Management strategy and labour relations on British Rail

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MANAGEMENT STRATEGY AND LABOUR RELATIONS ON BRITISH RAIL

Submitted by Andrew Pendleton
for the degree of Ph.D
of the University of Bath
1986

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SUMMARY

The hypothesis explored in this thesis is that the management of labour in the 1980s may take a less planned and consistent form than many writers have suggested. Instead, other objectives to which managements attach greater priority will interact with labour management policies and practices, and lead to a variety of managerial approaches to labour issues within the firm. In certain circumstances management control of dimensions of labour management will be diminished. To explore this hypothesis, an extensive empirical investigation was conducted on British Rail since that organization appeared to be taking a strategic approach to restructuring its management of labour. Data was provided by a large number of interviews with managers, employees and union representatives and officials.

Government objectives towards nationalized industries of encouraging the reform of labour relations and the adoption of commercial priorities have not led to a more uniform approach to labour by BR since government interventions have occurred in an unpredictable way. A recent re-organization of BR's management structure to respond to these pressures has made the formulation and implementation of consistent labour policies more difficult by intensifying competing pressures within the management hierarchy. Greater variety in management decision-making has failed to achieve flexibility because of the continuing strength of railway workforce organizations.

This analysis is extended by a study of patterns of labour management in the train driving and train signalling functions. Examination of work re-organization in the driving function shows that a comprehensive strategy broke down because of governmental interventions and those elements of the strategy that were implemented have failed to increase managerial control of work organization. Investigation of the signalling function shows that labour management policies have generally not been integrated with technical priorities, and that current features of management strategy and structure are re-inforcing this tendency.
ACKNOWLEDGEMENTS

It should be a pleasant job to acknowledge the help and encouragement received during the preparation of a doctoral thesis. But so many people have assisted in the making of this one that singling-out those for thanks by name is an invidious task. Virtually everyone I met on British Rail and in the rail unions actively co-operated in the provision of information. Many went beyond this to give enthusiastic encouragement. To them a special thanks. I am grateful also to Roz Chand, Mario Garrett, Diane Jackson, Allister McGregor, Pete Scott, Gill Tipping and Judy Wright, of the School of Humanities and Social Sciences at the University of Bath, for their forbearance and expressions of solidarity whilst I was writing the thesis. Howard Gospel and Sarah Vickerstaff of the University of Kent contributed much both in giving encouragement and in discussing and criticising my thoughts on management strategies and structures. Eileen Robertson, also of the University of Kent, proof-read the thesis and endeavoured to correct the many mistakes and inconsistencies that had crept in. I am very grateful for her patience and understanding in the final stages of writing. Most of all I must thank Bryn Jones, of the University of Bath, for his encouragement, support, and helpful criticism throughout his supervision of the project. Needless to say the errors that remain are my responsibility alone.
CHAPTER ONE

INTRODUCTION
In the 1980s the managerial role in labour relations has come to be the favoured topic of study amongst industrial relations researchers. Such a degree of interest in management is unsurprising since product market developments since 1979 have frequently necessitated the formation of new approaches to the management of labour, whilst labour market movements have apparently enabled policies which would hitherto have been obstructed by trade union and workforce organizations to be successfully implemented. It was decided to research the nature of management strategy and labour relations on British Rail because new management policies had been hotly contested, to varying degrees, by the three rail unions. The first section of this chapter briefly surveys the recent literature on management to pinpoint those questions which seemed worthy of further study. The second outlines the reasons for selecting British Rail for empirical investigation and how the research project was designed and implemented.

1. NEW DIRECTIONS IN LABOUR MANAGEMENT

Since 1979 there have been major changes in the management of British organizations and the conduct of labour management within them. In many large organizations management hierarchies have been re-structured with the aim of both decentralizing operational responsibility and, at the same time, enhancing the capacity for strategic decision-making (Confederation of British Industry (CBI), 1985; British Institute of Management (BIM), 1985). In most cases
the objective has been to re-define product market niches and to increase the potential for flexible responses to external pressures in the internal arena of production.

One important element of this seems to be changes in the management of labour. There is now widespread evidence that managements are seeking greater flexibility in labour deployment (Atkinson, 1984; Incomes Data Services (IDS), 1986), whilst in the sphere of labour relations there are good grounds for believing that managerial approaches are shifting away from a 'constitutional' to a less formal 'consultative style' (Sisson, 1984).

Unfortunately, what has often been absent from accounts of these organizational changes is detailed analysis of the extent to which changes to business strategy and structure are integrated with such shifts in the practice of labour management. Furthermore, little empirical research appears to have been conducted on the effectiveness of those changes that have taken place. Accounts in the business press tend to proclaim the success of aligning labour management with strategic business objectives (for instance, Boulter, 1982; Norman, 1983). It is also commonly argued that the devolution of operational decision-making to lower tiers of management has facilitated both the formulation and successful implementation of production policy. However, the basis of these evaluations is often unclear. Detailed and comprehensive attention to the longer term results of such changes seems to be rare.
More radical commentaries, exemplified by that of Hyman and Elger (1981), adopt a similar stance if from an opposing perspective. They tend to argue that product market collapse have directly forced managements to 'claw-back' concessions 'granted' to workforce organizations when economic circumstances were more favourable to labour. Managerial control of labour deployment and task performance has been re-asserted through the dismantling of job controls built up through labour relations institutions. Common to both managerial and radical perspectives is a belief, often insufficiently supported by empirical evidence, that the connections between business strategy and labour management are direct (1), and that through this medium managerial control of labour has been enhanced. The twin themes that dominate this literature, then, are those of management strategy and control of labour.

Mainstream academic industrial relations research has generally been less ambitious in its scope. Many commentators have continued to focus on workplace labour relations largely without reference to managerial activity at higher levels of organizations (for example, Roberts, 1984; Gennard, 1985; Bright, Rees and Sawbridge, 1983). It could well be argued as a result that the exhortations to study the processes of management now often found in the industrial relations literature (in Wood, 1982 for instance) have not in practice amounted to much. Significant exceptions include Kinnie's (1983, 1985a, 1985b) and Purcell and Gray's research (1983) into the management of labour relations. Ironically, the criticism that could be levelled against these, however, is that the concentration
on management tends to preclude in practice a sufficiently comprehensive treatment of trade unions. As a result, the impression could be conveyed that managements are able to organize for labour relations and to select bargaining structures more or less at will (2). Similarly, Marginson's work (1982) on M-Form organizational structures seems to suggest that managements have a free hand to choose bargaining structures that bypass the main locii of trade union power. There are ample grounds for suspecting that union power has declined in the 1980s but its extent should not be taken for granted in this way.

If there has been little progress on researching patterns of labour management, even less has been made in following the suggestions that more attention be paid by researchers to exploration of the impact of business strategy and structure on labour management (Timperley, 1980; Kochan, McKersie and Capelli, 1984; Strauss, 1984). Other than historical work undertaken by Howard Gospel (1983b), the main exception to this is Batstone, Ferner and Terry's study (1984) of the formation of business strategy in the telecommunications and postal services activities of the Post Office in the late 1970s. These authors show how contradictory influences on strategy formulation, largely arising from state ownership, fostered a distinctive labour relations 'style' characterised by consensual relationships between top managers and union representatives. This relationship came under stress, particularly in the telecommunications sector, as the Post Office responded to governmental pressure to foster 'commercial' patterns of operation.
The contribution of Batstone et al's work is twofold: firstly, it deepens our understanding of labour relations in nationalized industries; secondly, it provides a set of insights into the interconnections between business strategy and labour relations strategies. The main weakness of the study, ironically in the light of the concerns of industrial relations researchers in the 1970s, is that insufficient attention is paid to the conduct of labour relations at the workplace. As a result it is difficult to assess how far strategies determine workplace practices, and how far strategists' objectives have been achieved.

Summarising the concerns of the literature to date, it could be characterised as falling into two main camps. Those accounts which have highlighted the formation of strategies have tended to be unable to assess how successful their implementation has been. By contrast, the large number of articles which have monitored workplace developments have not sought to determine to what extent these are the outcomes of strategic plans. Since the literature displays these divergent concerns it is difficult to decide how far management strategies are aimed at achieving greater control of labour and to what extent such an objective is achievable. On the one hand, some argue that a shifting industrial balance of power has permitted managements to develop strategic approaches to personnel and labour relations issues (for example, Brewster and Connock, 1985). On the other, structural transformations of managerial hierarchies to achieve market objectives, such as the decentralization of authority for operating decisions and the
emphasis on 'business management', may well reinforce existing, ad hoc characteristics of labour management since this sphere of decision-making is likely to become subjugated to other managerial priorities.

2. THE CHOICE OF BRITISH RAIL FOR EMPIRICAL RESEARCH

The fundamental rationale for the research project was to investigate which of these two perspectives more accurately characterizes contemporary developments in British labour relations. As has already been shown, there is a tendency in much of the current literature to assume that the former is the more likely scenario. Yet the alternative suggestion seems equally likely since evidence from the management science literature (for example, March and Simon, 1958; Cyert and March, 1963; Pettigrew, 1973; Blackler and Brown, 1980) indicates that managerial decision-making often lacks rationality and frequently contains inconsistent objectives. The project set out to answer this question through conducting a detailed assessment of the extent to which managements are formulating change strategies in the sphere of labour management, how far these are integrated with other corporate strategies, how far these are aimed at increasing managerial control of task performance, work organization and labour relations, and how far strategic objectives are realised in successful outcomes for management?
The project was designed to complement an ESRC-financed study (3), conducted by Drs. Michael Rose and Bryn Jones, which had aimed to assess whether the 'managerial offensive' perspective found in many radical and union commentaries on industrial relations was a realistic portrayal of contemporary developments in British workplaces. These researchers went about this by exploring the linkages between work re-organization schemes and labour relations objectives in a number of plants in manufacturing industry. The results suggested that these two areas of labour management possessed a separate momentum which militated against all-embracing aggressive strategies suggested by the notion of a 'managerial offensive' (see Rose and Jones, 1985; and Jones and Rose, 1985 for a summary of these findings).

In common with much of the other literature in the area, Rose and Jones' investigation was focussed primarily on the workplace. To answer the question posed at the beginning of this section, it was thought desirable to design the empirical element of the linked project to focus both on the 'horizontal' connections between management specialisms and activities, and on the 'vertical' distribution of authority between the tiers of the management hierarchy. In this way attention could be given to both the degree of integration of managerial strategies and to their translation into practice. The detailed examination which this implied of all levels of managerial decision-making and workplace labour relations was thought to justify a focus on just one employer.
It was decided early on to select British Rail for this empirical study. A market-oriented company in the public sector seemed a relevant organization to choose because in addition to the market difficulties faced by private sector industries, they have been faced with considerable government pressure since 1979 to attach greater priority to commercial practices and to improve the quality of their managerial decision-making. British Rail has had particularly acute difficulties since the Thatcher Governments have sought significant reductions in the Public Service Obligation Grant (PSOG) which in the late 1970s contributed over 30% of the British Railways Board's annual turnover. As well as intensifying the financial pressures on the Board, this financial dependence has also been exploited by the Government (this is not in itself a new development) to urge a reformulation of labour management objectives. The Thatcher Governments have viewed BR, more than most of the other nationalized industries, as a hotbed of union 'restrictive practices' and run by an 'indulgent' (Gouldner, 1964) management willing to defer to the rail unions at all levels of the organization. It could be anticipated, then, that high-level strategies to align labour management with business objectives would be especially likely to be found on the railways.

A number of events during 1982 suggested the choice was a sound one. In that year the railways lost more days through industrial action than in any other single year since nationalization in 1948 (Bagwell, 1984, p.82). Most of these days were lost through resistance organized by the train drivers' union, the Associated
Society of Locomotive Engineers and Firemen (ASLEF), to the imposition of new work rosters. The 'hawkish' stance adopted by the British Railways Board on this issue was followed by a refusal by BR management to honour the 1982 pay award until the rail unions, ASLEF in particular, agreed to new arrangements for the manning of trains. Concurrent with this a major study of BR's financial affairs was being undertaken by the Serpell Committee on Railway Finances (1983). At the beginning of 1982 the upper reaches of BR's management hierarchy had been extensively re-structured to emphasize 'business' considerations, and it soon became clear that a transformation of the management structure in BR's five Regions was in the pipeline. Thus, the issues of strategy, structure and control were at the forefront of railway affairs at the time the project was being planned.

On the basis of these contextual developments on British Rail and the issues that were arising in the academic literature three working hypotheses were adopted to guide the research:

1) the practice of labour management would become increasingly ad hoc since the primary objective of BR strategists would be to emphasize 'business' at the expense of production considerations in managerial decision-making. The managerial structures that were under construction would institutionalize these priorities and could well provide blockages to coherent labour management policies;

2) the Government's twin priorities of improving industry performance and reforming labour management would not in practice
reinforce each other. Instead, the product market strategies adopted to respond to financial imperatives would often be incompatible with consistent attempts to reduce the involvement of the rail unions in the day-to-day conduct of labour management, and the achievement of uniform policy in this sphere. Furthermore, because the labour relations priorities established by the Government are symbolic as well as substantive, the content of labour management strategies may not take the best form to achieve improvements in performance; 3) since management practice and decision-making in the management of labour will display growing variation as a result of (1) and (2), the policies that are adopted will not be sufficiently comprehensive in scope to ensure that managerial control is enhanced. The stronger the trade union, the more likely it is that they will be able to subvert management objectives. To assess these hypotheses it was thought necessary to choose for detailed study a number of occupational groups on British Rail. This would provide a focus at the workplace for management strategies, thus enabling an analysis of the consistency and success of managerial decision-making. The train-driving and signalling functions were those selected. The number of train drivers and other footplate staff at the end of 1982 was 23,054, and that of signalmen (including crossing keepers) 8,227 out of a total British Rail workforce of 161,402 (BRB, 1983c). These two groups are arguably the most important occupational groups in the supply of railway services since they share control of the movement of trains.
between them. It could well be anticipated that this role would be reflected in substantial degrees of labour relations power and considerable control of work organization. There was a useful comparative dimension in that train drivers are largely organized in a craft union, whilst signalmen form one section of an industrial union, the National Union of Railwaymen (NUR).

Train drivers were a near obvious choice for research precisely because of their centrality at the time to managerial plans to reform working practices. Of the package of changes proposed by the British Railways Board (BRB, 1979) shortly after the election of the first Thatcher Government, flexible rostering for train drivers came to assume particular prominence because its implementation came to be a test of management legitimacy with the government (Ferner, 1985). In addition to flexible rostering, the Board's proposals included changes in the division of labour between drivers and guards through Driver-Only-Operation (D.O.O.), modifications of the drivers' career and promotion structure by the Trainman Concept and relaxation of the locomotive manning agreements. The implementation of flexible rosters was selected for detailed investigation since it was unclear when the Trainman Concept and revisions to the Manning Agreements would come into operation (4), and problems of access prevented more than a superficial study of Driver-Only-Operation.

Signalmen were chosen because British Rail management's attempts to re-structure operations methods especially alters their work and
status. Furthermore, the combination of a high degree of worker autonomy with detailed control of signalling tasks suggested that railway signalling would be a fruitful area for the examination of prevailing orthodoxies in the literature on the links between skill, power and control. This element of the project centred on an examination of the impact of such changes on work organization and labour relations, and to what extent technical strategies were accompanied by labour-focussed policies (5).

From the outset it was intended to trace the involvement of managerial functions at various levels in the formulation and implementation of strategies. From an early stage of the project this assumed even greater importance than initially anticipated because of the large-scale re-organization of BR's management structure and re-formulation of railway objectives taking place at the same time as the project. Investigation was made of the main dimensions of these changes and how they seemed to be moulding policy formulation in areas additional to those of management of the driving and signalling function. On the union side attention was paid to union functions above the workplace, and a study was made of labour relations practices at all levels of the labour relations machinery.

Since the research objectives were largely contextual and concerned with establishing the nature and extent of causal relationships, a qualitative rather than a quantitative approach seemed most appropriate. Accordingly, most of the evidence was obtained by in-
depth interviewing, using semi-structured interview schedules (details of which can be found in Appendix One). The method used in interview was to seek respondents evaluation of the impact of changes in labour management, and business strategy and structure. Through subsequent analysis of these responses it was possible to assess whether workplace practices were the outcome of strategic intent or whether instead they arose from contingencies particular to the workplace.

In addition a large number of informal discussions took place with the wide range of contacts established in the duration of the project. Since the formal interviews varied from interviews lasting around an hour to 'sessions' lasting for whole days, and the informal discussions similarly ranged from brief conversations to extensive social contact it is difficult to state precisely the numerical balance between formal and informal interviews.

To investigate the changes in the driving function interviews supplemented by informal conversations were conducted at seven traincrew depots (Electric, Northern, Stone, Junction, Western, Mixed and Freight), brief details of which can be found in Appendix Two. Twenty one formal interviews took place with depot managers, supervisors or administrators, workforce representatives on the Local Departmental Committee (LDC), and workforce representatives on the Sectional Council, the next tier of the negotiating machinery. In addition, it was possible to 'sit-in' on two sessions of the Sectional Council and attend an ASLEF weekend school.
Fifteen signalling locations were visited. Detailed information was acquired on twelve of these, and a further two in the planning and construction stage. Brief details of each can be found in Appendix Three. In addition, two Control Offices were visited. Since much of the information had to be acquired whilst signalmen were operating signalling equipment, many of the interviews were less structured than those conducted at traincrew depots. A significantly large number of interviews were conducted in the signalling function because the pilot fieldwork was conducted in signalboxes. Furthermore, some of the data acquired early on was not of a high quality since an industrial dispute over a managerial policy to re-organize the staffing of a number of signalboxes made data collection difficult. In all, forty five interviews took place, supplemented by informal sessions with the line managers, supervisors, signalmen's LDC and Sectional Council representatives, and Control Office staff. A great deal of information was also acquired by attending the annual Signalmens' Conferences (6).

Documenting analysis of labour relation practices was also undertaken at union head offices. This part of the investigation stretched as far back as the mid-1960s for drivers, when diesel and electric locomotives replaced steam, and the late 1960s for signalmen, when a 'control centre' signalling strategy emerged. Ten interviews were conducted with union officials and representatives at head offices in addition to the large number of informal contacts that inevitably arise when conducting archival research.

In addition to seventeen interviews with local managers, twenty one interviews were conducted with senior managers, largely in the engineering, personnel, and operating functions, at all levels of British Rail's organization. As with other interviews, a range of informal discussions arose as a result of conducting the formal interviews.
The empirical phase of the project lasted from May 1983 to October 1984. Overall, ninety seven in-depth interviews were conducted, supplemented by the large number of informed discussions already alluded to. To this author's knowledge it is the most extensive in-depth academic study of B.R.'s labour relations.

SUMMARY
A review of the literature on contemporary labour relations shows two areas of particular interest. One is the nature of changes in collective bargaining and workforce organization. The other is the form that management strategies and structure are currently taking. Whilst accounts that report the extensive changes that are taking place in bargaining pay relatively little detailed attention to the role of management's objectives, studies of management strategy and structure often tend to assume that managerial intentions are straightforwardly translated into outcomes.

Taking this material together, a number of issues are raised. These are (1) the degree of linkage between managements' objectives and practices in the sphere of labour management; (2) the degree of integration of labour management with core business strategies and structure. There is a widespread belief, found in both the managerial and radical literature, that the weakness of workforce representation in the 1980s has enabled a more uniform management approach towards labour management to be adopted, consistent with the primary goals of the organization. It seemed equally likely, however, that the greater importance that many organizations now attach to strategic business rather than production objectives could generate greater variability in the management of labour within them, and that this could be especially marked where workforce power has not declined to the degree that many observers have charted. As a result, managements may not have increased their control of aspects of labour management to the extent maintained by some commentators.
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B.R. appeared a good choice for empirical investigation of this issue since the Thatcher Governments have placed pressure on nationalized industries to both reform elements of labour relations and work organization, and to take more account of 'business' objectives in management decision-making.

Prior to reporting the results of the empirical investigation, Chapter Two explores the use of the concepts of 'strategy' and 'control' in the literature since the meanings of these seem likely to substantially determine the outcome of empirical research. Chapter Three shows how variability in governmental objectives has in the past stimulated a consensual pattern of labour relations on British Rail, and how the features of the current Government's labour relations approach has, contrary to the arguments of radical critics, made the formulation and implementation of uniform labour management strategies more difficult rather than easier. In Chapter Four the labour relation 'system' on B.R. is introduced. It is argued that the extent observed by some in manufacturing industry, with the result that management strategies continue to face substantial union obstacles. Chapters Five and Six show how B.R.'s management structure has been re-organized, and how the strategies arising from this have tended to fragment labour management practices. A reduction in the organizational standing of the personnel function has freed sections of management to pursue work organization policies which depart from past practice but, since workforce organization is still strong, the grievances that have arisen as a result have reinforced the role of labour relations management. Futhermore, the reduced authority of the personnel department overall has largely prevented B.R. management from successfully re-shaping the structure of employee relations towards a more 'consultative' form.

The rest of the thesis reports the findings of the case study exploration.
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a more 'consultative' form.

The rest of the thesis reports the findings of the case study exploration
of the train driving and signalling functions. Chapters Seven and Eight show how a consistent labour management strategy broke down because of the Government's labour relations objectives with the result that managerial control of work organization was diminished. Chapters Nine and Ten investigate the extent to which a technical strategy to transform signalling operation has been accompanied by a set of consistent labour management policies. The overall conclusion of the thesis is that, contrary to a number of propositions derived from the literature, management objectives to reform labour relations and heighten control of work organization on BR have largely not been achieved.
CHAPTER TWO

MANAGEMENT STRATEGY AND CONTROL OF LABOUR
INTRODUCTION

The nature of the project's objectives require that empirical and theoretical consideration be given to management strategy and to what extent strategies aspire to increase managerial control of the various dimensions of labour management. There is a rapidly growing literature on this issue (see Gospel and Littler, 1983; Thurley and Wood, 1983; Batstone et al., 1984; Knights, Willmott and Collinson, 1985; Kinnie, 1985b). Within this literature, however, there appears to be little consensus on what constitutes management strategy. Perspectives range from those accounts that tend to view strategies as little more than consistency of objectives, policies and practices (for instance, Nichols and Beynon's (1977) study of Chemco) to those which perceive strategies as a distinct form of managerial decision-making. It seems likely that definitional approaches to 'strategy' will substantially influence the outcome of empirical research. The looser the definition the greater the likelihood that research findings will indicate that labour considerations are a central focus of high-level management decisions.

Some of the impetus for the analysis of management strategies comes from the centrality accorded to managements' labour objectives in the radical literature. Braverman (1974) set this process in motion in the mid-1970s with his contention that the degradation of labour is the primary management strategy in the era of monopoly capitalism. Central to this process is the achievement of managerial control over task performance. Subsequent work in this genre, such as that of
Friedman (1977) and Richard Edwards (1979) suggested that this primary objective of securing control of workforces can be embodied in a number of types of management strategy. But as accounts became more sensitive to variations in management strategy, so the object of control became more varied. In Edwards' work, for instance, the object of control shifts from immediate control of task performance through 'simple' and 'technical' control, to a more generalized control of workforce orientations and behaviour achieved through 'bureaucratic' control.

Since the approach to control is not uniform in the literature, it is necessary to consider the meaning of 'control' too. The objects of control needs to be established, and the methods of regulating work relationships need to be separated-out from more generalized assessments of the balance of power between managers and workforces. This is necessary since, as with strategies, the scope and meaning of control seems likely to influence the approach to and results of empirical research. The use of both 'strategy' and 'control', then, are reviewed here in turn.

1 THE MEANING OF 'MANAGEMENT STRATEGY'

There is considerable divergence in the academic literature in discussions of the focus of management strategies. Broadly speaking the literature divides into those writers who view strategies as all-embracing expressions of imperatives facing managements in capitalist
economies and those who believe strategies have a more sharply-defined focus. Thurley and Wood argue that,

"Discussion of management industrial relations strategies reflects the fact that different writers have taken different problems as the focus of their argument. In a real sense there has been no debate, only a set of competing and somewhat ill-defined arguments about management, making quite different assumptions in their explanation of managerial actions" (1983, p. 207).

As a result it is difficult to examine whether strategies are in operation and, where they are, to what extent labour relations strategies are integrated with other labour-focused strategies and with business strategies. At the extreme, some radical accounts suggest that they are but one strategy.

The scope of strategies and the meaning of 'strategy' are closely related. Generally, the broader the scope strategies are perceived to have, the lesser attention is thought necessary to the components of managerial decision-making. Those accounts, such as Braverman's, which point to comprehensive strategies against labour suggest that, because these derive from fundamental imperatives, the details of decision-making are of secondary importance. Batstone et al make the similar point that such writers,

"tend to see labour strategies as flowing unproblematically from the goals of the capitalist firm. Management is often viewed in a crudely functionalist way as a kind of transmission belt converting the 'law of value' into strategies for the
exploitation of labour" (1984, p.2).

Since the differing perspectives can substantially affect the focus of research, it is necessary to examine both the scope of strategies and the components of management actions before empirical work can be successfully carried out.

The broad differences in approach in the literature arise from distinct disciplinary traditions. It is arguably unsurprising that accounts in the American school of radical political economy have a broader scope than those in the mainstream of industrial relations writing in Britain. The latter, in examining the details of "the institutions of job regulation" (Flanders, 1965, p. 10), has almost been bound to have a narrower focus than accounts which seek to generate generalizations about management objectives in various historical periods. Such differences in perspective would probably not be problematic if they could be clearly delineated. But many British industrial relations writers have extended the scope of the subject to what Hyman has termed "the process of control over work relations' (1975, p.10) (1). Thus, defined industrial relations can cover the whole arena of labour-management relationships in much the same way as labour process writing tends to. In the absence of clear boundaries to the subject of industrial relations it is often unclear what labour relations strategies identified by writers in this discipline refer to.

These problems are compounded by variations in the focus of management strategies in the radical literature. In Richard Edwards'
work, for instance, 'simple' and 'technical' control strategies are largely aimed at directing task performance and the division of labour, whilst 'bureaucratic' control strategies seek to generate employee consent through the systematic application of rules in the sphere of employment relationships. In Edwards' view these strategies possess a common objective in aiming to constrain the inherent variability of worker performance that arises because

"labour power is always embodied in people, who have their own interests and needs, and who retain their power to resist being treated like a commodity" (1979, p. 12).

Leaving aside the question of whether those features grouped under these types of strategies are, in fact, introduced by managements with this intent (see Penn, 1981; and Batstone et al 1984, pp. 290-8 for useful critiques of this), it is apparent that Edwards evidence for the three phases of strategy is insufficient. It is assumed rather than proved that the bureaucratization of employment conditions will lead to the successful implementation of managerial objectives in the sphere of work organization. His main instances of bureaucratic control are grading structures, which seem inadequate guides to either the division of labour or the achievement of consent, and a small number of job descriptions which cannot be assumed to be equivalent to formal rules of task performance. The operational rules on the railways, for instance, are considerably more extensive than job descriptions found in contracts of employment.

The confusions that arise from this sort of approach to strategy
suggest the importance of distinguishing separate dimensions of labour-management relationships to which strategies could be applied. Littler (1982) distinguishes between the bureaucratization of work tasks and the bureaucratization of employment conditions. Gospel (1983a) draws attention to three categories - work relations, employment relations and industrial relations. Work relations refers to the area of work organization and task performance, employment relations to job structure and employment benefits, and industrial relations to management-union relations and the institutions of collective bargaining. Such an analytical schema is preferable to that of Littler's since it directs attention to the institutions in which conflicts over work relations and employment relations may take place but which nevertheless have a separate dynamic of their own. It is then possible using such categories to empirically investigate how far management strategies are aimed at these dimensions and how far management policies towards them are integrated.

Once the focus of management's labour strategies have been established, it is possible to turn to the issue of how far managerial decision-making can be viewed as strategic. Labour process writing has a tendency to view all managerial actions in the sphere of labour management as reflecting one of a small number of basic strategies to extract surplus value in furtherance of a fundamental imperative of achieving profit. The problem with this is that it puts all managerial actions on a similar level, in effect conflating the day-to-day activities of individual managers with the coordination of management decision-making necessary to achieve
substantial shifts in the way an organization performs (2). Furthermore, it grants managerial action a sense of purpose which may not in reality be present.

Although industrial relations writing has tended to focus more on the details of management-labour relations, it has shared this tendency to impute a consistency and clarity of objectives to management decision-making which may not be warranted. Examples of this can be found in much of the material that has outlined the process of rationalization and formalization of British labour relations that has taken place since Donovan (Royal Commission, 1968). Yet these developments (evidence of which can be found in Purcell, 1981; Brown, 1981; Daniel and Millward, 1983), are not proof of a labour relations strategy even though they were consciously brought about by managements. One account which describes them as strategic nevertheless notes,

"very rarely did a management set out with an explicit policy of restructuring workplace industrial relations. Most introduced reforms in a piecemeal and ad hoc fashion in response to events" (Purcell and Sisson, 1983, p. 103).

It is apparent from this brief discussion that the meaning of strategy is often unclear. In the current debates in sociology and industrial relations on management strategy the protagonists fall into two main camps (though, as Thurley and Wood suggest, the boundaries are not always distinct). Firstly, there are those who adopt what is sometimes called a 'stringent' definition. Often
proponents of this view suggest that 'strategy' is a combination of a comprehensive analysis of a given problem, a suggested solution and a set of mechanisms to achieve it. On the other hand there are those, such as Child (perhaps surprisingly in the light of his previous work on 'strategic choice') who appear to suggest that in the key 'labour process' area 'strategy' need not have explicit goals (see Child, 1985).

The former approach is perhaps best exemplified by Rose and Jones (1985) in their analysis of work re-organization schemes. They devote little explicit attention to the meaning of 'strategy' in their work but they argue that the views of those who discern a 'management offensive' are mistaken since policies and objectives for work re-organization and labour relations rarely display the consistency and integration to be seen as strategic. As Child summarises the Rose and Jones approach, the criteria for a labour process strategy are (1) that managers be demonstrated to hold a coherent set of policy rationales, which (2) are directed specifically at key labour process dimensions such as control, discretion and skill, and (3) that there is a close and effective follow-through from policy to implementation. (Child, *ibid.†). This may well seem a fairly common-sense definition of a 'labour process strategy', but Child is highly critical of this approach.

The main reason for this seems to be that satisfaction of all three criteria is feared to be so unlikely that 'strategy' will be rendered
management actions with little or no ranking of significance. Yet what those both within and outside organizations call 'corporate strategy' does appear to be qualitatively distinct from the everyday activities of line, middle and, in many cases senior, managers. Corporate strategies are concerned with the medium and long term direction of the business. They are thus quite different from the main range of policies held and operated by managers. Whilst it is reasonable to assume that policies, defined as consistent ways of reacting to certain events, may well be implicitly held (Brewster and Richbell, 1983) this is not the case with strategies. A 'strategy', as commonly understood, has a clearly-defined goal and is thus clearly intentional. On this basis a labour process strategy has to be explicitly aimed, contrary to Child's suggestion, at changing some aspect of the labour process.

In addition, since strategies have a wider focus than individual policies, the process of arriving at and implementing strategies is distinctive. Because organizational development (which is what strategies are aimed at) generally involves a number of management functions, coordination and agreement between departments, both in the analysis of the problem and the formulation of acceptable solutions, is necessary. This is quite different from the everyday process of managerial decision-making even at senior levels. There are some grounds, then, for suggesting that strategy, as Child and Francis argue (1981), is a structured formulation of decision-making. This is not incompatible with accounts stressing the political, negotiated nature of such decision-making (such as that of Pettigrew,
Indeed there is some evidence that corporate planning is most successful where the participants recognise the 'political' nature of this activity (Grinyer and Norburn, 1974), and also that the process of strategy formulation can assist in the creation of political consensus amongst other groups of managers in the organization (Child and Francis, *ibid.*).

A further necessary component of strategy, in the definition proposed here, is an action plan and a set of controls and mechanisms to ensure that staff, particularly management, at other levels of the organization carry out its architects' wishes. The implications of Child's critique of the 'stringent' definition is that the existence of revisions of strategy during implementation once again cast doubts on the conceptual relevance of strategy. This criticism is, however, misplaced. What is necessary to a stringent definition is that strategy architects attempt to foresee and forestall problems in implementation. This is quite compatible with unanticipated difficulties modifying its substantive content. In the case of work re-organization strategies it may be the case that strategies aimed at altering workplace controls over aspects of work organization are implemented as their designers wished but yet nevertheless fail to achieve their objectives. In brief, strategies conforming to the stringent definition can produce unintended effects.

It is worth paying some attention to the implementation of strategies and the control of outcomes. In the past there has been considerable interest in management science in management control systems (see
The growing management literature on contemporary changes in business strategy and structure is, however, so far largely speculative on their outcomes. The study of strategy implementation in sociology and industrial relations is similarly under-developed. There is a widespread tendency, in part the consequence of unsystematic and 'weak' definitions of 'strategy', not only to 'read-off' strategies from the implementation of change, but also to imply that statements of managerial intent are unproblematically translated into action or that once a strategy aimed at increasing some aspect of managerial control is put into practice management have succeeded in effecting a shift in control.

The most detailed attention to the implementation of strategy is to be found in the 'new technology' literature (see, for instance, Wilkinson, 1983; Buchanan and Boddy, 1983; Child and Tarbuck, 1985). Even here many accounts suffer from a lack of depth because their focus does not go beyond the immediate implementation process. The study conducted by the New Technology Research Group at Southampton University on British Rail's Total Operations Processing System (TOPS) (see McLoughlin, Smith and Dawson, 1983) is a good example of this limitation. It omits detailed study of the implementation of TOPS at local level since it is largely based on retrospective study of the strategists' objectives. Since the change scheme was aimed at solving a specific problem - hoarding of freight wagons in sidings and marshalling yards - the initial success in achieving this tends to obscure from the researchers the possible creation of new and
unintended customs and practices.

In summary, a strategy has a distinctive set of characteristics which distinguish it from other forms of managerial decision-making. Not only must a strategy embody a clear set of objectives it must also contain a set of steps to achieve these objectives. It seems to be a corollary of such a definition that the focus of the strategy will be more sharply defined than is often found in many accounts in the literature. To examine strategies in the field of labour management it is worthwhile separating the spheres of work relations, employment relations and industrial relations from each other. Once we have an adequate conceptualization of strategy we are able to systematically investigate the widespread changes in strategy and structure that are currently taking place in British industry. In this study of British Rail, clarity in the dimensions of managerial decision-making enables an appraisal of how far strategies are in operation and the degree of integration between them.

2 MANAGEMENT AND CONTROL

Interest in the issue of managerial control of labour has developed in tandem with that in management strategy. As with strategy, control came to occupy a central place in academic research with the publication of Labour and Monopoly Capital (Braverman, 1974), though the broader question of organizational control has a longer pedigree in organizational studies (for instance, Tannenbaum, 1968) and in
management science (4). The problem with much of the subsequent literature is that the object of control is not always entirely clear. In Richard Edwards' work, for instance, the object of control shifts from the definition of the division of labour and work intensity by technological means to that of limiting the variability of human behaviour more generally. Furthermore whilst it is often assumed that the range of management-labour relationships can be summed up by a simple linear continuum of control, exemplified by the notion of a 'frontier of control' (Goodrich, 1920), there are precious few guides on how this might be operationalised. To investigate how far management strategies increase managerial control of labour requires some clarification of the application of 'control'.

In Braverman's account control was used in a relatively straightforward manner. As Edwards' did subsequently, Braverman viewed the achievement of the conversion of labour power into labour as the fundamental problem faced by employers. The solution that Braverman believed modern managements have adopted is the progressive wrestling of control of work from labour through the separation of task conception from execution. As a consequence of the application of the techniques of 'scientific management' skilled craftsmen have been deskilled to the point that they become what Braverman calls 'detail workers'. Through the removal of their craft skills, workers lose their power vis-a-vis employers and managers. Thus, the removal of workers' control in the arena of task performance has 'knock-on effects' in other areas of worker-management relations.
Braverman has been extensively criticised for making this latter assumption since there is substantial evidence that workers have been able to resist de-skilling (Littler and Salaman, 1982) and to retain job controls after de-skilling has taken place (Thompson, 1983). But at least the core concept of control is relatively clear, and can be subjected to empirical investigation. Such research that has taken place has examined how far managements aim to gain control of task performance when implementing new technology. Micro-processor technology in particular appears to offer the potential for managers to exert greater control, whilst the introduction of new technology more generally often gives management the opportunity to bypass traditional workplace controls which might have hitherto prevented this. Research findings have indicated, however, that such aspirations are not necessarily at the forefront of management objectives (Buchanan and Boddy, 1983; Pendleton, 1984; McLoughlin, Smith and Dawson, 1983; Rothwell, 1985), and also that there is a continuing requirement for 'traditional skills' after new technology has been introduced (Jones, 1982; Scott, 1985). Even where formal skill requirements are in fact lessened, employers are nevertheless dependent on less formal, 'tacit skills' (Kusterer, 1978; Jones, 1984; Jones and Wood, 1984; Manwaring and Wood, 1985).

The conclusion from these studies that greater managerial control of task performance is neither a necessary objective nor an easily attainable result of technological change is now something of a 'conventional wisdom'in academic circles. It sits uneasily, however, with the observable trend of corporate strategists seeking increased
control of organizational activities, of which labour performance is one element, since the late 1970s, with the objective of facilitating flexible and speedier responses to uncertain market situations. Alternatively, this latter objective could just as easily direct managerial attention to securing employee consensus and motivation (cf. Cressey and MacInnes, 1981) (5). This could be particularly so where the market strategy adopted is one of seeking 'up-market' product niches since particular attention has to be paid to achieving higher standards of product quality at minimum cost, or in service industries where the sphere of production is in close proximity to the customer.

How do we decide between or assess these apparently conflicting possibilities? Part of the problem is undoubtedly a methodological one in so far as the wealth of empirical case studies refuting the mono-causal, deterministic accounts of the labour process school do not provide a satisfactory base from which to make wider generalisations (cf. Storey, 1985a). As the literature currently stands, therefore, researchers are not well placed to resolve this inconsistency in evidence.

