Financial Times 12.2.86).

There has been an evident change of culture amongst the large textile enterprises of West Yorkshire, from manufacturing and then selling, to selling and then making. Whilst this presumably reduces uncertainty within the industry, minimises inefficient stockpiling and reduces the damaging impact of trade and fashion cycles, traditionally so detrimental to the industry, it necessarily demands flexibility and adaptability.

Intimately related to flexible production processes is the movement into high technology, which together are going some of the way to staving off damaging foreign competition:

"A labour intensive Far Eastern supplier could never respond to fashion changes at the same pace as high technology British manufacturers".

(Sunday Times 16.2.86).

"Technology now means that a store can run out of a fast selling item on a Tuesday and use its electronic point of sale (EPOS) machine to order a new batch which will arrive in some cases before the week-end. The effect has been to neutralise the cost advantage of the Third World and newly industrialised countries. A supplier in Hong Kong would take between 8 and 10 weeks to supply an item that would take four weeks to obtain from a domestic manufacturer."

(Financial Weekly 3.7.86).

This close relationship between flexibility and technology is again exemplified with reference to the Crowther Group:

"The concept of selecting, matching and ordering carpets via a computer video screen will certainly save on stock and distribution costs".

(Daily Telegraph 25.9.86).

Such flexible production processes are clearly in marked contrast to the rigid hierarchies and unadaptable production runs so typical of the textile industry in the 1970's, and represents a new and hitherto little documented corporate strategy. The implications, in terms of both production and labour processes, are significant indeed, and rigorous investigation of this flexibility phenomenon must certainly be on the research agenda.

5.8 DIVERSIFICATION: SPECIALISED PRODUCTS, CUSTOMISED DESIGNS.

In various ways, the large textile concerns within the local economy are restructuring their operations in the sphere of product design and market orientation and are coming to recognise that the route forward is through high quality, high profit margin, specialised products. Following reorganisation and rationalisation, what the large textile barons have finally recognised, is that in order to succeed, they must move up-market, must capitalise on high quality brand names and, crucially, must recognise that the consumer is sovereign, and must be tempted by innovative, design conscious products. Thus has emerged a new philosophy, starkly different to the traditional preoccupation with raw materials and costs, namely, an emphasis on retail pricing and consumer reactions: the aim is clearly to lead the market rather than passively react to it. Gone, then, is the routineised production of standardised products, the mass production of high volume, low value goods, in its place is a strategy of diversification into the specialised production of customised goods.

This emerging orientation is manifesting itself in a variety of ways, with different companies pursuing different strategies in an attempt to woo the customer and fight off the perennial problem of foreign competition. Many are capitalising on high quality names, recognising that their strength may increasingly lie in enviable brand names. Thus, Dawson International are actively pursuing a strategy of concentration on quality goods based on speciality fibres:

"Dawson International is a high margin specialist, the umbrella for a whole host of small businesses, each with its own identity and brand names".

(Investors Chronicle 31.1.86).

"Dawson is only interested in businesses which are specialist or unique in some way".

(Yorkshire Post 20.6.86).

"The Company cashed in on the 'brand hunger' of the early 1980's".
(Market Place, Summer 1986).

Similarly, the John Crowther Company Review for 1986 reported that during 1987, the emphasis would be on marketing the Group's products, on building strong international brands, and on developing the newly created Crowther image:

"We want quality, service and design".
(Mr. Barker, Chairman, in Glasgow Herald, 26.6.86).

Again, this movement towards consumer sensitive production is also revealed by Courtaulds, who are building up their design teams and have gained international acclaim at the glamour end of the business. The role of brand names has been fundamental in this respect, and Courtaulds have already recognised the value of their Gossard and Berlei specialised lingerie subsidiaries, which have enabled them to capture a large share of the brand name underwear market.

Other companies believe that the key to success lies in the movement out of commodity fibres, leaving this to low cost suppliers. The intention appears to be to move away from high volume, low margin activities which are vulnerable to the textile cycle, towards the up-market or value-added end of the industry. Illingworth Morris are a classic example of this new direction:

"The textile industry, virtually written off by analysts and politicians, has blazed back to prosperity. It (Illingworth Morris) lacked financial prowess and marketing techniques. Our concept was to go for high value added, not volume. Now we are the strongest wool manufacturer in Europe".
(Mr. Lewis, Chairman, in Sunday Telegraph 24.5.87).

As NEDO rightly recognise,

"Fashion is constantly changing, and this requires more design innovation, market research and faster responses right up the supply line".
(Financial Times 30.12.85).

It would appear, then, that the textile industry, with its new orientation towards design, product development and consumer preference, is a marketers dream, a textbook example of an industry prepared to dynamically reorganise and realign its production process according to the dictates of the market.

This movement into customised design is also manifested through a process of diversification into non-traditional or specialist products. Another arm of this concerted policy to capture the market is an emphasis unique or specialist products, resulting from the recognition that market niches are key growth areas. Thus, Allied Textile Companies are actively developing non-traditional activities such as the manufacture of fabrics for car, train and aircraft seat covers, and 75% of its profits now come from non-traditional activities (Financial Times 30.1.86). The Company plans to expand its specialty textile interests by buying more textile niche businesses (Financial Times 23.7.87):

"In a deliberate move to avoid the impact of imports and the vagaries of the fashion cycle, ATC has gone into a variety of high technology textile areas such as wind-surfing sails".
(Daily Telegraph 23.7.87).

In a similar manner, Illingworth Morris have come to recognise that the way ahead is to capitalise on unique or non-traditional products:

"The manufacturer of tennis balls for Wimbledon, cloth for Politburo members and the Pope's apparel is clearly through the first phase of recovery and preparing for expansion. The division making materials for tennis balls and snooker tables experienced a strong growth".
(The Times 24.6.86).

Evidently, the rapidly expanding leisure industry is giving the textile industry a strong boost, and is offering the realisation of potentially large profits, a fact which Dawson International has not been slow to recognise:

"The prospects for increasing sales in the fast growing leisurewear market are considerable".
(The Times 28.11.86).

A final aspect of this drive towards customised, specialised product lines is the fostering of close links with the retailer: the move to consumer sensitive fashion by the retailers has been a shot in the arm for the domestic textile producer, who recognises that future earnings are to be realised by fostering a more direct relationship with the retailer. Thus, Illingworth Morris recognise that

"The thrust is to get closer to the customer. Close links with Marks and Spencer and other multiples have already enabled Illingworth's to design yarn to the customers' specification and win orders at good margins".
(Financial Times, 24.6.86).

The role of Marks and Spencer has clearly been fundamental in this respect: while other chain stores were deserting the domestic textile industry in favour of low-cost foreign suppliers, Marks and Spencer, which has 18% of the domestic clothing market, stuck with its policy of buying 90% British, thus doing much to facilitate the fight-back by the industry. Thus, 30% of the output from Parkland Textile Holdings now goes to Marks and Spencer (Financial Weekly 21.8.86). As Sir Christopher Hogg, Chairman of Courtaulds remarks:

"I would rather have all my eggs in the M&S basket than smashed on the ground".

(Financial Weekly 3.7.86).

This emerging partnership between the retailer and the textile producer, while still in an embryonic phase, is clearly a recognition of the ultimate power of the consumer, and this forging of direct links between producer and consumer must have significant implications in for the textile industry, which is certainly moving up-market with a vengeance, becoming an altogether more polished, design conscious industry: gone are the 'dark satanic mills', the smokestack industries of the nineteenth century, in their place we see a marketeer's dream, a technologically advanced, highly efficient industry comprising

"Computers designing clothes, laser technology, and modern spinning and knitting machines".

(Financial Weekly, 3.7.86).

6. CONCLUSIONS

What this investigation has revealed, above all, is that a variety of different corporations have all pursued similar restructuring strategies during the last half decade, which together are representing a new and different phase of restructuring, one which involves a unique realignment and reconfiguration of the space economy and, crucially, one which demands rigorous investigation and understanding. What has become evident is that many of the trends identified during the 1960's are not in evidence today, or have undergone profound transformation, such that a new set of processes are now manifesting themselves:

1960's

Rigid hierarchies
Standard products and services
Feminisation of manufacturing

Domestic investment:
'green field sites'
Organisational and spatial disintegration: 'branch plants'

1980's

Flexibilities
Specialised products, customised designs
De-feminisation and de-masculinisation of manufacturing
Domestic disinvestment

Corporate integration and organisational devolution: 'profit centres'
Growing importance of technical and managerial grades
Empirical importance of unemployed reserve army

These processes are together combining to reinforce the need to consider companies as structural wholes and to contextualise them in terms of the wider, macro-level economy of which they are a part, as well as recognising the importance of the individual firm within the restructuring process: the enterprise does not homogenously or uniformly react to external conditions in some passive, pre-determined way, rather, a variety of micro-level adjustment processes are manifested as 'events on the ground', the particular outcomes of macro-level processes acting upon a unique variety of corporate enterprises. By conceptually focusing on the enterprise as part of an integrated, hierarchical system, some preliminary attempt has been made to bridge the gap between macro and micro scales of analysis. In this respect, the importance of relating aggregate trends to events on the ground cannot be over-estimated, since it provides a way in to an understanding of important feedback mechanisms and interrelationships within the spatial economy.

Clearly, important changes have occurred within the industry in recent years as it has slashed unproductive domestic capital, rationalised and 'streamlined' its operations and 'hunted abroad' for potentially lucrative investment opportunities. Indeed, one could surmise that this new phase of restructuring has indeed transformed an archaic, outdated remnant of the Industrial Revolution into a dynamic 'sunrise industry': productivity is now well ahead of the rest of manufacturing, and in many cases ahead of European competitors. As Mr. Harry Leach, president of the British Textile Confederation reports:

"Productivity increases have outpaced British industry as a whole. Output per worker went up by 5% last year and is now 40% ahead of its 1980 level...Textiles has been one of the star performers in the British economic scene. Modern, electronically controlled, ultra high-speed equipment and a greatly improved working environment are transforming conditions in the industry".
(Financial Times 22.4.86).

Indeed, it has been suggested that nothing short of a second textile revolution has occurred, and the feeling in the industry is that it has come through the recession with greater confidence than for many years. The message that the textile barons are trying to convey is that the textile industry has been reborn, has finally come of age and is ready to take on the rest of the world:

"All of a sudden, boring old textiles are back in fashion. After some time lurking in the outer reaches of the market, unwanted and unloved, the textile sector is now showing strong signs of a comeback".
(Financial Weekly 12.12.85).

This paper has demonstrated that there are strong reasons for such optimism regarding a sector for long regarded as the sleeping giant of industry: the image and orientation of many of the major names within the local economy have undergone profound changes through rationalisation, dramatic improvements in the quality of management, shifts away from routineised, standardised products towards design-led product innovation, and a close identification with the consumer through a 'sell-then-make' philosophy: the 'boom and bust' days, it would appear, are over, textile enterprises may no longer be a slave to cyclical domination. The optimism surrounding the industry is perhaps most cogently expressed by a press report earlier this year:

"After years of listening to Economists prattling about Britain being at a 'comparative disadvantage' in textile manufacturing, the manufacturers themselves are starting to make sparks fly".
(Daily Telegraph 9.2.87).