Although it is not easy to overcome the difficulties arising from much of the literature being based on specific organizational environments, the problem can be substantially resolved if much closer attention is paid to the areas of labour-management relationships to which control is applied. It seems likely from other work, such as that of Boddy and Buchanan on the implementation
of new technology (Boddy and Buchanan, 1983) that control objectives differ between levels and specialisms of management, with senior managers displaying more interest in control of organizations through coordination of functions, whilst line managers are more concerned with discrete areas of labour-management relationships. From the outset, then, a distinction can be made between 'zero-sum' and 'positive-sum' areas of control.

Having established this it is necessary to specify which elements of labour-management relationships can be seen as zero-sum since it is here that a notion of a 'frontier of control' could be meaningful. One solution might be to assess the three main areas of this relationship as outlined earlier in the chapter. However, the area of work relations, for instance, could be characterised both by zero-sum forms of control when discrete elements of it are examined and by positive-sum control when work relations as a whole are looked at. For instance, an increase in managerial control of work relations might be achieved by a loosening of individual controls on the way workers perform their tasks. Paul Edwards (1983a) notes how the gang system in parts of the British motor car industry gave considerable control of the details of work to the shop floor yet assisted management in the pursuit of its wider aims in production.

To distinguish, then, between the two forms of control seems to require that the locus of zero-sum control be specific instances of labour-management relations. This distinction can be highlighted by distinguishing control from controls. Controls are applied to
particular aspects of work relations, employment relations or industrial relations and may be perceived as zero-sum in so far as they constrain management or labour (cf. Purcell and Earl, 1977), whilst 'control' refers to an assessment of the success or failure of these controls. This distinction is very similar to that made by Paul Edwards (op. cit.) between detailed and general control of the labour process. Detailed control refers to the detailed regulation of work whilst general control refers to the degree to which the organization as a whole contributes to the achievement of surplus value and is, as a result, not a zero-sum phenomena.

The logic of these distinctions is that the notion of a 'frontier of control is neither meaningful in the sphere of general control nor in that of detailed control since the collection of controls seems to bear no necessary or calculable relationship to any overall balance of control between management and labour. This runs counter to those accounts which discern a 'management offensive' since in directing attention to a frontier of control they implicitly suggest that a 'calculus of control' can be constructed out of the sum of job controls. In the view of it's observers, the distinguishing feature of this offensive is that it embodies a generalized assertion of management control in contrast to earlier attention to small numbers of discrete job controls (Hyman and Elger, 1981). Nevertheless this wider assertion of management perogatives is essentially composed of changes to a collection of controls. But it is empirically doubtful that managements have in practice been able to assert such control across the whole field of management-labour relationships (Rose and
Jones, 1985). Furthermore, it is not possible to quantify an overall distribution of control between management and labour since the whole range of controls do not have any simple, unambiguous significance. Those controls which are amended in one sphere of relationships may have a contrasting effect viewed from another aspect of management-labour relations (cf. Rose and Jones, ibid.).

The simple framework of the dimensions of control proposed in this section bears comparison with categories that were developed earlier in the discipline of management science. R.N.Anthony (1965) distinguishes 'management control', embracing the balancing of all aspects of the organization's operations, from 'operational control' which focuses on specific tasks. This distinction between holistic control and atomistic controls is indeed central to management writing on control and can be found in similar form in Tannenbaum (1968), Lowe (1971) (who distinguishes 'Control-in-the-large' from 'Control-in-the-small'), and Nelson and Machin (1976). In the latter's study of the National Health Service it is argued that the introduction of formal procedures permitted a greater degree of control to be exercised on the management process without raising the level of constraint on individuals. The most extreme expression of this view that greater control can be achieved through the absence of restraint is to be found in Peters and Waterman's discussion of 'excellent' US companies (1982). They argue that the absence of bureaucratic controls stimulates a strong shared value system amongst members of these organizations with the result that organizational control overall is increased.
Once a distinction is accepted between controls and control, or general control and detailed control, and that it is not conceptually possible to calculate an overall distribution of control between management and labour, the study of control in management-labour relationships can become comparatively straightforward. It becomes possible to pose a number of questions which can be answered empirically. First, what effect does the construction or destruction of regulations have on managements' and labours' ability to achieve their objectives? Secondly, does the creation of control through closer coordination of managerial functions have any effect on controls in the sphere of labour-management relationships (6)? Thirdly, to what extent do strategies aimed at improving overall organizational performance make explicit reference to changing controls in the labour arena?

The usefulness of the distinctions proposed can be briefly illustrated by reference to one of the set of case studies chosen for detailed investigation as part of the project. The flexible rostering dispute in 1982, over changing the content of work programmes, appears an ideal example of the management offensive, embodying a sustained managerial strategy to 'regain control' of work scheduling from ASLEF, the traindrivers' union. Managerial success in forcing the introduction of these rosters could well indicate that management's control of work allocation has been increased. However, in so far as the new forms of rostering were accompanied by a new set of job regulations it cannot be assumed that management control was increased. Even if management control of scheduling was increased,
it could be that management control in the sphere of employment relations has been diminished.

SUMMARY

This chapter has explored the use of 'strategy' and 'control' in the literature and attempted to identify the conceptual problems that arise from the manner in which they are used. It is often unclear both what the focus of strategies are, and what distinguishes strategies from other forms of managerial decision-making. Indeed, these two weaknesses are connected in that the more 'diluted' the definition of strategy, the greater the likelihood that the focus of them is likely to be broad in scope, and vice versa. Conversely, the more rigorous the definition of strategy, the more specific the objectives of the strategy can be expected to be. The preference in this chapter is for the latter since it accords with 'every-day' usage and permits a more rigorous analysis of the degree to which strategies are in operation, their coverage and the extent to which they are integrated. Three main areas of management-labour relationships, drawn from the work of Gospel, were identified as useful analytical categories for such an investigation.

The assumption in much of the literature is that management strategies are aimed primarily at achieving enhanced managerial power over labour. Once again, however, the use of 'control' has often been unclear. This lack of clarity has often made it difficult to
compare developments between organizations, and to make sense of contrasting developments within organizations. The suggestion here, following Paul Edwards and a number of writers in management science, is that a distinction be made between holistic and atomistic controls. It is not possible to evaluate the overall degree of management control of labour, in terms of a 'frontier of control' but it is empirically possible to explore whether and how changes to atomistic controls contribute to more generalized control, and what implications movements in holistic control have for atomistic controls and management-labour relationships.
CHAPTER THREE

GOVERNMENT AND THE RAILWAYS: THE CONTEXT OF MANAGEMENT STRATEGY
INTRODUCTION

An investigation of strategy formulation and implementation in nationalized industries requires an assessment of the governmental role. This task is necessary since a central principle of nationalization in post-war Britain has been that industry Boards have the duty of day-to-day management whilst responsibility for policy formulation rests with the relevant Minister. The difficulties of defining this division in practice (see Minkes, 1985) gives rise to a fundamental question in the consideration of governmental-nationalized industry relationships. That is, how far have governments exercised strategic direction of these industries and to what extent have governments intervened to influence lower-order management decision-making?

The argument here will be that governments have largely failed to set strategic objectives for the railways. Attempts by the British Railways Board to fill this vacuum by developing its own strategic planning (a move supported in general by successive governments) has been decisively compromised by government interventions to achieve wider political or more short-run financial objectives. To develop this argument requires an understanding of three key processes:

1) how far has the series of reconstructions and re-definitions of railway activity that have taken place since nationalization embodied strategic goals on the part of governments?

2) What has been the involvement of governments in what can be seen as lower level (compared with the strategic) management decision-making?
taking?

3) How has this prevented the British Railways Board from fully developing its own strategic capabilities?

The first of these questions is answered in Section One, whilst the others are explored in Section Two.

After dealing with these three questions, the third section assesses the impact of government on railway labour relations. Leaving aside governmental influence on labour relations through macro-economic policy, the government shapes public sector labour relations in two main ways, one indirect, one direct. Apart from direct government interventions in the labour relations sphere to promote certain labour relations policies, governmental influence on the specification of business policies is also likely to indirectly affect, intentionally or otherwise, the conduct of labour relations. For example, tightening constraints on the availability of financial support from central government will, at the very least, fail to promote calm labour relations. This feature is likely to be prominent in those industries that are heavily dependent on the Exchequer for financial support.

The interplay of these two dimensions of government provides the basis for analysis of the Thatcher Governments' policies towards the railways in Section Four. A notable feature of these Governments is that they have withdrawn to a large extent from detailed involvement in the management of nationalized industries. Thus, the greater determination displayed by industry managers in labour management
could be seen as the product of greater exposure to market forces. At the same time direct interventions by government in the labour relations sphere seem to have increased. However, the net effect of this is not, as might be expected, a consistency of labour relations practice, and nor does it always contribute to the achievement of newly-stated business goals.

1. GOVERNMENT STRATEGY AND NATIONALIZED INDUSTRIES

Political scientists studying the relationship between government and nationalized industries have concentrated their attention on the thorny political issue of accountability (1), and their accounts tend to focus on government culpability. The reverse is true of economic historians. Taking industry performance as their point of departure, they have tended to focus on industry operating costs to the relative neglect of the governmental role (2). A significant element of this is often an emphasis on the centrality of trade union 'restrictive practices' in obstructing cost reductions (see, for instance, Pryke and Dodgson, 1975) and this has come to dominate much political discussion of nationalized industries (3).

However, from the political sociological (usually Marxist) perspective, governments in advanced capitalist societies have taken infrastructural industries into public ownership to maintain a core framework for the operation of the capitalist economy (Jessop, 1980). This approach, which has more than a hint of functionalism, often
seems to assume that the government-nationalized industry relationship is an unproblematic element of an imperative facing the state to maintain 'capitalist laws of accumulation'.

Both the views of economic historians and political sociologists grant a consistency to government policy which may not be shared by those managing nationalized industries. From the mid-1970s there was increasing criticism of governments for their reluctance to formulate strategic goals, and their obstruction, through a variety of political interventions, of attempts by nationalized industries to make good this deficiency. The investigation in 1975-6 by the National Economic Development Office (NEDO) showed that the division of responsibilities between government and industry embodied in the concept of the 'Morrisonian Corporation' (4) - that governments were to give strategic direction whilst industry Boards took charge of day-to-day management - was in disarray (NEDO, 1976). In this period nationalized industry publications were often openly critical (see BRB, 1976) and disillusioned industry leaders trenchant in their condemnation of government policy. The British Railways Board's then Chairman, Sir Richard Marsh, commented,

"I find it extraordinary that any business - let alone one the size and importance of this one - should be allowed to drift into a position where it is fixing short-term objectives but has no sort of longer term strategy" (Marsh, 1976, p. 71).

A review of the main elements of rail policy bears this out. The evidence suggests that British governments have been reluctant to
define fundamental objectives and strategic goals, and the statutory obligations on the British Railways Board provide little indication of the services that should be provided (NEDO, op. cit.). Its main obligations (as listed in the Annual Report and Accounts until 1983 (5)) are limited to the following:

"to secure that the combined revenues of the authority and of its subsidiaries taken together are not less than sufficient to meet their combined charges properly chargeable to revenue account, taking one year with another" (Transport Act 1968).

And

"the British Railways Board shall from 1st January 1975 operate a railway passenger system so as to provide a public service which is comparable generally with that provided by the Board at present" (Railways Act 1974) (6).

The 1974 legislation exemplifies the difficulties faced by the BRB. Governments have largely failed to define in more detail a desirable network size or the level and nature of rail services that should be operated with the result that senior railway managers have little idea of what is expected of them (Marsh, 1976). Tightening constraints on the Public Service Obligation grant from 1976 (the state payment to the Board for the provision of passenger services) has intensified this uncertainty since, in the absence of agreed priorities, the Board have had few criteria upon which to amend services. As service planning on BR has to commence some eighteen months prior to the introduction of the timetable (see Ford, 1979), forward planning is made more difficult still by the annual...
establishment of SPO and the External Financial Limit (Glyn Williams, 1983).

Though the absence of long-term strategic direction by government appears to have been common to most major nationalized industries (NEDO, 1976), it is rendered particularly acute in the railway's case by chronic deficits (measured by costs against receipts exclusive of PSO and other specified state payments) since the late 1950s. As a result, the railways have been particularly affected by the differing political philosophies and objectives of successive governments. The British Railways Board has been subject to a series of reconstructions (1962 Transport Act; British Railways Board, 1963; 1968 Transport Act; 1974 Railways Act) and reviews (Ministry of Transport, 1966; Ministry of Transport, 1977; Monopolies and Mergers Commission, 1980; Serpell, 1983).

A number of these reconstructions are examined shortly but it is important to note at the outset that the 'dialectic' structuring these interventions is the fundamental political question of the function of state enterprise. Should industries such as the railways be run as a public service or on more explicitly commercial lines? However, the wider rationale for either of these options does not appear to have been fully developed by policy makers, and a comprehensive, coherent theory of the function of state enterprise seems to be largely absent (Hadley, n.d.). Instead, these two philosophies have co-existed in an uneasy tension, highlighting and intensifying the absence of strategic purpose. All this suggests
that those theories which maintain that the over-riding function of the state is to secure favourable conditions, of which transport infrastructure would seem to be one, for the operations of capital are largely misplaced, at least in this case. The reactions of governments, as embodied in the legislation and reports listed above, has been dominated by relatively narrow and short-term financial considerations.

Deteriorating financial performance from the late 1950s suggested to governments (in the absence of any well-developed conceptions of broader goals) the necessity of more detailed criteria to guide management decision-making as a supplement to the basic Morrisonian model. A number of White Papers (Treasury, 1967; Treasury, 1978) established criteria for pricing, costing and investment evaluation. At the heart of these is the establishment of 'market proxies' to stimulate forms of decision-making more akin to those in the private sector and to cement the 'arms-length' relationship between industry boards and government (Batstone et al., 1984). However, since governments possess a multiplicity of objectives this quasi-market logic was rarely pursued to its extreme. A variety of political considerations have intervened, of which the strongest is the notion widely held by the electorate that railways should provide a public service. These political constraints suggest that an expectation that governments will respond functionally to short-term and narrow demands of economic and financial management is as misplaced as that which anticipates that governments will respond to the dictates of some abstract imperatives of capitalism.
The political mediations that temper financial considerations are well illustrated by this dialectic of public service and commercial practice on the railways. There has been a retreat since nationalization from the notion of public service but it has been a highly uneven one. Whilst Conservative Government legislation in the 1950s sought to prune elements of the 'bureaucratic' structure of the British Transport Commission, no major attempt was made to re-define railway objectives (Channon, 1978). It was the package of changes in the early 1960s in response to the mounting deficit - the creation of the British Railways Board separate from other transport undertakings and the 'Beeching Report' - that marked the most significant shift towards a more commercial ethos. This philosophy was often compromised in practice, however, because of the political unpopularity of the strategy of line closures. The 1964-70 Labour Government sought to resolve this tension between service and profit through segmentation of railway passenger operations between those trunk services which ought to operate to profit criterion and those services which were highly unprofitable, but nevertheless 'socially desirable' services. (7).

Though frequent political interventions have embodied these differing philosophies, party labels are not an entirely accurate predictor of governmental action since party ideologies themselves also display this dialectic if to varying degrees. The 1974 Railways Act, replacing grant funding of specific services with a block grant for passenger services as a whole (the PSO), though passed by a Labour Government was in fact largely drawn up by the previous Conservative
Government (Pryke and Dodgson, 1974 p.24). This Act's stipulation that the Freight and Parcels business of British Rail should aim for profitability was supplemented by a requirement in the 1977 White Paper that the InterCity sector should aim for profitability (Department of Transport, 1977; see Beesley and Gwilliam, 1977). Reductions in the real value of the PSO and the imposition of 'cash-limits' on the total level of external funding available to public sector organisations were introduced by this same Labour Government.

The absence of a coherent, wider transport policy in Britain has mirrored, and in part explains, this variability in railway objectives. The dialectic between public service and industry profit is accompanied by persistent failure of successive governments to decide between market and bureaucratic allocation of resources and co-ordination of services. For a brief spell after the 1947 Transport Act Britain had something approaching an 'integrated' system of inland transport whereby the principal means of surface transport were welded together under unified direction and control. This was steadily undone by Conservative Governments in the 1950s with the abolition of the Railway Executive (the body charged with directing the Regions), the creation of Area Boards to supervise the Regional managements, and the denationalization of the state road haulage fleet (Pearson, 1964; Bonavia, 1971).

From the 1962 Transport Act, which ended bureaucratic integration of the main forms of inland transport, to 1980 government transport policy has shared the same parameters. The philosophies of both
political parties is well expressed in the 1976 Transport Policy Consultation Document,

"governments must...develop a controlled and managed market in transport, rejecting both the market philosophy of a free-for-all and, at the other extreme, the approach of those who would rigidly allocate transport between different modes by administrative direction" (Department of Environment, 1976 p. 22).

The one partial exception to this pattern of pragmatic balance was the 1968 Transport Act, and its failure illustrates the reluctance of governments to take decisive action to develop a transport infrastructure for wider economic ends. The Minister of Transport, Barbara Castle, sought to develop a more rational approach to freight transport through some measure of integration. Accordingly the National Freight Corporation was established and British Rail's container train ('Freightliners') business transferred to it. However, this initiative came to little as the Freight Integration Council, whose purpose was to encourage integration, was found to be a toothless talking-shop and soon fell into decay (Thomson and Hunter, 1973) and the limited system of lorry quantity licensing was not implemented by the time the Government fell (Kelf-Cohen, 1973). Subsequent Labour Governments have shared Conservative Party hostility to the proposal, advanced by the TUC and the rail unions (eg. ASLEF, 1976; Buckton, 1982), for a national transport planning authority.(8).
The tension between philosophies of public service and commercialism has not only contributed to the absence of a coherent set of objectives for the railways, it has also created persistent uncertainty over the appropriate size of the railway network. An influential and persistent belief is that there is a profitable 'core' to railway operations which will be revealed once the unprofitable layers of activity have been stripped away. As one economist reacted to the Beeching proposals, "the right size of the system can only be found by ruthlessly chopping off the useless parts until a paying system is discovered." (Munby, 1962).

This philosophy first found common currency as the railway industry began to incur mounting losses in the late 1950s, though some route closures had taken place earlier in the 1950s (SCNI, 1960), and some Regions, notably the Eastern, had already started to eliminate considerable numbers of country stations (Fiennes, 1967).

The spur to decisive action arose from the critical report of the Select Committee on Nationalized Industries (1960) and the Stedeford Committee Report to the Minister which, it is believed (it has never been made public), was more critical still (Bonavia, 1971) (9). The conclusions of this report found public expression in the report by the Chairman of the newly-formed British Railways Board, Richard Beeching, on 'The Reshaping of British Railways' (BRB, 1963). Studies undertaken for this report found that approximately one third of railway stations generated only 1% of revenue (ibid.). The central tenet of the report was that the services using these
stations (generally cross country and branch line services) should be discontinued and the lines closed. At that time the Beeching administration envisaged an eventual route mileage of the order of 12,500 miles against that existing in 1961 of 17,830 (ibid.) though by the end of Beeching's tenure as Chairman it was planned to reduce it further to around 8,000 miles (see BRB, 1965).

Though there was a positive aspect to the Beeching philosophy - development of major trunk routes and the creation of container trains ('freightliners') - the strategy was soon discredited (10). There was criticism of the report's supporting data from those otherwise sympathetic to its recommendations (Munby, 1963) and line closures were politically unpopular. Probably the most compelling reason, however, was mounting deficits from the mid-1960s onwards. It came to be realised that elimination of branch lines cut off a source of feeder revenues to the main system (Hillman and Whalley, 1980), and that whilst such revenue ends immediately, the costs of closure, such as staff transfer payments, continue for some years. As an element of the philosophy surrounding the 1968 Transport Act the route network was stabilized at around 11,000 miles and a system of subsidy payments introduced for specified unremunerative services which British Rail would otherwise have withdrawn.

By the early 1970s mounting losses on BR's current account led the Department of Environment in 1972 to investigate the potential of further route closures (Pryke and Dodgson, 1975). At the same time the Board's economists conducted a major investigation of the notion
of the profitable core (SCNI, 1977), and concluded that one could not be found. In a significant victory the Board managed to convince the Minister of Transport, John Peyton, of this, and in the resulting Interim Rail Strategy, agreed in the absence of any long term government plans for the railways, network cuts were rejected and a programme of increased investment set in motion (BRB, 1973).

The issue was to resurface in a veiled form in the 1976 Transport Consultation Document (Department of Environment, 1976), and came to occupy a prominent place in the SCNI's subsequent investigation (1977) largely because of the evidence submitted on railway costs by two academics, Richard Pryke and John Dodgson (op. cit.). Nothing came of it on that occasion probably because it seemed a lower order priority for the Callaghan Government compared with the burning issues of macro-economic management and sustaining a viable incomes policy.

The size of the network rose once again as a central theme in the Serpell Report on Railway Finances (1983). Despite initial optimism in the railway industry that this review would decisively settle questions of major strategy and the future relationship between Board and Government (11), the Committee did not depart from the tradition of focusing on short term financial options and the contraction of network size. The fallacious assumptions upon which the cost and revenue targets supporting these were based (including the assumption that lines that were closed would continue to bring in revenue from traffic) earned the Report near universal condemnation in the
transport industry (BRB, 1983a, Hope, 1983; Freeman Allen, 1983) and in political circles (House of Commons Transport Committee, 1983; Railway Gazette International, 1983a). Though the Government initially expressed interest in further consideration of a network reduction (Howell, 1983), the Report's hostile reception precluded this. In a major Commons debate the Secretary of State ruled out the major network cuts suggested in the Report (12).

The review above illustrates how successive governments have largely failed to develop coherent long-term strategic objectives for the railways in Britain. Instead government policy has been characterized by competing and under-developed rationales. All this suggests that those accounts which view the state's foremost objective as securing the most favourable conditions, of which transport policy and infrastructure would seem to be one, for the maintenance of private capitalism are mistaken (cf. Zeitlin, 1985), at least as far as the nationalized industries are concerned. Government activities in their dealings with nationalized industries have been dominated by short-term financial and political considerations rather than those of strategic economic planning.

I. POLITICAL INTERVENTIONS AND OVERLAPPING RESPONSIBILITIES

It may thus seem reasonable to infer from the reluctance of governments to provide strategic direction that nationalized industries have come to possess considerable autonomy. On this basis
the 'arms length' relationship would operate in British Rail's favour, allowing both substantial freedom to make key decisions that go beyond day-to-day management (at least on one interpretation) and to the generation of long-term strategy itself. It will be argued here that such an assumption is almost entirely unjustified. The lack of strategic governmental purpose has resulted in BR being subject to recurrent government interventions in management decision-making precisely because the absence of a clear division of functions results in few, if any, self-imposed restraints on government. The processes at work here will be examined through a brief review of some key areas of management decision-making, such as pricing policy and investment evaluation, and the attempt by British Rail to generate Corporate Plans.

The irony of government interventions in decision-making is that they have often conflicted deeply with attempts by industry Boards to meet government-set financial objectives. Probably the most striking example of this was provided by pricing policy in the early 1970s (13). The operation of the Heath Government's prices and incomes policy led to the prices of nationalized industry services being held well below the rate of inflation and that of their competitors. In British Rail's case, its finances deteriorated to such a degree that the financial reconstruction of the 1968 Transport Act was wrecked. The Heath Government's concern subsequently about the ensuing deficit and its effect on public expenditure resulted in successful) pressure for fare increases that were substantially higher than those desired by the British Railways Board, and which BR
managers feared would lead to a decline in traffic (Harris and Williams, 1980).

The often contradictory nature of government expectations of nationalized industries have been intensified since the early 1970s because of concern about the level of public expenditure (cf. Batstone et al., 1984, ch. 2). BR has been especially subject to policies of restraint on public expenditure since the railways have been dependent, along with the National Coal Board, on particularly high levels of government subsidy. The imposition of the External Financing Limit from 1976 constrained the already limited ability of the Board to invest to improve operating and business performance. Furthermore, government interventions to set or substantially influence prices and wages levels, alongside restraints on the PSO grants from 1977 onwards, the remit to make Freight and Parcels commercially viable by 1978 and the political refusal to countenance further substantial line closures seemed to BR management to make their job near impossible (Marsh, 1976, p.72). Thus, the impact of competing government goals, as outlined earlier, has been intensified by interventions with wider political and economic objectives.

The lack of clarity in the division of responsibilities between Board and government has been intensified by such interventions. Indeed, Chomson and Hunter (1973) suggest that the weaknesses of the prisonersian theory of ministerial control over nationalized industries are most obvious in the railways case. 'Market proxies', such as marginal cost pricing, have failed to provide useful
guidelines because of the difficulties of allocating railway costs (ibid.; Aldcroft, 1975) whilst government interventions have been more frequent than in other industries. The 1978 Select Committee on Nationalized Industries' Report on Ministerial Control noted that

"the Committee believe that the continuance of the detailed Ministerial interference that has been experienced by British Railways would seriously call into question the position of the Board as a partly autonomous public corporation" (quoted in Thompson and Beaumont, 1978, p. 202).

Such pressures as these were intensified by the 1974 Railways Act. This Act, in stipulating that the Board 'should act on lines settled from time to time with the approval of the Secretary of State', broke new ground in nationalized industry-government relations by formally involving the Secretary of State more fully in the approval of the policies surrounding the five year rolling industry plan (Fowler, 1974). However in the absence of clear strategic intent on government's part, this potentially innovative legislation merely served to strengthen the accounting officer role of the Department of Transport (Harris and Williams, 1980) and further confused the division of responsibilities between Board and government.

The low levels of trust that result from this confusion of roles between the British Railways Board and government is well illustrated by the process of investment authorization. Though a key objective of the standardization of investment policy guidelines proposed by the 1967 White Paper on Nationalized Industries (Treasury, 1967) was
a firmer definition of the 'arms length' relationship, in practice
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been particularly evident on British Rail (NEDO, 1976), probably as a
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The very low level of trust by government in British Rail evaluation
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"the Department have built up their own expertise in certain
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the 'arms length' relationship would operate in British Rail's favour, allowing both substantial freedom to make key decision that go beyond day-to-day management (at least on one interpretation) and to the generation of long-term strategy itself. It will be argued here that such an assumption is almost entirely unjustified. The lack of strategic governmental purpose has resulted in BR being subject to recurrent government interventions in management decision-making precisely because the absence of a clear division of functions results in few, if any, self-imposed restraints on government. The processes at work here will be examined through a brief review of some key areas of management decision-making, such as pricing policy and investment evaluation, and the attempt by British Rail to generate Corporate Plans.

The irony of government interventions in decision-making is that they have often conflicted deeply with attempts by industry Boards to meet government-set financial objectives. Probably the most striking example of this was provided by pricing policy in the early 1970s (13). The operation of the Heath Government's prices and incomes policy led to the prices of nationalized industry services being held well below the rate of inflation and that of their competitors. In British Rail's case, its finances deteriorated to such a degree that the financial reconstruction of the 1968 Transport Act was wrecked. The Heath Government's concern subsequently about the ensuing deficit and its effect on public expenditure resulted in (successful) pressure for fare increases that were substantially higher than those desired by the British Railways Board, and which BR
managers feared would lead to a decline in traffic (Harris and Williams, 1980).

The often contradictory nature of government expectations of nationalized industries have been intensified since the early 1970s because of concern about the level of public expenditure (cf. Batsone et al., 1984, ch. 2). BR has been especially subject to policies of restraint on public expenditure since the railways have been dependent, along with the National Coal Board, on particularly high levels of government subsidy. The imposition of the External Financing Limit from 1976 constrained the already limited ability of the Board to invest to improve operating and business performance. Furthermore, government interventions to set or substantially influence prices and wages levels, alongside restraints on the PSO grants from 1977 onwards, the remit to make Freight and Parcels commercially viable by 1978 and the political refusal to countenance further substantial line closures seemed to BR management to make their job near impossible (Marsh, 1976, p.72). Thus, the impact of competing government goals, as outlined earlier, has been intensified by interventions with wider political and economic objectives.

The lack of clarity in the division of responsibilities between Board and government has been intensified by such interventions. Indeed, Thomson and Hunter (1973) suggest that the weaknesses of the Morrisonian theory of ministerial control over nationalized industries are most obvious in the railways case. 'Market proxies', such as marginal cost pricing, have failed to provide useful
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The low levels of trust that result from this confusion of roles between the British Railways Board and government is well illustrated by the process of investment authorization. Though a key objective in the standardization of investment policy guidelines proposed by the 1967 White Paper on Nationalized Industries (Treasury, 1967) was
a firmer definition of the 'arms length' relationship, in practice government involvement in investment evaluation has remained substantial (at least until very recently). Such involvement has been particularly evident on British Rail (NEDO, 1976), probably as a reaction to the earlier findings of the Select Committee on Nationalized Industries (1960) that the Ministry of Transport had exercised virtually no financial control at all over the 1955 Modernisation Plan (14).

The very low level of trust by government in British Rail evaluation procedures has been reflected by the existence of a parallel investment appraisal unit within the Department of Transport. As the Serpell Report noted,

"the Department have built up their own expertise in certain fields and, in their own words, "have substituted their own commercial judgement for the Board's" (Serpell, 1983, p. 44). At the same time such judgements have not formed elements of a wider government business strategy for the railways. The Report goes on to note that

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The annual submission to government by the Board of its five-yearly investment projections is instead largely for the benefit of the Treasury's Public Expenditure Survey Committee exercise (Monopolies and Mergers Commission, 1980).

This pattern of parallel project evaluation has stimulated a cycle of
mistrust between Board and Government which has often resulted in the revision of project targets. A number of large projects have been substantially modified by the Department in recent years because, as the Serpell Report puts it, of unrealistic (sic) estimates of revenue gains and cost savings (particularly in the maintenance areas) (Serpell, op. cit.) accruing from such schemes. Yet is is precisely the susceptibility of nationalized industries to wider public expenditure policies and unsympathetic evaluation by government departments that has led some of these organisations to inflate the benefits of investment schemes to provide some degree of protection against possible cuts in public expenditure (NEDO, 1976) (16).

This confusion of roles, institutionalized distrust, persistent uncertainty over network size and conflicting philosophies highlight and intensify the absence of strategic objectives for the railways. BR itself has been largely unable to develop its own strategic capabilities to fill this gap since the importance of relatively short-term financial objectives to government does not provide a stable context in which long-term planning can take place. It might be argued that external uncertainty is common to all firms since markets are apt to change, and that nationalized industries are better off than most since they are protected from the full extent of market forces by government subsidy (Pryke, 1981). This review suggests that the opposite could be the case. Whilst large firms have the capacity, at least to some degree, to respond strategically to market movements or even to substantially mould them, similar
attempts by public sector firms can be decisively compromised by
government interventions which deeply conflict with such goals. To
illustrate this it is worthwhile briefly examining the record of
corporate planning on BR.

The adoption of formalized corporate planning in the late 1960s was
hailed as the most significant development at BRB Headquarters of its
era (Bonavia, 1971). However, much of the subsequent record is one
of abject failure. All six Corporate Plans produced between 1970 and
1980 had to be scrapped either because of changes in government
policy or else because of problems arising from rapid inflation
(Harris and Williams, 1980, p. 8).

Particularly problematic for railway managements was that it was
difficult to obtain long-term commitment from central government to
future investment levels given the combination of concern about
public expenditure and the absence of strategic purpose. This is
most graphically illustrated in the early 1970s when, after the Heath
Government accepted the Interim Rail Strategy's proposals for the
development of high speed trains, new commuter rolling stock and the
modernisation of track and signalling (BRB, 1973), the investment
element of these proposals was cut only a few weeks later. Thus,
although the Interim plan was 'accepted' as rail policy, it was in
reality a 'dead-duck', almost from the start (Marsh, 1976). Later in
the 1970s, as the majority of the assets ordered under the 1955
Modernisation Plan approached life-expiry, the problem of investment
constraints became critical for the Board. There was a deep fear
that if governments did not overcome their reluctance to commit themselves to increased investment the railways would rapidly enter a cycle of decline from about 1983 (Parker, 1978; BRB, 1981a).

Whilst corporate planning in the 1970s largely failed the Board did, nevertheless, attempt to formulate business strategies. From the late 1970s the Board responded to the recurrent failures of the Corporate Plan by a shift of emphasis to sector and sub-sectoral strategy development (Harris and Williams, 1980 p.98). But this process of fragmentation was already well in hand. As these same authors describe this development,

"In effect, what has happened is that individual strands which together made up a corporate plan have been pursued. Unfortunately, not all of these strands have been accepted by government or progressed, so that what was initially evaluated has become a political patchwork based on the 'art of the possible'" (ibid., p.129).

Probably the most significant feature of those strands that were successful was their apparent capacity to reduce railway manpower (Glyn Williams, 1983). This coalesced with those elements of academic thinking which suggested that one of the most promising avenues for a major reduction in railway costs was reform of 'restrictive' working practices (Pryke and Dodgson, 1975). It is to the impact of this political environment on railway labour relations that we turn in the next section.

By way of conclusion to these two sections, the history of
governmental-BRB relationships has been shown to be characterized by a combination of mistrust, overlapping responsibilities and the absence of agreed objectives. At first sight this pattern might appear surprising given the attempts since the early 1960s to distance nationalized industries from government. Such an 'arms-length' philosophy was central to those measures such as the White Papers of 1961 and 1967 which sought to formalize guidelines for detailed policy criteria as a supplement to the general directions established by statute. However, it is precisely the arm's length relationship itself (and the adoption of more explicitly competitive forms) that has led to low degrees of autonomy from central government. Since the nationalized industries occupy a strategic role in the social, economic and political affairs of the country, it is unrealistic to expect governments not to intervene in their affairs in pursuit of wider objectives or to limit the logic of competitive forms where they are politically unpopular. As the NEDO Report points out,

"the pressure on government to intervene or otherwise influence management decisions have increased over the last decade. Specific interventions may be triggered by a variety of factors, including a commitment to implement Party policy, macro-economic policy decision, pressure from sectional interests, major industrial disputes and a variety of wider social cost/benefit considerations. Government has not been able to stand outside this widening arena even if it wished to" (op. cit., p.43).

However, the pretence that it does has resulted in few rules to govern this activity and the failure to create sharply defined areas
of responsibility.

3. POLITICAL UNCERTAINTY AND LABOUR RELATIONS

In assessing the impact of the external context in which British Rail operates on the broad character of labour relations, two opposing perspectives can be constructed. On the one hand the uncertainty of the politically defined environment described earlier could be seen as stimulating persistent tension in the labour relations sphere. Oscillations in government policy, coupled with an underlying emphasis on reducing operating costs in virtually all policy options, seems likely to conflict directly with union and workforce aspirations to protect job numbers and income. On the other hand, right-wing commentators would argue that the relative insulation from 'market forces' experienced by nationalized industries has created a 'cosy' style of labour relations in which managers largely relinquished their 'right to manage'. Sheltered by government financial support from the ultimate sanction of bankruptcy, managers permitted 'restrictive practices' to develop with the result that industry costs were kept artificially high (Pryke, 1981). And as business objectives were poorly developed, managers allowed operating and engineering decision to assume an undue centrality in managerial decision-making. In this view, then, such production imperatives led to an emphasis on maintaining industrial peace at the expense of cost-effective performance.
Both these perspectives offer partial analyses of the broad character of railway labour relations in the 1970s. What is striking about railway labour relations in this period, with the exception of the period immediately following the 1971 Industrial Relations Act (17), is their stability and harmony relative to other industries. Throughout the 1970s, the railways continued to be one of the least strike-prone industries, measured by the number of strikes per 100,000 employees (see P. Edwards, 1983b, p. 202). However, these findings do not provide support for the 'feather-bedded' perspective. Not only was British Rail not insulated from market forces but the problems arising from steadily rising competition from other transport modes were compounded by government re-definition of the markets themselves and the response the railways were expected to make to them. If anything 'right-wing' analysis more accurately characterizes the 1950s when governments were prepared, if reluctantly, to fund railway losses through deficit financing (as opposed to grant aid) and when railway management had little idea of the costs of the services it provided (18).

Public ownership in the 1970s, then, was notable not for producing insulation from markets but for compounding the problems faced in them. This measure of external uncertainty gave rise to a distinctive pattern of labour relations. During the 1970s the relationship between rail union leaderships and senior managers can be characterized as that of a 'tacit alliance' based on common, and often shared, perceptions of problems and objectives. Just as Batstone et al (1984) have argued in the case of the Post Office,
both management and unions in state industries can have a common interest in developing and maintaining 'stable bargaining relationships' so as to constrain the effects of uncertainty in the external environment. Similarly, the degree of information possessed by NUM leaders about the 1981 pit closure proposals prior to their public release suggests a similar alliance between the National Coal Board and National Union of Mineworkers (see Goodman, 1984, pp.22-3).

Proof of the existence of such a 'tacit alliance' demands evidence not only of shared interests but some recognition by the actors themselves that they take that form. Precisely because this alliance was tacit such evidence is not always easy to find or its significance easy to assess. However, two types of source suggest that this analysis is not misplaced. The first is data obtained from research interviews. National union officials and representatives in particular repeatedly referred to a large measure of substantive agreement on rail policy and its implications for the conduct of labour relations in this era. Such an analysis was less explicitly made by managerial respondents but nevertheless cropped up regularly in interviews (19). From these responses it was possible to discern a shared recognition between railway headquarters and unions that they both walked a political tightrope, and that if either party fell off the other would be likely to follow.

The second source is to be found in documentary material. Throughout the 1970s senior railway managers were publicly sceptical of the likelihood or desirability of improving labour productivity through
the reform of working practices in isolation (see, for instance, Bowick, 1976), despite repeated messages from the political arena that railway performance could best be improved through reduced labour costs. Such messages were given credibility by academic accounts such as those of Pryke and Dodgson (1975), and Board members and managers had to devote considerable resources to challenging this analysis during the Select Committee on Nationalized Industries investigation of BR in 1977 (SCNI, 1977).

The basis of this 'tacit alliance', then, was mutual defence against a hostile environment. Its main function was to maintain a capacity for an orderly response to external pressures so as to avoid catapulting potentially disruptive labour relations issues into the political area where they might be exploited by governments eager to limit their financial commitments to British Rail.