The regeneration of the local industry, it would appear, is practically a textbook example, a marketer's dream, and is littered with all the fashionable jargon: 'fast-response time' which utilises 'flexible production systems' to create 'customised', 'design conscious', high value-added products. The epitome of efficiency, perhaps, yet barely concealed beneath this glossy facade lie the deeper effects of such a profound restructuring process: the reality of the 'slim-down' and 'shake-out' is the relentless shedding of capacity and the associated reduction in the labour force. While much debate surrounds this emotive issue of industrial adaptation in the face of economic austerity, the fact remains that the problems of adjustment and recovery are widespread, and have largely been borne by the workers: while the industry may well be 'leaner and fitter', the labour market implications of this are grave indeed, and one must question what is to become of those unfortunate victims for whom the reality of restructuring is the erosion of local employment opportunities. While such adjustment processes may well be in the best interest of the enterprise, they can hardly be desirable for the region as a whole: somebody has to bear the cost of supporting those who become unemployed, and if these textile enterprises were good corporate citizens, surely they ought to consider an alternative route to higher profits, one which does not typically usher in a new wave of large scale redundancies.

Crucially, the emergent transformation is structural in origin, such that there can be no suggestion of a cyclical 'upturn': whatever the mechanics of this new reconfiguration turn out to be, and however these embryonic trends develop and progress, there can be little hope of any return to a labour-intensive textile industry.

APPENDIX 1

SECTORAL EMPLOYMENT WITHIN WEST YORKSHIRE.

| | TOTAL | 1 9 7 8 | | | | TOTAL | 1 9 8 1 | | | |
|--------------|--------|---------|------|-------|-------|--------|---------|------|-------|-------|
| | | MFT | MPT | FFT | FPT | | MFT | MPT | FFT | FPT |
| 01 AGRIC | 4344 | 2728 | 385 | 827 | 404 | 4030 | 2511 | 353 | 799 | 367 |
| 02 MINING | 24896 | 24236 | 17 | 438 | 205 | 24156 | 23416 | 16 | 573 | 151 |
| 03 FOOD | 24602 | 11524 | 385 | 5688 | 7005 | 26377 | 12252 | 306 | 6343 | 7476 |
| 04 COAL | 651 | 497 | 9 | 101 | 44 | 652 | 480 | 2 | 128 | 42 |
| 05 CHEMICALS | 14583 | 10425 | 107 | 3043 | 1008 | 11574 | 7987 | 100 | 2926 | 561 |
| 06 METAL | 16625 | 14519 | 148 | 1572 | 386 | 13223 | 11807 | 101 | 1028 | 287 |
| 07 M. ENG. | 58459 | 49818 | 680 | 6042 | 1919 | 47227 | 40343 | 388 | 4919 | 1577 |
| 08 I. ENG. | 2483 | 1735 | 45 | 543 | 160 | 3123 | 2042 | 56 | 783 | 242 |
| 09 E. ENG | 16538 | 10804 | 61 | 4752 | 921 | 13463 | 10309 | 127 | 2463 | 564 |
| 10 SHIPBLDG | 223 | 173 | 3 | 22 | 25 | 104 | 86 | 4 | 6 | 8 |
| 11 VEHICLES | 16035 | 14074 | 69 | 1597 | 295 | 11519 | 9686 | 38 | 1485 | 310 |
| 12 METALS | 18709 | 14318 | 461 | 2899 | 1031 | 15450 | 12252 | 247 | 2187 | 764 |
| 13 TEXTILES | 84522 | 50332 | 1459 | 24373 | 8388 | 55880 | 34622 | 665 | 15939 | 4654 |
| 14 LEATHER | 3037 | 1356 | 54 | 1120 | 507 | 1693 | 1079 | 40 | 404 | 170 |
| 15 CLOTHING | 46360 | 5444 | 507 | 14975 | 4508 | 19478 | 4580 | 342 | 12117 | 2439 |
| 16 BRICKS | 9230 | 7767 | 137 | 1051 | 275 | 8591 | 7240 | 90 | 952 | 309 |
| 17 TIMBER | 14324 | 11045 | 202 | 2412 | 665 | 12128 | 9273 | 148 | 2033 | 674 |
| 18 PAPER | 20948 | 12882 | 354 | 5798 | 1914 | 20071 | 12415 | 309 | 5557 | 1790 |
| 19 OTHER MFG | 9792 | 5381 | 151 | 2978 | 1282 | 8330 | 4988 | 90 | 2348 | 904 |
| 20 CONSTRUEN | 42257 | 38156 | 444 | 1990 | 1667 | 39056 | 34362 | 511 | 2065 | 2118 |
| 21 GAS ETC | 17283 | 14318 | 11 | 2256 | 698 | 17525 | 14320 | 6 | 2488 | 711 |
| 22 TRANSPORT | 42660 | 34355 | 623 | 5179 | 2503 | 41990 | 33288 | 679 | 5749 | 2274 |
| 23 DISTRIBV | 103686 | 42302 | 4222 | 29417 | 27744 | 102144 | 41417 | 4608 | 28069 | 28050 |
| 24 INSURANCE | 35177 | 14764 | 988 | 12496 | 6929 | 40097 | 16630 | 1318 | 13801 | 8348 |
| 25 PROF SER | 131587 | 34595 | 6042 | 45279 | 45671 | 132040 | 36042 | 4541 | 46310 | 45147 |
| 26 MISC SER | 81731 | 25952 | 6558 | 16504 | 32717 | 80441 | 25929 | 7038 | 17125 | 30349 |
| 27 PUB ADMIN | 50694 | 31313 | 1281 | 12990 | 5110 | 48118 | 28829 | 853 | 13133 | 5303 |

APPENDIX 2

MALE SECTORAL EMPLOYMENT CHANGE WITHIN WEST YORKSHIRE.