Public ownership had a distinctive effect on labour relations because of the susceptibility of BR to government policy. The consensus that arose in response to these external factors was reinforced by certain internal features of BR and trade union employment. Railway employment is characterized by long service and well-developed internal labour markets, both amongst management and workforce. Within the trade unions, recruitment of officials and employees is almost exclusively from within the railway industry, and the conduct of national level negotiations by practising railwaymen reinforces this. The result is high levels of commitment to the industry (20) and it is possible to discern a distinct railway 'culture' (21) that
cuts across divisions between managers and workers. The dimensions of this included commitment to public service and a pronounced sense of individual responsibility.

Before turning to the demise of the tacit alliance portrayed here, it is worthwhile briefly summarizing its origins. As others have noted, the stability of public sector labour relations for two decades after World War Two rested on well-developed centralised formal bargaining arrangements, and governmental sponsorship of 'good' industrial relations (see Winchester, 1983). With the exception of the 1955 dispute over enginemen's differentials (22), railway labour relations were quiescent, and the major reduction in workforce size accompanying the Beeching plan was achieved without any major conflict (23). From the late 1960s, as Thomson and Beaumont have shown (1978), industrial conflict arose in the public sector out of a combination of governmental attempts to restrain the growth in public expenditure, and the workings of incomes policy. However, in the railways case, just as these factors strained the traditional consensual pattern of industrial relationships, so along with government indecision in the area of rail strategy, they served to create a 'tacit alliance' to replace it.

The likelihood that the growing crisis in public expenditure in the late 1970s would stimulate variability in government decision-making, along with the debate on industrial democracy started to transform this alliance into one that was more explicit. The institutional basis for this was provided by the creation of the Rail Council in
1978 with a remit to discuss the strategic plans developed by BR Headquarters. The Council was (and is) composed of top BR managers and union officials, and was created as a result of governmental requests to nationalized industry Chairmen to draw up joint proposals for improvements in consultation and participation (Treasury, 1978).

Within the Council the interests of the railway unions in increased levels of investment to secure the future of the industry (and hence jobs) complemented the urgency of management's need for greatly increased levels of investment from the latter half of the 1970s to replace the bulge of assets approaching life-expiry (see BRB, 1981a; BRB, 1981b). This coincidence of interests was increasingly welded into a political alliance by the then BRB Chairman Peter Parker and the General Secretary of the NUR, Sidney Weighell. Initially the alliance was strengthened by the election in 1979 of a government that was likely to be considerably more hostile to the public sector than its predecessors. The strong mutual interest of BR and rail unions resulted in joint submissions to government for increased investment (Bowick, 1979; Weighell, 1983). This strategy enjoyed some initial success, and Sir Peter Parker notes that the first Transport Secretary in the Thatcher Government, Norman Fowler, was greatly impressed by this joint approach (Weighell, 1984, p. 241). However, such alliances as these were viewed by prominent sections of the Cabinet as obstacles to managements' duty to manage and, as will be illustrated in the next section, they were not to last.

In summary, then, the form that the government-industry relationship
has taken in Britain has stimulated a distinctive pattern of consensual labour relations at senior levels. The absence of coherent government strategies and objectives for nationalized industries, and frequent government interventions, both particularly marked in British Rail's case, have pushed management and unions together. Though governments have periodically sought major reductions in manpower and some critics have strongly argued for reform of working practices, railway managements have not pursued these options with vigour, and labour relations were quiescent for much of the 1970s. This pattern in turn served to confirm critics of labour relations and manpower management of the 'indulgence' of railway management towards labour. It was this 'cosy' style in public sector labour relations that the Thatcher Government sought to break up.

4. THE THATCHEr GOVERNMENTS AND THE RAILWAYS

The Thatcher Governments' objectives and policies towards the railways will be considered in some detail since they form the backdrop to a hypothesized 'management offensive'. To understand the impact of the Thatcher Governments on nationalized industry labour relations we need to differentiate labour relations policies from broader business strategies. This is necessary to resolve the paradox of government claims that the autonomy of such industries has been increased whilst events such as the 1984-5 coal strike suggest that it has been progressively reduced.
The election of this radical government in 1979 has heightened academic interest in public sector labour relations but, as yet, there is little material on the impact of this government in this sphere (an exception is Soskice, 1984). Batstone et al's (1984) investigation of the Post Office largely stops at 1979, and although Willman and Winch's (1985) study of British Leyland continues to 1983, its detailed examination of state strategy focuses on the mid-1970s. Earlier work on nationalized industries, such as that of Kelf-Cohen (1973), being overwhelmingly descriptive provides little analytical framework that can be adapted for the rigorous study of developments since 1979.

Arguably the most striking development in railway labour relations in the 1980s is that the 'tacit alliance' has been broken up. This seems to be the result of a combination of two developments which are linked by a concern with public expenditure and a desire to instill commercial practices into the public sector. The first is that the Government has withdrawn to a large extent from detailed involvement in establishing railway business policies, preferring to restrict itself to setting financial targets. The level of these targets creates pressure on traditional patterns of labour management and labour relations, whilst removing that uncertainty of government policy which seems to have stimulated close relationships between Board and unions. The second is that labour relations has become the most significant area of government interventions, and the Government's hostility to trade unionism has directly challenged consensual traditions of labour relations on BR.
In turning to an exploration of the business objectives set for the railways, what is most striking about the early years of the Thatcher Government is the lack of any coherence to government policy. It is not an exaggeration to suggest that the only consistency to government actions lay in hostility to British Rail. On gaining office in 1979 this Government seemingly arbitrarily cut £15 million from the PSO grant for that year, and shortly afterwards introduced a new cash limits procedure by turning quarterly cash forecasts into cash limits (Harris and Williams, 1980). But at the same time, the Government was sensitive to the political dangers of appearing to promote line closures. In November 1979 the Government was quick to dispell rumours that the closure of 900 route miles was on the agenda, and in September 1981 the Secretary of State re-affirmed that the Government did not seek major line closures (Dodgson, 1984).

Riddell (1983) suggests, in arguing against those Marxist commentators who claim a consistency to the Thatcher programme (such as Hall and Jacques, 1983), that it was not until 1981 that the Government developed a strategy for the nationalized industries. The main components of this were large-scale privatization and the formation of 'commercial' relationships between Boards and Government. It was not until considerably later still that a clear approach came to be applied to the railways, in part because the Serpell Committee inquiry was underway for much of 1982. Unfortunately for the government a number of options with which it had considerable sympathy (such as network reductions) were discredited even before the Report was published (25). It was only
in mid-1983 that the Government's current objectives emerged, combining privatization of non-rail ancillaries, the introduction of private capital to marginal rail operations and the extension of 'market proxies' (26).

These 'market proxies' were announced by the Secretary of State for Transport, Nicholas Ridley, in October 1983 (BRB, 1984c). The central element is that the PSO grant is to be reduced to £635 million by 1986, two years sooner than that initially proposed by the BRB in its 1983 Corporate Plan (BRB, 1983b), and representing a reduction of 25% in real terms on the PSO grant for 1983. At the same time Ridley stipulated that the Parcels business should continue to make the modest level of profits earned since withdrawal from the heavily loss-making parcels Collection and Delivery Service in 1981, and that Freight should earn a 5% return at current cost on assets by 1988/9. This principle was extended to InterCity passenger services in August 1984 (27) along with a requirement that InterCity should not consume any PSO from 1988/89 (BRB, 1985b). Public financial support is thus to be limited to 'provincial services' and the great majority of services in the London and South East area.

Earlier in the chapter it was suggested that past attempts to extend the 'arms-length' relationship through the introduction of 'market proxies' further confused the relationship since government objectives were contradictory (cf. Batstone et al, 1984). It could well be expected, then, that the current centrality of such financial objectives has further reduced the autonomy of the Railways Board
from government. However the reverse appears to be the case, and the Secretary of State’s claim that the objective is to set targets and leave the professionals to get on with the job of meeting them (RGI, 1984) appears to be borne out in practice. The Government does not appear to have attempted to shape the content of the business strategies adopted by the Board and the Board seems to have been given a free hand to define product markets and set fare levels as they wish. As a result, the Board has claimed a major victory in its relations with central government since these financial targets provide clear objectives for the railways. Furthermore, central government has, for the first time, indicated levels of funding for the duration of the Corporate Plan. In consequence, railway management claims that it has become possible to develop meaningful business strategies for the railways.

Though the autonomy of the Board in business strategy does seem to have been increased through greater clarity of objectives, this claim should be treated with a certain amount of caution. To some degree the Board’s praise of the new relationship is political ‘window-dressing’. In some respects the reduction in government involvement arises from the Board, in effect, policing itself. This is well illustrated by investment evaluation policy. The BRB claim record levels of investment authorization in 1984-5 as a result of this new relationship. However, this is substantially lower than the level the BRB claimed in 1981 was necessary to maintain rail services at existing levels (BRB, 1981b). Furthermore, to achieve current levels of authorization the Board has modified its investment policy so that
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all schemes now submitted to the Department of Transport meet the Required Rate of Return established in the 1978 White Paper (Treasury, 1978) (28).

However, the greater clarity that now seems to exist in the BRB's relationship with government has on a number of occasions been decisively compromised by sudden government interventions in the sphere of labour relations. The net effect has been an intensification of the contradictions of the arms-length relationship. Labour relations has provided the focus of these interventions because the Government believes that the rail unions obstruct the full extension of commercial practices, introduced by financial targets, into the arena of production. Moreover the labour relations machinery is seen to impede the pace of change. In consequence, the conduct of labour relations has come to occupy a central determining role in the contradictory workings of the arms length relationship.

It would be a mistake to conclude from this that government actions are a simple unfolding of the secret report on the public sector prepared by Nicholas Ridley in the late 1970s (29). Whilst government preparations for and conduct of the coal dispute bears remarkable comparison with this report's proposals, the coal dispute is exceptional for a number of reasons which are unlikely to be replicated elsewhere. The NUM posed a special symbolic threat to the Conservative Party because of its role in the fall of the Heath Government. Furthermore, the proximity of the railways to the public
places political constraints on the levels of disruption that would be tolerated in the furtherance of labour relations goals. However inadequate as a description of Board-Government relationships, the notion of an 'arms-length' relationship is nevertheless politically entrenched. Indeed, it is integral to the ethos of commercial responsibility promulgated by the Thatcher Government.

There are substantial political constraints, then, on the consistent implementation of governmental labour relations policies in some nationalized industries. The Government's claim for much of the coal strike that it was not involved is testament to this. This is not to argue that the Thatcher Government does not aspire to reduce union influence on the management of industrial organizations. It undoubtedly does. Indeed there are good grounds for arguing that the government has responded to private sector caution in reforming labour relations practices and institutions by selecting those organizations over which it has most control to take the lead in restructuring labour relations (as suggested by Soskice, 1984). However, there are political constraints, for the reasons outlined above, on the uniform and progressive implementation of strategies in particular industries (other than coal). Whilst Government philosophy may be coherent, a mixture of pragmatic, political reasons combine to select particular industries for particular interventions at particular times. Thus, many labour relations interventions are more accurately portrayed as ad hoc than as the outcomes of carefully constructed strategies(30).

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The flexible rostering dispute on the railways in 1982 (to be discussed in detail in Chapters Seven and Eight) is a good example of these tendencies. From one perspective, it is the logical outcome of a consistent state-inspired strategy to steadily reduce the involvement of railway unions in work organization (cf. Elger and Hyman, 1981). However, despite the centrality of increased labour productivity to the Thatcher Government (Jones, 1983), governmental involvement in this case seems to have been inspired by wider political considerations. Whilst the Government was certainly not averse to the productivity proposals that had been tabled by the British Railways Board, flexible rostering seems to have emerged when it did as the key issue when it did because it served to heal divisions within the Cabinet over rail investment policy.

The lack of a consistent long-term strategy towards railway labour relations it further illustrated by the sluggish progress on labour productivity issues for over three years after the flexible rostering episode, arising again only in the spring of 1985. For some of that period the overwhelming political necessities of isolating the labour relations effects of the coal strike are responsible (31). It was only after the coal dispute ended, along with the turning in of a large loss in 1984-5 (see BRB, 1985), that the railways vulnerability seems to have been exploited to 'test' the government's labour legislation on financial compensation for disputes and, it can be surmised (32), to government demands for renewed managerial determination on issues of labour productivity such as driver-only-operation.
The ad hoc nature of labour relations interventions has intensified the problems of the 'arms length' relationship because they often conflict with the business strategies that have been adopted to meet the Government's financial targets. Whilst the Board needs to display a more unitarist management ethos to show Government that it can manage the industry without deferring to the rail unions (Ferner, 1985), the product market strategy of seeking revenue improvements through substantially raising product quality requires a heightened degree of workforce consent. The notion of 'customer care' by railway staff (cf. Peters and Waterman, 1982) is integral to the attempts by the passenger sectors to improve their financial position, and sustained good operating performance is important for all sectors.

Thus, the Board is faced with a dilemma. It cannot afford to be seen to defer to the railway trade unions but it also cannot afford not to achieve agreement with the unions on most issues. The result of these contradictory pressures is often violent oscillations in the Board's position on contentious issues. This is exemplified in the dispute around the rail service strategy for London and the South East in autumn 1984. The London and South East Sector had planned widespread service reductions but the manual rail unions' threat not to co-operate led to crisis talks, the outcome of which resulted in the NUR and ASLEF having more influence on the eventual service pattern than had often been common in more 'pluralist' eras of labour relations. At this same meeting a national review procedure for traincrew depot closures was agreed much to the surprise of the

The contradictions between labour relations and business strategy, arising from government objectives in both these areas is reinforced by contradictions within the practice of labour relations itself as a consequence of the mode of government intervention described above. The problem is this: whilst the Board needs to display that it is taking a firm line with the railway unions, the lessons of flexible rostering, to be outlined in Chapter Eight, suggest that it should not push issues so far as to provide an opportunity for the Government to intervene in a way that ties the Board's hands in negotiations. The aim, then, is to achieve some autonomy from government in labour relations in a context where the Board, because of its weak financial position, is highly vulnerable to government intervention.

CONCLUSION

In this chapter the interplay between government objectives in British Rail's labour relations and the labour relations impact of business strategies derived from government policy has been examined in detail. Following Batstone et al (1984) it has been suggested that the view that the consensual character of nationalized industry labour relations has been due primarily to insulation from the full pressure of market forces is mistaken. Instead, where they have taken this form in the 1970s it is in large part due to inconsistent
government policies presenting management and unions with a strong identity of interest in warding-off potentially damaging interventions.

The breakdown of this consensus in the nationalized industries after 1980 has led some commentators to imply that the autonomy of these organizations has been steadily reduced. Conversely, members of the Thatcher Government have argued that the 'opening-up' of these industries to market forces has extended the 'arms-length' relationship. Leaving aside the political objectives of those making such statements, this inconsistency can be explained by the promulgation of labour relations objectives radically different from those of previous governments, and at the same time a retreat by government from detailed involvement in management decision-making. Instead the Thatcher Government has preferred to establish stringent financial targets. The combination of these and its labour relations objectives have stimulated both a deterioration in labour relations and the encouragement of major schemes of work re-organization.

However, precisely because government interventions have a multiplicity of aims and because of this tension between autonomy and control, those inconsistencies which underpinned the labour relations consensus in the past could come to generate new instance of consensus, if less stable than in the past. The large measure of agreement formerly found is unlikely to be regained in the short term because of changes in the political complexion of BR management and the rail unions, the NUR in particular, and any such consensus is
likely to be based in large part on mutual uncertainty of the other's reactions. Fluctuating labour relations stances by ER management over the last eighteen months provide some support for this.

Thus, apparently coherent government philosophies of undermining trade unionism in nationalized industries and its influence over work organization is not necessarily reflected in coherent strategies either on the part of Board or government and, where it is, the scope for attenuation between initial formulation and implementation is considerable.
CHAPTER FOUR

LABOUR RELATIONS: INSTITUTIONS AND PRACTICE
INTRODUCTION

In the mid-1980s British trade unions and workforce organizations do not appear well-placed to protect their past achievements. High levels of unemployment provide an unpropitious environment for successful union activity, whilst the Thatcher Government's labour legislation has placed considerable constraints, where employers have chosen to make use of them, on the sanctions that can be successfully used by unions. Where employers have been determined to implement changes, union organizations have often been unable to stop them. Prime examples of this on British Rail are the defeats suffered by ASLEF in 1982 over flexible rostering and the NUR's failure to win sufficient support from railway guards to prevent the implementation of driver-only-operation.

It may seem a reasonable assessment that the 1980s have witnessed a major shift in power from worker organizations to employers. My argument will be that the dramatic set-backs for union policy and legitimacy on the national stage obscure a continuing strength to railway workplace organization. Indeed, that attempts by BR management to forcefully implement productivity measures have been met by sustained (if ultimately unsuccessful) resistance is good evidence for this. Workforce and union organizations continue to retain effective controls in the sphere of work relations, employment relations and labour relations. In consequence, there are substantial obstacles to the implementation of managerial strategies and policies where these are aimed at reforming both labour relations
institutions and practices, and the organization of work.

The basis of this claim is that the sources of railway labour organizations' power differs from those found in much of manufacturing industry, with the result that, even if there has been the alleged decline in the literature for the latter, this has not been replicated to the same degree on British Rail. There may be good grounds for suggesting that the power of shop stewards in manufacturing is fairly directly related to labour and product markets (McCarthy, 1966). On this assumption, with the collapse in both these spheres post-1980, workplace organization has fallen away, and shop stewards and union leaders have found it more difficult to mobilize their constituents.

Such a movement is illustrated by statistics on industrial action. The total number of strikes which, after making allowances for 'strike prone' parts of the public sector (coal mining and shipbuilding), largely refer to manufacturing has displayed a substantial decline since 1979 (Edwards, 1983b). By contrast, the numbers of days lost through industrial action in the public sector is now consistently exceeding those lost in the private sector (see Beaumont and Leopold, 1985). Case study evidence suggests that private sector managements have often been able to exploit trade union weakness and the falling-away of workplace organization to reduce the scope of collective bargaining (Terry, 1983b; 1984; Chadwick, 1983), whilst many managements have sought to achieve a shift from collective bargaining to joint consultation in their
dealings with labour organizations (Sisson, 1984).

Explanations of the decline in the power of workforce organizations and managerial success in side-stepping traditional bargaining practice take two main forms. Perhaps inevitably given the recent history of industrial relations research in Britain, both of these concentrate on manufacturing industry. One argument, advanced by William Brown (1983), suggests that the transition during the 1970s from industry-wide to plant or company bargaining created a form of workplace organization that was largely separate from the wider trade union movement. This species of representation - Brown calls it 'enterprise unionism' - was crucially dependent for its success in bargaining on the health of the plant or company since, by definition, it drew on resources internal to the firm rather than those supplied externally by trade unions. Underpinning this development were buoyant labour and product markets. When these collapsed in the early 1980s, the source of power for such enterprise organizations drained away, leaving shop steward organizations which, though largely intact, were nevertheless comparatively quiescent in the face of managerial action to restructure production and employment practices.

An alternative view put forward by, amongst others, Hyman (1979), Terry (1983a; 1984) and Lane (1982) argues that the formalization and centralization of plant level industrial relations (which went hand-in-hand with the developments outlined by Brown) stimulated the creation of structured shop steward organizations, characterized by
some degree of internal hierarchy. For as plant level bargaining was rationalized and centralized from the workshop to the plant as a whole, so involvement in pay bargaining came to be the preserve of an elite group of senior stewards (see Batstone et al., 1977 for an account of the social structure of steward organization in a car assembly plant). One important consequence of this development, it is said (the evidence for this claim is often impressionistic), was a growing alienation of 'rank and file' workers from their representatives and institutions. As a result shop steward organizations now often find it difficult to mobilize shop floor consent to defend union institutions and practices when managerial policy switches from co-operation and support to hostility or indifference.

Both these explanations provide a plausible account of recent changes in labour relations activity in manufacturing workplaces. What can be demonstrated here is that the power of workplace organization may not have declined to the extent observed elsewhere where it is to some degree insulated from changes in the external environment and, furthermore, has not been subject to post-Donovan restructuring.

It is this hypothesis that will be advanced to explain the current pattern of labour relations at workplace level on British Rail. To do this it is necessary to focus on two areas. One is the degree of integration of workplace institutions and bargaining with both wider trade union organization and other levels of labour relations machinery. The other is the organization of representation at
workplace level.

By first outlining the main characteristics of trade union organization and labour relations institutions, we can then go on to explore the hypothesis through an examination of the impact of the pattern of multi-unionism, the structure of bargaining, the democratic style of union government, and finally the structure of representation at and above the workplace. The chapter concludes with an examination of the varying strength of the representative organizations of the groups of railway staff selected for detailed study.

1. THE RAILWAY TRADE UNIONS

Prior to examining the main hypothesis proposed above, it is necessary to briefly outline the main contextual features of railway labour relations. The majority of British Rail employees are represented by three trade unions, the National Union of Railwaymen (NUR), the Associated Society of Locomotive Engineers and Firemen (ASLEF) and the Transport Salaried Staffs Association (TSSA). The NUR was formed in 1913 out of the Amalgamated Society of Railway Servants, the United Pointsmen and Signalmen's Society and the General Railway Workers Union. The inspiration for its formation derived from the inter-union co-operation of the 1911 national railway strike (Bagwell, 1963 p.326) and the commitment to syndicalism of a sizeable minority of railway union activists
As an 'industrial union' the union aspires to represent all grades of railway employee, and it is the one union recognised by British Rail as representing all grades of staff. In addition to railway employees it represents a number of other occupations such as busmen and hotel employees, as a consequence of following the railway companies moves towards horizontal integration earlier in the century. Its membership in 1985 amounted to 127,000 of whom 78% were employed by British Rail.

The TSSA, prior to 1951 the Railway Clerks Association, has traditionally been composed of clerical and supervisory staff (it was one of the unions studied in Lockwood's *The Blackcoated Worker* (1958)), but in recent years it has come to represent a large number of managerial staff, including members of the senior management grades. Reflecting the experience of other industries (see Bain and Price, 1983) the TSSA benefited more in membership terms than the manual rail unions from the introduction of the closed shop in 1970 (Seglow, Streeck and Wallace, 1982). It also represents a number of occupations outside the railways, having chosen in 1948 to organize in all activities coming under the aegis of the British Transport Commission. The total membership of TSSA in February 1986 was 48,769 of whom 31,747 (65%) were employed by the British Railways Board.

ASLEF was formed in 1880 after enginemen members of the ASRS decided that their interests would be better protected by a craft
organization (Bagwell, 1963, p. 85) (5). It currently represents those grades in the footplate line of promotion, namely traction trainees, drivers assistants, relief drivers and train drivers. Of the three rail unions, ASLEF is the only one that is purely a railway union. At the end of 1984 ASLEF's membership stood at 22,735 of whom 20,792 (91.4%) were employed by British Rail (the remainder were employed by London Transport (now London Underground Limited) and the Tyne and Wear Metro) (6).

It is worthwhile summarizing here two features of trade union organization on the railways which either contribute to trade union strength or else, where the effect is less clear-cut, place obstacles in the path of management. These are the levels of union density on the railways and the form that multi-unionism takes in the labour relations institutions.

The level of union membership is an important variable in explaining union power (Bain and Price, 1983, p. 1). The railways in Britain have been characterized by high levels of union density for some years. On nationalization in 1948, union density stood at 88.7%, making the industry the most highly organized after docks and waterways (see Price and Bain, 1983, pp. 54-5). By 1979, union density had risen to 97.8% (ibid.). Explanations of union growth are beyond the scope of this thesis, but nevertheless it seems incontrovertible to assert that governmental sponsorship of collective bargaining, through the application of the Whitley system to the railways in 1919 and the statutory obligations placed on the
British Transport Commission in 1948 to negotiate and consult, and the encouragement to unionism presented by the signing of a closed shop agreement in 1969, are important factors in explaining these high levels of union density. Supporting these are a number of features of railway occupations such as long career service and family continuity in railway employment (Seglow et al, 1982).

High levels of union membership are distributed amongst the three rail unions to create an entrenched multi-unionism which can cause chronic difficulties to BR management in implementing change schemes. Indeed the then Chairman of British Rail, Stanley Raymond, in a speech to the TSSA annual conference in 1967, called for a federation of railway unions to overcome this problem (Bagwell, 1982, p.357). The significance of this pattern of multi-unionism lies not so much in the area of job demarcations, as is the case in some parts of manufacturing industry, but more in that of the composition of labour relations institutions. Job functions are clearly established by the operating Rule Book on the railways and demarcation disputes are rare (7).

The pattern of multi-unionism on the railways replicates distinct job functions rather than cutting across them. Such a division can prove advantageous to management in so far as it permits 'divide and rule' tactics (it was this potential for inhibiting worker solidarity that lay behind managerial acceptance of Lloyd George's conciliation scheme in 1907 (see Bagwell, 1963, Ch. 10)), but there are also constraints on this because of overlapping union membership. There
are pockets of NUR train drivers in some areas such as the North East (Weighell, 1984) though, as the number of footplatemen decline, ASLEF density is increasing. 98.79% of those in the footplate line of promotion belonged to ASLEF at the close of 1983 (8) compared with about 74% in 1960 (Seglow, et al, 1982 p. 48). The presence of the NUR amongst train drivers means that the NUR participates in the locomotive section of the national bargaining institutions (the Railway Staff Joint Council (Loco)). In addition, a number of supervisors, footplate supervisors in particular, retain their original membership on promotion from wage grades, with the result that all three unions attend the salaried section (the RSJC (Salaried)).

The presence of a number of unions, with different and potentially competing policies and philosophies, in sectional bargaining institutions has been identified by management as introducing additional complexity into national level bargaining, particularly over change schemes (Palette, 1984). This is well illustrated by the flexible rostering episode in 1982. Whilst ASLEF was implacably opposed to the introduction of any variation around the eight hour day, the NUR's leadership was more favourably disposed to it since the 1919 guaranteed eight hour day agreement does not have the same significance for the NUR (Bagwell, 1984), and adoption of new forms of rostering formed part of the NUR's strategy to increase pay and reduce working hours (9). Though the BRB exploited these divisions when the dispute was underway, these competing dynamics added complexity to the negotiating process prior to the strike.
Though it has been argued that industry unionism can lead to better industrial relations (Bell, 1972), in the British context of complex multi-unionism, industrial unions are under pressures which can heighten labour relations instability. The PSI study describes the NUR's dilemma:

"If its' demands (the NUR) for footplate and white collar staff are considered to be too high it runs the risk of antagonising these two groups (ASLEF and TSSA). If, however, its' demands for these two groups are seen to be too low, it risks prejudicing its claim to represent their interests effectively."

(Seglow et al., 1982 p.53)

In addition, the NUR has to balance the often potentially competing claims of sections of its membership, some of which, such as signalmen, have a pronounced sense of their occupational identity. (10) Hemingway (1978) has illustrated how the NUR was unable to meet the demands of Bridgend busmen for some decentralization of bargaining since they conflicted with wider union policy towards the maintenance of existing bargaining structures. As a result of the NUR leadership's policies, the busmen left to join the Transport and General Workers Union.

The instability in NUR internal politics that arises from the composition of its membership has often fed through into the conduct of labour relations with BR management (see McLeod, 1970). Overall, then, the pattern of railway unionism can provide a number of obstacles to BR management in labour relations. Their significance here lies in the fact that they are not directly affected by the
external environment in the short run. The ending of the closed shop agreement in 1985 will no doubt reduce union membership but it is unlikely to occur to the extent that union power will be substantially reduced or the pattern of railway unionism significantly modified.

2. THE INSTITUTIONS OF LABOUR RELATIONS

The railway labour relations machinery is composed of institutions at workplace, Regional and headquarters level. The current Machinery of Negotiation and Consultation was introduced in 1956 but is very similar to the institutions and division of functions introduced in 1919 and given statutory force through incorporation in the 1921 Railways Act (11). Thus a notable feature of railway labour relations procedures and institutions are their longevity. As Sid Weighell has noted, the industry possessed the main features found in the Donovan Commission's recommendations for some fifty years before the Commission reported (Weighell, 1977). Such a lengthy existence has helped to entrench the labour relations machinery and may have obstructed pressures for change (Thomson and Beaumont, 1978).

The railway negotiating machinery is structured both by occupation and organizational hierarchy. At the workplace groups of staff are entitled to form Local Departmental Committees (LDCs) of four representatives to deal with management (where there are less than 35 staff employed two representatives act as spokesmen). The functions
of LDCs, as outlined in the Machinery Agreement of 1956, are to agree
line (i.e. workgroup) arrangements and work rosters, piecework and
bonus arrangements where they exist, questions of seniority of local
application, health and safety and accommodation issues. The LDCs are
specifically excluded from consideration of national agreements
except where they are specifically remitted to do so. The object of
the DM is to

"provide a recognised means of communication between the staff
and local management for the negotiation and prompt settlement
of local problems and applications...and to give the staff a
wider interest in their work and the conditions under which it
is performed, with a view to the maintenance, development and
efficient working of British Railways" (Machinery of Negotiation

The next tier of the Machinery are the Sectional Councils at Regional
level, consisting of anything up to twelve staff side members elected
on a divisional basis. There are four Councils on each Region: A -
Salaried and Supervisory; B - Footplate; C - Traffic (i.e. guards,
signalmen and terminals staff); D - Permanent Way, and Signals and
Telecommunications. The functions of the Councils, as laid down in
the 1956 Agreement are "the application of national agreements
relating to pay, hours of duty, and conditions of service;
applications upon which there has been failure to agree at LDC level
or by local representatives; the application of agreed promotion and
redundancy arrangements; and applications for reclassification and
regrading of posts" (ibid). Sectional Council is also the medium for
discussion at Regional level of matters coming within the scope of the consultation procedure (to be described shortly).

A similar division by grade is found in the four sections of the Railway Staff Joint Council, the lowest tier at national level. These are the forum for negotiation of proposals to vary national agreements where they relate to specific groups of staff. 'Failure to agree' from the Councils (and from the LDCs via the Councils) can be presented to a section of the RSJC where there is an issue of principle at stake.

Above this is the Railway Staff National Council, consisting of eight union representatives - four from the NUR and two each from ASLEF and the TSSA, and an equal number of managers drawn from the operations and personnel functions. In the event of failure to resolve disagreements at this level there is the Railway Staff National Tribunal, consisting of one union and one management nominated member and a chairman (currently Lord McCarthy). In contrast to arbitration in other parts of the public sector, either party can submit claims to this body for arbitration, without the agreement of the other (Thomson and Beaumont, 1978), and the decision of this body can be non-binding if the parties so wish (12).

In addition to the negotiation arrangements there is a Consultation Procedure which, unlike many other industries, operates through the same institutions.

"The object of the scheme is to provide a regular means of
consultation between the Management and the staff by affording opportunities for co-operation and discussion between the Management and the Staff on matters of mutual interest, including efficiency in the working of the railways and the development of their business and the best use of manpower" (Machinery of Negotiation and Consultation, Appendix 7, quoted in ASLEF, 1982a).

The type of issues listed for local level consultation include staffing arrangements and establishment, infrastructure layout, equipment, and train working. At Regional level efficiency measures, staffing arrangements and establishment where more than one station, depot or yard is involved, new working methods, new rolling stock and their operation, timetable planning and introduction of new apparatus are within the remit of consultation. At national level, anything of relevance to British Rail as a whole is permissible.

Though consultation takes place in the same institutions as negotiation, the two forms possess different procedures to differentiate the adversarial character of negotiations from the cooperative objective of consultation. In contrast to the negotiating procedure, it is not generally possible to refer issues upwards in consultation, though it has been agreed that where difficulties are encountered the issue may be refered to union headquarters for assistance. Contrary to tendencies elsewhere (McCarthy, 1966), both workforce representatives and managers have maintained in practice a clear distinction between negotiation and consultation items (though, of course, representatives have sought to
influence managerial decisions in the consultation process).

The structure of labour relations institutions on BR underpins two features of labour relations which together inhibit the potential of the external environment to bring about a decline in union power. Firstly, the centralized nature of pay bargaining obstructs the emergence of 'enterprise unionism' in the form that Brown (1981) describes. One of the most noticeable differences between the railways (and indeed the public sector generally) and manufacturing industry is the importance of company-level bargaining on pay and conditions of employment (13). Since national union leaders are responsible for bargaining on pay and conditions issues, trade union organizations have a relevance to employees which may not be found where decentralized pay bargaining is the norm.

Of course, it could be objected that the railway unions are a good example of enterprise unions, if more of a Japanese type than that outlined by Brown, since the majority of their members work for British Rail. Indeed, members of the unions' executive committees are BR employees. However, the background of the unions in several railway companies prior to nationalization and the growing proportion (due to privatization) of rail union memberships who work for organizations other than those managed by the BRB prevents the development of that kind of identification with the company found in certain sectors of the Japanese economy. Furthermore, whilst the bargaining behaviour of stewards participating in workplace pay negotiations in manufacturing may be influenced by an awareness that
the more successful they are the more likely it is that their plant will close, past experience indicates that BR will not be allowed to go out of business.

If it was not for centralized pay bargaining labour relations on the railways could have come to exhibit similar characteristics to manufacturing. As in much of the latter, the organization of union government from branch level upwards is bifurcated from the institutions of workplace representation (Undy, Ellis, McCarthy and Halmos, 1981). When the Whitley system was introduced to the railways, the unions did not object to constitutional provision for the participation of non-union members in the workplace institutions (see Clegg, 1979, p. 32). This formal separation between union branch and the workplace can potentially stimulate bargaining activity at the workplace without reference to wider trade union goals and philosophies. However, because pay bargaining is centralized on the railways and is conducted by elected representatives (the twin channels of bargaining representation and union government are brought together at national level), the wider union has a more pronounced relevance to individual members than in much of manufacturing. This is reflected in high involvement of workplace representatives in branch affairs. Of the footplate LDCs interviewed, at least one member of each occupied a position in the branch organization. Of the eleven signalboxes where it was possible to interview LDC representatives, in nine cases one or more of the representatives occupied a branch position (14).
Adherence to union policy and philosophy seems to be strongest amongst train drivers. All driver representatives interviewed drew attention to union policy in describing the factors influencing their decision-making. Mention of union policy was much less common by signalling representatives. In the two interviews conducted with guards' representatives NUR policy was repeatedly mentioned but described as something to be taken into consideration rather than followed without fail. The driver representatives' perception of their role thus appears to be similar to that described by Brown as the 'print model'. In other words an important function of local representatives is to maintain loyalty to the external union.

The consent of local representatives to this structure of authority is particularly marked amongst train drivers because of their sense of craft solidarity. It is found more generally, if less strongly, throughout the railways because of the democratic ethos that characterizes the internal processes of the rail unions (15). This second key feature of labour relations on BR not only helps to generate consent for union policy, but also places obstacles more directly in the way of management change schemes since union negotiators are often unable to move away from formal union policy in bargaining.

There are a number of features of rail union government which explain this democratic style. Firstly, the annual conferences (Annual Assembly of Delegates in ASLEF's case) are not only the supreme policy making organs (the NUR's conference rules the union for the

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fortnight it is in session) but are accepted as such in practice by union executives and officials. In both the flexible rostering dispute and the driver-only-operated trains episode union leaderships were unwilling to make concessions in negotiations for fear of violating conference policy. To settle these disputes special union conferences had to be called to change union policy in both cases.

Secondly, Executive members (who are working railwaymen) rather than officials are largely responsible for bargaining with BR management and for running the union headquarters organization (16). BR management have long been critical of this, particularly in the the NUR's case, because they argue such negotiators are unwilling to make agreements without the explicit consent of the rest of their Executives, and because the turnover of Executives obstructs the build-up of bargaining experience (Royal Commission, 1966a; McLeod, 1970). The unions' dependence on working railwaymen results in rail union organizations having considerably smaller staffs than is found on other rail networks (Seglow et al, 1982) and in other British unions (Royal Commission, 1966b; Weighell, 1977)(17).

At the start of the 1980s the democratic style was most in evidence in ASLEF and it was this union which seemed to provide the largest stumbling block to BR management. However, with the election of Jimmy Knapp to the General Secretaryship of the NUR in 1983, interviews with senior rail managers indicated that the NUR had come to pose more of a problem. Knapp's accession to the leadership in 1983 was described as marking a shift to the left in the NUR
(Guardian, 23/3/83). This analysis, however, does not do justice to the complexity of the situation. The significance of Knapp's leadership is that he is more willing than his predecessors to respect the workings of union government. Traditionally, NUR leaders have seen their role as balancing the potentially competing interests of sections of NUR membership (see Royal Commission, 1966b). Sid Weighell took this further by attacking more openly the decisions being made by both the conference and executive (see Financial Times, 10/7/81) to maintain the 'tacit' and, in the late 1970s, the progressively more explicit alliance with senior BR management in pursuit, as Weighell saw it, of the long term health of British Rail and hence NUR membership.

So far in this chapter two features of the railway labour relations 'system' have been outlined - centralized bargaining on pay and conditions, and the democratic character of union government. The consequence of these are twofold. Firstly, workplace representatives display an awareness of union policy which might not be anticipated from the separation of institutions from union government at workplace level. Second, the rail unions' leaderships exhibit a particularly marked adherence to union policy. As a result it can be difficult for managers to achieve union agreement to change schemes where these seem to conflict with union policy. Furthermore, union leaderships possess a greater capacity to mobilize their memberships in defence of union policy than would seem likely in the present environment. Attention inevitably focuses on the defeats in the guards' strike ballot and the failure of a strike on London
Underground over one-man-operation of trains but during 1985 widespread industrial action took place in support of union policy over driver-only-operation in Scotland, Yorkshire, the West Country and London (18) and in the East Midlands and Yorkshire against the alleged victimization of rail staff supporting the miners' strike (19).

3. THE STRUCTURE AND PRACTICE OF WORKPLACE ORGANIZATIONS

The mobilization of trade union membership directs us to the linkages between workplace representatives and their constituency. The apparent failure in the 1980s of workplace representatives to defend industrial relations procedures and practices has been viewed by many as a consequence of a 'bureaucratization' of workplace representation during the 1970s (Terry, 1983a; 1984; Hyman, 1979). In the formalization of shopfloor labour relations and the transition to plant wide bargaining that took place post-Donovan, the primary role of many shop stewards shifted from direct representation of individual workgroups to greater involvement in plant-wide institutions.