| | MALE FULL TIME ABSOLUTE CHANGE | MALE FULL TIME % CHANGE 1978-81 | MALE PART TIME ABSOLUTE CHANGE | MALE PART TIME % CHANGE 1978-81 |
|---------------|---|--|---|--|
| 01 AGRIC | -217 | -8.0 | -32 | -8.3 |
| 02 MINING | -960 | -3.9 | -1 | -5.9 |
| 03 FOOD | 728 | 6.3 | -79 | -20.5 |
| 04 COAL | -17 | -3.4 | -7 | -77.8 |
| 05 CHEMICALS | -2 438 | -23.4 | -7 | -6.5 |
| 06 METAL | -2 712 | -18.7 | -47 | -31.8 |
| 07 M. ENG. | -9 475 | -19.0 | -292 | -42.9 |
| 08 I. ENG. | 307 | 17.7 | 11 | 24.4 |
| 09 E. ENG | -495 | -4.6 | 66 | 108.2 |
| 10 SHIPBLDG | -87 | -50.3 | 1 | 33.3 |
| 11 VEHICLES | -4 388 | -31.2 | -31 | -44.9 |
| 12 METALS | -2 066 | -14.4 | -214 | -46.4 |
| 13 TEXTILES | -15 710 | -31.2 | -794 | -54.4 |
| 14 LEATHER | -277 | -20.4 | -14 | -25.9 |
| 15 CLOTHING | -864 | -15.9 | -165 | -32.5 |
| 16 BRICKS | -527 | -6.8 | -47 | -34.3 |
| 17 TIMBER | -7 772 | -16.0 | -54 | -26.7 |
| 18 PAPER | -467 | -3.6 | -45 | -12.7 |
| 19 OTHER MFG | -393 | -7.3 | -61 | -40.4 |
| 20 CONSTRU CN | -3 794 | -9.9 | 67 | 15.1 |
| 21 GAS ETC | 2 | 0.0 | -5 | -45.5 |
| 22 TRANSPORT | -1 067 | -3.1 | 56 | 9.0 |
| 23 DISTRIBV | -885 | -2.1 | 386 | 9.1 |
| 24 INSURANCE | 1 866 | 12.6 | 330 | 33.4 |
| 25 PROF SER | 1 447 | 4.2 | -1 501 | -24.8 |
| 26 MISC SER | -23 | -0.1 | 480 | 7.3 |
| 27 PUB ADMIN | -2 484 | -7.9 | -428 | -33.4 |
| TOTAL | -46 768 | -9.6 | -2 427 | -9.6 |

Source: DOE Statistics (NOMIS)

APPENDIX 3

FEMALE SECTORAL EMPLOYMENT CHANGE WITHIN WEST YORKSHIRE (1978-81)

| | FEMALE FULL TIME ABSOLUTE CHANGE | FEMALE FULL TIME % CHANGE 1978-81 | FEMALE PART TIME ABSOLUTE CHANGE | FEMALE PART TIME % CHANGE 1978-81 |
|--------------|---|--|---|--|
| 01 AGRIC | -28 | -3.4 | -37 | -9.2 |
| 02 MINING | 135 | 30.8 | -54 | -26.3 |
| 03 FOOD | 655 | 11.5 | 471 | 6.7 |
| 04 COAL | 27 | 26.7 | -2 | -4.5 |
| 05 CHEMICALS | -117 | -3.8 | -447 | -44.3 |
| 06 METAL | -544 | -34.6 | -99 | -25.6 |
| 07 M. ENG. | -1 123 | -18.6 | -342 | -17.8 |
| 08 I. ENG. | 240 | 44.2 | 82 | 51.2 |
| 09 E. ENG | -2 289 | -48.2 | -357 | -38.8 |
| 10 SHIPBLDG | -16 | -72.7 | -17 | -68.0 |
| 11 VEHICLES | -112 | -7.0 | 15 | 5.1 |
| 12 METALS | -712 | -24.6 | -267 | -25.9 |
| 13 TEXTILES | -8 434 | -34.6 | -3 734 | -44.5 |
| 14 LEATHER | -716 | -63.9 | -337 | -66.5 |
| 15 CLOTHING | -2 858 | -19.1 | -2 069 | -45.9 |
| 16 BRICKS | -99 | -9.4 | 34 | 12.4 |
| 17 TIMBER | -379 | -15.7 | 9 | 1.4 |
| 18 PAPER | -241 | -4.2 | -124 | -6.5 |
| 19 OTHER MFG | -630 | -21.2 | -378 | -29.5 |
| 20 CONSTRUEN | 75 | 3.8 | 451 | 27.1 |
| 21 GAS ETC | 232 | 10.3 | 13 | 1.9 |
| 22 TRANSPORT | 570 | 11.0 | -229 | -9.1 |
| 23 DISTRIBV | -1 348 | -4.6 | 302 | 1.1 |
| 24 INSURANCE | 1 305 | 10.4 | 1 419 | 20.5 |
| 25 PROF SER | 1 031 | 2.3 | -524 | -1.1 |
| 26 MISC SER | 621 | 3.8 | -2 368 | -7.2 |
| 27 PUB ADMIN | 143 | 1.1 | 198 | 3.8 |
| TOTAL | -14 612 | -7.1 | -8 396 | -5.5 |

Source: DOE Statistics (NOMIS)

APPENDIX 4

DIFFERENTIAL SHIFT FOR MALE EMPLOYMENT IN WEST YORKSHIRE, 1978-81.

| | MFT 1978 | MFT 1981 | DIFF | % DIFF | MPT 1978 | MPT 1981 | DIFF | % DIFF |
|--------------|-------------|-------------|--------|-----------|-------------|-------------|--------|-----------|
| 01 AGRIC | 2 728 | 2 511 | 19 | 0.7 | 385 | 353 | 8 | 2.2 |
| 02 MINING | 24 376 | 3 416 | 215 | 0.9 | 17 | 16 | -2 | -12.7 |
| 03 FOOD | 11 524 | 12 252 | 1 522 | 13.2 | 385 | 306 | 50 | 13.0 |
| 04 COAL | 497 | 480 | 5 | 1.0 | 9 | 2 | -5 | -61.0 |
| 05 CHEMICALS | 10 425 | 7 987 | -1 361 | -13.1 | 107 | 100 | -1 | -1.2 |
| 06 METAL | 14 519 | 11 807 | 1 872 | 12.9 | 148 | 101 | 12 | 7.8 |
| 07 M. ENG. | 49 818 | 40 343 | -3 709 | -7.4 | 680 | 388 | -203 | -29.9 |
| 08 I. ENG. | 1 735 | 2 042 | 389 | 22.4 | 45 | 56 | 19 | 42.8 |
| 09 E. ENG | 10 804 | 10 309 | 47 | 0.4 | 61 | 127 | 68 | 112.1 |
| 10 SHIPBLDG | 173 | 86 | -54 | -31.2 | 3 | 4 | 1 | 45.0 |
| 11 VEHICLES | 14 074 | 9 686 | -1 772 | -12.6 | 69 | 38 | -14 | -20.4 |
| 12 METALS | 14 318 | 12 252 | 734 | 5.2 | 461 | 247 | -106 | -23.0 |
| 13 TEXTILES | 50 322 | 34 622 | -232 | -0.5 | 1459 | 665 | -86 | -5.9 |
| 14 LEATHER | 1 356 | 1 079 | -55 | -4.1 | 54 | 40 | -3 | -6.3 |
| 15 CLOTHING | 5 444 | 4 580 | 241 | 4.4 | 507 | 342 | 17 | 3.3 |
| 16 BRICKS | 7 767 | 7 240 | 828 | 10.7 | 137 | 90 | -20 | -14.2 |
| 17 TIMBER | 11 045 | 9 273 | -43 | -0.4 | 202 | 148 | -11 | -5.4 |
| 18 PAPER | 12 882 | 12 415 | 566 | 4.4 | 354 | 309 | -28 | -7.9 |
| 19 OTHER MFG | 5 318 | 4 988 | 664 | 12.3 | 151 | 90 | -30 | -19.9 |
| 20 CONSTRUCN | 38 156 | 34 362 | 125 | 0.3 | 444 | 511 | -32 | -7.3 |
| 21 GAS ETC | 14 318 | 14 320 | -253 | -1.8 | 11 | 6 | -6 | -51.4 |
| 22 TRANSPORT | 34 355 | 33 288 | 668 | 1.9 | 623 | 697 | 36 | 5.7 |
| 23 DISTRIBV | 42 302 | 41 417 | -368 | -0.9 | 4222 | 4608 | 673 | 15.9 |
| 24 INSURANCE | 14 764 | 16 630 | 726 | 4.9 | 988 | 1318 | 125 | 12.6 |
| 25 PROF SER | 34 595 | 36 042 | 370 | 1.1 | 6042 | 4541 | -1 484 | -24.6 |
| 26 MISC SER | 25 952 | 25 929 | -506 | -1.9 | 6558 | 7038 | -204 | -3.1 |
| 27 PUB ADMIN | 31 313 | 28 829 | 695 | 2.2 | 1281 | 853 | -315 | -24.6 |

Source: DOE Statistics (NOMIS)

APPENDIX 5

DIFFERENTIAL SHIFT FOR FEMALE EMPLOYMENT IN WEST YORKSHIRE, 1978-81.

| | FFT 1978 | FFT 1981 | DIFF | % DIFF | FPT 1978 | FPT 1981 | DIFF | % DIFF |
|---------------|-------------|-------------|--------|-----------|-------------|-------------|--------|-----------|
| 01 AGRIC | 827 | 799 | 23 | 2.7 | 404 | 367 | -8 | -1.9 |
| 02 MINING | 438 | 573 | 61 | 13.9 | 205 | 151 | -53 | -25.7 |
| 03 FOOD | 5688 | 6343 | 996 | 17.5 | 7005 | 6343 | 1183 | 16.9 |
| 04 COAL | 101 | 128 | 28 | 27.9 | 44 | 42 | 3 | 7.4 |
| 05 CHEMICALS | 3043 | 2926 | 205 | 6.7 | 1008 | 561 | -210 | -20.8 |
| 06 METAL | 1572 | 1028 | -65 | -4.1 | 386 | 287 | 52 | 13.4 |
| 07 M. ENG. | 6042 | 4919 | -385 | -6.4 | 1919 | 1577 | -204 | -10.6 |
| 08 I. ENG. | 543 | 783 | 320 | 58.9 | 160 | 242 | 116 | 72.3 |
| 09 E. ENG | 4752 | 2463 | -1545 | -32.5 | 921 | 564 | -77 | -8.4 |
| 10 SHIPBLDG | 22 | 6 | -13 | -60.0 | 25 | 8 | -14 | -55.6 |
| 11 VEHICLES | 1597 | 1485 | 206 | 12.9 | 295 | 310 | 104 | 34.4 |
| 12 METALS | 2899 | 2187 | 33 | 1.1 | 1031 | 764 | 29 | 2.8 |
| 13 TEXTILES | 24373 | 15939 | -2 128 | -8.7 | 8388 | 4654 | -814 | -9.7 |
| 14 LEATHER | 1120 | 404 | -520 | -46.5 | 507 | 170 | -286 | -56.4 |
| 15 CLOTHING | 14975 | 12117 | 687 | 4.6 | 4508 | 2439 | -484 | -10.7 |
| 16 BRICKS | 1051 | 952 | 97 | 9.2 | 275 | 309 | 96 | 34.9 |
| 17 TIMBER | 2412 | 2033 | -11 | -0.4 | 665 | 674 | 36 | 5.4 |
| 18 PAPER | 5798 | 5557 | 153 | 2.6 | 1914 | 1790 | -33 | -1.7 |
| 19 OTHER MFG | 2978 | 2348 | 7 | 0.2 | 1282 | 904 | 8 | 0.6 |
| 20 CONSTRU CN | 1990 | 2065 | -16 | -0.8 | 1667 | 2118 | 62 | 3.7 |
| 21 GAS ETC | 2256 | 2488 | 102 | 4.5 | 698 | 711 | 7 | 1.1 |
| 22 TRANSPORT | 5179 | 5749 | 232 | 4.5 | 2503 | 2274 | -245 | -9.8 |
| 23 DISTRIBV | 29417 | 28069 | -887 | -3.0 | 27744 | 28050 | 195 | 0.7 |
| 24 INSURANCE | 12496 | 13801 | 255 | 2.0 | 6929 | 8348 | 352 | 5.1 |
| 25 PROF SER | 45279 | 46310 | 758 | 1.7 | 45671 | 45147 | -2 705 | -5.9 |
| 26 MISC SER | 16504 | 17125 | -175 | -1.1 | 32717 | 30349 | -5 991 | -18.3 |
| 27 PUB ADMIN | 12990 | 13133 | 987 | 7.6 | 5110 | 5303 | 1 142 | 22.3 |

Source: DOE Statistics (NOMIS).