Concomitant with this, and encouraged by managements, has come the development of hierarchy in shop steward organization. The Warwick survey indicated that management acknowledged senior stewards to be present in 74% of establishments where there were manual stewards (Brown, 1981, p.62), and that the number of full-time stewards has
quadrupled since 1966 (ibid., p.66). Batstone et al's study suggested that there is a 'quasi-elite' of stewards supporting full-time stewards who, in common with them, possess 'strong bargaining relationships' with managers (Batstone, Boraston and Frenkel, 1977, p. 45). The formalization of plant level labour relations and development of shop steward organization in manufacturing has also led to a diminution of the significance of multi-unionism. Cross representation among manual unions was reported in 29% of cases, and "inclusion of more than one union is a 'regular' occurrence in 52% of establishments which have steward meetings and more than one union" (Brown, 1981, p.67).

Since functional organization has been the predominant structural characteristic of Britain's railways and since the function of plant level works committees in the Whitley model was to deal with work organization matters workplace institutions on the railways are organized on a departmental basis. Thus, there are separate LDCs for footplate, white collar, traffic and maintenance staff. As railway labour relations have traditionally been 'good' - it is one of the least 'strike prone' industries (see Paul Edwards, 1983b, p.222) - and formal procedures are well established, top rail managers perceived no necessity to fundamentally reconstruct workplace institutions along the lines that took place in manufacturing and local government post-Donovan. Thus railway labour relations are largely fragmented (in the sense of a multiplicity of workplace institutions), though neither informal (in Flanders' sense) nor autonomous of trade union organization.

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Interviews with LDC representatives confirmed that LDCs operate largely independently of each other (20). Only at one location was it revealed that there was a joint LDC committee composed of representatives of all LDCs. However, this committee did not appear to meet frequently, and its remit seemed to be social and welfare arrangements rather than the conduct of bargaining (29).

A corollary of the fragmented system of workplace representation is that it is rare for representatives to undertake steward duties on a full time basis. All the representatives interviewed were working railwaymen and were only 'booked-off' normal duties for specific purposes. It is most common for train drivers representatives to have time off since the compilation for new rosters for the twice-yearly timetable changes is a complex and time consuming process. Furthermore, it is a condition of the 1965 Manning Agreement that driver LDC representatives have the right to scrutinise weekly alterations to drivers' work schedules to check that the requirements for single manning have been complied with (22).

Since workplace representation is organized on a departmental basis, representatives act as workgroup delegates in a way that may be more difficult where steward committees are composed of representatives of a number of groups of employees. As a result, structural features of the bargaining system at local level are less likely to lead to a divorce between representatives and workgroups that has been hypothesized to have taken place elsewhere. This facilitates both a greater responsiveness to work group opinion and, in the opposite
direction, makes it easier for representatives to convey union policy to work groups where they choose to adopt a 'leadership role' (Batstore et al, 1977).

It is argued, then, that structural features of bargaining institutions on the railways permit a closer association between representatives and workgroups than is found elsewhere. This in turn indicates that railway LDCs may be more able to resist managerial change schemes than in much of manufacturing industry.

One important feature of railway labour relations is that well-developed representation exists above the workplace. On each Region there are Sectional Councils for each grade or group of grades, standing above the LDCs, and who have considerable involvement in workplace labour relations. Thus those studies of workplace representation on the railways which confine themselves to LDCs, such as Christine Edwards' survey of workplace power (1982a and b), provide a partial picture of workplace labour relations (23). Until the data collection for the project reported here, the role and activities of Sectional Councils had not been systematically researched. (24) The reason behind the detailed attention given to the Councils was because of this well-developed role in workplace labour relations, particularly in the implementation of change schemes. The conclusion is that the primary role of Sectional Councils is not that of a negotiating forum but of providing individuals to act as 'trouble shooters' and coordinators of bargaining that outside BR might be conducted by senior stewards and
One of the few academic studies to deal with the railway Sectional Councils is Boraston, Clegg and Rimmer's book, *Workplace and Union* (1975). They suggested that the "Sectional Councils' staple business lies in appeals on gradings" (*ibid.*, p.135). The data collected for this project suggests this claim is misleading for two reasons. First, the varying employment conditions of the grades of staff covered by the Councils results in variety between the Councils' negotiating activities. Second, the formal negotiating functions of the Councils form only a small element of their activities.

Negotiations on individual grievances that are referred upwards by LDC take place in sub-committees (composed of Council members and Regional managers) that meet between four and six times a year. It is only on Sectional Councils A (salaried) and C (traffic) that grading issues form part of the agenda. Even here, interview evidence indicated that grading claims are a declining element of Council C's activity. Members of the occupational groups covered by 'C' can seek re-grading on the basis of job content but when the Pay and Efficiency Agreements of 1968-9 *(25)* created 'versatility grades' with a wide combination of duties for each, the scope for re-grading claims became limited. As one senior personnel manager put it, "the trade unions were happy (with the P & E Agreements) at first because large numbers of staff had their grades raised and an increase in pay. But what they did not foresee was that when they argue about gradings we have an objective document which we
can wave at them. It is a lovely document from a management point of view. But it's very frustrating for people like (the Sectional Council Secretary) because he knows he's got to find something special to get away from the agreement in the book".

At Sectional Council A (the salaried council) the scope for regrading is greater since responsibility and performance are important factors in promotion. As this same personnel manager put it, "this is where the real negotiations take place."

Re-grading claims are rarely presented at the drivers' Councils since promotion is determined by a combination of seniority and competence in tests. Instead, agendas tend to be dominated by claims for payment where it is contended that driving jobs had been allocated to the wrong crew member as determined by local and national agreements. Some highly-organised footplate LDCs, such as that at Northern also consciously use the Councils to seek interpretations of and modifications to national agreements. The engineering maintenance Councils were not studied in the same depth as the other blue-collar Councils but interview evidence indicated once again that re-grading claims were not a significant part of their activities because promotion is dependent on the passing of tests of competence.

In their negotiating role the primary function of the Councils seems to be that of 'Court of Appeal'. Much more important than this role is their involvement in the Consultation Procedure. The great bulk of their time, and that of the secretaries and chairmen in particular (27), is spent on issues arising from their role in consultation.
The Councils have the right to be consulted on any scheme which affects more than one location which, given the geographical interdependence of railway operations, results in Councillors being involved in most change schemes on BR. This includes both major one-off changes, such as re-signalling schemes, and regular alterations to the organization of operations.

Both Sectional Councils B and C, because of their representation of traincrews, are consulted on the bi-annual timetable changes since these have implications for traincrew depot work allocation. The drivers' Councils also have consultation rights on depot establishments over a five year period which has in the past given them some informal negotiating ability on establishment and recruitment (Seglow et al, 1982). Regional practices vary in the extent to which Council's seek to influence work allocation but, in general, footplate Councils are less willing than the traffic Councils to be seen to usurp the functions of LDCs. Interviews with guards', drivers' and signalling representatives indicated that guards' and signalling LDCs guard their prerogatives less jealously than footplate LDCs (28).

In consultation over change, the Councils organize and marshall (to varying degrees) the forces of the LDCs concerned. The logic of the Councils' role here is that in seeking to achieve the best solution for all affected they necessarily stand apart from the interests of individual LDCs. For example, it is rare for Councils to mount sustained opposition to closures because to do so, they argue, could
seriously affect redundancy payments and the resettlement of displaced staff to other depots. The tacit condition of Council consent to BE change schemes, the vast majority of which on BR reduce employee numbers, is that Regional personnel managers find alternative jobs for those displaced.

In the process of consultation around change, Councils largely perform a 'lubricant' role. The secretaries and chairmen, furthermore, act as 'trouble-shooters' in the event of labour relations difficulties at local level. They do this because of their conception of the Councils as 'the guardians of the Machinery', and the desirability of maintaining the established procedures. That Councillors are not simply union delegates is illustrated by the practice of non-involvement in industrial disputes. When the Machinery breaks down, the Council bows out and the 'union' in the form of the district official steps in (29).

To summarize, the functions of the Councils in practice go beyond those identified by Boraston, Clegg and Rimmer. Their involvement in maintaining procedures, progressing change schemes and marshalling groups of workplace representatives suggest that they occupy a role akin to that of senior stewards and convenors in manufacturing. Although Councils often restrain the activities of LDCs in consultation items and take up LDC grievances selectively they nevertheless facilitate a continuing strength to LDC representation. Precisely because the balancing of often divergent or competing workforce interests takes place through the Councils, then it is
feasible for LDC members to perform a strong representational function without restraining workforce claims to the same extent as Batstone et al's 'leader' stewards appeared to. Furthermore, in their negotiating role as 'Courts of Appeal', Councils prevent failed LDC claims from developing into tests of legitimacy for the LDCs in their dealings with management. In other words, they provide an escape valve for LDCs (see Becket, 1982). In conjunction with the departmental basis of LDC representation, this feature of the labour relations system underpins the structural role of LDCs as workgroup spokespeople, and has facilitated the continuing importance of these representatives despite adverse external circumstances.

4. THE VARYING STRENGTH OF WORKPLACE INSTITUTIONS

A number of structural elements of the 'system' of workplace bargaining have been outlined which contribute to a continuing vitality of this form of representation. However, whilst these features are common to all occupational groups, it became clear at an early stage of the research that the power of workplace institutions is not uniform, and that some occupational groups possess a greater capacity to resist or influence managerial change schemes than others. In this final section, we consider which factors are responsible for this distribution of power.

Assessments by interviewees indicated, as anticipated, that footplate LDCs are virtually always the most powerful group, defined as "the
possession of the ability to influence aspects of local industrial relations" (30). Edwards found that footplate LDCs are the best organized, as measured by levels of labour relations training, attendance at branch meetings, contact with local officials, dissemination of information, and time spent on LDC business both at home and work (C. Edwards, 1982b). She found that footplatemen are most committed to their representatives and that footplate LDC members can rely on membership support more than any other occupational group can. These findings are broadly supported by the comments of respondents interviewed for this project, and only one line manager thought his footplate LDC was of a lower calibre than other LDCs in the area (31).

The sense of craft cohesion amongst train drivers is clearly important here as an explanatory variable, underpinned by the exclusivity of footplate workplace institutions and the entirely separate line of promotion from that of other railway staff. Representational specialization is permitted by the 1956 Machinery Agreement for other groups of staff where their numbers permit it (ie over 35). Thus, at large depots guards will have their own LDC (32), as will signalmen where there is a large control centre (33). Thus, the larger the work group, it seems more likely there is to be specialist representation and hence a greater identity between work groups and representative institutions.

Christine Edwards argues that the most important factor explaining variation in power is the characteristics of the representatives
themselves, and that structural variables are less important, although strategic position defined as 'centrality within the railway network', along a somewhat crude traincrew/non-traincrew dichotomy, has a relatively high correlation (1982a., pp.14-15). The case study methodology adopted in the present project does not enable a fully rigorous appraisal of Edwards' research. However, the findings do nevertheless call into doubt the central thrust of her results and, contrary to her thesis, it is the centrality to train service operations that is the most important variable. Thus, the footplate grades (who drive the trains) and signalmen (who set the routes for them), are the most powerful groups.

Edwards' results indicate, as outlined above, that train drivers are the most powerful group at workplace level. Her findings also suggest that train guards are nearly as powerful. The evidence from this project conflicts with this since comments by union representatives and officials and managers indicated that guards' LDCs are considerably weaker than train drivers'. The explanation behind this discrepancy may well be that Edwards' variables pick out degrees of workplace organization in an administrative sense and not its effectiveness in practice. Whilst guards' representatives, like their footplate counterparts, are responsible for roster and link compilation they have little control, and nor do they seem to seek it over daily variations in work scheduling (34). However, since guards' LDCs have a role in timetable scheduling they have access to office facilities, unlike most occupational groups on British Rail, which permits relatively high levels of organization if the...
individuals involved should so choose. This could explain why she found the characteristics of individual representatives so important.

Workgroup power arising from centrality to production is translated into cohesive LDC groups amongst footplate staff because of the complexity of work scheduling (i.e. matching crews to trains) and the daily variation in task requirements caused by the incidence of 'special workings' (i.e. train movements that are not planned in advance), in combination with the comprehensive coverage of national and local agreements in these respects. An important function, and one that is more developed than for any other grade of staff, of local representatives is the application of these agreements on a day-to-day basis. The coverage of these agreements is much greater than in the case of guards, and may be explained by the presence of mileage bonuses for footplatemen since 1919 (this mileage bonus scheme was only extended to guards in 1965) and the perceived necessity of applying these fairly in situations where a number of conflicting criteria may be relevant.

However, though footplate LDCs are the best organized, all representatives interviewed downgraded the importance of formal LDC meetings. As one put it, "we only have one when we need it". Issues arising from the application of agreements to specific instances of work scheduling are generally sorted out informally between representatives, roster clerks, supervisors and traincrew managers. Similarly, Edwards' survey shows that footplate representatives have the most informal contact with management (ibid., 1982b). This is
not so surprising as she seems to think since, despite the
geographical isolation of driving itself, the spare time built into
traincrew work diagrams can give a fair amount of time around the
depot. The combination of extensive written agreements and informal
bargaining tends to reinforce that evidence which suggests that the
more comprehensive the formal rules surrounding workplace activities,
the greater the degree of informal contact necessary to apply them
(cf. Terry, 1977).

Though signalmen occupy a similarly important place in train service
operations, the considerable power this gives them is not always
converted into cohesive, formal LDC organization (cf. Edwards', 1982a
and b). Once again, this suggests that her survey may pick -out
degrees of organization rather than effective power. There are a
variety of reasons that explain why these institutions are
comparatively under-developed. One is that the relative day-to-day
autonomy from management, both in task execution and the wider work
environment, enjoyed by signalmen does not always suggest the need
for strong formal organization against management. In addition, as
the Tavistock survey of attitudes to participation on BR indicated
(Hilgendorf and Irving, 1976), those workers in most contact with
their representatives appear to see less need for formal organization
- in large, modern power-operated signalboxes all, or nearly all,
signalmen are grouped under one roof and hence are able to take up
issues with their representatives informally.

Secondly, unlike traincrews there is not the necessity for complex
work scheduling since the signalmen operate their work stations on a straightforward eight hour, three or four shift basis. Hence, there is not the need for frequent contact between representatives and management to deal with the allocation of work, nor the need for comprehensive agreements to govern it. This is reinforced by the absence of a generalized system of bonus payments for signalmen. In areas controlled by one power box, the details of work allocation can be controlled largely on a rotational basis by the signalmen concerned with little day-to-day intervention by management.

Though signalmen's LDCs are often weaker organisationally than traindrivers, many line and operations managers are more mindful of signalmen than drivers which, given the definition of power presented earlier suggests that signalmen's power is greater than that of drivers in some locations. Many managers see the power signalboxes under their responsibility as, as one Area Manager put it, 'their Achilles Heel'. In fact, some powerbox workgroups have been perceived as so powerful in the past that managements simply did not attempt to put certain issues, such as work re-organisation and staff reductions, onto the bargaining agenda. This emphasizes the importance of 'non-decisions' in explanations of power (Lukes, 1974), which Edwards' method of evaluation of influence over a list of specific areas may not be able to fully pick out.

Though the footplate LDCs are generally perceived as the most formidable bargaining opponents, many managers prefer this LDC to bargain with since the representatives can be relied upon to
'deliver'. As one Area Operations Manager put it,

"the easiest to deal with (LDCs) are not necessarily the best ones to deal with from a management point of view.....often you make agreements with the LDC, you think that it's all been sorted out but then the men themselves reject it. With guards and drivers though when agreement is reached at LDC it sticks."

**SUMMARY**

There are a number of features of railway labour relations that provide workforce organizations with continuing power despite the recession. Of these the most important seem to be the integration of workplace representation with the wider union movement and railway labour relations system, and the structure of workplace institutions. Workplace representatives have largely unimpeded access to higher degrees of representation and the support of the external union movement. Though workplace representation is bifurcated from the official union organizations, as in much of manufacturing, the two are integrated in practice by the centralized nature of pay bargaining in conjunction with the democratic style of union government.

This linkage between national union and workplace organization is mirrored by a cohesive pattern of relationships between these organizations and their constituencies. Part of the explanation for this is provided by the factors just mentioned but in addition the
Specialized structure of local representation results in LDC activity reflecting workgroup concerns fairly directly.

The combination of these features provides railway workforce organizations with continuing strength. In contrast to manufacturing industry, where managements have often been able to mould the pattern of shop steward activity to their liking (Terry, 1983, 1984; Chadwick, 1983), these features of the railway labour relations system continue to place constraints on local managers and can provide substantial obstacles to management strategies. The capacity of union organizations to obstruct management change schemes varies between occupational functions. The features summarized here are most marked in the case of train drivers, and it is this group which is most able to resist management plans. Their power in the production process is replicated in the structure of representation. Signalmens' power in this process is, by contrast, generally not reflected in representational cohesion, with the result that once management decides to vary features of labour management, signalmen are less able than train drivers to resist such moves successfully.
CHAPTER FIVE

MANAGEMENT STRUCTURE AND ORGANIZATIONAL CONTROL
INTRODUCTION

During the 1980s the BRB's business strategies have not been the subject of detailed government involvement. Government interventions have concentrated instead on setting financial targets to guide these strategies and in forcing changes in the management of labour. It will be argued here that changing business strategies, and the structures through which they are implemented, have led to a deterioration in labour relations through their impact on aspects of work organization. However, the large number of changes that contribute to this deterioration do not exhibit the consistency necessary to be seen as the outcome of a 'management offensive'. Instead, a number of features of current business strategy and structure inhibit the emergence of coherent labour management strategies.

This contention will be demonstrated by an examination of two recent changes in the organization of BR management. These are,

1) the creation of rail business sectors in 1982 and their superimposition on an organization structured by function and geography. These have been accompanied by major revisions of corporate planning and financial control procedures; and

2) the elimination of one tier of management within British Rail's Regions (1) and the decentralization of managerial authority to lower levels.

It has already been pointed out (in Chapter One) that the growing
managerial literature on contemporary organizational change has so far provided little evaluation of the success of these innovations in practice. Academic material on the impact of management strategies and structures have so far largely concentrated on making broad comparisons between the character of labour relations associated with the main type of company form (for example, Purcell, 1983; Gospel, 1983b; 1983c). The objective here is to give more detailed attention to specific processes of organizational restructuring and their impact on labour dimensions by outlining each of the main features of the changes outlined earlier and the modifications to labour management that have accompanied them.

1. THE HISTORY OF RAILWAY MANAGEMENT

In 1982 the British Railways Board adopted a new structure to manage its railway activities. Management units based on business Sectors were created, each headed by a director with 'bottom-line' responsibility for the financial performance of that business. These sectors are InterCity, Provincial, London & South-East, Freight, and Parcels, and are superimposed on a management organization structured by geography and function. The new structure thus takes the form of a matrix (see Knight, 1977).

The prime objective was to facilitate central strategic planning and to emphasise business priorities at the expense of those operating and engineering considerations which were perceived to have directed
managerial attention away from cost effective performance in the past (2). One element of past practice had been the capacity of subheadquarters units to define priorities without reference to the broader requirements of the financial constraints of the business (see Reid, 1982; BRB, 1983b; RGI, 1984a). To understand how BR management came to acquire these characteristics it is necessary to undertake a brief historical survey of British railway management.

Chandler (1977; 1984) has shown how railways provided the earliest model for the creation of managerial hierarchies because of the need to coordinate the dispersed nature of railway operations (3). The British companies, like most of their American counterparts, reacted to the requirement to coordinate the four 'classic' functions of a railway - provision of track and structures, provision of motive power and rolling stock, obtaining traffic and carrying traffic - by creating departmental or functional management structures (Bonavia, 1971) with general management exercised at top level (4).

One important consequence of this structural form was the encouragement of occupational specialization and to emphasise professional expertise in the operating and engineering functions rather than business needs (Bonavia, ibid; Chandler, op. cit.). Recent research on U.S. railroad companies has shown how technical specialism leads managers to focus on individual departmental budget costs rather than on all-round business performance (Kinnunen and Janell, 1982) (5). In Britain occupational specialization was reinforced by the British Transport Commission's attempts to break
down company loyalties after nationalization. The general management function in the six Regions was substantially less-developed than in the 'Big Four' railway companies they replaced (the erstwhile General Managers were re-titled Chief Regional Officers), and supervision of the Regions activities passed to a functionally organized Railway Executive, leaving the Chief Regional Officers as co-ordinators. Thus the departmental system was extended to the top of the railway structure (Pearson, 1964; Bonavia, op. cit.).

The other distinguishing feature of railway management in Britain since rationalization has been (despite the efforts noted above) the entrenched role of the Regions and the weakness of corporate control. The British Transport Commission and Railway Executive (responsible to the BTC for running the six Regions) were run on a shoestring and when the Railway Executive was abolished (by Ministerial Order) in October 1953 a substantial degree of general management authority was passed to the Regions, each supervised in part by an Area Board. The Chief Regional Officers became Chief Regional Managers. Sir Brian Robertson (the head of the BTC from 1955) attempted, unsuccessfully, to fill the vacuum in central direction by creating a complex General Staff structure, akin to military structures, to assist the members of the Commission (see Pearson, 1964, Bonavia, op. cit.).

The appointment of Dr Richard Beeching to head the newly-created British Railways Board in 1963 ushered in a new era of organizational thinking on the railways. Beeching sought to correct what many see as the excessive decentralization of the 1950s (Pryke, 1971, p.247)
by reserving the establishment of commercial policy, control of finance and investment and technical standards to the Board, leaving the Regions with responsibility for operations (see Bonavia, 1971, pp. 98-9, pp. 101-3). The potential for coherent strategic planning was compromised, however, by Beeching’s decision to organize the Board on functional lines. As a result the exercise of central control was often confused since overlapping and contradictory directives were frequently sent from headquarters to Regional General Managers (Bonavia, 1976). Beeching's aim to exercise strategic control from the centre largely failed since he was unable to break the the Regional Manager's 'fiefdoms'. Fiennes records (1967) how the Eastern Region's General Manager, H.C.Johnson, resisted the Beeching Plan as far as possible (p. 117) and how he himself obstructed what he saw as BRB interference in the running of 'his' Region (p.130-1) (7).

By the time of the 1968 Transport Act the railway activities of the British Railways Board were an odd structure. Whilst the relationship between Board and Regions had a very strong functional component, the Regions themselves from the late 1950s onwards had replaced departmental with largely federal management structures (8). Following a report on internal organization by McKinsey & Co. (BRB, 1969), the BRB adopted structures more akin to those of an M-Form company. The activities managed by the Board were substantially divisionalized with separate Chief Executives and Boards appointed for each business (9). The Railways Board itself became non-functional and Executive Directors were created, reporting to the
Chief Executive, to take responsibility for freight planning and marketing, passenger planning and marketing, systems and operations, finance, personnel, and (later) planning. Consistent with the M-Form model, the objective was to enable the Board to "give greater emphasis to overall corporate planning, policy making and longer term direction" (ibid., p.10), whilst the primary function of the Regional General Managers (members of the Railway Management Group along with the Executive Directors) was defined as "the effective day-to-day management of the railways in the Regions" (p. 21).

This formal division of functions between Board Headquarters and Regions remained in place until the business Sectors were created in 1982. However, though the management structure prior to 1982 embodied the main characteristics of M-Form organization (see Chandler (1984) and Williamson and Bhargava (1972)), it does not necessarily follow that management practice was in accordance with the key tenets of this model. As in many large U.K. firms, central strategic control has in practice been weak. In BR's case this seems to result more from chronic inconsistency in government policy and the vagaries of government interventions rather than from the distinctive British feature of company growth through amalgamation.

Regional management, then, possessed substantial autonomy both in the spheres of operating management (as in the M-Form model) but also in that of wider business policy. Central monitoring of the Region's performance concentrated on short-term financial and physical measures rather than their contribution to more long-term business
strategies. In consequence, the criteria by which rail service specification were judged were often dominated by production considerations. At the same time, the shortcomings of the accounting system, which was unable to provide either a genuine Regional or business 'bottom-line', impeded the development of meaningful budgetary measures capable of practical control by BR Headquarters. This reinforced operating and engineering considerations and, in turn, re-affirmed the Region's primacy in railway management (cf. Berry, Capps, Cooper, Ferguson, Hopper and Lowe's work on the NCB, 1985).

This pattern of management activity had a distinctive effect on labour management which replicated the 'tacit alliance' found at national level. Since authority in commercial management was concentrated in practice in the Regions, and since discussion of the organization of labour deployment to meet commercial targets was remitted to the Regional labour relations institutions, Sectional Council representatives gained considerable informal access to commercial specifications. In Consultation meetings on the implications for traincrews of the bi-annual timetable representatives often focused their attention beyond work organization issues to those of the commercial attractiveness of new or revised services. Furthermore, as production considerations weighed heavily in Regional management approaches to performance, the views of the rail unions on the operating feasibility of managerial plans were generally taken seriously.
From one perspective Regional managers could be judged to have abrogated their 'right to manage'. Such a criticism would be unfair since managers rarely uncritically deferred to union objections. Equally, the criticisms of union representatives of management plans were inspired as much by a broad concern for good railway performance as the achievement of union goals in work organization. What is most significant about these relationships is that both workforce and management viewed union participation in railway affairs as a 'matter of fact'. In particular the pattern of long career service amongst managers stimulated an awareness of the unions' concern for the railway's well-being, and an acceptance of the legitimacy of union involvement in railway affairs. A further influence is managerial dependence on the exercise of unsupervised responsibility amongst core operating groups such as traincrews and signalmen. In this way the 'tacit alliance' at national level has been replicated in the Regions. Just as the tacit alliance has been ruptured by recent government interventions, so this similarity of perspectives in the Regions has been substantially weakened by the new patterns of management organization to be described in the next section.

2. THE INTRODUCTION OF SECTOR MANAGEMENT

Sectorization revolutionized BR's management structure through the creation of Sector Directors with 'bottom-line' responsibility for InterCity, Provincial, London & South East, Freight and Parcels. It
was clearly intended that this structure would weaken the power of the Regional General Managers and diminish the prominence of the operating and engineering functions. The 1983 Corporate Plan outlined the main elements of the new structure:

"This new Sector management structure has been integrated with the other essential forms of railway management - functional management and Regional management. Whilst Sector Directors give strategic direction, Functional Directors are technical experts responsible for identifying cost savings and productivity initiatives in the shared operating, engineering and administrative facilities and Regional Managers implement these and co-ordinate all rail activities on a geographical basis" (BRB, 1983b, p.13).

The philosophy that underpins this matrix is that of 'creative tension' (RGI, 1984a) or, as Sir Peter Parker put it, "the human chemistry of creative conflict" (Parker, 1983), in the belief that this will assist in cost reductions and creation of a more market-oriented product than hitherto (Reid, 1982).

The underlying principles of Sectorization are a clear identification and segmentation of product markets, and the direct linking of managerial responsibility to discrete patterns of business activity. The main effects of this have been centralization of managerial authority, a departure from uniformity in management structures, and a clear separation of business strategies. The main determinant behind the form and extent of these changes is the Sector Directors' perceptions of product markets (for reviews of these see Ford, 1982a;
1982b;1983a; 1983b). These are now outlined through an examination of post-Sectorization developments in freight and the passenger businesses.

Sectorization has had the clearest impact on management structures in the Freight Sector. In September 1984 direct marketing responsibilities were removed from Regional freight management, and the post of Regional Chief Freight Manager was reduced in status to that of a resource manager acting as a 'go-between' for the Freight Sector business managers and the operators (Abbott, 1985b; Freeman Allen, 1984). Commodity managers (National Business Managers) were appointed to cover each major group of freight traffic supported by outbased managers at key locations. These report to the Sector Director and all are headquarters managers with 'bottom-line' responsibilities. Thus, in this sector a management organization has been created that is almost entirely separate from operating management in the Regions.

Two features of the product markets lie behind this. One is that contracts are reached centrally and so the traffic flows do not bear any necessary relationship to the geographically-based Regions. The second is that market pressures are felt particularly keenly in this sector and strong central control of operating costs is especially necessary (11). As one commentator has described the new organization created to respond to this;

"Railfreight has developed into an aggressive commercial organization quite distinct from the old railway freight
business based on geographical Regions which was a set-up with more relevance to the commercial world of 1923 than that of 1985" (Harris, 1985, p. 185).

As we shall see later, this has put considerable strain on prevailing patterns of work organization.

The passenger sectors have created somewhat more hybrid structures than those found in the Freight Sector. Headquarters staff have been kept smaller in size and business managers have been inserted into Regional management organizations, in place of the Regional Chief Passenger Manager, with dual responsibility to the Sector Director and the Regional General Manager. On the Southern Region the passenger business managers have no direct day-to-day responsibilities and are instead encouraged to prioritize forward planning (Harris, 1984). The structural patterns are not entirely uniform between the Regions. On the Western Region it was initially believed that the limited number of Provincial services did not justify a Regional Provincial Services Manager and instead considerable responsibility for service performance was devolved to a number of Area Managers (Freeman Allen, 1985b).

The creation of three separate passenger sectors led to segmentation of passenger market strategies. The InterCity strategy has to respond to Government requirements that the sector should turn-in a 5% current cost return on assets in 1988-89 (12). To achieve this demanding target the principles behind the sector strategy have been transformed. The high-volume ('bums on seats') philosophy of the
Parker era has been replaced by a policy of developing higher quality traffic (BRB, 1984a). Over the period of the 1984 Corporate Plan it is planned that the Sector's performance will improve by £103 million through a combination of Sector re-definition (£25 million), increased revenue (£31 million) and cost reductions (£47 million) (BRB, 1984b). Whilst this strategy document is coy about how this will be achieved, changes in working practices are said to form only a relatively small element of this (£11 million).

In the Provincial and London & SouthEast (L & SE) Sectors the possibilities of acquiring major new sources of revenue to meet reductions in government grants are slight. On the Provincial Sector, for instance, working expenses are roughly four times as high as receipts (BRB, 1984a) and though operating some 33% of loaded passenger train miles, achieves only 15% of receipts. The strategies in these sectors thus largely focus on reductions in operating expenses. So far these have been achieved by much greater attention to the deployment and maintenance of physical, rather than human resources and as a result the pressures on work organization have not been as severe as in the Freight Sector.

This discussion of sector management structures and objectives has highlighted the formation of product market strategies which, through clearer segmentation, have been more fully developed than in the past. An integral element of Sectorization has been the creation of new corporate planning and budgetary control procedures. These have resulted in these new strategies becoming more rigorously specified.
and monitored than in the past (Williams and Linney, 1985), and it is to an outline of these that we now turn.

3. CORPORATE PLANNING AND BUDGETARY CONTROL

From the late 1970s BR attempted to enhance its strategic capabilities. Criticism of its existing procedures centred on inadequate development of objectives, weak monitoring procedures and oversimplistic forecasting particularly on the revenue side. (Williams and Linney, *ibid.*). The most significant shortcoming, however, was that the plan was not expressed in detailed action plans and neither was it integrated with annual budgets. Instead of implementing detailed action plans, Regional General Managers were handed down a set of budget objectives from which they compiled annual Regional Rail Plans. Since the General Managers had no involvement in the preparation of the Plan and did not necessarily share its assumptions, their commitment to implement the Plan's requirements was often half-hearted.

From 1984 the Corporate Plan has been produced by a new set of procedures which fully integrate the Regional General Managers. In the preparatory stages the Sector Directors undertake strategy studies which review the medium-term prospects for their sector. These are then considered by the Strategy Committee, composed of Board Members, after which predicted results are drawn up. At this early stage the forecasts are analysed into Regional Performance Goals (RPGs), and agreed with the Regional General Managers at a
Railway Planning Conference. Measured against these 'top-down' RPGs are 'bottom-up' five year Regional forecasts produced function by function within the Regions in the next stage of the process. In the final stage they are critically appraised by Sector and Functional Directors at headquarters before the plan is put to the Strategy Committee and then the Board itself.

A number of features of the new planning process heightens central control of the BR organization. The integration of Regional plans with the Corporate Plan provides the main context for this. In these Regional forecasts a named manager is made responsible for their implementation, and the timescale is specified through a series of action steps (which include consultation and negotiation with workforce and union). The Plans are diverse in scope and range from quite small-scale ones producing a net financial benefit of £10,000 to system-wide initiatives (13). These Plans are summarized by means of an integrated computer system with terminals in BRB Headquarters, Regional headquarters and outbases.

Adherence to the plan is ensured by a rigorous monitoring process. There are two strands to this - one is the formal monitoring system, the other the budgetary control system itself. Progress on the Action Plans is considered monthly by sub-groups of the Railway Executive with General Managers/Functional Directors reporting progress on a by-exception basis. Every quarter a brief summary is submitted to the Railway Executive summarising corrective action and recommending the triggering of contingency plans where necessary.
Financial performance has been assessed through the Sector Performance and Monitoring System (SPAMS) developed for the introduction of Sector Management. From 1984 the Action Plans that make up the Corporate Plan have been integrated with the budgetary control system so that financial results can be assessed by function, sub-sector and individual budget responsibilities, to give what is called 'cost classification. All budgets and four weekly results on an out-turn basis are available to all sectors/sub sectors analysed on this basis.

Costing and budgetary control

The main feature of budgetary control that has been developed with sectorization is that net profit/loss accounts have been created for each sector. Previously, the difficulties of allocating railway costs and revenues meant that profit and loss could only be established at Chief Executive level for the railways as a whole. In consequence, budgetary control and profit/loss accounting were largely separate.

Though both costs and revenue present problems of assignment on railways, interest has generally focussed on costs because of chronic deficits on current account (excluding government contract payments). Railway costs have appeared an intractable problem since railway operations, involving use by large numbers of highly diverse services of shared track, signalling and terminal facilities leads to a relatively high level of joint indirect costs (in the region of 40%).
Though the great majority of firms experience joint costs, the railways face particular problems (14). One Board member has described how,

"railway managers are under strong political pressure to devise rational and precise ways of allocating all costs. Without such allocations, the inability to state precisely who is subsidising what leads to accusations of obfuscation, if not incompetence". (Fowler, 1977, p.436).

Prior to sectorization the budgetary control system operated Regionally. Performance was assessed by attention to budgeted rather than actual costs, whilst revenues were re-assigned to service groups using a Profit Planning and Cost Centre Analysis system (PP & CCA) to produce a net contribution to join indirect costs. The Regions and major functions within Regions accounted for costs and receipts originating within their geographical boundaries. Thus a ticket purchased from a Western Region station for travel on the Eastern Region was credited to the Western. Originating costs from cost centres were set against receipts to form a statement of Regional receipts and costs but one which did not approach a genuine profit and loss account of the services operated by the Region. Analysis of business results, then, could only be done at BRB Headquarters for the railways as a whole.

The extension of avoidable cost techniques to the network as a whole was integral to the introduction of sector management in 1982 since it then became possible to allocate all indirect costs to sector
activities and hence permit the calculation of a sector bottom-line. The convention established by the 1974 Act that the freight and parcels sectors continued to pay only their avoidable costs (except where they were the sole user of a facility such as a siding) was retained. All other track, signalling and terminals was allocated to the three passenger sectors on a prime user basis with the other sectors paying that sector the avoidable costs incurred in their use of it. The BR network was divided into some 5,000 route sections for this purpose.

Since technical advances now allow costs to be assigned on actual rather than budgeted figures, the budgetary control system and profit and loss account have been integrated, with the result that financial results can now be tied much more precisely to the dimensions of railway activity. Thus, the combination of sectorization with refinements in budgetary control has created sharper management accountability and the capacity for more detailed central control. Hitherto Area cost centres were monitored by the Divisional tier of management with budget construction moving up through Region to BRB Headquarters. Now, prime user conventions and bottom-line responsibilities give Sector managers at Headquarters considerable interest in ground level performance since in this avoidable cost accounting system there is an obvious incentive for the sectors to keep their shared costs as low as possible.

It is apparent that these new planning and budgetary procedures have potentially far-reaching implications for management control. The
detailed action focus of the planning procedures means that corporate
managers have both greater interest in managerial activity at lower
levels of the organization whilst the 'bottom-up' features of the
process make them more visible. Once an initiative is introduced to
the corporate plan it is difficult for the responsible managers to
fail to fully implement it. In budgetary terms, local managers can
now be effectively scrutinized directly by headquarters' managers.
These features of the new planning and control procedures, the
rigorous definition of management accountability that lie at the
heart of them and Sectorization have thus reduced the scope for
managerial discretion at lower levels of the management hierarchy.

4. MANAGERIAL EFFICIENCY AND THE ORGANIZATION OF WORK

What impact have the changes in management structure and practice
had on labour management? The argument is that the pressures for
changes in working practices widely observed on BR are best perceived
as a set of discrete by-products from these rather than the result of
a strategic 'management offensive'. Furthermore, the nature of the
changes in structure tend to preclude rather than encourage the
generation of comprehensive labour management strategies. These
reforms, as outlined in previous sections, embrace
a) the creation of new management structures which have shifted the
   locus of policy formulation away from Regional management;
b) the clear segmentation of product markets and the development of
   strategic responses in which financial or 'business' objectives
play a more important role than hitherto; and
c) the tightening of control of lower levels of the management
   hierarchy through new planning and budgetary control procedures.

The impact of the Sector Directors has gone beyond the formulation of
commercial strategies to profoundly influence the organization of
production. As headquarters managers now make the core decisions on
service specification, the content of operating decisions is now
largely structured by managers situated both outside the production
function and away from the locus of their implementation.
As an element of this the allocation of all motive power and rolling
stock (except engineering departmental stock), along with all
infrastructure on a prime-user basis, has been shifted from the
Regions to the Sectors. Regional boundaries no longer have their
traditional significance, then, for operating purposes.

But since the Sector Directors and their staff are sited away from
the production function they are neither constrained by 'traditional'
methods of organizing production nor have to face the immediate
labour relations consequences of their decisions. As Sector bottom-
lines are the most fundamental criteria for management activity,
there are pressures on those traditional patterns of operations and
associated patterns of labour deployment which conflict with Sector
objectives. Because Sector managers closely monitor the generation
of the costs which impact on their bottom-line, BR headquarters are
more aware of Regional labour management practices than hitherto. As
a result production managers may be pressurized to reform any working
practices that obstruct sector management plans.

This is well illustrated by one case uncovered during the research which is cited here since both workforce and Regional managers interviewed believed it to be highly significant. Indeed, some workforce representatives claimed it could pave the way for wholesale revisions of working practices. The Freight Sector had won a contract with an oil company in which it was stipulated that the train would run non-stop and would hence be operated throughout by crews from depots close to either the origin or destination of the train. In so doing, the 'sphere of influence' of an intermediary depot where it was traditional for a crew change to take place was violated. Traincrew representatives from this depot protested vigorously to Regional train planning managers (responsible for issuing the details of the train service and its crewing) but, since the contract had been negotiated by BRB headquarters managers, their hands were effectively tied.

Segmentation of product market strategies and the allocation of all resources to specific sectors has fragmented resource management to some degree. The traditional belief that coordination and standardization achieved the most productive use of people and machines through economies of scale has been superceded. The Freight Sector, for whom cost reductions are the most imperative, is particularly hostile to the use of pooled resources (between Sectors) on the grounds that it blurs lines of managerial accountability. Their strategy has been, therefore, to reduce their proportion of
shared costs and resources so as to maintain as high a level of control over the resources they use. In the human resources sphere the Sector has attempted in a number of instances to re-allocate work between traincrew depots to create specialist freight units. As well as modifying 'traditional' patterns of labour deployment, market pressures have been translated into moves to increase labour efficiency. One instance of this is the tighter scheduling of traincrew work programmes ('diagrams') by Regional train planning managers to achieve Sector resourcing requirements.

Close budgetary control and Sector scrutiny of workplace events seem to be raising the pressures on line managers as well as on production planners. For instance, the tightness of the budgetary control system makes it difficult for local managers to fill vacancies where budgets are being exceeded. But since many ground-level staff are now allocated to the Sectors, line managers' flexibility to temporarily re-deploy staff in accepted ways has often been reduced. Instead they may be forced to make use of different groups of staff in ways that may violate local, Regional or national agreements.

Many examples of this sort arose in interviews, providing evidence of how the attempt to raise managerial efficiency has put pressures on existing patterns of labour management. In many cases such attempts to modify prevailing forms of labour deployment have come up against strong workplace and union organizations. At the same time Sector demands on Regional management to attach greater importance to business rather than production priorities is in effect restricting
the access of Sectional Councils to Regional management.

As a result of these twin developments, the workforce representative function of Sectional Councils is being strengthened at the expense of the 'trouble-shooter' role hitherto undertaken jointly with sections of Regional management. Taking these developments together, it is now more difficult for labour relations problems that arise at local level to be informally solved at higher levels of the organization.

It is difficult for union organizations to respond to these developments by seeking to influence the process at source, ie at Sector level, since the Regional operators are responsible for production (cf. Marginson's (1982) comments on the usefulness of M-Form structures to side-step union organization). Awareness of the implications of Sectorization is limited since the Sector structures are obscured behind the operating and engineering departments, and representatives have little reason or opportunity for day-to-day contact with commercial managers. Of all the Regional and local representatives interviewed only one group - a footplate Sectional Council - displayed any awareness of the potential impact of Sectorisation on work organization and labour relations. Within the trade union organizations at national level awareness is greater but the translation of this into new union strategies is limited both by the primacy of bargaining on specific items such as pay and conditions in the workload of officials and representatives, and the non-involvement of commercial managers in labour relations institutions.
Although Sectorization has had a wide-ranging impact on labour management, it appears to make the formulation and implementation of work re-organization strategies more difficult rather than easier. Since the priority for each Sector is its own 'bottom line', Sector managers' view of production performance tend to be limited to that which affects their own Sector. A good example here is the BRB traincrew depot strategy. For some time the strategy has been to steadily reduce the number of footplate depots, constructing in the process a small number of 'super depots' (16). Whilst some specialization by sector activities may be possible, many of these new depots would inevitably supply traincrews for both passenger and freight services. However, Freight wants to develop its own specialized resources to gain greater control of its overheads (RGI, 1984a). As an element of this it has sought to locate its traincrew depots to suit its own bottom line rather than comply with the existing traincrew strategy. For instance, one medium-sized freight depot visited which had been perceived as a very safe depot in the traincrew strategy (and which had been recently developed at the expense of a number of smaller depots nearby) is now listed for closure. In effect, the traincrew strategy is falling apart under the weight of conflicting Sector demands (17).

The overall assessment of current developments in functional management re-organization must be that they do not easily accord with the analysis of contemporary managerial activity found in the 'management offensive' perspective. The evidence gathered from BR does not suggest that a new breed of 'macho managers' are single-
mindedly rolling back the 'frontier of control'. At the same time, it does seem that the greater strength and diversity of demands originating from parts of the management hierarchy, along with tighter central control, has raised the pressures on production managers. Their response has taken the form of ad hoc variations to traditional patterns of work organization since violations of existing agreements are often the easiest solution.

5. THE INTRODUCTION OF TWO-TIER REGIONAL MANAGEMENT

The argument so far has been that tighter budgetary control by corporate headquarters of subordinate tiers of management and the greater diversity of demands placed upon them have stimulated a retreat from the philosophies of standardization and co-ordination which have hitherto characterized railway management. This has been particularly felt in the twin spheres of work organization and labour relations. A further structural influence on labour management has been the impact of the two-tier re-organization of Regional management that took place on British Rail during 1984. This devolution of general management has further tightened budgetary accountability, hence increasing the pressures on local managers, whilst at the same time their responsibilities in labour management have been increased. By describing the main features of both the former and the new structures it will be seen that, like the commercial and functional re-arrangements described earlier, such
structural factors as these are stronger determinants of current changes in labour relations and much of the approach to working practices than any intentional over-riding management strategy aimed at labour.

The main feature of the two-tier re-organization is the decentralization of management responsibility and authority to Area Manager level (the lowest tier of BR management). Devolution of this sort, like the strengthening of commercial management, has been a widespread organizational response to the environmental context of the recession (see BIM, 1985; CBI, 1985; Cowling and Evans 1985; Evans and Cowling, 1985). The benefits usually claimed are reductions in administrative costs, greater responsibility and motivation amongst local managers and heightened commercial flexibility. Furthermore, since the lines of communication between ground level and senior management are shortened, this pattern of decentralized management is thought to render easier the implementation of corporate strategies and to increase central control. Hence, in BR's case this re-organization does not necessarily conflict with the centralising tendencies of Sector management.

During 1984 the Traffic Divisions were eliminated from the Eastern, London Midland, Southern and Western Regions of British Rail leaving a 'two-tier' structure of Region and Area. In all this involved the closure of 21 Divisional Offices and a reduction in administrative and management staff of 6,000, some 13% of the total (BRB, 1985, p.4).
This re-organization primarily affected the operating function since regional engineering management was largely two-tier anyway. An element of the restructuring was the movement of London Midland and Western Regional Headquarters out to Birmingham and Swindon respectively, consistent with an office accommodation policy of reducing use of office space in central London.

Prior to outlining in greater depth the features of two tier organization, it is necessary to describe the structure it replaced. Regional headquarters were responsible for all aspects of running the railway. The organization of management in the Regions was (and remains) a hybrid of federal and departmental structures: the Regional General Manager was supported by a management team responsible for maintenance engineering, finance and planning, personnel, operations, public affairs, investment, and the passenger and freight commercial function. Reporting to the General Manager too were Traffic Divisions, were headed by a Divisional General Manager and supported by a team that largely replicated that found at Regional level. Area Managers reported to the Divisional General Manager. Area Managers in most Regions were supported by assistants who specialized in activities such as operations, but they did not possess a functional management team as such. Below Regional level, however, the engineering functions - Signals and Telecommunications, Civil Engineering, and Mechanical and Electrical Engineering - were organized as separate departments.

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responsibilities was as follows: Regional headquarters had responsibility for policy and operations planning, including timetable specification and planning, and the production of locomotive, rolling stock and traincrew diagrams to operate them. The Divisional tier was responsible for the current operation of the railway, leaving Area Managers with, in effect, day-to-day staff management.

Areas usually consisted of a major station and the lines leading into it. The role of the Area Manager was that of the day-to-day management of the railway, the core element of which was line management of traincrew, operating (ie signalling) and terminals (ie yard and platform) staff. Divisional management, however, was also deeply involved in this function since they investigated all operating incidents and were responsible for the conduct of the disciplinary procedures. On the Southern Region the authority of Area Managers was particularly low: largely as a result of the dense, complex nature of services in much of that area, and the need for operations management to be conducted above ground level. The Area Manager had no functional assistants and, although traincrew management was exercised at depot level such managers reported to the Division (18).

It was this three tier structure of Regional management that came to occupy the central focus of a high level working party at corporate headquarters charged with conducting a strategic review of
administration and organization. Both the Board and Government had become concerned at steeply rising administrative costs between 1978 and 1981. This group's remit was to find ways of reducing administration costs and improving the quality of management decision-making. Its' finding that the Regions should abolish the Traffic Divisions and should move to a two tier structure of Region and Area had three main supports: one, the gradual decline of operations and withdrawal from the collection and delivery of parcels had substantially reduced the number of staff in many areas (19); two, the introduction of new technologies reduced administrative needs (20); three, the desirability of increased management accountability and the business advantages of decentralized management.

Interviews with BR managers supported the proposition that the structure prior to two-tier diffused managerial responsibility. Respondents noted that the Divisions were in practice able to form their own policies and practices, and that they would not necessarily follow BRB and Region policies or transmit them to the Areas. As one commentator has described the effect on the Southern Region, "The Divisional level was predominantly concerned with day-to-day decision-making and effectively drew some of the responsibility away from local managers. It is also true that the Divisions tended to absorb some of the functions that rightly lay at Regional level, so that the effect was to 'Balkanise' the Southern Region and reinforce the image of a railway harking back to its past" (Harris, 1984, p.581).
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At the same time, the diffusion of responsibility arising from the structure restricted the capacity for vigorous managerial action. As one BR manager noted of these structures in interview, "The Divisional role was largely sorting the mail and passing the buck. The principle used to be that if something smelt bad you handed it to someone else".

In consequence the formulation and implementation of either Board or Regional strategies was highly problematic.

After the re-organization in 1984, Region was made responsible for policy, planning and control in the sphere of operations whilst Area Managers were given responsibility for virtually all day-to-day operations in their area. The Area Manager's authority has been increased in a number of ways. He/she is now entirely responsible for operations in yards and terminals (responsibility is shared with Regional managers for running lines) and staff discipline. Area management teams have been widened to include commercial and personnel managers in addition to upgraded functional assistants for operating, terminals and traincrews. On the Eastern Region a number of Area Managers have been given responsibility, on an experimental basis, for the production of service and traincrew schedules for local services.

In some areas Area Managers have taken on Sector Management responsibilities through devolution of responsibility for the specification of train services. On the Western Region four Area Managers were initially made responsible for bottom-line management.
of Provincial services in their area (Abbott, 1985a; Freeman Allen, 1985b) (21). In addition to their main operating functions, these managers were concerned with control of engineering costs and with revenue generation. A similar development is found on the Scottish Region where business management teams of operators, engineering and commercial managers, cutting across departmental lines, have been formed to improve the performance of specific lines (RGI, 1985c). On the London Midland region, Sectorization of Area management units has been taken furthest by the creation of a number of Sector specific Areas (22).

Devolution of responsibility to Area Managers and the elevation of business management in these functions has been thought by many to have led to a deterioration in operating performance (23). In part this is due to the teething problems of re-organization, but there may be deeper structural factors too. Some senior managers interviewed were critical of reduced levels of co-ordination arising from the elimination of the Divisions and the enhancement of the often separate interests of the Areas. One important function of Divisional offices had been the co-ordination of Area-managed staff during infrastructural maintenance activity which, because of the nature of railway systems, generally has significant knock-on effects in areas far removed from the original location. One senior engineering manager suggested that this feature of the re-organization had created severe problems for the exercise by Regional managers of practical control of the technical implementation of change.
In turning to an analysis of the impact of two-tier on labour management, the two most important influences are the removal of some managerial controls on local management and the dissolution of the traditional ground level management culture.

Since the introduction of two-tier, interview evidence and union publications suggest that there has been a dramatic increase in the level of disciplinary action now that Area Managers conduct the disciplinary process. This development could be interpreted as the first stage of an attempt by local managers to increase their control over task performance. However, the overwhelming assessment of trade union respondents was that it was more accurately viewed as the flexing of new-found managerial muscles once Divisional constraints had been removed. Prior to two-tier Divisional labour relations management regulated the application of the disciplinary procedures in combination with Sectional Council representatives and union district officials. Interview responses from both management and representatives stressed that 'fairness' had been the fundamental philosophy behind the arrangements as they were then operated (24).

The variation in practice which is seen to be associated with the removal of restraints hitherto exercised by Divisional management has been reinforced by the more limited perspective possessed by Area level managers. One of the main dangers pointed out by both union representatives and senior managers is that Area Managers do not necessarily look beyond their own 'fiefdoms' to ensure consistency of practice. One case described was where an Area Manager had cut down
station staff with the result that passengers were unable to buy tickets when stations were busy. Since the Open Station concept (the removal of ticket barriers) had been implemented, passengers boarding trains without tickets could be fined by the train guard. In response to a public outcry a supervisor was posted on the station at busy periods to hand out xeroxed slips to passengers informing the guard that passengers could not be blamed for not holding tickets. The Area Manager did not notify Region of this practice with the result that guards from other depots not familiar with practice refused to accept the slips.

The fear that senior BR management was walking a tightrope between delegation and control arose repeatedly in interviews with senior Regional managers. The potential for diversity in Area management practice seems to be greatest, if by default, in worker-management relationships since budgetary techniques and commercial policy are tightly controlled from the centre whilst planning, investment and most operational planning are largely in the hands of Regional managers. Since budgetary control of local managers was further tightened by two-tier the pressures on them to find ad hoc solutions to labour management problems was increased. All but two of the senior personnel managers interviewed displayed concern that two-tier management could undermine Regional personnel policy for this sort of reason.

Diversity in managerial practice in the sphere of labour relations has been added to by the modifications of managerial career paths
consistent with the elevation of the status of Area management teams. The management development policies adopted as part of the management re-organization has fractured the traditional culture of local management (cf. Berry et al, 1985).

Senior management control of appointments is a key mechanism by which top managers control subordinate managers. To secure the commitment of ground level management to commercial rather than production priorities, Area Managers have been integrated into the Senior Management grades and are now recruited from higher tiers of the management hierarchy. Their functional assistants - Traincrew Manager, Operations Manager and Terminals Manager - are now often graduates in their first management appointment. This is a striking break with the past practice of aligning promotion patterns with the structure of management. Prior to two-tier a common career path was a progression from a blue collar/clerical post, through supervisory and local management positions to Division and beyond. For instance, four of the six traincrew managers interviewed were ex-footplate staff (26). This characteristic of local managers' background helped to create a shared culture at workplace level which was particularly strong amongst the skilled grades. In practice, this culture gave rise to similar perspectives on staffing and labour relations practices. Since this culture is now being ruptured, such an approach can no longer be taken for granted.

Managerial attitudes to resourcing at local level, then, are undergoing change as a result of two tier. At the same time the
steady removal of more traditional line managers has led in many
cases to a loss of detailed knowledge at ground level of arrangements
regulating the organization of work. The majority of union
representatives interviewed argued that it was this dispersion of
managerial knowledge which lay behind the increase in managerial
violations of agreements rather than a deliberate management
strategy. This situation has come about partly because of the
deliberate transformation of local management character by senior
management and partly because the major staff reductions associated
with two tier were achieved by the early retirement of many
experienced managers.

The effect of this has been felt particularly strongly in labour
relations not only because labour management is open to greater
diversity than other aspects of management practice but also because
the now abolished Divisional Staff Organization acted as a resource
to local managers, as well as a control on them, in the crucial area
of national, regional and divisional agreements. Area Personnel
Managers have been appointed to take their place but seem unlikely to
fill (in the short term at least) the vacuum created by the abolition
of the DSOs. For as this function appears to be conceived as a
'first post' position for graduates seeking a career in personnel, so
such managers are unlikely to have a comprehensive knowledge of the
vast array of agreements regulating work and employment. Footplate
representatives identified this as a severe problem probably because
their conditions of service and agreements on work organization are
more complex and extensive than for any other grade on the railway.
Talking together the features of the two-tier re-organization described in this section it is misleading to postulate a management offensive against organized labour at ground level. Interview evidence indicated that labour relations had deteriorated but that this had been uneven and particularistic. Where violations of agreements governing the work organization have occurred, the cause could often be traced to a combination of the dissolution of the traditional social structure of ground level management and the associated dispersion of knowledge of labour management, the removal of restraints that had been hitherto exercised by the Divisional tier of management, and the tightening of budgetary controls on Area managers.

**SUMMARY**

The proposition that BR management has embarked on a sustained managerial offensive against labour has been found wanting in a number of respects in this examination of management structures and strategy:

1) though there is evidence of widespread attempts to re-organize work on BR, these are not strategic in the sense described in Chapter Three but are instead largely the summation of the discrete activities of individual managers;

2) the deterioration in labour relations that results in some cases from these attempts to re-organize work are likewise not part of a strategy to weaken organized labour but are instead the result of
increasing pressures being placed on production and line managers by their seniors and the removal of resources (including knowledge) to respond to these;

3) whilst some of the Sectors are giving active consideration to evaluating and changing existing patterns of labour management so as to improve Sector efficiency and performance, the strengthening of potentially conflicting management objectives by Sectorization largely prevents these being translated into uniform labour management strategies. Instead the changes that are implemented are generally *ad hoc* in character.

The broad conclusion from this, then, which sits uneasily with much contemporary comment in the business press, is that product-based management structures and devolved managerial accountability, both currently much in vogue, make the genesis and implementation of coherent strategies highly problematic.
CHAPTER SIX

THE MANAGEMENT OF LABOUR RELATIONS
INTRODUCTION

Academic interest in management strategy and the impact of the recession is currently stimulating research and comment on two central aspects of labour relations management. The first of these is management organization for the conduct of labour relations, and the second is the nature of management dealings with employees and their organizations. Research findings indicate that major changes are taking place in both. Furthermore, some commentators suggest they may well outlive the recession (for example, Bright, Sawbridge and Rees, 1983).

Investigation of management organization has not led to consensus on either the nature or significance of the changes that seem to be taking place. Some writers have argued that the personnel function is declining in organizational status (for example, Manning, 1983). Others suggest instead that a fragmentation of the function is underway with the implication, though one that is understated, that some sections of personnel management could be coming to play a more important role than hitherto in wider managerial decision-making (Guest, 1982; Tyson, 1985).

There is broad agreement that personnel management has undergone some measure of decentralization in large organizations since around 1980 (Evans and Cowling, 1985; Cowling and Evans, 1985; Kinnie, 1985b; Purcell, 1985), though it is not entirely clear from which levels of organizations this has taken place. The discretion of line managers
in labour management matters is said to have increased with the decline of the personnel function above plant level (Kinnie, 1985a and b) but it is not clear yet what the distribution of responsibilities and authority between line managers and the 'new' plant personnel managers in personnel matters is. Research has yet to establish whether decentralization of the personnel function makes a positive contribution to flexible patterns of management, as the supporters of decentralized management units claim (BIM, 1985), or else reinforces the tendencies towards ad hoc, reactive labour relations management traditionally found in Britain (Commission on Industrial Relations, 1973).

Analysis of managerial policies in the conduct of labour relations is similarly characterized by lack of agreement. More left-wing commentators argue that there has been a widespread retreat from collective bargaining by managements, and that such 'macho managements' have exploited labour's weakness to unilaterally reduce union controls on work control (for example, Hyman and Elger, 1981; MacKay, 1986). The evidence for such claims, however, is either based on a small number of possibly exceptional instances or else tends to be inconclusive overall (1).

A more widely accepted argument is that whilst managements are often seeking to restrict the scope of collective bargaining, they are nevertheless continuing to support workplace organization in some form (Terry, 1983b; 1984; Chadwick, 1983) and to maintain structured contact with their workforces. Evidence from large-scale surveys
indicates that there has been a growth in the incidence of joint consultation and attempts to increase employee involvement (Daniel and Millward, 1983; Batstone, 1984). Less extensive studies suggest, furthermore, that managements have in some cases come to expand the scope of consultation from the traditional focus of 'tea and toilets' to that of strategic issues of company policy (Joyce and Wood, 1984). According to Sisson (1984), such developments mark a shift from a management strategy of formal codification of management-labour relations to a more informal, consultative one. It has been argued that the twofold objectives are to reduce trade union-imposed constraints on managerial flexibility and at the same time heightening employee motivation.

Have these movements also changed the patterns of labour relations management organization and policy on British Rail? It will be argued in the first part of this chapter that despite attempts by BR strategists to shift the conception of the personnel function to that of 'advisers and persuaders' to executive managers on human resource issues, labour relations management as a specific function continues to form a very important component of the personnel function for a number of reasons. These include the centralized nature of pay bargaining, the continuing strength of workplace organization (outlined in Chapter Four), and the failure to integrate labour relations policies with broader business strategies.

In the second half of the chapter, management conduct of labour relations will be examined. It will be contested that, contrary to
indicates that there has been a growth in the incidence of joint consultation and attempts to increase employee involvement (Daniel and Millward, 1983; Batstone, 1984). Less extensive studies suggest, furthermore, that managements have in some cases come to expand the scope of consultation from the traditional focus of 'tea and toilets' to that of strategic issues of company policy (Joyce and Wood, 1984). According to Sisson (1984), such developments mark a shift from a management strategy of formal codification of management-labour relations to a more informal, consultative one. It has been argued that the twofold objectives are to reduce trade union-imposed constraints on managerial flexibility and at the same time heightening employee motivation.

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developments discerned elsewhere, the scope of consultation is diminishing. This divergence is explained by a traditional balance between consultation and negotiation that differs from that of much of manufacturing industry, and the changing nature of the personnel function overall. Indeed, there are good grounds for suggesting that the new structures for managing personnel issues are, in the British context, incompatible with attempts to shift management dealings with employees to a more sophisticated, consultative level.

1. THE CHANGING NATURE OF THE PERSONNEL FUNCTION

The widespread belief that there has been a reduction in the importance of labour relations management (Manning, 1983; Tyson, 1985), which in turn involves reduced power of trade union organizations, enables managers to pay less attention in decision-making to the aspirations of labour. However, the evidence for this is far from conclusive. Manning argues that a major factor in the decline of personnel management is a decline in labour relations activity (2), and Tyson suggests that the 'model' of personnel management which is disappearing is that whose mainstay is labour relations management. Yet the U.M.I.S.T. survey indicates that, far from being in decline, the employee relations (3) element of personnel work is not only of primary importance but seems to be growing in this respect (Torrington, MacKay and Hall, 1985).

What does become clear, however, from this conflicting evidence is
that a decline in the functions of labour relations management cannot be predicted from a hypothesized decline in the personnel function more generally. Unfortunately, assessment of the contemporary direction of the labour relations function is especially difficult because much of the research material does not fully differentiate between the various components of the personnel function. The 1978 Warwick survey, for instance, asked questions about 'personnel and/or industrial relations management' (see Brown, 1981, pp. 26-34) with the result that, though an increase in the incidence of such managers could be charted, it is not possible to distinguish the degree of specialization of industrial relations management within the personnel function. Similarly, in the 1980 DE/PSI/ESRC (Daniel and Millward, 1983) survey personnel work is used to cover both the industrial relations and personnel functions. (4)

It is not possible to conclude, then, on the basis of what is known about personnel management that changes to the status of the personnel function will be translated straightforwardly into corresponding shifts in labour relations management. If changes to the personnel function as a whole have masked some degree of continuity in the structure of labour relations management, we might find a greater continuity in the approach to and style of labour relations than the macro-changes in the personnel function might lead us to expect.

There are several grounds for anticipating that the labour relations approach will be one that, whatever wider company policy, accepts the
basic legitimacy of workforce and union organizations:

1) The recruitment of labour relations managers from workforce representatives and union activists in Britain has meant that nationalization involved the appointment of senior trade unionists to the most senior personnel positions (5). More generally the well-developed internal labour markets that are found in nationalized industries, the Post Office and railways in particular, have provided greater opportunities than in many other firms for manual and clerical employees to gain promotion into the managerial hierarchy (6).

2) Labour relations managers and employee and union negotiators develop a shared commitment to maintaining the rules of the procedural game (Wilson, 1983). Much of this arises from the bargaining process itself but is probably underpinned on the managerial side by the relative isolation of labour relations managers from core groups of managers, and their low status with them (7). Labour relations managers instead develop strong bargaining relationships with their union counterparts. The influence they do have with more senior managers is based to a large extent on the unique access to union policies and thinking arising from their possession of this relationship with union negotiators (cf. Batstone et al, 1984, p.127).

3) Continuing traditional patterns of recruitment and relatively low status in the management hierarchy should mean a persistence of a 'traditional' style in these managers dealings with labour
negociators. If this status is reduced then this may lead such managers to rely more on them for support. This may be heightened by disinterest among senior managers in the sphere of labour relations since it could permit greater discretion to such managers in the day-to-day conduct of labour relations though the tighter central controls on core managerial issues detailed in the previous chapter is likely to prevent this from taking place on core issues such as pay settlements. Furthermore, if labour relations comes to be perceived as a low level managerial activity then it is likely that it will come to be placed outside the favoured career routes of 'high-flyer' managers, and hence will permit the continued dominance of managers with 'traditional' orientations.

So, the widely observed changes in the structure and authority of the personnel function as a whole do not have any necessary consequences for individual components of it such as labour relations management. Furthermore, a marginalization of the labour relations management function by other tiers and sections of management does not necessarily lead to a dramatic change in managerial style. We now deal with these issues in the specific context of British Rail.

2. PERSONNEL MANAGEMENT ON BRITISH RAIL

Study of BR indicates that whilst the personnel function has undergone those changes observed to be widespread elsewhere (Evans and Cowling, 1985; Cowling and Evans, 1985), the practical results of
this are not those which much of the literature would suggest. The main areas of change that will be examined are the diminution in the personnel function at corporate level, and the strengthening of ground level personnel management and its relationship to line management.

Sisson and Scullion (1985) draw attention to four types of corporate personnel function ranging from that which undertakes a wide grouping of activities including pay bargaining, management training and development, and human resources planning more generally, to those where the function is restricted to employee relations and management training and development, or just the latter. A fourth group has no corporate department at all. British Rail falls into the first category of these since the head office personnel department has dealt with training, management development, manpower planning, employee relations (including pay negotiations), welfare and pensions.

Evidence on recent changes in levels of specialist Board representation remain scarce of inconsistent (8). However, there is more agreement that the number of firms with personnel functions above plant level have declined (Batstone, 1984). In so far as there is a correlation between well-developed corporate personnel functions and centralized pay bargaining, then the decentralization of wage negotiations may well permit a dramatic reduction in the size, functions and authority of the corporate office (9). If, as in BR's case, bargaining continues to take place at company level then even
if attempts are made to scale down the central personnel function it is likely that the labour relations management component of it will retain considerable significance.

The evidence indicates that there has been some diminution of the corporate personnel department on British Rail. In 1983 the incoming Director of Personnel was not given a seat on the Board (10), the department has been reduced in size, and the personnel function for the non-railway subsidiary companies have been hived off into the companies themselves. The department which is left is comprised largely of a bargaining unit, and a human resource management team responsible for management training and development policy and a management services team. Training of staff other than managers has been shifted to the Regions. There also seems to be a shift of elements of manpower planning to resourcing managers located within the business Sectors. Interview evidence indicates that the personnel department has very little input to the Corporate Plan, other than providing specialist information on redundancy payments. Instead what personnel input there is is found in the constituent Action Plans, and provided by specialists at lower levels of the organization.

There is evidence here, then, of a vertical and horizontal dispersion of the personnel function on BR. However, a note of caution is necessary prior to concluding that events on BR mirror those identified elsewhere. The removal of the Director of Personnel (re-titled Managing Director, Personnel from 1983) from the Board does
not solely represent a shift in conception of the personnel role in isolation but is instead one instance of a wider policy, promoted by the Government, to remove executive representation from the Boards of nationalized industries. (11) The new title of the head of personnel does reflect, however, a change in conception of the personnel function from that of a bureaucratic department to that of a collection of sub-units within the organization.

Whatever these changes in philosophy, whilst pay bargaining continues to take place at company level and the structure of negotiating institutions continues unchanged, then labour relations management will continue to be an important function at headquarters. Commentators on other industries would accept this but maintain that senior managers outside this function now exercise greater control over the parameters of labour relations issues such as wage determination (for example, Kinnie, 1985a and b). On the railways there do not seem to be significant changes in this respect. The Chief Executive and other top managers have long had considerable involvement (if behind the scenes) in pay negotiations because of the railway's dependence on financial support from central government, and governments' willingness to use this to influence other aspects of managerial strategy (12).

As well as pay negotiations conducted in the RSNC, headquarters' labour relations managers have been responsible for negotiations at the specialized and general sections of the RSJC, the sub-committees of these and ad hoc working parties that report to them. They have
continued to perform these roles but senior managers have sought to restrict the scope of bargaining to some extent by attempting to push down some of the detailed regulation of work arising from work reorganization schemes to sub-corporate level. At the sub-committees of the RSJC which deal with 'failed to agree' claims on matters of principle that have risen through the Machinery, interview data suggests that headquarters labour relations managers are now less likely to make concessions. They reason that since these issues arise in the operating units they ought to be settled there. Study of documentary evidence indicated that these meetings now take place less frequently than in the late 1970s.

The second main aspect of change identified in the literature is the decentralization of the personnel function. The main evidence here is that over the last six years or so there has been a major shift towards 'ground level' personnel management. Kinnie's investigation of four companies finds that in all cases the authority of ground level personnel managers has been increased (though they have also been subject to tighter central control)(1985b). Purcell's work too indicates a relative strengthening of operations level personnel management. The IPM survey of 50 large organizations mentioned earlier finds in virtually all cases a similar decentralization (Evans and Cowling, 1985; Cowling and Evans, 1985).

British Rail is no exception to this pattern. The personnel function in the traffic Divisions has entirely disappeared as a result of the elimination of these Divisions. That function provided specialist
advice, acted as 'trouble shooter' where labour relations arose, and undertook some executive functions in labour management issues both in the traffic divisions and in the engineering departments. To fill the gap created by the two-tier re-structuring, a specialist personnel function has been created at Area level in the operating and engineering organizations (13).

Area Personnel Managers have been created as integral members of the Area Managers' teams. The personnel function is not new at local level. Prior to two-tier Area Managers and their functional assistants dealt with LDC matters and day-to-day labour management, albeit with the assistance of the Divisional Personnel Officer; the Area Administration Assistant dealt with the routine administration of employment, and had a low status in the managerial hierarchy. The creation of Area Personnel Managers, and the expansion in the size of Areas, has upgraded the job of Administration Assistant and taken staff management and dealings with LDCs from other local managers, enabling the Area Manager to become primarily a business manager and the functional assistants resourcing managers. As well as taking over the duties hitherto performed by Area Managers and Divisional Personnel Officers, the remit of this new managerial post includes functions formerly performed by the Regional personnel departments.

In common with other organizations, the function of the Regional department is now largely seen as 'adviser and persuader' (Evans and Cowling, 1985) to the Area management units, and the Area Personnel Managers have been encouraged to develop their own policy guidelines.
However, an important residual function at Region is labour relations management that correspond to Sectional Council level, and indeed the Regional personnel function is now largely composed of such managers. The prime responsibility of these staff in fact has come to be restricted to that of the conduct and servicing of negotiations at the Councils, and they have lost their role of scrutinising change schemes drawn up at Area level.

The sections of the labour relations management element at Region have been merged to create a more flexible unit. Traditionally, the sectionalism of the bargaining institutions and trade unions has been reflected in separate functions within the personnel department. Reporting to the (Regional) Chief Personnel Officer were three sections - Industrial Relations, Establishment, and Administration. Administration dealt with, for instance, supply of office services and management information systems, whilst the functions of the other two were labour relations management. 'Industrial Relations' was responsible for negotiation and consultation for conciliation and workshop staff (Sectional Councils B, C, D and Regional British Rail workshops), whilst 'Establishment' covered salaried staff (Sectional council A). The Industrial Relations and Establishment departments have now been merged and report to the newly created post of Regional Employee Relations Manager which, in turn, reports to the Regional Personnel Manager.

Not all managers in the new Regional departments are engaged in labour relations management. The Regional Administration Manager has
retained control of administrative services and has had an expanded training and development role added to his or her responsibilities. Interview evidence indicates that the senior managers - Regional Personnel Manager and Regional Employee Relations Manager - are no longer closely involved in the conduct of labour relations (because much of the work on changes schemes has been farmed out to the Areas), and instead are largely responsible for personnel policy formulation on the Region.

That this division of responsibilities has been established in a comparatively short space of time owes much to a deliberate rupture of traditional career structures as a consequence of two-tier 'culture'. In the past the career structure matched the hierarchy of the organization and emphasised labour relations experience. A typical career would involve a series of steps from say a clerical job in the Areas or Divisions, promotion to a position in the DPO, from there to Divisional Personnel Officer or a negotiating post in the Regional Industrial Relations or Establishment to senior regional or headquarters labour relations management. In consequence, senior personnel managers were usually steeped in labour relations culture and towards the end of their careers. Since 1983 they have been replaced, on retirement, by younger managers, often with little of the practical labour relations experience of the past, and whose background has instead involved personnel policy and development at corporate headquarters (14). This feature illustrates how Regional appointment policies have changed with the diminution of the Regions' autonomy and the appointment of Regional General Managers who owe
their loyalty to headquarters rather than Regional traditions (cf. Jones and Rose, 1985).

From this summary of personnel management on BR's Regions it is apparent that not only has a vertical re-distribution of authority taken place but that also its role has been re-conceptualized. This may seem proof of Tyson's contention (1985) that personnel management is becoming increasingly fragmented between an 'administrative support' role, with minor decision-making responsibilities, and a 'business manager' role, that is concerned with identifying the human resource implications of business decisions. Tyson suggests that what he calls the 'systems-reactive' model, the main component of which has been labour relations is being dissipated because senior line managers have taken over much of the contact with trade union representatives.

It is doubtful how far this applies in BR's case. Though from a distance the newly-formed Area Personnel Managers seem to fit the administrative support model, closer examination shows that they have taken over some negotiating functions to leave other managers to concentrate on business and resourcing issues. Furthermore, in so far as they provide inputs to Area Managers' business decisions, they perform the business manager function to some degree. In addition the need for labour relations management continues to exist at all levels of the organization. What this suggests is that the continuing strength of the railway unions, an entrenched Machinery of Negotiation and centralized pay bargaining will prevent a simple
movement towards the bi-polar model identified by Tyson.

So far we have seen that features of the labour relations 'system' on BR have required the retention of a specialist labour relations management function at corporate and Regional level. The second reason (outlined in the introduction) for the continuing importance of labour relations management is caused by the interaction of strong workplace representation with the new management structures created by two-tier. The reduction of the executive authority of the residual Regional personnel departments has added to the operational autonomy now possessed by Area management teams. The diversity in policies encouraged by this, and underpinned by tight budgetary controls and, in many cases, managerial unfamiliarity with the agreements has come up against strong LDC representation well-versed in the procedures and content of local and national agreements. The deterioration in labour relations that has resulted from this process provides Regional labour relations managers with a continuing role as 'trouble shooters'.

To fully understand the dynamics of this process it is necessary to briefly recount the traditional functions of the Regional labour relations functions since it is Region that has acted as 'Court of Appeal' to the Areas and Divisions. In addition to the conduct of and support of negotiations, such managers were responsible for checking, amending and authorising change schemes devised at Area and Divisional level. These people sought to ensure that national and Regional agreements were not violated and that functional managers
did not create precedents which could be exploited by the staff side.

Those Regional managers interviewed were quite explicit that their function was as much control of Area management as labour. Thus, the elevation of Area discretion and the restriction of the Regional labour relations department's executive authority was perceived by such managers as posing a number of dangers. These included the inadvertent creation of precedents by Area level managers which could be exploited by union organizations, and that this would lead to an ad hoc and fragmented approach to labour relations, based on local managers short term aspirations rather than a balanced assessment of Regional priorities and long term goals. Similar to the managers interviewed by Purcell (1985), these managers viewed the changes as a violation of professional competence (cf. Purcell, 1985).

The diminution in the authority of Regional labour relations management seemed likely to stimulate a fragmentation of labour management practices. The timing of the data collection precluded a comprehensive investigation of the extent to which these fears have been realised but the following findings did emerge. Overall local labour relations showed increasing diversity in terms of interpretations of agreements, such as promotional arrangements (15), and a large number of union respondents interviewed drew attention to a marked deterioration in local labour relations.

The reason for such a deterioration seems to be threefold. Firstly,
workers and their representatives were reluctant to deal with the Area Personnel Managers, wanting instead to deal with their 'proper boss'. The 'intrusion' of such specialist managers injected a greater formality into aspects of the employment relationship. Whereas line managers traditionally gave a 'nod and a wink' to workers on certain issues, such as minor disciplinary matters, Area Personnel Managers were more likely to follow formal procedures. Respondents thought this to be insensitive to the diversity of operational situations in which such issues arise. Secondly, knowledge of agreements was seen to be a major problem area. The new Area Personnel Managers are largely either upgraded Administrative Assistants or else recent graduates. Many representatives, particularly those on the footplate, argue that their knowledge in terms of local and national agreements and 'feel' for agreements is poorly developed.

Thirdly, the tightening of central budgetary control resulting from the two tier re-organization has placed increasing pressures on Area level managers. As Kinnie has shown in his case studies (1985b) these Area managers have been encouraged at the same time by their superiors to take initiatives on operational matters. The combination of these factors has led to a diversity of responses which has conflicted on many occasions with the provisions of agreements and established customs and practices.

The interaction of these developments with workplace organizations that continue to possess organizational strength has resulted in
widespread labour relations difficulties. In consequence, the labour relations function at Regional level has retained an importance which the architects of the two tier structure probably did not foresee. Their 'trouble shooter' role (performed by Divisional Personnel Officers before the run-down of the Divisions from the early 1980s) has been reinforced through the need to sort out labour relations problems which have arisen at local level. Thus, *ad hoc* tendencies in labour relations management are being stimulated. Furthermore, the poor state of local labour relations continues to provide a steady stream of LDC claims to the Sectional Councils so justifying their formal negotiating activities.

In part these developments arise out of the continuing strength of workplace organization. At a more fundamental level, however, they can be explained by the failure to either develop or integrate labour relations strategies and policies with wider business strategies. The restructuring of personnel management on BR arose out of that twin strategy (described in Chapter Five) to promote the primacy of business considerations in managerial decision-making through re-distribution of managerial authority between functions, and to eliminate bureaucratic management styles through decentralization of responsibility.