APPENDIX 6

TEXTILE ENTERPRISES WITHIN THE WEST YORKSHIRE ECONOMY:
THE MAJOR EMPLOYERS.

| ENTERPRISE | HEADQUARTERS | SUBSIDIARIES IN WEST YORKSHIRE |
|-------------------------|--------------|--|
| COATS VIYELLA PLC | GLASGOW | THOMAS AMBLER & SONS. HEYDMAN SHAW LTD. LANCASTER CARPETS (BATLEY) LTD. PATONS & BALDWINS LTD. PRIEST (LINDLEY) LTD. RTN YARNS LTD. THOMAS BURNLEY & SONS LTD. WEST RIDING FABRICS. CARRINGTON PERFORMANCE FABRICS. B. WHITELEY & SONS LTD. JOHN MURGATROYD LTD. HUNSWORTH DYEING CO. |
| ALLIED TEXTILE CO's PLC | HUDDERSFIELD | BLACKBURN & SUTCLIFFE. BOARDMAN & SMITH LTD. BULMER & LUMB LTD. H.F. HARTLEY LTD. MOXON (HUDDS) LTD. S.H. RAWNSLEY LTD. WALSHAW DRAKE & CO. LTD. WALTER WALKER & SONS LTD. WILLEY & PEARSON LTD. CENTURY DYEING CO. LTD. ATC DYERS LTD. JAMES HAIGH LTD. REDMAN & SMITH LTD. K.M. FEATHER LTD. W. WHITEHEAD & SONS. JOSEPH LUMB & SONS. |

| | | |
|-----------------------------------|--------------|--|
| ILLINGWORTH MORRIS | BRADFORD | ALSTON SCOURING CO. BROADHEAD & GRAVES LTD. BROOK WALKER CO. LTD. DANIEL ILLINGWORTH LTD. DANIEL ILLINGWORTH & SONS GLOBE WORSTED CO. LTD. HUDDERSFIELD FINE WORSTED LTD MARTIN SONS & CO. W.M. MORRIS & SONS WOOLCOMBERS HOLDINGS PLC. WOOLCOMBERS LTD. WOOLCOMBERS (PROCESSORS) LTD. WILLIAM SMITH & CO. LTD. WESTBROOK LANOLIN LTD. J & C CRABTREE H & F TETLEY LTD. |
| READICUT INTERNATIONAL | HUDDERSFIELD | WHITLEY WILLOWS MILL LTD. FIRTH CARPETS LTD. FIRTH FURNISHINGS LTD. PLASTICISERS LTD. READICUT WOOL CO. LTD. F. DRAKE & CO. LTD. SHELLEY TEXTILES LTD. CHARLES BUSFIELD & CO LTD. CELAIRIC LTD. |
| BRITISH MOHAIR HOLDINGS PLC. | BRADFORD | GEO. ACKROYD JUNIOR LTD. BRITISH MOHAIR SPINNERS LTD. JAROL LTD. STORK BROTHERS LTD. ROBERT CLOUGH (KEIGHLEY) HGS LTD KEIGHLEY FLEECE MILLS LTD. CROFTON YARNS LTD. |
| PARKLAND TEXTILE HOLDINGS PLC. | BRADFORD | GLEDHILL OF HUDDERSFIELD LTD. W. ODDY & CO. LTD. PARKLAND MANUFACTURING CO. LTD. SMITH, BULMER & CO LTD. |
| JOHN FOSTER & SON PLC. | BRADFORD | JOHN HALLIDAY & SONS LTD. E.A. MATTHEWS & CO. LTD. PEPPER LEE & CO. LTD. JF & SON (MNFG) LTD. DUNCAN BARRACLOUGH & CO LTD. WILLIAM LAYCOCK & SONS LTD. PRIESTLEYS LTD. BECKSIDE MILLS LTD. MELFAR MANUFACTURING CO. LTD. |

| | | |
|------------------------------|--------------|--|
| LISTER & CO. PLC. | BRADFORD | GEORGE LEE & SONS LTD. JOSEPH HOYLE & SON LTD. BINGLEY MILLS LTD. |
| ROBERT GLEW & CO LTD. | BRADFORD | ROBERT GLEW YARNS LTD. ROBERT GLEW WOOL IND. LTD. EMU WOOLS LTD. |
| DAWSON INTERNATIONAL PLC. | SCOTLAND | DAWSON FUR FABRICS LTD. W. GLADSTONE & CO. LTD. JOSEPH DAWSON LTD. ANIMAL FIBRES BRADFORD LTD. JD WOOLS LTD. |
| JEC INVESTMENT CO LTD. | HUDDERSFIELD | JOHN EDWARD CROWTHER LTD. COLNE VALLEY SPINNING CO. LTD. JOHN EDWARD CROWTHER HGS PLC. |
| COURTAULDS PLC. | LONDON | COURTAULDS WOOLLENS LTD. COURTAULDS LTD. C.H. FLETCHER LTD. W.M. HUTCHINSON (YARNS) LTD. |
| SIRDAR PLC. | WAKEFIELD | HAYFIELD TEXTILES LTD. SIRDAR PLC. |
| JOHN CROWTHER. | HUDDERSFIELD | J.W. MYERS LTD. CROWTHERS CLOTH LTD. RICHARD INGHAM & CO. LTD. DADON INTERNATIONAL. W. & W. DISTRIBUTORS LTD. CROWTHERS CARPET YARNS LTD. CROWTHERS CARPETS LTD. |