As far as could be determined, the traditional pattern of labour relations was viewed as an activity that would decline in importance because of labour market movements. Furthermore, it was undesirable that labour relations should influence management decision-making as
much as it had done in the past. Hence the strategists viewed labour relations as a residual function. It would occupy a less important place than hitherto in the new management structures, and residual functions would be retained at corporate and Regional levels merely to service those labour relations institutions whose existence was stipulated in the Machinery.

So for these reasons, analysis of the potential labour relations effects of the new structures, and of future labour relations policies that should be adopted were under-developed in these organizational strategies. In addition, the personnel department seems to have had little input in the design of the new structures, though as elsewhere the personnel units throughout the organization played an extensive role in their implementation and the allocation of staff (see Evans and Cowling, 1985). Instead, top managers sought to promulgate an employee relations philosophy of flexibility, as an element of a new corporate culture of 'devotion to the customer'. It seems to have been assumed that if employees could be made to internalize these beliefs then, given trade union weakness, commitment to union policy would decline over time and labour management issues would flexibly respond to customer-oriented business practices (17).

If senior BR managers had paid more attention to rigorous social science analysis and less to the corporate culture 'fad' (Thackray, 1986) then they might have had more success in effecting a shift from traditional labour relations. For the evidence suggests that the
effective translation of employee relations philosophies into practice requires the creation of institutions and policies that go beyond rhetoric. The logical extension of this approach is the replacement of unions by management specialists. But Foulkes work (1980) suggests that to keep companies union-free requires the implementation of sophisticated policies which, in practice, can be more restrictive on management than trade unions. Furthermore, management practice in other areas has to be consistent with the philosophy. Blackler and Brown (1981) show that Shell's 'new (participative) philosophy of management' conflicted with other management objectives (such as cutting back capacity) to create cynicism towards the philosophy. Similarly, in BR's case 'customer care' is viewed cynically by many staff since it contrasts with widespread managerial hostility to staff aspirations and sits uneasily with the cutback in rail services throughout the 1980s.

Since employee relations issues went no further in business strategists' thinking that this philosophy, BR management were ill-prepared for the labour relations effects of their new policies of management organization. Despite attempts to diminish the organizational significance of the labour relations function, labour relations management has continued to form an important, if often reactive, element of decision-making. Thus, the evidence from BR suggests that, in contrast, to much of the contemporary material on personnel management, a decline in the role of labour relations management cannot be predicted from cutbacks in the personnel function. Indeed, where organizational re-structuring pays
insufficient regard to the labour relations features of the organization, such as the nature of pay bargaining and the strength of trade unions and workplace organization, labour relations management may have to a more important role than management strategists initially plan. Thus, that material (for example, Tyson, 1985; Manning, 1983) which suggests that labour relations management is the element of personnel management in the greatest decline may have fallen prey to the wishful thinking that many managers seem to have done.

3. LABOUR RELATIONS POLICIES AND STYLE

Labour relations management continues to occupy an important place in BR's management structure. But such a continuity could be consistent with a radically different management style. It would not be surprising to find that the 'brinkmanship' that has characterised BR's conduct of two major disputes has been translated into a 'macho-management' style in more routine labour relations practice. However, the research evidence indicated that this has not been generalized throughout BR. A more common management approach in industry in the 1980s has been to seek to increase employee motivation through expanding employee involvement (Batstone, 1984). British Rail has expressed interest in such policies (Palette, 1984). However, its capacity to implement them is restricted because of the organizational diminution of the personnel function. Of particular importance here is the passing of responsibility for consultation to
sponsoring managers. The primacy that they attach to short-term and individual implementation targets places obstacles in the way of any desire by senior managers to move the conduct of labour relations away from collective bargaining towards joint consultation and other forms of participation.

Interview evidence indicated that bargaining behaviour by managers at corporate level displayed elements of that identified as 'macho-management'. Managers believed that they were being more 'hard-nosed' in their approach, and trade union respondents drew attention to a more aggressive style. Major instances of an aggressive approach are provided, of course, by the 1982 and 1985 disputes. Other less dramatic components have already been referred to, such as trying to push consultation issues away from national level to the Regions and a reluctance to deal with individual claims passed upwards through the Machinery. ASLEF respondents also drew attention to misuse of Machinery procedures. One instance, to which respondents attached some significance, was a new practice at national level of management recording 'failed to agrees' without union agreement. However, this corporate practice does not seem to have been translated into Regional practice. The near unanimous response of both Regional labour relations managers and Sectional Councillors was that labour relations were being conducted more or less as they always had been, and that values such as trust and respect for the other side were still the most important in bargaining.
Differential recruitment patterns seem to underlie these divergent styles. At headquarters, as old-style labour relations managers have retired they have been consciously replaced by appointees who are less 'indulgent' towards the rail unions. Since corporate headquarters establishes corporate philosophy it is unsurprising that appointments at that level closely reflect it. At Regional level, however, the downgrading of labour relations has meant that the new senior positions in personnel have little involvement in labour relations. Those posts which contain a major component of negotiating activity have remained with 'traditional' managers. Partly this is because the closure of the career route into the senior positions is likely to concentrate these managers in these functions. But it is also due to the steady contraction of managerial numbers on BR. Through established principles of allocating managers displaced by re-organizations to newly-created posts, there will be a steady supply of 'traditional' managers with prior claims to these posts within the personnel function for some time to come.

Because corporate philosophy emphasizes that labour relations is now less important than previously, then posts in labour relations management are unlikely to be attractive to 'high-flyer' managers who might be expected to possess a more aggressive orientation to labour relations. Furthermore, where 'high-flyers take up such posts they are not likely to remain in them for long whilst career advancement generally on BR requires frequent changes of job this is particularly marked with such 'fast-track' managers. In these
circumstances such managers may find it difficult to build up the
knowledge of procedures and agreements to counter the acknowledged
skill of union negotiators at Regional level. There are, of course,
advantages to senior management in retaining 'traditional' labour
relations managers because their good lines of communications with
the trade unions can be of decisive importance where labour relations
difficulties inhibit the implementation of managerial policies in
other areas (c.f. Batstone et al, 1984). We have already noted that
features of the management re-organization are strengthening these
managers' 'trouble-shooter' role.

Although the conduct of Regional level negotiations displays
considerable continuity for the reasons outlined above, the reduction
in the executive authority of the personnel function does on
occasions lead to conflict between managers and union negotiators.
One feature identified by some respondents was a greater emphasis on
formal procedure than in the past. For example, senior LM management
had insisted to personnel managers that agreements reached at sub-
committees would not be respected by line and other operations
managers until ratified by the parent Sectional Council body.
Similarly decisions on substantive issues were on occasions taken by
senior managers to create a favourable impression in other quarters
(governmental circles for instance) in a way that constrained the
negotiating ability of labour relations manager and did little for
'good' industrial relations (18).

The conclusion so far is that the decline in importance attached to
labour relations in BR's management philosophy has not led to a uniform labour relations 'style'. Whilst corporate level bargaining displays evidence of aggressive management, the same is not generally true of Regional level negotiations. This suggests that there is not a uniform over-riding management strategy to reduce the scope of bargaining and that instead the conduct of labour relations is, to some extent, determined by other management priorities.

Although the conduct of negotiations displays continuity, union respondents drew attention to a major change in style in the consultation process. All Sectional Council representatives interviewed said that relations between management and workforce representatives in consultation had deteriorated significantly, and that management was generally adopting a more aggressive stance. This finding is intriguing since senior BR management has indicated that it wants to devote more attention to communications with employees than hitherto (Palette, 1984), as have many other major firms (CBI, 1985; Batstone, 1984). Furthermore, it conflicts with evidence from industrial relations research. The DE/PSI/ESRC survey found that the incidence of joint consultation is (at least up to the date of the survey) increasing (Daniel and Millward, 1983), whilst other commentators have suggested that the its scope is being extended by managements (Joyce and Woods, 1984) (19). On the basis of these sorts of findings Sisson has argued that British managements are moving towards a consultative style in labour relations.

The explanation for this conflict of evidence seems to be that BR
managers have failed to integrate policies on employee communications and the desirability of a shift from negotiation to consultation with other management strategies and policies. This is illustrated by a review of developments in the area of consultation. At headquarters level managers have both reduced the incidence and attempted to reduce the scope of consultation over change schemes. The justification is that since they largely refer to 'production' questions they should be dealt with in the Regions. So in this instance the managerial objective of separating out the functions of the operating units from the business strategy functions of headquarters is paramount. Consultation on the corporate plan still takes place in the Rail Council (see Chapter Three), though the earlier 'tacit' alliance between the BRB and rail unions (the NUR in particular) has been broken up. The Rail Council is now used largely to announce management plans to the unions rather than to engage in a genuine dialogue (20).

Developments in consultation within the Regions are more significant since the great bulk of consultation has always taken place at this level of the organization. As far as could be determined there had been little change in the incidence of consultation over change schemes. However, a large majority of union and workforce respondents indicated that the scope of consultation had been dramatically reduced at both Region and Area. Now, in a great many cases, managers used consultative forum to tell and instruct workforce representatives what they were going to do, rather than engage in a genuine dialogue. It was widely believed that managers
were less prepared to alter elements of their plans to take account of suggestions and objections from the workforce. Since no means of direct communication between managers and workers have so far been developed the BR case runs contrary to the trends in private industry.

The reason for this change in managerial style does not seem to have arisen from a major change of policy on consultation but instead from a policy to reduce the involvement of the personnel function in operational decisions. As former BRB chairman Sir Peter Parker has outlined the main element of this new policy (talking about change schemes), "I firmly regard line managers as being the initiators and I see the personnel function as playing a very important but nevertheless supporting role" (1983, p. 17). In accordance with this philosophy responsibility for the consultative process passed in the early 1980s from personnel departments to those managers sponsoring change.

Now, given that, as suggested earlier, line managers may have much in common with the sections of the workforce they manage (because of similar occupational backgrounds), we might expect that this would lead to more extensive consultation. However, an element of the two-tier strategy to raise the quality of managerial decision-making at area level has been the elimination of managerial 'indulgence' to labour. Thus, 'traditional' line managers have been steadily replaced since 1984 by a new breed of resourcing managers whose background rarely includes shop-floor experience and who have less
intuitive sympathy for workforce aspirations and fears about change. Furthermore, the enhancement of Area status has resulted in considerably larger Areas (in terms of staff numbers) with the result that additional workplaces have been added to the responsibilities of such managers. This, too has served to weaken the ties between depots and line managers (21). The strategy to improve managerial decision-making, then, has conflicted with the philosophy of extending forms of communication.

That such managers are less sympathetic to labour than their predecessors is not reason in itself for a dramatic change in practices surrounding Consultation since individual attitudes are not necessarily translated into organizational activity. What is significant here is that the input of personnel managers has been reduced, and, in particular, the detailed scrutiny of many schemes by experienced personnel managers has ceased and their capacity to impose amendments virtually eliminated. This has given those managers responsible for sponsoring schemes more autonomy in the generation, specification and proposed implementation of change schemes (cf. Kinnie, 1985b). As earlier research has shown, the urgency such managers attach to the implementation of their own schemes generally precludes detailed attention to their potential human and labour relations consequences (Legge, 1978). The budgetary pressures on local managers outlined earlier is currently accentuating this tendency.

The result of these processes is that the scope of Consultation has
declined in the 1980s. Management attitudes, as already stated, are less favourable to workforce-inspired alteration to their programmes of change. In part this is the direct consequence of the factors outlined above; in part it is because Consultation now often takes place late in the implementation process when scheme proposals have been largely 'firmed-up'. Traditionally, Consultation took place well in advance of the technical implementation of schemes to allow sufficient time for re-allocation of staff, since union and workforce consent to labour-displacing proposals was premissed on management taking a sympathetic attitude to the human results of change. At a Consultation meeting on the introduction of a innovative signalling scheme attended by the author in January 1984, management proposals seemed, to put it mildly, under-developed. The Sectional Council representatives present, however, argued that this was to the good since it allowed ample time to iron out both the human and technical problems arising from the scheme (22).

That Consultation now takes place later in the implementation process is due to a combination of factors which include the reduced involvement of personnel managers, the changing social character of line managers, the budgetary pressures upon them and the importance now attached to 'vigorous' managerial practice in current management thought on BR and elsewhere. It has not been possible to systematically research the longer-term labour relations impact of this change in the Consultation process since large-scale data collection ceased not long after the transition to two-tier Regional management. Unstructured and informal data collected since then (from
respondents and documentary sources such as union newspapers) indicates, however, that the transition in management practice has led to the demise of active consent (already under strain at the time of data collection) amongst LDC and Sectional Council representatives to change schemes generally and its replacement by grudging and unwilling acceptance.

In 1983/4 the main labour relations problems arising from Consultation in the Regions were concentrated at Area level. As well as managers at that level beginning to assert their authority to devise and implement change schemes, Sectional Council members were deeply concerned about procedural aspects of the Consultation process under two-tier. As part of the restructuring it had been decided that Area Managers would take charge of the Consultation process where more than one Area was involved, as well as of those confined to their own areas of responsibility. Councillors argued that this made a mockery of Council level Consultation as 'fair' arbitration by higher level managers of management-initiated schemes and workforce counter-claims. The Council would no longer be 'Court of Appeal', and instead, during Consultation at this level, Area Managers would become prosecution, jury and judge. Since 1984 Councillors appear to have come to terms to some extent with this change in practice and regional managers appear to have used this mechanism sparingly.

From 1984 labour relations difficulties arising from aspects of the Consultation process have spread to Regional level Consultation. In part this is a reflection of the diminished role of the personnel
department. More deeply, it is a consequence of the impact of Sectorisation on BR's Regions. As the strategies of individual Sectors have developed and as Regional resistance to Sector claims has been diminished through the gradual replacement of old-style Regional managers by those committed to the philosophy of Sector management (23), so Regional management has been faced with often divergent and competing Sector objectives in the sphere of work organization. In consequence Regional decision-making has become less consistent than in the past and more unpredictable to the extent that Sectional Council trust in the veracity of managerial statements in Consultation has been severely shaken (24).

SUMMARY AND CONCLUSIONS

This evidence on trends in consultation with unions and employees on British Rail suggests labour relations is not following patterns identified elsewhere. Instead of an increase in joint consultation, this study has found that the incidence (as reported by respondents) is more or less unchanged whilst the scope of much of the consultative process has been diminished. This could be because the balance between negotiation and consultation on BR has always tended to favour a more meaningful role for the latter with the result that the widely-reported diminution in negotiating scope identified in other organizations is found in BR's case in consultation rather than negotiation. Alternatively, the detailed study of the processes of
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consultation conducted here might well lead to different conclusions from that survey based material (such as Daniel and Millward, 1983) which is less able to record the qualitative aspects of such practices.

Whatever the basis of this divergence of evidence (be it methodological or substantive), the results reported here do not provide support for the type of Marxist view that extensive consultation is a 'phantom' process designed by managements to achieve labour consent when labour is strong and to be dispensed with when it is weak (for example, Ramsay, 1977). BR's philosophy is to retain extensive consultation with its workforce and, in line with developments elsewhere, to extend it at the expense of detailed negotiation. However, such a philosophy has not been translated into a comprehensive, well-formulated labour relations strategy, and remains largely a pious statement of managerial objectives. In the absence of a clear strategy, the reduction in the organizational significance of the personnel function and the shifting of authority to line managers has set in motion processes which have reduced the scope of consultation. However desirable extensive consultation might be in theory, in practice current management practice results in it taking second place to considerations of immediate management effectiveness.

Such processes as these are reflected more broadly in the structure and practice of specialist labour relations management on British Rail. The personnel function at Regional and corporate levels has
been substantially reduced in size and authority, not as part of a coherent set of labour relations policies but as one element of a strategy aimed at stimulating the importance attached to commercial considerations in managerial decision-making, and reducing those elements which might be described as 'bureaucratic'. Within this strategy, certain assumptions were made about labour relations: most importantly it was thought that union power would decline. Furthermore the strategy embodied the view that labour relations considerations ought to be removed from the core of decision-making.

Since labour relations issues were under-developed in this strategy, and because management expectations about the decline in union power were not soundly based, BR management has been unprepared for the continuing salience of labour relations. The relative importance of labour relations management in that part of the personnel function that remains at Regional and corporate level has been increased because of this. Since the role of labour relations managers has been circumscribed by BR strategists in relations to other areas of management decision-taking, labour relations management is taking a more reactive form than hitherto and displays an ad hoc character which industrial relations reformers were so critical of in British industry in the late 1960s and early 1970s.
CHAPTER SEVEN

MANAGEMENT STRATEGY AND TRAINCREW PRODUCTIVITY
INTRODUCTION

In 1982 British Rail lost more working days through strike action than between 1948 and 1981 put together (Bagwell, 1984, p. 82). The majority of days lost arose from industrial action mounted by ASLEF against the introduction of 'flexible rosters' for footplate staff (1). Behind this dramatic change in railway labour relations lies the development from the late 1970s of a comprehensive package of measures to increase labour productivity. By 1982 flexibility around the length of the working day was at the forefront of the package, and the Board was determined to implement the measure with or without the agreement of ASLEF.

The events leading up to industrial action and the BRB's conduct of the strike apparently provide powerful evidence for the contention that British managements have been mounting an 'offensive' against organised labour. Since ASLEF resistance needed to be overcome to implement the new rosters, there seems to be a clear link between managerial policies to increase efficiency and those to reduce trade union involvement in labour management. This episode is a test case, then, for the counter hypothesis that far from generating comprehensive labour-focused strategies, management priorities in the 1980s often heighten ad hoc features of labour management.

The flexible rostering case supports the latter hypothesis. By 1982 the work re-organization strategy that BR had been carefully constructing from the late 1970s had largely broken down. In its
ace were a number of ill-defined labour relations aims, all of which sought a reduction in union power, and which were largely designed for external (government) consumption. As Ferner has shown (1985), the need for the BRB to achieve legitimacy with the government far outweighed the potential efficiency benefits of flexible rosters.

To understand the events of 1982 it is necessary to outline why train drivers occupied the central role in the management strategy devised in the late 1970s to increase labour productivity through extensive work re-organization. Up until 1981 the underlying objective of the BRB was to shield itself from potentially damaging government interventions by demonstrating that it was capable of achieving increases in efficiency without government enforcement. From then on, government interventions broke up the more comprehensive strategy, and more immediate labour relations objectives took its place. Attention here will focus on the pattern of job regulation in the train driving function which made it the subject of the original strategy, the formation of the labour productivity strategy, and its eventual demise under the weight of government involvement.

1 TRAIN DRIVERS AND THE CONTROL OF WORK

Train drivers were traditionally the aristocrats of the railway (see Hobsbawm, 1984). Their craft skills, acquired through a long 'apprenticeship' as engine cleaners and firemen, were reflected in
hensive union organization and rewarded by high wages and a substantial degree of autonomy in the way they learnt and performed their job (2). Dieselization wiped out many of the skills of driving and eliminated those of firemen and engine cleaners altogether (3), but drivers managed to retain many of the traditional advantages of their craft, such as high incomes (Hollowell, 1975)(4). In large part this was achieved through the establishment of extensive job controls at national level as protection against the potential employment effects of technical change.

As a result, the organization of footplate work and drivers' conditions of service are subject to a much greater degree of regulation than any other railway occupation. The traditional strength of depot controls, both informal and formal, have come to be supplemented by extensive national agreements backed up by the substantial involvement of union headquarters in work allocation. The extent of these controls are the reason why managerial attempts to increase labour productivity from the late 1970s took a strategic form, whereas attempts to increase the productivity of other railway staff could generally be pursued in a more incremental or decentralized manner. It is instructive to outline how these job controls create difficulties for management control of service planning/operations and manpower planning since problems in these spheres formed the rationale for the strategy.
vice planning and operations

In comparison to manufacturing industries, the locus of detailed function planning in transport industries is generally relatively rationalized (5). On BR the Regional tier of management compiles on services and plans the use of physical and human resources necessary to operate them (see Ford, 1979). The production of traincrew work schedules ('diagrams') is the most technically difficult part of the planning process because crews are subject, unlike rolling stock, to working time constraints and the provisions of national agreements (Monopolies and Mergers Commission, 1980). In constructing work programmes the traincrew diagramming office at Region has to take account of the overall length of the working day, the components of the Manning Agreements, conventions surrounding the allocation of work to depots, and a number of time allowances established by national agreement (and fixed at depot level).

The manner in which staff are deployed on driving duties is substantially determined by the Manning Agreements. The main Diesel and Electric Manning Agreement dates from October 1965 when steam traction was about to be eliminated from British Railways and the job of fireman rendered redundant. This agreement sets limits in time and mileage to aggregate and continuous driving for single-manned passenger trains (it was extended to freight and parcels in 1970) (i). Thus, where a diagram exceeds the mileage or time limitation for single-manning the train working is double-manned throughout by a driver and an assistant. The agreement introduced a Physical Needs
thirty minutes on single-manned turns to be taken between third and fifth hours of duty.

Initially single manning was possible only for part of the day. The HUD had sought single manning over the full twenty four hours in 1965, but after industrial action mounted by ASLEF a Court of Inquiry recommended that double manning be retained in the night hours (Court of Inquiry, 1965; McLeod, 1970). In the Pay Efficiency Agreements of August 1968, single manning was extended as the Board had originally wanted. Furthermore, agreement was reached that station pilots would be single-manned, and that on light locomotive movements the driver's assistant could be replaced by a guard where the movement was not from one depot to another for the purpose of changing locomotives, and the journey comprised part of a train service or 'trip' (local freight) movement. By 1970, then, all trains were single manned except those exceeding the time or mileage limit, light engine movements, steam heated trains (which require a driver's assistant to tend to the heating boiler), and ballast trains on site (7).

Since 1970 there have been a number of changes to this picture. With the conversion of passenger and parcels trains to electric heating run off the locomotive generator there has been a decline in requirements for second men. The High Speed Train agreement (reached in 1976) stipulates that trains operating at speeds in excess of 100 mph should be manned by two qualified drivers. The agreement also established a maximum weekly mileage per driver of 1750.
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i) Service planning and operations

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National agreement establishes, then, the number of footplate staff to be deployed on trains on the basis of speed, type of train movement, mileage and time, and sets constraints on the overall length of working time and the use of time at work. The difficulties these cause in the process of matching footplate staff to driving work are added to by further constraints on available driving time posed by national agreements on time allowances for preparation and disposal of locomotives, walking time (the actual times are agreed at LDCs) between parts of the workplace, and for reading operating notices and instructions.

All of the above set limits on the amount of time that can in practice be diagrammed for driving duties. When the four elements of the shift - driving, allowances such as the PNB, preparation and disposal of locomotives and turn-round time (ie the time added to the end of the outward journey to allow for late-running) - were added together total productive time came to around six hours (Bowick, 1976). This tightly regulated structure did not entirely preclude flexibility in work organization. For instance, diagrams in excess of eight hours could be permitted but the agreement of union headquarters was required (through Regional Manning Committees composed of Regional managers and union headquarters' officials). From the late 1970s the BRB sought greater flexibility through the revision of the set of agreements regulating train manning. In particular, it hoped to lengthen available driving time by varying the length of the working day ('flexible rostering'), lengthening the time and mileage that could be driven single-manned, displacing the
second crew member on light engine movement, and re-timing the Physical Needs Break.

As well as extending driving time, railway management have also sought greater freedom to allocate work between depots. Traditional 'spheres of influence' rather than national agreements largely determine the allocation of driving jobs to particular depots. This control is achieved through the consultation process around the bi-annual timetable changes. In these meetings, drivers' Sectional Council and LDC representatives seek to prevent transfers of work between depots. Most of the Councils believe that it is a managerial duty to allocate new work on the most economical basis but they seek to restrict changes to existing work. This control is most extensive on the Eastern Region where the Council demands that management justify each transfer item-by-item with all LDCs on the Region in attendance.

Since many LDCs would refuse to undertake re-allocated work, diagrammers have not attempted to achieve covert modifications to spheres of influence through traincrew diagrams. Furthermore, as the BRB explained at the SCNI hearings in 1977, fluctuating depot establishments that could result from short-term re-allocations could conflict with longer term manpower planning (SCNI, 1977). This is changing because with the decline in workload many LDCs seem to be less altruistic in their approach. In addition, Sector specification of services and their resourcing is putting pressure on diagrammers to change existing scheduling practices.
An additional set of constraints on management command of work organization is provided by the process of allocating these work diagrams to footplate staff at depot level. The size of depot establishments (based on, but not entirely determined by, a computation of the number of diagrams) are agreed between Regional managers and Sectional Council representatives. The allocation of diagrams to staff is undertaken by the staff side of the LDC with traincrew management making little input (8).

In this process driving staff are divided into a number of workgroups called 'links'. Link membership is based on seniority (the length of time in footplate service), and footplate staff progress through the links over time. There are no nationally agreed criteria on link structures - they are governed instead by local agreement - and depot practices vary widely. Link size varies widely and is related to the variety of driving work: the larger the link the more diverse the jobs covered are likely to be. As well as 'progressive' links each depot generally has a number of residual links which contain staff medically or otherwise restricted from undertaking full driving jobs. Footplate LDCs generally seek to include both freight and passenger work in link content to provide job variety, though they vary in the extent to which they do this. By contrast, specialist freight and passenger links are common amongst guards, and link membership is determined by choice instead of seniority.

Link structure is mentioned here because it interacts with national agreements on training and union policy on long mileage work to
strongly influence traincrew productivity (10). Since 1975 it has been agreed that management and union would encourage the sharing of torus work as far as possible. Prior to dieselization, 'mileage jobs' were allocated on the basis of seniority to the most senior drivers and their firemen. This underpinned the seniority system since those at the pinnacle of the profession and those whose family commitments were likely to be most pressing (firemen in their twenties) received the highest wages. This policy was changed since, with the ending of steam, a source of high income was eliminated for those in mid-career and because the most senior drivers often found main-line diesel driving too stressful.

The change in union policy resulted in bonus work being in all or most of the progressive links with the result that the job content of each link became more varied. For this policy to be implemented many footplate staff required more extensive knowledge of routes and traction. The length of training for each is governed by national agreement and drivers are required by law to sign that they are familiar with the routes that they drive over every six months. To learn each route from a depot takes up to three weeks. This union philosophy of equalising work, then, makes heavy demands on training. Richard Pryke was highly critical of what he saw as excessive route knowledge in his submission to the Select Committee (1977). He argued that if the work content of links could be specialized then training needs could be substantially reduced, and hence labour productivity increased. It was for similar reasons that the BRB sought some standardization of link construction when it came to
devise its work re-organization strategy.

So far, the main controls exercised by ASLEF on the use of labour in the service planning process have been identified. In current operations the management labour is similarly constrained by a combination of local and national agreements. The focus of these agreements are the principles and methods to be adopted where deviations from planned schedules has to take place either because of staff shortages or because of the addition of new work.

Each LDC has a comprehensive written agreement with local management, the main elements of which are the procedures to be applied by depot administrators in the cover of staff absence from duty. The cardinal principle is that of seniority - the most senior spare driver within a certain time band gets the vacant turn of duty (11). This principle is strenuously enforced by footplate LDCs, and place substantial constraints on the flexibility available to roster clerks (who deal with changes to work programmes in advance) and supervisors (responsible for dealing with these problems as they arise). For instance, footplate LDCs generally insist that vacancies are covered on a daily basis, whereas guards' LDCs are usually content to allocate spare staff on a weekly basis to cover long term absences.

National agreements give footplate LDCs a considerable role in the allocation of new or one-off items of work too. The Manning Agreement gives LDCs the right to scrutinise the diagrams of such jobs to check that the requirements for single-manning are complied
with. Where scrutiny is unable to take place the job has to be double-manned throughout. As a result LDC representatives have to be booked-off normal duties to undertake this function.

The foregoing shows that local representatives' extensive control over the allocation of footplate staff to work rests on a combination of local and national agreements. Management control here is further constrained by the involvement of union headquarters, primarily on issues connected with the length of time on duty. ASLEF policy is against the diagramming of overtime and the working of Rest Days. This policy is enforced through agreement with the BRB that statistics on the level of overtime and Rest Day working are supplied every four weeks to the union (12). Furthermore, to keep overtime working low there is a further agreement that the BRB will approach ASLEF headquarters for permission before depots can work their Rest Days (13).

ii) Manpower planning

The restraints that comprehensive agreements and powerful union representation place on management in the sphere of work relations are compounded by controls in that of employment relations. Accordingly, managerial attempts to achieve greater flexibility in the organization of work have been accompanied by similar moves to increase managerial control over aspects of footplate conditions of service. As an element of the work re-organization strategy, it was proposed that restrictions be removed from the promotion and transfer
arrangements and that the career structures for traincrews be reconstructed.

On British Rail the Promotion, Transfer and Redundancy Arrangements (P.,T. & R.) place controls on the movement of personnel between jobs and locations, and managerial freedom in employee selection. Superficially these arrangements could appear to be the main mechanism of a management 'bureaucratic control' strategy (Edwards, R. 1979). Such an assessment would be mistaken, however, since these structures have in part emerged out of union aspirations to extend, rationalize and codify career possibilities. It is true that their existence has helped to achieve workforce and union consent to job displacing rationalization schemes (Palette, 1984), but their operation is also deeply problematic for line management since they remove all managerial control over promotion and selection of footplate staff.

Traincrew management have no freedom to select staff of their choice since the cardinal principle of the P.,T. & R. is seniority. Furthermore, within this the agreement specifies that certain groups of footplate staff, such as those earlier displaced by a depot closure, have priority in the filling of vacancies. The problems this causes for management are severalfold. First, new staff may not be effective for some time because they need extensive training. For instance, drivers' assistants at depots where the potential for promotion is limited transfer to depots to undergo driver training and gain promotion to the driving grade. Since the training period can last a year in total the depot remains under strength. Electric
had suffered from this problem shortly before the interviews were conducted there, and the LDC had been driven to approach ASLEF headquarters for permission to work Rest Days.

At least depots such as Electric are attractive to staff because of the large number of mileage turns there. Drivers thus tend to remain there for some time, and such training problems that arise are usually temporary in duration. The second and more intractable problem is that of the so-called 'transit camp' depots. The difficulty here footplatemens transfer from depots with limited promotional opportunities listing as their second preference depots those with a large number of vacancies so as to get geographically close to their first preference depot. Then when the opportunity arises they exercise their right in the P.T.& R. to get into the depot of their first choice. As a result some depots can be permanently short of trained men. Watford is a good example of this kind of depot - it is a highly unattractive depot to remain at since there is no mileage work and its staff are trained only on one form of traction (to operate the Watford-Euston/Broad Street lines) and thus cannot take on any other work. There is thus a continual turnover of staff and a permanently high level of vacancies (14).

In response to these problems BR management have sought more flexible arrangements and the removal of some controls. The rail unions are not hostile to this eventuality since the current agreements do not pass control to them either. Sectional Council representatives (who monitor the workings of the scheme) are reluctant to exploit the
problems outlined above to press for increased depot complements
since as the rules are to a large degree beyond manipulation in the
short term, depots could equally receive applications from drivers
who are adequately trained. In these circumstances, management would
probably attempt to reduce the labour surplus that results by
declaring junior staff redundant.

The second element of employment relations that BRB managers would
like to reform is the footplate's entirely separate promotional
hierarchy. In its place the BRB would like a new grade of
'trainman', members of which would be able to perform the duties of
drivers' assistant, guard and, where the driver's exam had been
passed, relief driver. Behind this proposal lies a number of major
manpower issues that were facing the Board from the late 1970s
onwards. One was the unbalanced age profile of BR's footplate staff.
67.12% of drivers employed in 1983 were over 50 (15). Since traffic
levels are likely to decline and operational methods likely to change
in the long-term, means that it is undesirable to recruit staff in
the numbers necessary to replace these retirees in the short term.

Secondly, the work opportunities for drivers' assistants (who
currently provide the source of future drivers) have been steadily
reduced because of the elimination of steam heating and the
introduction of High Speed Trains. Flexibility in promotional
hierarchies offers the potential for an alternative solution drawing
on a wider pool of staff. The advantage of replacing the current
career structure by the 'trainman concept' is that the supply of
future drivers could be drawn to some extent from guards already in BR's employment, thus improving guards' career opportunities (16). Such a facility would provide potential employment for those guards displaced by the proposed introduction of driver-only-operated trains, and at the same time would create flexibility of staffing in those situations where drivers needed some form of operational assistance.

To summarize so far, the regulation of work organization and conditions of service are especially comprehensive in the case of BR's footplate staff. Controls in local and national agreements and the involvement of union headquarters result in the scheduling of train crews being particularly complex and restrictive. Some of these controls represent a continuity with craft practices whilst others were designed to defend them when they were threatened by technical change. It seemed by the late 1970s that any meaningful changes to them to increase labour productivity would need to be comprehensive in scope.

2. THE EMERGENCE OF THE WORK RE-ORGANIZATION STRATEGY

In the late 1970s labour productivity emerged as a major issue on BR after a decade of quiescence. From this a strategy was constructed to substantially reform the pattern of work and employment relations in the train driving function. Its underlying objective was to insulate the railways from the danger that governments might re-define railway
objectives as part of a set of restrictive public expenditure policies. To achieve these work organization aims, BR attempted to achieve the active consent of the rail unions (cf. Ferner, 1985). Thus, this element of management plans formed a major component of the 'tacit alliance'. The genesis of the strategy and its eventual breakdown will be described here since it provides the context for the analysis of the impact of flexible rosters.

Renewed interest in railway labour productivity was sparked-off by the Select Committee on Nationalized Industries' investigation of British Rail in 1976-77 (SCNI, 1977). Though the remit was rail policy, the Committee's proceedings were dominated by the question of labour productivity because of a submission by two economists, Richard Pryke and John Dodgson. Drawing largely on their book The Rail Problem (1974), they made extensive criticisms of work organization on BR. They were particularly critical of aspects of footplate work organization described earlier in the chapter such as the short length of average train-driving time per driver. Their recommendations included a number of reforms such as changes to the mileage bonus scheme, greater freedom for management to re-allocate work between depots, overhaul of the 'link' system of work groups and, most important, revisions to policies on route knowledge and training.

The Board's reply to these claims at the SCNI (op. cit.) are worth summarizing since they contrast with the stance adopted by BR headquarters more recently. Members' arguments fell into two main
categories. The first was that Pryke and Dodgson's recommendations were unworkable since manpower policies were in part dictated by wider social factors. The second was that footplate productivity is substantially determined by rail service patterns, and labour controls have a lesser importance.

At this time, then, senior railway managers were sceptical of the scope for improvements in labour productivity in isolation from increased investment. But because of the SNCI's investigation, labour productivity and the question of restrictive working practices started to emerge as a major issue. To respond to this, the Board commissioned a detailed study of European railway performance in 1978 (BRB/Institute of Transport Studies, University of Leeds, 1980). The report provided a wealth of detail on comparative labour productivity. Overall, the data indicated that BR was above average in terms of labour productivity (measured as train miles per staff member) but that the despite considerably longer hours worked by British railway employees, it did not result in an equivalent high level of output per member of staff (17). The researchers suggested that the restricted length of the standard working week on British Rail (Monday to Saturday) compared to that common in Europe was important here. In addition, British rostering practices were generally less flexible such that it was more difficult than on the continent to match the times when staff are on duty to the work required.

More detailed analysis of train crew productivity by type of traffic
showed that whilst traincrew productivity on passenger services was relatively high on British Rail, on freight and parcels BR (along with the Italian Railways (FS)) required twice as many traincrew members as other railway administrations run trains. Partly this can be attributed to low driver productivity but the primary reason for the discrepancy was that all other railways had largely abolished guards and/or driver's assistants on freight trains. The authors suggested that the potential for increasing traincrew productivity through revision to manning arrangements was probably the clearest conclusion to arise from the study.

The election of the Thatcher Government in May 1979 coincided with this study. Early on it became obvious that the policies of this government would add to the pressures for increased labour productivity in three main ways. Firstly, the new government believed that low labour productivity was a significant factor in Britain's poor economic performance and that trade union 'restrictive practices' were a major cause of this. Secondly, though the Thatcher Government did not have a clear policy towards the nationalized industries at the time of assuming office (see Chapter Three), it was nevertheless clear that it was likely to be hostile to the public sector and that there would be increasing constraints on public financial support as a result. Thirdly, the deflationary policies which this government seemed highly likely to adopt would add to the problems presented to the rail business by growing economic difficulties. Between 1979 and 1980, freight receipts dropped dramatically by £90 million (total freight income in 1979 was £597
million), and the total number of passenger miles dipped after a trend upwards since 1977 (see BRB, 1982).

In 1979 these contextual factors served to translate the growing interest amongst senior British Rail managers in labour productivity into a high level strategy aimed at improving it. At Board Headquarters number of productivity working groups were formed to prepare for the 1980 pay negotiations (see Monopolies and Mergers Commission, 1980). Some 200-300 items were generated by these groups from which, after evaluation by a coordinating groups, 52 items were finally selected for development. The criteria for this selection included the potential of such items to be implemented comparatively quickly and the levels of investment that would be required. The likelihood of acceptance by the rail unions was excluded from these criteria. Superficially, this might suggest that the Board was already beginning to take a firm line with the unions in implementing change. The reality, however, was that the sponsors did not want to constrain the generation of ideas for development at such an early stage.

In fact in this period the 'tacit alliance' between the BRB and rail unions became increasingly explicit. The BRB's strategy was to defend the railways from government intervention through reducing as far as possible the grounds for government to impose new and restrictive policies. Central to this was action to increase labour productivity. In so doing, BR would be better equipped to respond to changing trading conditions, more able to adapt to cutbacks in
financial support from central government, and (it was hoped) would impress upon the government that BR was not the inefficient organization the government appeared to believe it was. Fundamental to this strategy was that these measures would be achieved peacefully with the active consent of the trade unions and railway workforce (cf. Ferner, 1985).

From the beginning of the Thatcher regime senior managers sought to involve the rail unions in its strategy. Within weeks of Mrs Thatcher gaining office, the Board invited the officials of the rail unions to a special meeting to discuss the potential for improvements in productivity (Bagwell, 1984, p. 70). The main expression of the BRB's thinking is to be found in The Challenge of the Eighties presented to the unions in November 1979. This document outlined a fourfold strategy of withdrawal from unprofitable activities (primarily Collection and Delivery of parcels), development of market opportunities through clearer product segmentation, investment in new technology and long term manpower planning. Essential to the success of this were revisions of traditional practices in the sphere of work organization. The philosophy behind the planned implementation of the strategy was that

"these improvements cannot be achieved without the unions' active cooperation" (1979, p.2).