| | | |
|-------------------------------|----------|--|
| AW HAINSWORTH. | LEEDS | WORMALDS, WALKER & ATKINSON LTD JOHN HAINSWORTH & SONS LTD. EDMUND BARRACLOUGH & SONS LTD. A. W. HAINSWORTH & SONS LTD. QUALITEX FABRICS. M. & M. CALVERTS. |
| STROUD RILEY DRUMMOND. | BRADFORD | J. HAYWOOD & SONS LTD. JAS DRUMMOND & SONS LTD. STROUD RILEY INTERNATIONAL LTD. |
| S. JEROME & SONS PLC. | BRADFORD | WILLIAM WHITE & SONS (HUDDS). GEORGE PRIESTLEY & SONS LTD. HIELD BROTHERS LTD. HIND PRIESTLEY LTD. HENRY MASON (SHIPLEY) LTD. |
| SANDERSON, MURRAY & ELDER. | BRADFORD | BOWLING MILLS COMBING CO. LTD. SANDERSON, MURRAY & ELDER LTD. |

BIBLIOGRAPHY

- Averitt, R.T. (1968) The Dual Economy: The Dynamics Of American Industry Structure, Norton, New York.
- Boddy, M. Lovering, J. and Bassett, K. (1986) Sunbelt City: A Study Of Economic Change in Britain's M4 Growth Corridor, Clarendon Press Oxford.
- Blackaby, F. (1979) Deindustrialisation, Heinemann, London.
- CALLMI (1987) Computer Assisted Local Labour Market Information Manpower Services Commission, Leeds.
- Clairmont, F. and Cavanagh, J. (1981) The World In Their Web: The Dynamics Of Textile Multinationals, Second Edition Press, London.
- Clarke, I.M. (1985) The Spatial Organisation Of Multinational Corporations, Croom Helm, London.
- Cooke, P. (1986a) Global Restructuring, Local Response. E.S.R.C.
- Cooke, P. (1986b) 'Britain's New Spatial Paradigm: Technology, Locality and Society in Transition'. Paper For The I.S.A. XI World Congress Of Sociology. New Delhi.
- Diamond Commission (1978) Royal Commission On The Distribution Of Income And Wealth, Command Paper 7175 H.M.S.O.
- Danson, M. (ed.) (1986) Redundancy and Recession in the Regions, Geobooks, Norwich.
- Dicken, P. (1976) 'The Multiplant Business Enterprise and Geographical Space: Some Issues In The Study Of External Control and Regional Development', Regional Studies 10 pp. 401-412.
- Dun and Bradstreet, UK Market Facts File, Dun and Bradstreet, London.
- Dunning, J.H. (1985) 'Multinational Enterprises and Industrial Restructuring In The U.K.', Lloyds Bank Review 157.
- Foley, P.D. and Green, H. (1985) 'Yorkshire and Humberside: The Strategic Framework for Industrial Change in a Declining Industrial Region'. T.R.P. 58, Department Of Town and Regional Planning, University of Sheffield.
- Foley, P.D. and Green, H. (Unpublished) Redundancies in West Yorkshire (mimeo).
- Fothergill, S. and Gudgin, G. (1979) Regional Employment Changes: A Sub-Regional Explanation, Progress in Planning 12.3, Pergamon, Great Britain.
- Hamilton, F.E.I. and Linge, G.J.R. (eds.) (1979) Spatial Analysis, Industry and the Industrial Environment, Volume 1: Industrial Systems, John Wiley, Chichester.

- Hardhill, I. (1982) 'Components of Employment Change in the West Yorkshire Woollen Textile Industry', Centre For Urban and Regional Development Studies, Discussion Paper 44, University of Newcastle Upon Tyne.
- Harvey, D. (1975) 'The Geography of Accumulation- A Reconstruction of the Marxian Theory'. Antipode 7 (2) pp. 9-21.
- Healey, M.J. (1981) 'Plant Closures In Multi-Plant Enterprises- The Case Of A Declining Industrial Sector', Regional Studies 16 pp. 37-51.
- Healey, M.J. (ed) (1983) Urban and Regional Industrial Research: The Changing U.K. Data Base, Department of Geography, Lanchester Polytechnic, Geobooks, Norwich.
- Healey, M.J. (1986) 'Collecting Data From Industrial Firms: Directories, Interviews and Questionnaires', Paper Presented to Research Workshop on Industrial Geography and Area Development, Birkbeck College, London.
- H.M.S.O. (1968) Census Of Production Business Monitor, H.M.S.O.
- H.M.S.O. (1968) Standard Industrial Classification, H.M.S.O. London.
- Hudson, R. (1986) Producing An Industrial Wasteland: Capital, Labour and the State in north-east England, Chapter 6 in Martin, R. and Rowthorn, B. (1986) The Geography Of Deindustrialisation Macmillan, London.
- Kelly's (1986) Industrial and Commercial Directory.
- Kirklees Metropolitan Council Employment Development Unit (1987) Kirklees Industrial and Commercial Directory, Huddersfield.
- Kompass (1986) Volume 2: Company Information, Kompass Publications Ltd. West Sussex.
- Leigh, R. and North, D.J. (1978) 'Regional Aspects Of Acquisition Activity In British Manufacturing Industry', Regional Studies 12 pp. 227-245
- Lloyd, P. (1979) 'The Components of Industrial Change for Merseyside Inner Area', Urban Studies 16 pp. 45-60.
- Lloyd, P. and Dicken, P. (1983) The Components of Change in Metropolitan Areas: Events in their Corporate Context, in Goddard, J. and Champion, A. (eds) The Urban and Regional Transformation of Britain. Methuen, London.
- Lloyd, P. and Shutt, J. (1985) Recession and Restructuring in the North West Region, 1974-82: The Implications of Recent Events, Chapter 2 in Massey, D.B. and Meegan, R.A. (eds) (1985), Politics and Method: Contrasting Studies in Industrial Geography, Methuen London.