The proposals found in this document centre on the reform of the restrictions on labour deployment described earlier in the chapter. They included extensions of single manning of locomotives, the
The philosophy of making concessions in the sphere of job regulation in return for improved conditions was most readily embraced by the NUR. From then until Sid Weighell's retirement in 1982 the NUR's policies and practice developed in tandem with those of the BRB. The union produced a parallel document, *The Railwayman's Charter* (1980) which, like *The Challenge of the Eighties*, argued that if employment conditions were improved, the NUR would look favourably on reforming traditional working practices. Interview evidence suggests that the TSSA was in broad, if less open, agreement with the NUR strategy, whilst ASLEF's willingness to discuss productivity measures was nevertheless tempered by wariness of the implications of the Board's
proposals for craft exclusivity.

From 1979 onwards the rail unions, the NUR in particular, and the BRB moved closer together to maintain consensual labour relations. The 1980 Pay Agreement gave a rise of 20% on basic rates (18) and reduced the standard working week to thirty nine hours (to be implemented by November 1981). In return the rail unions undertook to give the Board's productivity proposals active consideration. The centrality of this strategy to the Board is revealed by the statement in the 1981-5 Corporate Plan that its successful achievement was premised on the implementation of The Challenge of the Eighties' proposals, and that successful implementation was dependent on trade union involvement (BRB, 1981b).

As the Board's financial situation deteriorated, due to the combined effects of the recession and cuts in the PSO, the alliance between Board and unions grew closer. In The Balance Sheet of Change, presented to the unions at a meeting of the Rail Council in November 1980, the Board asked that the unions consider a package of economy measures and review with the BRB the progress being made on the pay deal commitments (Bagwell, 1984, p. 73). As a result of this meeting the NUR decided to ask the BRB to join the unions in a joint approach to the Minister of Transport to seek an increase in the External Financing Limit and the Public Service Obligation Grant and to approve a package of investment projects. In return the NUR would give full cooperation on those issues in The Balance Sheet of Change that fell within its remit (Bagwell, ibid.).
The meeting of the Rail Council that took place in January 1981 with the Minister present represents the high point of the alliance that had been becoming more explicit since 1979. The history of BRB-union relationships in that period provides proof of the argument, put forward in Chapter Three, that consensual relationships have developed not primarily because the railways are insulated from market pressures but because of the hostility of governments to British Rail and the variability of government policy interventions. In these circumstances unions and management draw themselves together to protect themselves. This consensus was to be broken, however, by subsequent events.

3. THE BREAKDOWN OF THE STRATEGY

In the strategy that had been developed so far flexible rosters were a relatively unimportant component. The Challenge of the Eighties had called for,

"a new approach to rostering, including the incorporation of Saturdays and Sundays in the standard rostered working week for those staff whose work at the weekends is essential to the railway's operations: greater flexibility about the length of the rostered day, subject to turns not exceeding a given minima and maxima" (1979).

Much more important in terms of cost savings were proposals to introduce driver-only-operation, ease the manning conditions on locomotives, and implement the Trainman Concept.
At this stage the Board does not seem to have formulated specific proposals on rostering since it was viewed as something that would form just one element of other productivity initiatives, which taken together would increase flexibility for management. The BRB outlined its objectives in March 1980 to the NUR and ASLEF at the RSJC (Loco.) as,

"a new framework agreement which removed the rigidities from present rostering arrangements as far as practicable and also improve the effective use of working time as well as reducing the unsociability of roster and overtime requirement." (19)

At this meeting the BRB's representatives suggested that this was a complex matter, and that a Joint Working Party was the best way to proceed.

In mid-1981 the pluralistic approach faltered when the Board started to deviate from the strategy that it had adopted in 1979. The main reason for this was that the Government had started to intervene in railway affairs, taking advantage of a major disagreement between Board and unions over the 1981 pay claim. In April 1981 the Board's offer of 7% was rejected by all three rail unions, and the NUR's claim was referred to the RSNT. The RSNT, reporting in July, recommended a two-stage increase. Basic rates should be raised by 8% from 20 April, whilst a further 3% should be paid from August onwards. But the BRB broke with the tradition of accepting RSNT awards by announcing that it would not implement the second stage of the award. At subsequent meetings of the RSNC, BRB negotiators told the unions that they would need government financial support to meet
the award, and that such support would only be forthcoming with firm trade union commitment to the productivity proposals already presented to the unions.

These events suggest that from spring 1981 the Government was taking a closer interest in railway labour relations. There were a number of reasons for it to do so. Some commentators, such as Soskice (1984), believe the government's change of tack in mid-1981 had an explicit labour relations focus. He argues that prior to 1981 government strategy had been to inhibit joint industrial action between public and private sector unions through allowing high pay settlements to the public sector. Once the danger of union unity had passed it was feasible to reconstruct British labour relations by using the public sector as a lead. Though subsequent events in the public sector give this view a certain plausibility, it probably overstates the coherence of government strategy (Riddell, 1983). Until 1983 the Thatcher Government was a fragile coalition, and its apparent lack of concern with public sector pay levels in 1980 probably owes more to monetarist beliefs than labour relations policies (see Keegan, 1984, Ch.5).

Secondly, the framing of an agenda for railway management by the Government could well have arisen out of political divisions within the Cabinet. It is difficult to state such an argument with certainty because of the level of secrecy in British government, but a number of contextual factors suggests that this is not an unreasonable interpretation. The joint approach of Board and rail
unions seemed to be winning the political battle for increased public financial support for the railways. In early 1981 the BRB had achieved a remarkable coup in gaining Department of Transport agreement in principle on the merits of network electrification (Department of Transport/BRB, 1981). There appears to have been a bitter Cabinet battle over this issue, with the Prime Minister (whose closest advisors at the time were vehemently anti-rail transport economists) strongly critical of the Secretary of State for Transport for allowing such a document to be produced. An issue was needed to get the Government off the hook. Labour productivity fitted the bill since it accorded with the Prime Minister's own beliefs on the source of the BR's shortcomings.

From that point increases in labour productivity were to be the condition of increased investment. In the House of Commons, the Secretary of State announced that whilst agreement in principle to network electrification had been given, the Government would await the details of the implementation of productivity schemes before sanctioning expenditure on any particular scheme. From then on BRB representatives were to reiterate to the rail unions that achievement of increases in efficiency were vital if the BRB was to secure greater levels of investment finance (see Bagwell, 1984). Accordingly, the BRB started to prioritize certain measures out of the package contained in The Challenge of the Eighties.

The essence of the Government's approach was active intervention to model management decision-making. It did this by taking advantage of
the opportunities presented by a series of bargaining situations to increase the pressure on BR management to take a firm line with the unions. This is reflected by the BRB's successively more hostile approach to the rail unions at each stage of the 1981 pay claim. At the same time, the BRB was still attempting to keep control of the situation in July 1981 by seeking to win the unions consent to the productivity proposals at a set of crisis talks. However, this attempt was in vain since the dependence of the BRB on government funding to finance the unions' pay claim allowed the conflict within the Government outlined above to spill over into the industry's labour relations.

Sir Peter Parker's guarded recollections of this period are nevertheless highly revealing:

"I went to the Department of Transport in the summer of 1981 arguing to get part of the East Anglian electrification under way. In negotiating change, over time, you are climbing the mountain, you pull hard on the rope, ease a bit, pull again. But in the public sector, the relationships with Whitehall, between Departments and the Treasury and Number 10 are all part of the bigger scene - and the negotiators themselves turn out to not to be the only ones on the climbing rope. Some day, it will become clearer what those other Whitehall factors were" (Weighell, 1984, p. 219).

The strategy of the BRB since 1979 was resting on very uncertain foundations. As argued in Chapter Three, because the Government's
interventions were primarily in the sphere of labour relations, it proved difficult to maintain the 'tacit alliance' in labour relations (which hitherto had been the response to uncertainty and variability in government policy). As the Board's practice became increasingly determined by government tactics, so the hands of the critics of the alliance in the unions were strengthened. When the BRB refused to pay the second stage of the 1981 pay award, the NUR Executive, many of whom were suspicious of their General Secretary's closeness to the BRB, responding by calling a national strike.

Before the strike took place, the BRB and rail unions met under the auspices of ACAS. The degree of linkage between two agreements reached in these discussions was subsequently to be one of the major issues in the ASLEF strikes in 1982. In The Understanding on Pay the unions conceded that payment of the 3% would be delayed until January 1982 as would implementation of the 39 hour week. In The Understanding on Productivity the parties committed themselves to reaching agreement on flexible rostering of traincrews and the easing of manning conditions on locomotives by 31 October 1981; the open station concept by 31 October 1981; the trainman concept and the removal of freight guards by 1 January 1982; and the single manning of passenger trains by May 1982.

By this stage flexible rostering had become an important element of the productivity proposals for two reasons. The most pressing was that the introduction of the shorter working week required some changes to the organization of work. In addition, the notion of
flexibility seemed likely to appeal to those who believed that BR was riddled with rigid union-imposed practices. Development of detailed work on flexible rosters took place comparatively late, reinforcing the argument that they were not initially a significant element of the productivity package. In the discussions in July 1981 the BRB had been unable to supply specimen rosters to the unions since they had not been prepared, and it was only after the ACAS talks that the BRB presented specimen rosters based on two links at Nottingham depot to the unions.

When these rosters were considered at the RSJC (Loco) on 2 September 1981 it became clear for the first time that not merely was the BRB seeking greater flexibility in rostering arrangements but changes to the payment arrangements too through abolition of the eight hour guaranteed day established in 1919. ASLEF negotiators, though willing to discuss flexibility in rostering, were opposed to the latter since the latter was a fundamental principle of footplate conditions of service (see McKillop, 1950). As flexible rostering now involved wider issues than variation in the rostered day, agreement was impossible to reach and, after another five meetings of the RSJC (Loco), a 'Failed to agree' was finally recorded.

Once again it is possible to discern the hand of government. Though the Board initially accepted that the two Understandings reached at ACAS were separate, the BRB announced shortly before Christmas its decision not to introduce the shorter working week and to withhold payment of the 3% outstanding from the 1981 settlement to the train
drivers. In consequence, on 13 January 1982 a series of one-day strikes called by ASLEF in protest commenced.

So by the beginning of 1982 the alliance between rail unions and the BRB had broken down, under the pressure of government interventions. Anthony Ferner (1985) has argued that the shift in management strategy is best explained by what he calls a 'calculus of rationality'. In this calculus the likely cost to management of industrial action came to be outweighed by the potential long-term benefits of achieving legitimacy with the government. This analysis is consistent with the argument in this chapter with two differences. The first is that such a 'calculus' tends to overstate the degree of choice available to BRB managers in this situation. Government interventions exploited the predicament of the BR to enforce at various stages its own conceptions of how improvements in productivity could best be implemented. Secondly, given such constraints on the BRB, it is misleading to suggest that the BRB adopted a new strategy. By now it was dependent, to a large extent, on events beyond its control.

SUMMARY

It is difficult to escape the conclusion that BR's work reorganization strategy had failed in its underlying objective. A
strategy that had begun life to keep governments at bay had fallen victim to one. Footplate productivity had re-emerged as an issue in the late 1970s leading to fears amongst top rail managers that governments could exploit this to impose restrictive financial policies on the railways.

Senior managers were sceptical of the extent to which reductions in controls in agreements could improve labour productivity. More substantial increases in labour productivity were more likely to come from investment schemes than modifications to agreements. But since the scope of footplate controls on work organization were so comprehensive, and were strongly adhered to by workplace representatives and union headquarters, any major change to existing practices could only be achieved by a top level strategy. The scope for more incremental changes at Regional or depot level was limited.

So far the late 1970s a major work re-organization strategy was constructed. The unity in its proposals was the achievement of flexibility in labour deployment and manpower planning. As the strategy was designed to ward-off potentially damaging labour relations interventions, the philosophy underlying the implementation of the strategy was that it should be achieved with the active consent of the rail unions. In this way Board and unions could present an effective front to government: the case for more investment funds would be difficult to decline if BR and unions had 'put their own house in order.' In this way the strategy was integral to the 'tacit alliance' described earlier. However,
mounting financial pressure on the Board provided the Government with
the opportunity to enforce its labour relations goals and prejudices
on BR. Thus, as the work re-organization strategy broke down, the
flexible rostering element was, in effect, taken from the wreckage to
be used as a weapon to achieve other objectives. From this
perspective, the flexible rostering case is not the outcome of a
consistent management strategy but the remaining vestige of one that
had been abandoned.
CHAPTER EIGHT

FLEXIBLE ROSTERS AND MANAGEMENT CONTROL

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Flexible rosters came to the forefront of the BRB's labour management priorities in 1982. The vigour with which the Board fought its case against ASLEF could suggest that this issue was the cutting edge of a consistent strategy in which work re-organization and labour relations objectives were clearly linked. But by 1982 flexible rosters had become largely separated from the work re-organization strategy that had been constructed in the late 1970s. Instead, they provided a mechanism for the BRB to prove its legitimacy with the Government (Ferner, 1985) by inflicting a defeat on the train drivers' union. However, the Board did not have a free hand to do this since the Government intervened at key points of the dispute to enforce other, not necessarily consistent, priorities (1).

The emergence of flexible rosters in this way proved fatal to their success as a labour management policy. Precisely because of the way flexible rosters were removed from the context of a more comprehensive work re-organization strategy, and because introduction of them came to be of symbolic importance, insufficient attention was paid by BR management to the labour relations processes likely to surround their implementation and the way in which they would interact with existing agreements. Radical perspectives on issues of this sort can tend to suggest that the immediate outcome of industrial conflict represents the final balance of power between management and workforce. However, if the examination goes beyond this to the implementation process in full a different conclusion may
well emerge. In this case flexible rosters have not shifted control of rostering away from workforce representatives. Indeed their potential to do so was compromised from the beginning because of the factors mentioned here.

The findings reported here substantially confirm Rose and Jones' contention that

"the dynamics of detailed strategy implementation may alter the pace or character of the changes in ways that are incompatible with the existence of a detailed and comprehensive type of control-oriented strategy" (1985, p. 91).

Furthermore, apropos the current interest in flexibility in labour deployment (Atkinson, 1984; IDS, 1986), attempts to increase flexibility in highly regulated work environments may provide few benefits to management. Indeed, if attention is not paid to reforming the whole pattern of regulation, the introduction of flexible arrangements in one area of work relationships can tend to increase rigidity in labour management overall.

The results are reported here in a number of sections. The first outlines the immediate implementation process. The second summarizes the main effects of flexible rosters on work content and administration, prior to presenting managerial assessments of their success in the third section. The fourth provides an analysis of the attitudes of footplate representatives to this new form of work scheduling.
1. THE INTRODUCTION OF FLEXIBLE ROSTERS

The pressure on the BRB to make a stand on flexible rosters was to have a decisive impact on their eventual operation in practice. Since quick agreement became vital, the rostering proposals were developed largely without reference to other agreements with which they would be likely to interact at depot level (2). Furthermore, because the labour relations objective of overcoming ASLEF resistance came to be central, the implementation of flexible rosters was inadequately planned. As a result the Board's policies came to be open to amendment by unpredictable elements of the labour relations 'system'.

The first major constraint placed on the BRB by labour relations institutions was provided by the Railway Staff National Tribunal to which the Board's proposals had been submitted as a solution to the impasse in March 1982 (3). At the Tribunal the Board's evidence, presented by the Board Member for Industrial Relations, Cliff Rose, consisted of three main arguments. First, the shorter working week had to be introduced at minimum cost; second, that flexibility of rostering could bring benefits to footplate staff; and third, that ASLEF negotiators were aware of the full implications of the Board's proposals at the ACAS discussions in August 1981 and thus, in registering failures to agree to them, was acting in bad faith (4).

If rosters could be varied in length, Rose argued, the amount of unproductive time could be minimised either by lopping if off the end
of a shift or else adding time on such that an extra driving turn could be performed. The Board contended that flexible rosters could bring benefits to footplate staff such as raising the number of rest days, facilitate the grouping of them to form long weekends and lessen the incidence of unsocial booking on and off times. This objective would be achieved by placing many of the longer turns on nights.

At the heart of variable day rosters, as the Board saw it, was the ending of the eight hour guaranteed day. In place of the 1919 Guaranteed Day Agreement which provides that "in the event of a man being available for duty on any week day he shall be guaranteed a day's pay" (source), the BRB proposed that a guaranteed 39 hour week should be introduced "providing the rostered turns are worked". The Board's contention was that this was clearly understood in the August 1981 discussions at ACAS. Subsequent discussions at RSJC (Loco), the Board said, were thus not about the principle but how flexible rosters could be implemented. Thus ASLEF's failure to agree to the BRB (and NUR proposals) was in breach of an agreement and an act of bad faith.

ASLEF argued that at no point in the ACAS discussions did the BRB put forward a direct proposal to eliminate the 1919 agreement, and, General Secretary Ray Buckton contended, "The BRB was either acting under a complete misunderstanding of our position or indulging in wishful thinking" (ASLEF 1982b, paras. 16-18).
For locomen and their union the eight hour guaranteed day is a fundamental principle of their conditions of service since it provided for eight hours pay if a man was available for work even if his train working was cancelled. In 1982 the Society had declared itself willing to discuss some flexibility of rosters but argued that any rostered duty over eight hours should be paid at overtime rates in line with existing agreements, whilst a driver working a seven hour diagram would receive eight hours pay. ASLEF maintained that at a number of large depots where rosters in excess of eight hours were already in operation that drivers could suffer a large drop in earnings if flexible rostering was implemented in the way the BRB proposed. The BRB argued, however, that to implement flexible rosters this way would cost an extra £10.9 million p.a. and require an extra four thousand Drivers Assistants.

As well as arguing that flexible rosters would affect pay and the number of jobs, ASLEF claimed that they would reduce flexibility. A whole range of local practices, such as swopping turns, the equalisation of earnings and the maintenance of an am/pm shift balance, would be disturbed by a variation in shift length. The process of rostering would, in effect, be centralized away from the depot to the Regional Diagramming Office. Furthermore, the diagrams that had been supplied by the Board indicated that work often reserved for medically restricted men, such as shed and loco disposal jobs, would be added onto the end of main-line driving turns, thereby eliminating productive work for them.
The RSNT's report attempted to strike a balance between the BRB's and ASLEF's claims (see Modern Railways, 1982a). In so doing, it reduced the scope for flexibility on railway management's part since, in trying to achieve a compromise solution to end the dispute, it stipulated that a number of existing features of depot practice should be left untouched by the implementation of the rosters. The RSNT agreed to the BRB's proposal to implement flexible rosters of between 7 and 9 hours (with an 8 week cycle length) and to amend the Manning Agreements to permit single manning up to nine hours but imposed the following safeguards:

1) The majority of rosters should not be over 8 hour hours and no more than 20% should be over 8 1/2;
2) successive turns over 8 hours should only be worked if mutually agreed;
3) there should be no increase in unsocial hours;
4) drivers should be given advance information of the 8 week programme cycles;
5) rostered overtime should be spread equally within depots;
6) significant increases in overtime should not be added to 'specials' or spare turns;
7) local practices should not be significantly affected.
8) flexible rosters should not involve any re-allocation of work between depots;
9) flexible roster should not lead to any alteration to traction training or any major changes in existing link structure (RSNT, 1982).
The RSNT awarded that the introduction of the new rosters at depot level should be specifically remitted to LDCs. In the event of disagreement, then implementation should be deferred pending agreement within the Machinery, with a review after six months or longer if necessary. Thus, as the Tribunal put it, the RSNT extended the status quo principle and extended joint determination. Thus, any possibility that flexible rosters could decisively shift control to management was restricted by both the stipulation that a range of existing practices should be unchanged, and that the rosters should be implemented through existing labour relations institutions.

Once the Tribunal had reported, the BRB seems to have sought to 'get back to normal' labour relations. However, at this stage a second element of the railway labour relations system came into play. The democratic nature of ASLEF allowed union activists, not privy to the traditional workings of the 'tacit alliance' but hostile to the BRB because of its break from consensual labour relations over the previous months, putting pressure on ASLEF representatives to refuse to accept the award. Thus, in early May the ASLEF Executive voted not to accept the RSNT decision. During June the RSNC met on several occasions in an attempt to find common ground but as ASLEF's Annual Assembly of Delegates was now in session, conference activists played a very important role in the formulation of the Society's bargaining position. When the BRB stated that it would shortly introduce the new rosters whether agreement had been reached or not, ASLEF called an indefinite national strike to start at midnight on Sunday 4 July.
Once ASLEF had declared its hand, it seems the Government stepped-in to insist that the fight be fought to the finish (Bagwell, 1984, p. 100). It is not proposed to discuss here the events of the strike (for accounts see Bagwell, *ibid.*; Ferner, 1985; Atkin, 1982; Modern Railways, 1982b). The strike was eventually ended by TUC intervention. After two days of arbitration over the weekend of 15/17th July the Finance and General Purposes Committee of the TUC recommended that:

1) BR should withdraw the dismissal threat and treat as provisional rosters posted at 71 depots, and introduce no further ones before August 2nd;

2) ASLEF should call off the strike, recall the AAD and recommend it authorize the EC to enter into negotiations and conclude an agreement on the basis of RSNT 77;

3) the negotiations should begin immediately after the special ASLEF conference and be completed in six days (Bagwell, 1984).

The ASLEF EC accepted the decision as a basis for settlement, though TUC involvement was widely seen as a 'sell-out' by the Society's activists. The truth appears somewhat more complex. Some discussions (see Bagwell, 1984, p. 102) suggest that full-time officials, such as Ray Buckton, would have accepted some movement away from the eight hour day but that they were constrained by conference decisions. According to Weighell (1983, pp. 96-97), members of the TUC Committee quickly saw that ASLEF's case was non-existent, and that much of the weekend was spent trying to find a face-saving formula for the ASLEF EC by now trapped in a corner. Weighell argues that the TUC saved
ASLEF from self-destruction. Sources interviewed by this author indicates that Weighell's account is not entirely inaccurate.

Even with this apparently decisive defeat of ASLEF at national level, constraints on the implementation of the rosters emerged which immediately illustrated the difficulties of reducing the role of local representatives in work allocation. The recalled Annual Assembly of Delegates on 27 July voted to allow the EC to negotiate an agreement to introduce the rosters but stated that the new rosters would be worked under protest and that drivers would not accept responsibility for their smooth operation (6). The problem for BR management was that at the great majority of depots the organization of rosters and links had traditionally been the preserve of LDC representatives, with Traincrew Managers playing a minimal role. Managerial inexperience was exacerbated by the novelty of flexible day lengths and balancing out hours over eight weeks, the complexities of respecting the element of the agreement which stipulated that there should not be significant changes in local agreements and practices without LDC consent, and the lack of enthusiasm for the rosters amongst the workforce.

At a large number of depots where management was forced to take on the rostering process LDC representatives were able to delay implementation for some time. At Electric, for example, management drew up three sets of rosters, all of which were rejected by the staff side as offending local agreements on the placing of rest days and the sharing of mileage work. This depot, along with Northern and
Mixed did not work flexible rosters until October 1983. Where flexible rosters were introduced in 1982 it appears to be largely due to staff side efforts. The Traincrew Manager at Western, the first depot on its Region to work the rosters, recorded in interview that implementation on time would not have been possible without the active co-operation of the staff-side of the LDC.

Discussions continued at national level through most of 1983 on how flexible rosters should be implemented at local level. A 'full and frank exchange' took place at the RSJC in March 1983 over wide-ranging differences of interpretation. By this time a large number of 'failed to agrees' were being recorded by LDCs. At the same time ASLEF was pressing for payment of the premium which the RSNT had awarded train drivers for working the new rosters. This proved a difficult issue since some depots had chosen to work them from summer 1982, some had them imposed, whilst the rest had not yet implemented them. ASLEF argued that all train drivers should receive the payment from a common date once the differences of interpretation had been sorted out. Headquarters' labour relations managers shared ASLEF's view on this but were unable to concede it because of pressure from the Regions who wanted their 'loyal' depots to be rewarded. The continuing problems that flexible rostering caused railway management in 1983 and the divisions that were being prolonged in ASLEF led the BRB and ASLEF to issue a joint interpretation of the issue in September 1983 (7).

So far we have seen that the proposals for flexible rostering were
substantially modified because of the findings of the RSNT. This institution had become involved since BR management, under mounting pressure from the Government, shifted its objectives from the introduction of a set of productivity proposals towards the labour relations objective of overcoming ASLEF resistance to change. In so doing it became difficult, despite the exercise of 'macho' styles of management, to plan for and control outcomes. Furthermore, because the Board did not have a labour relations strategy to implement the rosters, it failed to come to terms with the possibility that the position of the LDCs in work allocation might be relatively unaffected by defeat of the union on the national stage. With a continuing dependence on workforce representatives, well-versed in the details of job regulation, for the conduct of aspects of labour management, there would be persistent obstacles to the achievement of the flexibility that the BRB sought.

2. FLEXIBLE ROSTERS AND WORK RE-ORGANIZATION

It could well be argued that the involvement of LDC representatives in labour management and their exercise of controls over work allocation, leads to the successful exercise of managerial control of the production process overall (cf. Edwards, 1983). On this basis the introduction of flexible rosters, despite the controls that have been asserted by workforce representatives, might be seen to have led to increased managerial control of labour deployment and task content through increasing managerial flexibility. Assessment of this is an
important issue since the growing literature on flexible patterns of work has so far provided little detailed analysis of its practical results. Analysis of the data collected on train drivers suggests that attempts to increase flexibility of labour deployment in highly regulated work environments may provide few benefits to management and can lead to increased rigidity. This contention will be demonstrated by an examination of the impact of flexible rosters on work content and the administration of employment.

1) Work Content

In its evidence to the RSNT, the BRB stated that a central objective of flexible rostering was to match footplatemen's hours of work more precisely to the requirements of train services. By cutting time off some turns and placing it on others and thus re-working diagrammed duties, it would be possible to replace some unproductive time with train driving duties. The results from the project suggest that this aim has largely not been realized. The explanation of this is to be found in the nature of work operations at depot level in conjunction with the provisions of RSNT 77.

The main impact of flexible rosters has not been the wholesale re-diagramming of main-line driving duties as was originally feared by ASELF (1982b) but the addition of locomotive/train preparation and disposal duties and general shed duties at the beginning and end of shifts. On a number of turns, particularly medium length freight services, it has been possible to reduce the number of depots
involved in the service. Since British Rail is largely a passenger railway the spacing of depots largely reflects the needs of a high speed passenger railway. In consequence, prior to flexible rostering, some freight services required crew changes very close to their destinations to keep within national agreements. With an extension of turn length it is possible for the crew to work the service throughout (8).

The impact of flexible rostering on employment has varied between depots. At Stone, for instance, six driving jobs were saved. At Northern, by contrast, an extra five turns were needed. Since the former is a freight depot whilst the latter is largely a passenger depot it was initially believed that variations in the impact of flexible rosters between depots could be explained by reference to the nature of the workload. Closer analysis of the data suggests that this is not the case (though the passenger/freight distinction seems to be important in explaining variations in footplate attitudes to flexible rosters) and the most important determinant is whether the depot is an 'initiating' or 'relieving' depot.

The most obvious instance of initiating depots are those at terminii stations where train services commence (and terminate). 'Relieving' depots are those which provide traincrew relief for services from elsewhere. In practice it is not always possible to make a clear distinction between them. Western, for instance, as well as being at the centre of a complex of regional and inter-regional workings, also initiates a large number of local and provincial services.
Nevertheless the distinction has a useful heuristic value.

These dimensions structure the nature of diagram content under flexible rostering in two main ways. Firstly, the fact that train formations at 'relieving' depots are largely fixed leads to a relatively lower requirement for preparation and disposal duties than is the case with initiating depots. Secondly, relieving depots are subject to patterns of train running which are beyond their control, the most obvious here being late running. To cope with this diagrammers build in margins of 'unproductive time' to cater for this eventuality. The possibility of late running also inhibits the addition of miscellaneous duties at the end of driving turns. It also inhibits the wholesale reworking of diagrams for fear of passing operating difficulties from one group of services to another. It has thus not proved possible to comprehensively re-allocate work within relieving depots, whilst at initiating depots it has only been possible to add relatively light duties at the beginning and end of shifts.

So, the impact of flexible rostering has been significantly influenced by the prevailing pattern of work operations, rather than revolutionizing them as some of their proponents in their more optimistic moments hoped. There are limits, for a wide variety of reasons, on how much time can be diagramed for productive work due to the degree of interdependence and complexity of the 'production' of rail services. As the Board argued in the 1970s (SCNI, 1977; Bowick, 1976), the overall 'quality' of diagrams in productivity terms is
very much influenced by the overall quality of train services. The more frequently particular services operate the easier it is to balance outward journeys with productive return journeys. On the Southern Region, for instance, where services operate at high frequency, it is possible to diagram some turns with up to 90% driving duties.

So far, flexible rostering has not led to major changes to job content. But it could do if work is redistributed between depots. The extension in working hours introduced by flexible rostering could, on the face of it, permit the redistribution and reworking of diagrams between depots, and enable a reduction in the number of depots, through facilitating longer driving time. Widespread fears were uncovered amongst LDCs that traditional depot 'spheres of influence' will eventually be breached as a result of flexible rostering. As the LDC Chairman at Junction put it, referring to this question, "the diagrammers could give us a bloody hiding if they wanted to".

However, it seems unlikely that flexible rosters will be widely used for this purpose, though the extension of single manning to nine hours could facilitate it. As Ferner notes, the current depot strategy was underway before the new rosters were introduced (Ferner, 1985). Furthermore, during the dispute the BRB was insistent that flexible rostering would not be used to initiate a major reallocation of work between depots, and this was incorporated in the RSNT award. At the time of the research BR management had used the
extension of single manning up to nine hours to close a small number of very small depots. But the limited extent to which this had taken place suggested that the Regions were engaged in a 'tidying-up' exercise rather than a comprehensive re-organization of depot work allocation. This judgement now seems (in June 1986) open to reassessment since Sectorization has started to rupture the existing traincrew depot strategy and Sector priorities are now taking precedence over integrated production strategies.

ii) The administration of work

Flexible rostering, if it has made a negligible impact overall on work content, has vastly changed the organization and administration of work at depot level. Flexible rostering has made a fundamental rostering practice in separating man hours length from turn length. The problem that thus faces work arrangers at depot level - roster clerks, supervisors, managers and LDC - is to match them within a day length of between 7 and 9 hours, and to achieve 312 hours over an 8 week cycle. The constraints on them in this task include national agreement that no more than 50% of turns should be over 8 hours, no more than 20% over 8 1/2 and that local practices on equalizing mileage jobs and route and traction knowledge should not be transgressed. The problem here is twofold. One is to get the turns to balance to 312 hours over 8 weeks within these constraints. The second is to reconcile payment arrangements with this. The argument in this section will be that the greater complexity of work
arrangements has reduced flexibility and strengthened the reliance of managers and supervisors on footplate staff.

Prior to flexible rosters link size had been largely determined by the number of different driving jobs over the duration of the timetable, taking account of the necessity of maintaining adequate route knowledge and policies of equalizing mileage bonus earnings. Flexible rostering complicated this by adding time as the major determinant. To implement this new system, links had to be constructed of eight or blocks of eight drivers to fit in with the eight week cycle. In many cases links had to be completely reconstructed. This restructuring often conflicted with existing depot policies on maintaining route knowledge. Indeed interview evidence indicated that the early days of flexible rosters were marked by chaos since men were re-allocated to links for which they did not have adequate route or traction knowledge. In this situation traincrew managers, supervisors and roster clerks were forced into dependence on footplate cooperation to resolve such problems.

Flexible rosters were introduced into an already highly regulated work environment and the new arrangements have interacted with existing practices in a variety of ways. A large number of national and local agreements are premised on a standard eight hour day. For instance, the agreement covering supply of relief drivers from one depot to another lays down limits on rostered work and travelling time which are in conflict with the contours of flexible rosters. It is a moot question which agreement takes priority. Since the LDCs
eventually resumed their traditional role of compiling the rosters, they were forced to prioritize the range of existing practices in respect to links construction. As a traincrew supervisor at Northern put it, 'Flexible rostering has come to the front and pushed other agreements out of the way'.

At Freight both the traincrew supervisor and the guards' LDC recorded in separate interviews that the ranking of agreements was unresolved and that they were hoping to avoid a situation where they would have to come to terms with this.

At Western the mileage agreement had to be modified to facilitate the movement of turns between links. At Electric the LDC was forced to abandon its traditional opposition to compulsory overtime, and add it to the spare turns to retain the system of sharing all the work (and mileage turns), since it is only by adding time to the spare turns that 312 hours can be achieved over the 8 week cycle. At Mixed the LDC had to supplement the spare link with spare turns in the main links to achieve the balance. As signing on times for spare turns can be varied daily by two hours either way this can spread irregular signing on times to the depot as a whole. It is these compromises that LDCs have had to make to implement flexible rosters that provide continuing opposition to flexible rosters despite the negligible impact they have had on work content.

Time has been elevated to become the prime determinant of roster construction. Given varying diagram length and the constraints
outlined above the only way that the cycle length can be achieved is through adjustments to the rostering of spare drivers and through adding time. At Northern, for instance, where all spare work is done by drivers concentrated in a spare link, 312 hours is only achieved in the main links by 'padding-out' turn lengths. Mixed too, tends to be short of time for 312 so the diagrams have to be padded-out. LDC policy there is to pad to 8 hours in an attempt to get back to the 8 hour day. At Junction the LDC similarly uses the spare turns to achieve the balance, and since a high proportion of the diagrams are well below 8 hours, a number of spare turns are rostered in excess of 8 hours.

This data suggests that the central objective of flexible rostering to maximise the levels of productive time has been compromised by the difficulties of achieving the cycle lengths in practice. One Regional Employee Relations Manager was highly critical of the benefits to management of flexible rostering, arguing that,

"all flexible rostering has done is shift around the block of spare time."

Indeed ASLEF policy is opposed to padding precisely because it makes a mockery of the alleged productivity improvements brought about by flexible rostering. In furtherance of ASLEF policy, Northern (whose LDC is highly committed to ASLEF) depot unsuccessfully attempted to get the amount of time each diagram was padded-out officially shown on signing-on sheets. Despite their criticisms of this practice, most LDCs are nevertheless dependent on it to compile the rosters.
However, the problems of flexible rosters are compounded in that the use of spare turns to achieve the administrative requirements of cycle times conflicts with traditional methods of allocating work. It is here that the consequences of the separation between person length and turn length can cause labour relations problems. To illustrate this consider the situation where a nine hour job arises at short notice but the only spare driver is on a seven hour turn. Traditionally, at most footplate depots the local agreement would stipulate the procedures the Traincrew Supervisor and/or Roster Clerk should follow to cover vacant turns. Since seniority is the cardinal principle of footplate conditions of service, in most cases the most senior driver (within broad time bands) would have got the job. However, since flexible rostering elevates time as a principle, where a nine hour job comes up and the most senior driver is on a shorter turn length, it is not clear who the Traincrew Supervisor should allocate the turn to. Where the job length is longer than the spare turn, a driver is entitled by RSNT Decision 77 to decline the job if it involves rostered overtime greater than one hour. Thus the necessity of using sparemen's times to achieve the administrative requirements of Decision 77 conflicts with the need to cover turns of varying lengths.

This contradiction has passed considerable power to drivers since in many instances they have the right to turn down work. The Traincrew Manager at Electric complained that it was not uncommon for trains to be left standing at the station with no driver. This situation was graphically illustrated on a visit to one depot when the crew booked
to work an oil train refused to leave the mess room on the grounds that to have worked the train would have violated the overtime agreement. In this context the day-to-day negotiating role of traincrew supervisors, as the staff who deal with immediate work allocation difficulties, has been heightened. However, because of the detailed nature of the traincrew agreements and resentment amongst drivers in the wake of the rostering dispute, their resources to deal with such problems are limited. The Sectional Council representative conducting the visit suggested that supervisors were the group who had suffered most from flexible rostering since they had to resolve the immediate problems arising from it.

3. MANAGEMENT ASSESSMENTS OF FLEXIBLE ROSTERING

In highlighting some of the problems faced by work organisers at depot level as a result of flexible rostering, it is appropriate to turn to managerial assessments of its success of failure.

The senior managers interviewed were somewhat circumspect in their assessment of the merits of flexible rostering. No one interviewed at this level suggested that they had achieved their central objective of maximizing productive driving time. Indeed, off the record comments suggest that it is believed that flexible rostering has been a remarkable failure in this respect. The achievements that such managers pointed to are two fold - the limited extension of single manning and the introduction of the 39 hour week at minimum
cost, neither of which are integral to flexible rosters per se (9).

It is difficult to assess the financial benefits that are claimed to arise from flexible rosters since the Board's published information suffers from a lack of clarity (cf. Ferner, 1985). It seems likely that the savings largely come from the extension of single manning up to 9 hours, and the reduction in the requirements for second men. Since the agreement stipulate that no compulsory redundancies should arise in consequence and that earnings should be protected, these savings are spread over a number of years, as depot establishments are revised downwards as drivers retire and drivers' assistants and relief drivers are promoted into the main driving links. Against this must be set the costs of flexible rostering. ASLEF respondents directed attention to increased levels of overtime arising from the need to balance out cycle lengths. In interview one ASLEF official pointed out that some depots which had never hitherto worked overtime were now working quite high levels. The Board has vigorously rejected these claims and has argued that any increase in overtime since 1982 has been marginal (10).

Of senior managers, labour relations managers were most critical of the new system of rostering. They claimed that it had failed to achieve more productive use of time, that it had increased rigidity, and that it had produced a continuing supply of claims from depots to higher reaches of the Machinery. Middle managers were more critical still; comments such as 'a bloody waste of time' were very common in interview responses.
The depot managers interviewed were near unanimous in their criticism of flexible rosters. The loss of managerial control over aspects of work organization appears to have been felt most acutely at this level. A fairly typical evaluation is that of the Traincrew Manager at *Western,*

"It had a great initial impact but then lost it. It was very much a one-off, and indeed it has produced more problems than it solved. Flexible rosters are a bit of a gimmick. Someone at the BRB thought it was the be-all and end-all. But, to make these things work you have got to have practical experience of railway life."