- Low Pay Unit (1986) On The Bread Line. Low Pay Unit Pamphlet 40, London.
- Malecki, E.J. (1982) 'Industrial Geography: Introduction to the Special Issue', Environment and Planning A, 14, pp. 1571-5.
- Market Location Ltd. (1985) Industrial Market Location, Warwickshire.
- Martin, R. (1986) Thatcherism and Britain's Industrial Landscape, Chapter 8 in Martin, R. and Rowthorn, B. The Geography of Deindustrialisation, Macmillan, London.
- Martin, R. and Rowthorn, B. (1986), The Geography of Deindustrialisation, Macmillan, London.
- Massey, D.B. (1978) 'Regionalism: Some Current Issues', Capital and Class pp. 106-25.
- Massey, D.B. (1979) 'In What Sense A Regional Problem?', Regional Studies 13, pp. 233-43.
- Massey, D.B. (1984) Spatial Divisions of Labour, Macmillan, London.
- Massey, D.B. (1986) The Legacy Lingers On: The Impact of Britain's International Role On Its Internal Geography, Chapter 2 in Martin, R. and Rowthorn, B. The Geography Of Deindustrialisation, Macmillan, London.
- Massey, D.B. and Meegan, R.A. (1978) 'Restructuring Versus the Cities', Urban Studies 15.
- Massey, D.B. and Meegan, R.A. (1982) The Anatomy Of Job Loss, Methuen, London.
- Massey, D.B. and Meegan, R.A. (1985) Profit and Job Loss, Chapter 5 in Massey, D.B. and Meegan, R.A. (1985) Politics and Method: Contrasting Studies In Industrial Geography, Methuen, London.
- Palmer, J. (1986) Sectoral and Spatial Characteristics of Employment in West Yorkshire 1971-81, Working Paper 458, School of Geography, University of Leeds.
- Palmer, J. (1986) A Shift-Share Analysis of Employment Change in West Yorkshire 1971-81, Working Paper 463, School of Geography, University of Leeds.
- Peck, F.W. and Townsend, A.R. (1984) 'Contrasting Experience Of Recession and Restructuring: British Shipbuilders, Plessey and Metal Box', Regional Studies 18, 4 pp. 319-338.
- Peck, F.W. and Townsend, A.R. (1986) 'The Impact Of Technological Change Upon The Spatial Pattern Of U.K. Employment Within Major Corporations', Regional Studies 21 pp. 225-239.
- Penrose, E. (1959) The Theory Of The Growth of the Firm, Blackwell, Oxford.

- Prais, S.J. (1976) The Evolution Of Giant Firms in Great Britain, Cambridge University Press, Cambridge.
- Rowthorn, B. (1986) Deindustrialisation in Britain. Chapter 1 in Martin, R. and Rowthorn, B. (1986) The Geography of Deindustrialisation, Macmillan, London.
- Sayer, A. (1986) (unpublished) 'Some Theoretical Issues In Contemporary Industrial and Locality Research'. Paper Presented At IBG Workshop, Birkbeck College.
- Stapleton, J. (1981) 'Why Recession Benefits Britain' Journal of Economic Affairs, 1, pp. 7-11.
- Taylor, M.J. (1975) 'Organisational Growth, Spatial Interaction, and Location Decision Making', Regional Studies, 9, pp. 313-23.
- Taylor, M.J. and Thrift, N.J. (1979) 'Guest Editorial', Environment and Planning A, 11, pp. 973-5.
- Taylor, M.J. and Thrift, N.J. (1982a) 'Industrial Linkage and The Segmented Economy' parts 1 and 2, Environment and Planning, 14, pp.1601-1613, and 1615-32.
- McDermott and Taylor, M.J. (1982b) Industrial Organisation And Location, C.U.P.
- Taylor, M.J. and Thrift, N.J. (1982c) The Geography Of Multinationals, Croom Helm.
- Taylor, M.J. and Thrift, N.J. (1983a) 'Business Organisation, Segmentation, And Location', Regional Studies, 17, 6. pp. 445-466.
- Taylor, M.J. and Thrift, N.J. (1983b) 'Guest Editorial' Environment and Planning A, 15, pp.1287-1291.
- Taylor, M.J. (1984) 'Industrial Geography', Progress In Human Geography, 8, (2) pp.262-274.
- Taylor, M.J. (1986a) 'Industrial Geography', Progress In Human Geography, 3, pp.406-412.
- Taylor, M.J. and Thrift, N.J. (1986b) Multinationals and The Restructuring Of The World Economy, Croom Helm.
- Townsend, A. and Peck, F. (1985) An Approach To The Analysis of Redundancies in the U.K. (post 1976): Some Methodological Problems and Policy Implications, Chapter 3 in Massey, D.B. and Meegan, R.A. Politics and Method, Methuen, London.
- Toyne, B. Arpan, J. Ricks, D. Shimp, T and Barnett, A. (1984) The Global Textile Industry, George Allen and Unwin, London.
- Walker, R. and Storper, M. (1981) 'Capital and Industrial Location', Environment and Planning A, 13, pp. 321-38.

- Watts, H.D. (1980) The Large Industrial Enterprise: Some Spatial Perspectives, Croom Helm, London.
- Watts, H.D. (1981) The Branch Plant Economy, A Study Of External Control, Topics In Applied Geography, Longman, London.
- West Yorkshire Metropolitan County Council (1975-84) Economic Trends, WYMCC, Wakefield.
- Yin, R.K. (1985) Case Study Research: Design and Methods, Sage, London.
- Yorkshire and Humberside Development Corporation (1981) Yorkshire and Humberside Company Guide.