There are two main areas where depot managers feel some loss of control over work and its organization. The first is the difficulties of inserting amended workings and the refusal of LDCs in most cases to countenance it. The second is the difficulty of matching spare men to turns whose lengths differ and the right of drivers to turn down overtime. Both of these have been exacerbated by the bitterness in the footplate arising from the dispute. As the Traincrew Manager, at *Electric* put it,

"It has saved us money on BR, I guess, but on the practical side it has done us a lot of harm. It is nowhere near as flexible as the 8 hour day. Under that if you got an overtime situation you paid it and that was that. Flexible rosters tried to take up unproductive time and as a result must have saved money I think, but it ties you down. We have lost a lot of goodwill too. You find that when a driver is on his long week he is often not
prepared to make overtime. When he gets onto his short week he just wants to get home early so he won't do any then either. Now they often won't wait for late running trains for relief purposes. We had a better movement and utilization of men at depot level under the eight hour day."

Uncertainty as to the precise benefits of flexible rostering was repeated in numerous other interviews. Two local managers argued that the BRB would have been better to have sought to revise the HST Manning Agreement since the benefits of saving drivers was not compromised by the complication of rostering arrangements.

Criticisms of flexible rostering was replicated in interviews with Roster Clerks and Traincrew Supervisors. Both deal with immediate issues of work allocation and hence the problems outlined above are felt particularly keenly. The Traincrew Supervisor often faces the most immediate problems since this function is responsible for minute-by-minute alterations to rosters. However, Roster Clerks have additional area of difficulty in that they are responsible for dealing with time sheets and wages, and resolving the complexities arising from the interaction of flexible rosters with payment systems and other conditions of service. Indeed, the Head of Rostering at Northern suggested this is far more problematic than rostering itself. The root difficulty is that it is difficult to keep track of drivers' hours where they transfer depots or move into new links in the middle of a roster cycle. It is particularly problematic in depot transfer since the promotion arrangements operate on a two-monthly rather than eight-weekly cycle. In such circumstances, there
is the danger that drivers lose their additional rest day and work considerable levels of overtime without payment. In the face of ardent scrutiny by LDCs and the absence of national agreements to govern these situations, Roster Clerks, as one put it,

"have to make up their own rules here just to keep the job moving".

As a result, the complexities of administering flexible rosters have stimulated the growth of informal payment practices which can run counter to 'good housekeeping' policies promulgated by senior managers since 1979.

4. FOOTPLATE ATTITUDES TO FLEXIBLE ROSTERS

Footplatemen share the lack of enthusiasm of managers and supervisors for the new rosters. In fact, most footplatemen interviewed were scathing in their criticism. As a group of staff generally highly committed to the railway they are critical of a system which they perceive to be inefficient. And, unsurprisingly, the Board's conduct of the dispute left a residue of resentment which managers believe will take some time to clear. Particularly galling to footplatemen, given their highly irregular hours of work, was the Board's assertion that the guaranteed eight hour day precluded flexibility. As locomen oft remark, they are the most flexible grade on the railway. In this section the wide ranging criticisms of LDCs are outlined.
LDC members suggested that the fears presented by ASLEF negotiators to the RSNT had been borne out in practice. For instance, shift balances had been disrupted by the mathematical complexity of reaching 312 hours. At the Tribunal the Board had claimed that flexible rosters could facilitate a reduction in the incidence of unsocial booking on and off times by putting a high proportion of long turns on nights. However, at the depots visited only a minute reduction of such booking on and off was in evidence, for the reason that the structure of work was largely structured by the prevailing pattern of railway operations. At freight depots, in particular, there appears to have been little change since Speedlink freight traffic takes place largely at night. At Junction (a major Speedlink freight depot) the majority of turns are late at night and in the very early morning.

A further concern of ASLEF and its members was that the variation in turn length would prohibit the exchange of turns, a facility held dear by footplatemen. As well as occasional swops, it has also been the practice at some depots for exchanges to made on a rolling basis such that older men work all day shifts and younger men, to whom enhancements are more important, to work solely on nights. Flexible rostering has made the practicability of such practices far more dependent on the individuals involved. It is not possible to formally exchange turns since the computer payment system cannot make the necessary adjustment. Thus, drivers have to settle up financially amongst themselves.
Against this must be set the overall reduction in working hours introduced by flexible rosters. The increase in overtime has to be set against this, but at evry depot the switch to the 39 hour week has been used to create an extra rest day every eight weeks. The practice adopted by virtually all depots is to use this to form a very long weekend away from work every eight weeks (11).

Although all LDC representatives interviewed were critical of flexible rostering, there were significant variations in the pattern of evaluation overall. Passenger and mixed traffic depots were most critical whilst the LDCs at the freight depots visited suggested that flexible rosters, as currently operated, could work to the footplate's advantage. The reasons for this divergence seemed to be differential levels of involvement in union policy and the nature of work operations.

Although freight only depots are generally as loyal as others to the union they are less centrally involved in Society policy, either at Conference, Executive Committee of Sectional Council level. There are three main reasons for this;
1) In terms of union office they are at an electoral disadvantage since they are generally smaller than passenger and mixed traffic depots;
2) Because freight traffic is generally slower than Intercity passenger trains there are fewer opportunities for mileage bonus work. For instance, at the time of the interview, Freight had one mileage turn, whilst Junction had none. Since earnings as a
result are generally lower than main-line depots there is a tendency to transfer away from them. Thus, freight-only depots tend to have a much younger age profile and since adherence to the Society has usually been enforced by 'depot elders' in most depots adherence to Society policy is less deeply rooted than in main-line passenger depots (12).

3) Because of the nature of freight operations, such depots are somewhat apart geographically from the rest of the railway.

This physical separation from the rest of the railway, the concentration of work operations at night, the shorter distances worked, and the high levels of yard and depot working, set freight depots apart from the rest of the railway and contribute to a distinct freight depot culture. One element of this is that such depots tend to sort their own affairs out with less reference to outside institutions, be they Sectional Council or senior management. It was possible to discern a sense of a shared culture amongst managers, supervisors and traincrews greater than that found in passenger depots. Adherence to national agreements is less deep, and managers and workforce seemed more willing to 'bend' if not break national agreements.

The nature of operations at such depots enables flexible rostering to be turned to the footplate's advantage in two respects - hours of work and payment. As freight trains do not operate to the same rigid timetable as passenger trains, it is often possible to start freight trains early, if ready, and arrive back at the depot earlier. The
existence of longer turns provides an incentive to do this. Indeed the Traincrew Supervisor interviewed *Freight* believed that one unanticipated benefit of flexible rostering had been an acceleration in Speedlink timings since on arrival back at the depot it was the custom to be booked-off. Another factor relevant to freight operations is the frequent cancellation of trains by the customer. In these circumstances, similarly, the supervisor would generally allow the driver to go home early. At the same time as this reduction in working hours it is generally easier for loco-men to make overtime if they should so desire. As passenger trains generally take precedence over freight 'paths', particularly on high speed lines, it is easy, by a variety of strategems, for the driver to 'lose' his path, leading to substantial late running and overtime. Many drivers, in the absence of mileage work, are not averse to making overtime on the short turns introduced by flexible rosters.

The freight depots studied, then, argued that flexible rosters did not uniformly work to drivers' disadvantage. The reasons for this re-affirm the argument outlined earlier that flexible rostering has not transformed work operations at depot level but instead has been substantially moulded by them.

**CONCLUSIONS**

Flexible rostering is one of the first major instances of a public corporation attempting to restructure working practices in response
to governmental pressures. The objectives of the current government to improve labour productivity, dismantle trade union controls on its organization, and more generally weaken trade union power provides an explanation of how this issue came to the fore and, to a large extent, the conduct of the dispute. The evidence suggests that the Board's initial response to an anticipated radical government was to attempt to win the trade unions to a comprehensive strategy of reform of all areas of railway activity. The Board's autonomy to continue this traditional consensual approach was, however, curtailed by increasing financial pressure and growing government assertiveness in the restructuring of the public sector.

As Ferner (1985) has argued, the prime reason for flexible rostering assuming centre stage was essentially political. Managerial determination at first offered the opportunity for BR to prove its legitimacy with the government; as the issue hardened into a dispute it became vital. The financial benefits of new forms of rostering itself seem to have been negligible. The response of senior BR managers to this charge is that the benefit of flexible rostering lay in its catalytic effect to the implementation of a range of productivity improvements. However, the reverse has been the case as this disruption of consensual labour relations has impeded such amendments of other areas of working practice. But it may be that the determined stance of the Board on flexible rostering has contributed to a new respectability of BR management in key government circles which, in permitting increased levels of investment, has financial significance far beyond that of the issue.
of labour productivity.

At the level of workplace organization flexible rosters have been seen by many, management, union and workforce, as little short of a disaster. Work organization has been rendered vastly more complex with negligible gains in productivity measured in terms of driving time per driver. In a number of ways management have lost control of some aspects of production in consequence. The revision of timetables has been impeded by union adherence to cycle times and depot work organisers have had to resort to informal payment practices, in violation of 'good housekeeping' policy, to deal with a number of problems arising from the interaction of flexible rosters with other local and national agreements. The irony here is that flexible rosters have, in many ways, exacerbated the rigidity of these constraints. There is substantial evidence in this case, then, to support the argument of Rose and Jones that work re-organization and labour relations have a separate dynamic in practice, and that pursuit of certain objectives in one of these spheres may conflict with apparently similar goals in the other.
CHAPTER NINE

THE TRANSFORMATION OF RAILWAY SIGNALLING AND ITS IMPLICATIONS FOR SIGNALMEN
INTRODUCTION

The emergence of micro-processor technology in the 1970s led to considerable interest in the potential impact of technical change on skills and the nature of work. These concerns coalesced with the issues arising from Braverman's *Labour and Monopoly Capitalism* (1974) to generate research into management strategies behind the implementation of changes in production methods. Initially, a number of researchers demonstrated that the pattern of management aims in implementing technical change did confirm the labour process view associated with Braverman (Zimbalist, 1979). It was not long, however, before both historical investigation (see Lazonick's account of the 'self-acting mule', 1979) and research into contemporary change emphasized both variability in managerial objectives (McLoughlin, Smith and Dawson, 1983) and in the impact on skills (Jones, 1982). As these findings have come to be widely replicated they have come to represent something of a 'conventional wisdom' on the subject.

So far the focus in this thesis has been management business strategies and managerial objectives in the organization of work. It seemed worthwhile to include a study of technical change in railway signalling in this research since an important long-term objective of railway managements has been to reduce the element of operator discretion in signalling operation (1). Since managerial aspirations have included attention to task performance, it seemed possible that the case of railway signalling could contradict the findings of that
material which had been critical of the labour process perspective. The investigation thus attempted to explore the objectives and content of management strategies, taking as their focus the replacement of simple mechanical signalling systems by electrically-powered systems involving substantial degrees of automation. The development of railway signalling is outlined first, prior to an examination of how far the emergence of a management strategy to centralize operational control has been premised on gaining control of signalling tasks from signalmen.

1. THE DEVELOPMENT OF RAILWAY SIGNALLING

The fundamental purpose of railway signalling is to prevent more than one train being in a block section on the same line at the same time (BRB, 1972, p.2). When railway operation first commenced few companies saw the need for systems of regulating traffic (Andrews, 1968), but after a number of railway accidents the necessity for some form of operational control soon became apparent. The first statutory intervention was the 1838 Railways Act. This legislation created a class of railway policemen whose duties were to enforce order amongst railway employees, of which one element was to secure adherence to embryonic bureaucratic operational rules. On the Great Western Railway the duties of these policemen were to,

"preserve order at stations, remove intruders, direct passengers, assist in the case of accidents, keep the line free
of obstructions, give and receive signals, superintend points and crossings, give notice of times of arrival and departure of trains, watch for movements of embankments and cuttings, inspect rails and sleepers, convey the earliest information on every subject to their superiors." (Great Western Rule Book, quoted Andrews, 1968) (2).

The earliest form of systematic signalling used a time interval system whereby a second train would be allowed to enter a block section after a certain passage of time had elapsed since the previous train entered it. More intricate bureaucratization of work tasks was permitted by the application of the electric telegraph. Some reduction in the discretion of the railway policemen proved possible with the development of a system of 'Absolute Block' operation in which train movements could only take place after a telegraphic message confirming that the line was clear had been received from a location further up the line. The line was always assumed to be closed unless specifically cleared in this way for the passage of a train.

Pressure from the Railway Department of the Board of Trade on the railway companies to adopt the Absolute Block system, and technical experimentation by railway engineers led to the development of a separate signalling function and, associated with it, a re-division of railway labour. Hand signals came to be replaced by simple mechanical signals, and the controls for these were concentrated in mechanical signalboxes (3). Each signalbox controlled one 'absolute
block'. The 'Absolute Block' system of rules, and the mechanical interlocking of levers to prevent operators setting-up conflicting routes, were made compulsory by the 1889 Regulation of Railways Act. As a result of these developments the functions of railway policemen were re-divided and signalling was established as a discrete occupational function.

From the turn of the century a number of technical developments facilitated the transformation of the methods of railway signalling. It became possible to operate semaphore signals and sets of points using electric motors. The invention of the 'track circuit' in the late nineteenth century made it possible to use train movements themselves as part of the signalling system. Finally the development of the fail-safe electrical relay suggested that a replacement could be found for mechanical interlockings. Such devices as these were increasingly found in signalling schemes after the First World War.

The importance of these technical developments was that it appeared signalling safety could be achieved through building the safety functions into the equipment itself rather than relying on bureaucratic specifications of task performance and on signalmen's knowledge and judgement of the application of the rules. 'Absolute Block' operation could be replaced by the less-restrictive 'Track Circuit Block Operation'. Since electrical relays ensure that the signalmen cannot make routing errors, it is possible to assume, in direct contrast to 'Absolute Block', that the line is always open unless closed by a train movement. The core element of the
signalman's job, the safe passage of trains from point to point, could be rendered redundant.

Initially these new elements of signalling operation were incorporated into traditional systems and operated by signalmen in a similar manner to that found in entirely mechanical environments. Electrically controlled points and signals were interlocked mechanically within the signalbox and operated individually by miniature levers, acting as electrical switches. But the use of fail-safe relays and track circuits permitted control of multiple functions by a smaller number of switches, and from the late 1920s the LNER pioneered the use of control panels and thumb switches in a number of signalling schemes north of York.

Two forms of operator control have been used to work 'route relay interlockings' of this sort, both of which are described in the ITF's study of technical change on BR (International Transport Workers Federation, 1974). The earlier is known as One Control Switch (OCS). Here, the operation of the group of signals and points at each junction is concentrated on multi-position switches with each position opening a different route. This form of control was used at York, St Pancras, Crewe, Liverpool Street and Bethnal Green, and as late as the early 1960s in the re-signalling schemes associated with the Crewe-Manchester electrification. The second type, which is now standard on BR and on other European railways, is known as Entrance-Exit (NX). The automation of functions is more advanced than found in OCS systems since the pressing of two route buttons at
the beginning and end of a route sets up all the points and signals on that route. In addition, stretches of plain line can be signalled entirely automatically by the passage of trains themselves.

Electrical operation of this sort revolutionised railway signalling since, as well as displacing the signalman's safety function, both the area of control of signalboxes and the intensity of operations could be considerably expanded. Power boxes were freed from the technical and statutory requirement placed on manual boxes to be sited at the junctions they controlled. Furthermore, with 'Track Circuit Block Operation' signals can be brought closer together (until the space between them is half the braking distance of the fastest trains) with the result that line speeds can be increased and a large number of train movements take place simultaneously in the area of control. By contrast, in 'Absolute Block' operation the 'block' is the distance between each signalbox. Since only one train can be on the block at any one time, line capacity and, to an extent, line speed are dependent on the spacing of signalboxes.

Until the early 1960s, however, the cost of cabling limited the potential area of control of each signalbox to around seven route miles (Johnson and Long, 1980). This constraint was removed by the development of remote control systems which permitted the installation of relay interlockings at locations removed from the main signalbox and controlled by coded messages. These were first used in resignalling schemes on the Crewe-Manchester line in the early 1960s, and are now commonly used in large-scale re-signalling.
schemes.

This technical development is important because it enabled a new managerial approach to be adopted to the provision of modern signalling. Prior to the use of remote control systems, resignalling schemes had generally proceeded on an incremental scheme-by-scheme basis, except where they formed part of wider electrification projects. Even here, though, the coherence of schemes could be compromised by variability in governmental policies. The plan to resignal the London-Crewe line with NX control throughout was thwarted by governmental anxiety over the rising costs of the electrification scheme of which it formed a part and the trenchant criticism of railway costing and investment procedures found in the Select Committee's report in 1960 (SNCI, 1960 (3)).

The centralization of managerial authority which emerged after the creation of the British Railways Board facilitated the development of a strategic approach to operational and technical decision-making. In 1965 the Signals and Telecommunications Department at BRB Headquarters produced the National Signalling Plan (4). In place of the earlier ad hoc approach to signalling schemes, the central feature of the strategy was the concentration of operational control as far as possible in large 'control centres'. The objective, as stated by the Chief Signals and Telecommunications Engineer in 1975, was to work towards controlling about 90% of the network by about 70 such centres with each controlling an average of 500 track kilometers. The remaining 10% of the network was of such low
traffic density that it would not be financially or economically worthwhile providing the same level of centralized control (Cardani, 1976).

A few examples should suffice to indicate the operational scale of the type of 'signalling centre' envisaged by the Plan. With the completion of the East Coast Main Line electrification in the late 1980s the long-term aim of concentrating operational control in six large power boxes at Kings Cross, Peterborough, Doncaster, York, Newcastle and Edinburgh will have been realised. At the beginning of the 1970s the Southern Region planned to concentrate signalling in thirteen large signalboxes (Modern Railways, 1970). On the Western Region the situation was more complex since by the time of the NSP it was already well underway on a Region-wide policy to re-signal virtually the entire Region with standardised lineside equipment and control centres (5).

The majority of the signalling locations visited resulted from the NSP. These 'control centre' signalboxes represented a major break with the past in terms of employment numbers and the nature of signalling work. Substantial continuity could be found between manual boxes and the early power signalboxes since in both the signalman often worked alone, and signalling was performed over a fairly small area. By contrast, in the signalling centres large numbers of signalmen were grouped together, generally under a supervisor, controlling a large number of train movements over a wide geographical area. These control centres could control up to 300
track miles, taking over the work of sixty signalboxes and displace several hundred signalmen (6).

Table 1 The Employment Effect of large signalboxes

<table>
<thead>
<tr>
<th>Location</th>
<th>No. of signalmen</th>
<th>No. of boxes displaced</th>
<th>No of signalmen displaced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-National Signalling Plan (NSP)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Welsh</td>
<td>23</td>
<td>69*</td>
<td>234*</td>
</tr>
<tr>
<td>Central</td>
<td>12</td>
<td>34</td>
<td>136</td>
</tr>
<tr>
<td>West Country</td>
<td>18</td>
<td>16</td>
<td>44</td>
</tr>
<tr>
<td>NSP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western</td>
<td>32</td>
<td>61</td>
<td>270</td>
</tr>
<tr>
<td>Eastern</td>
<td>31</td>
<td>50</td>
<td>214</td>
</tr>
<tr>
<td>Bridge</td>
<td>41</td>
<td>16</td>
<td>154</td>
</tr>
<tr>
<td>South-Eastern</td>
<td>55</td>
<td>70</td>
<td>120</td>
</tr>
<tr>
<td>Airport</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interim-NSP #</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University</td>
<td>10</td>
<td>14</td>
<td>36</td>
</tr>
<tr>
<td>Cathedral</td>
<td>6</td>
<td>6</td>
<td>35</td>
</tr>
<tr>
<td>Late-NSP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stone</td>
<td>19</td>
<td>12</td>
<td>n/a</td>
</tr>
<tr>
<td>Devon</td>
<td>n/a</td>
<td>30</td>
<td>n/a</td>
</tr>
</tbody>
</table>
As a result of the introduction of these large control centres signalling employment has fallen considerably since nationalization. 7,961 signalmen were employed in 1978 compared with 25,190 in 1950 (7). Taking signalmen and crossing keepers (operators of level crossings) together their numbers fell from 9,638 in 1978 to 7,330 in March 1985 (8). The number of signalboxes fell from around in 1950 to 2,256 in 1979.

2. THE LABOUR PROCESS AND MANAGEMENT OBJECTIVES

In this brief history of railway signalling operation two themes apparently provide powerful support for a labour process perspective. The first is that managerial objectives appear to have centred on reducing the potential for operator discretion. The decision-making
element of railway signalling appears to have been progressively diminished through the application of a bureaucratic set of work rules, the interlocking of human functions in the rules, the mechanical interlocking of manual signalling equipment, the gradual use of electrical supplements to this, and finally the vesting of the safety function in electrical relays and the automation of many signalling functions. The second is the formation of a high-level management strategy in the late 1960s to implement signalling schemes making use of this latter form of operation on a comprehensive scale, and hence rendering redundant the traditional signalman's function of passing safely trains from A to B. To demonstrate that a labour process analysis is one that has solid empirical support, it would be necessary to prove that these two developments are closely connected.

The temporal conjunction of these two trends seem to support Braverman's (1974) case that managements have, through adoption of the principles of scientific management, steadily removed the judgmental elements from manual and white collar work. Since the characteristics of traditional signalling work, though physically demanding, require judgemental ability rather than manual dexterity, Braverman's description of the degradation of white collar work is apposite here. As he describes it,

"the progressive elimination of thought from the work of the office worker thus takes the form, at first, of reducing mental labour to a repetitious performance of the same set of functions. The work is still performed in the brain, but the brain is used as the equivalent of the hand of the detail worker"
in production, grasping and releasing a single piece of 'data' over and over again. The next step is the elimination of the thought process completely" (1974, p.319).

Ardent defenders of Braverman's thesis are now hard to find. Critics have convincingly demonstrated that his concept of actors is highly abstract, since it ignores the potential for worker resistance to the process he outlines. As a result the Marxian link between the productive forces and the relations of production is severed (Littler and Salaman, 1982). Empirically-based work indicates that managerial intentions behind changes to production methods are as often aimed at responding to market developments as to achieving internal objectives (Buchanan and Boddy, 1983; Kelly, 1985; Francis, Snell, Willman and Winch, 1982). Where potentially de-skilling technology is introduced, realisation of such an objective can be obstructed by a range of factors (Jones, 1982) and by continuing managerial reliance on workers' 'tacit skills' (Jones, 1983; Jones and Wood, 1984).

Nevertheless it is often possible to discern sympathy for the labour process perspectives based on evidence in the literature of managements using new technology to achieve greater control of the production process at the expense of labour (see, for instance, Willman and Winch's account of process innovation at Longbridge (1985) and Wilkinson's set of case studies in manufacturing (1983).

Railway signalling appears to be a case where such suspicions are well justified because a long term objective has been to reduce
operator discretion. Proof that the labour process view offers a valid perspective in this case of requires the following:
a) that management be shown to have explicit labour control objectives as a central rationale for change schemes;
b) that foremost amongst the advantages of the particular scheme chosen is its abilities to facilitate managerial control of task performance and of work organization more generally.

Each of these will be examined in turn.

i) **Strategic objectives**

Turning to the first of these, the results of the project fail support the contention that management undertook change schemes to wrest control of task performance from labour. In every case studied the investment was 'renewals-led', that is it took place to replace existing equipment that was life-expired. This is not to say that the details of schemes were entirely determined by renewals needs. Precisely, because the central strategy was to steadily concentrate control the opportunity was taken in a number of these schemes to replace certain equipment that was not life-expired or where the immediate financial benefits were not always apparent.

Investment has been dictated by renewals needs because of the limitations on the Board's access to investment finance. This provides a contrast with many other studies in the area. NTRG's research on the adoption of TOPS by BR found that it was adopted by the BRB as an attempt to stem deteriorating financial position of the
freight business and its declining market share (McLoughlin, Smith and Dawson, 1983). Buchanan and Boddy's study indicated that improved product and attempts to increase market share were important reasons behind process innovation (1983). Similar results were found in a survey of companies conducted by the Imperial College team (Francis et al., 1982).

To show that the primary management objective is to replace worn-out equipment does not preclude other objectives. Managements have choices in the form replacement equipment takes. Labour-focused objectives could well be important in this respect both as a rationale for the configuration of the scheme overall and as an explanation for the selection of particular items of equipment.

In the justification for signalling schemes reduction in labour costs and the improvement in labour productivity have an importance that is probably greater than is found in other industries because of Treasury investment appraisal procedures. Schemes over £5 million are subject to Governmental approval and have to achieve a Required Rate of Return of 7% (8). To estimate the net financial benefit scheme designers have to weigh cost savings against likely increased revenue. On the revenue side the improvements in train speeds and line capacity that result from modern signalling are converted by standard formulae into revenue gains. However, the scope for increasing revenue is believed to be limited. As one interviewee put it,

"investment on BR is essentially about stemming a long-term
Since technical changes on the railways provide limited product market advantages, the financial justification of signalling schemes largely comes from cost reductions. In a labour-intensive organization such as British Rail labour saving is the most significant source of this. Signalling schemes are largely financed by reductions in signalmen and crossing keepers, and to a lesser extent in signalling and track maintenance staff. So, although renewal of facilities rather than external market or internal labour-focused objectives is the main reason for investment taking place, reductions in labour costs are the prime justification.

ii) Scheme design and control

Though the findings of the case studies indicate that enhanced managerial control of labour is not the reason for undertaking resignalling schemes adherents of the labour process perspective might nevertheless wish to argue that the content of particular schemes both in terms of the nature of the equipment utilized and the design of the scheme overall owe much to managerial control objectives. For example, a number of Wilkinson's case studies show that the configuration of equipment is substantially determined by management's labour objectives (Wilkinson, 1983). Two central features of the strategy adopted by BR since the late 1960s could embody such control aspirations. The first is that the higher standards of safety found in NX operation could be seen as dependent...
on reducing the signalman's decision-making role. In this way signalmen could be said to be de-skilled. The second is that the importance attached to the centralization of operational control has directly deleterious implications for labour's autonomy in decision-making.

However, the results to be summarized here indicate that BR management has paid little detailed attention in advance to the distribution of decision-making in the area of task performance. Furthermore, the shifts in control that have taken place occurred between operating functions rather than between management and labour (cf. Clark, Smith and Rose, 1984).

The main components of traditional signalling skills lies in the area of operator judgement. This has two elements - decision-making on the safety of allowing train movements to take place, and decision-making on the priorities of these movements. Whilst changes in the two dimensions above may effect both these aspects, it is necessary for the proof of a labour process perspective that managerial strategists are not only aware of these potential consequences but that they form a central rationale for strategy content. Interview questions sought to probe, therefore, the rationale for the adoption of 'route relay interlocking' signalling equipment concentrated in large control centres.

We have already seen that a key feature of power signalling using the 'Entrance-Exit' form of operational control is that the signalman
sets-up a route by pressing buttons at the beginning and end of a route, leaving the 'route relay interlocking' to perform the control function of individual points and signals. Since the traditional signalman's tasks involved direct control of points and signals this may well seem a prima facie case of de-skilling. Whatever the consequences, however, this is insufficient evidence for a managerial intention. Interview evidence overwhelmingly indicated that managerial intentions did not centre on de-skilling signalmen. Rather this form of operation was adopted chiefly because the equipment was well-established technically. In this way, this element of the re-signalling strategy could be said to be 'engineering led.'

When NX operation was first developed in the 1930s it may well have been believed by some rail managers that this form of operation would eliminate the traditional signalling function, potentially allowing route setting of trains to be performed by relatively unskilled labour. However, evidence (which will be outlined shortly) that this has not been feasible in practice has meant that such an objective has not been present in subsequent managerial decision-making. Even at the time NX was first introduced, the main impetus for its development was the separate dynamic of technical advance and the long held objective of continually refining signalling safety rather than an explicit aspiration to remove signalling skills. To achieve greater safety some restraint on signalmen's discretion was necessary, and from the nineteenth century onwards mechanical and electrical devices have been installed in signalling systems to
prevent human error. However, their main use has not been to managerial dependence of signalmen's skills but to reduce the reliance on short-term memory in signalling systems (9).

We have already seen that a signalman's skills are more akin to those of white collar workers rather than engineering craftsmen in that they are primarily based on knowledge rather than manual dexterity. The technical devices that have been adopted to reduce the scope for error can in fact make greater demands on operator knowledge and conceptual ability. All manual boxes are now protected by 'lock and block' equipment which locks the signal and points levers and block instruments (the indication of line status) in place once set. This means that the signalman cannot allow another train onto the block until the first train movement has taken place. As a result the signalman must set up the right route since if he sets up a wrong one it can only be released by taking special action which is subject to investigation by signalling inspectors) and carries the possibility of disciplinary action).

Turning to large power signalboxes, it could be argued that the more advanced state of automation lessens the reliance on signalmen's knowledge of train running and equipment. Andrews (1979) has argued that in equipment terms alone such third generation boxes do not make greater demands on signalmen than second generation signalboxes since much of the equipment is automated. Such an assessment pays insufficient heed to methods of organizing work in large signalboxes and to the manner in which automated equipment works in practice.
Since each signalling panel carries a varying workload it was the practice in all the boxes visited for the signalmen to rotate round the panels on either a daily or weekly basis to give a break from the more arduous panels and to provide variety. This makes greater demands on knowledge of the equipment than where dedicated operation takes place. As a result signalmen get extra credits in the grading of the signalbox for payment purposes (10).

Furthermore, as a number of other studies have shown (Jones, 1982; Buchanan, 1984; Buchanan and Bessant, 1985), automated and semi-automated equipment tends not to be the panacea some of its supporters claim. It is no exaggeration to report that in every interview conducted with signalmen, their representatives and signalling supervisors and line managers, it was pointed out that NX equipment is not difficult to operate when it is working properly but that when it fails (as it frequently does), then considerable demands are made on signalmen's knowledge of both the equipment and the pattern of train movements. In interviews conducted at South-Eastern box it was pointed out that equipment failures were running at the rate of 600 a month. Two respondents from Northern argued that the feature of NX operation that demanded most skill were those long stretches of line equipped with automatic signalling since when this equipment 'went down' (ie indications of where trains fail to show up in the signalbox) it is more difficult than in the case of controlled signalling to assess where trains are and to regulate train working accordingly.
This form of automation of signalling on sections of plain line is included in signalling panels which are otherwise composed of routes controlled by the signalmen. Potentially more damaging for signalmen's skills is the automation of signalling panels in their entirety. As yet there is one example of this in Britain in Airport signalbox (11). This system of operation, known as Automatic Route Setting (ARS), uses a computer data-base of train services to decide which routes to set up. Interviews were conducted at this signalbox but the results were inconclusive for any assessment of its potential impact on signalmen's skills. The panel was operated by a signalman in more or less the conventional way since the equipment was newly installed and experiencing a number of teething problems and it has a high speed level crossing in the middle of it which has to be operated by a signalman or crossing keeper (12). Furthermore, the computers route decisions were based mainly on local assessments of operating priorities, and it was sometimes necessary to over-ride the computer where a disrupted pattern of train movements had 'knock-on' effects some distance away.

It seems likely that the implication of this form of operation for skills will depend on how widespread its use comes to be and the nature of the track layout and services operated by it. Much will depend on the form of work organization that is adopted to operate it. In theory signalmen could either be used purely to deal with situations where operator intervention is required in which case no great demand would be required of signalling skills, or else interventions could form one part of an expanded control function
performed either by signalmen or supervisors. At the time of writing such issues as these have not found their way onto the negotiating agenda at either Regional or National level. Management want to deal with application of it on a case by case basis to preserve maximum flexibility, whilst union representatives are fearful that if a common policy is sought it will be at the expense of signalling jobs.

The evidence so far suggests, then, that the adoption of NX equipment by management is not substantially influenced by a desire to reduce their dependence on signalling skills. Instead managerial policies are largely engineering led and labour management considerations seem to be secondary. In terms of outcomes, some elements of the traditional signalling function seem to be rendered redundant but equally signalmen in large power signalboxes need an expanded knowledge of the equipment they operate.

The second element of the signalling strategy followed since the late 1960s is the centralization of signalling operation into large control centres. The prime reason for pursuing this policy is that operational control can be improved. The provision of centralized information on train running and the centralizing of decision-making on train running over a large area, facilitates a more efficient form of train regulation than is found where signalling control points are more dispersed. Enhancement of managerial control of current operations in this way may be thought to reduce signalmen's decision-making in train regulation. Instead of widely dispersed signalmen
making a number of isolated though connected decisions, the number of
decisions are reduced and made more amenable to management control.

Even though a number of managers indicated that this was an advantage
of centralized control, it is not evidence *per se* of a management
strategy to control signalmen's decision-making. Interviews with
senior managers confirmed that such an objective did not form an
element of management aims. Indeed what came over from these
interviews was that these managers did not have a clearly
quantifiable assessment of what precisely the advantages and
disadvantages of centralized control was. Instead the advantages of
centralized control were largely taken for granted, or else only
became clear in particular operating contexts. As Rothwell (1985)
has argued, control is often an implicit objective in technical
change. Since control objectives are fairly weakly defined, policies
to reduce (or increase) the signalmen's role in operational control
have not been clearly formulated, and the approach to this question
in the early years of the big-box strategy seems to have been an *ad
hoc* one.

The assumption at the heart of a radical perspective is that
relationship between railway management and signalmen in the sphere
of operational control is a zero-sum one. That is, if managerial
control is increased, then labour's control must be correspondingly
reduced. Interview evidence indicated, contrary to this perspective,
that both management and signalmen benefitted from the centralization
of control (14). Managerial control was heightened by improved
coordination of decision-making that resulted from the concentration of signalmen, whilst the signalman's role in train regulation has been considerably expanded because the area of control has grown. In other words the benefit to management arose from better decision-making by signalmen rather than from its elimination.

Since the traditional safety function of signalman has been largely eliminated by power signalling, whilst the scope of decision-making on train running priorities has been substantially enlarged, the function of the signalman in large signalboxes has shifted to that of a 'controller'. This development has reduced the role of the other key function in railway operations - that of the Traffic Control Organization. Traditionally, manual signalboxes were responsible for signalling trains safely, whilst a centralized Traffic Control Organization ("the Brain's Trust") made decisions on train running priorities. As well as train regulation the 'classic' functions of Control were adjustments to locomotive and rolling stock allocation, and the provision of relief train crews (Burtt, 1926). Control's decisions on train running were made on the basis of information supplied by signalboxes, and were transmitted back as instructions to signalmen.

Since with power signalling information on train running is concentrated in the signalbox it is possible for the signalmen to take over this function of Control. As a result the train regulation function of Control has substantially declined. Furthermore, since the signalbox is the focal information point (with communication
facilities to traincrew depots, freight yards, signals, management offices) it is often feasible for the signalbox to sort out current difficulties in stock allocation and traincrew relief directly with yard and traincrew supervisors without Control's intervention (15).

The degree to which this takes place seems to depend much on Regional traditions, which in turn draws on the practices of the railway companies before nationalization. Traditionally, on the Midland and Western main lines of the LMS the authority of the Control offices was substantial, leaving very little initiative to the signalman. By contrast, on the LNER and Great Western a much less rigid form of control was used (Marlow, 1956; Weighell, 1984,). As a former Western Region signalman describes the relationship,

"I believe it would have been the correct procedure for the Freight Controller to instruct all signalmen on his patch when to put goods trains into loops and when to let them out, but in fact they system worked the other way round: the signalmen acted on their own initiative and Control was informed some time later. Indeed both signalman and controller were too busy for the system to work otherwise...signalmen were proud of their independence and they would have viewed instructions from Control as 'interference' in the running of their signalbox."


In interviews with Western Region signalmen in particular great stress was laid on the fact that where operating difficulties occurred the signalmen sorted them out on their own.
That these traditions moulded practices after the introduction of the big-box strategy indicates that management strategists had paid little attention to the precise details of the relationship between signalboxes and Control. Similarly, the transformation of the Control Organization as a result of the two-tier re-organization in 1984 was moulded by existing Regional customs on the allocation of duties between large signalboxes and Control offices. This transformation was necessary since the Control function was concentrated at the Divisional tier of management. BRB policy was for most of the functions of Divisional Control to be decentralized to Area level, as part of the wider policy of devolving managerial responsibility, or else eliminated, with locomotive control being centralized at Regional level (Holmes, 1984). However, three Regions studied had largely centralized the existing Divisional offices to Regional level since the power signalboxes already undertook the functions that it was envisaged would be decentralized to Area level. Only the London Midland Region (where Control has traditionally had more authority over signalmen and upon which there are still a large number of manual boxes) has implemented the Board's policy (16).

This discussion indicates that the strategy to centralize control of signalling in large signalboxes was not accompanied by detailed policy or objectives on the allocation of decision-making between production functions. Such a finding suggests that the labour process perspective, which assumes that management have clear objectives towards labour and skills, is mistaken. Certainly, no policy to reduce signalmen's or Control's role in decision-making was
uncovered prior to the 1984 re-organization. Instead, those responsible for designing large power-boxes seem to have assumed that traditional practices would continue or change gradually in response to events. As the big-box strategy developed it became clear that the scope of signalmen's decision-making in the sphere of train regulation was considerably increased. But no attempt was made to correct this by management since the higher degree of control exercised by signalmen in this respect brought operational advantages to management. Thus, the relationship between signalmen and operating management in technical change can best be seen as positive sum whilst that between operating functions is more accurately seen as zero-sum (17).

CONCLUSION

From the analysis presented here it is possible to draw a number of broad conclusions. The achievement of greater safety in railway signalling has required that the scope for operator discretion be systematically reduced. But, this long-standing policy has not been extended to form a uniform management strategy to de-skill signalmen. Indeed, some technical devices to achieve safer railway operation have made greater demands on signalmen's skills.

The elimination of human error that railway managements have sought has focused primarily on one aspect of the signalling function - the safe passage of trains through signalbox areas. However, this is
only one element of the signalman's task. In practice, signalmen in most areas have traditionally exercised a degree of judgement in assessing train running priorities. The introduction of modern power-operated signalling has reduced, though not eliminated, the safety function but it has significantly enlarged the latter form of decision-making. Managements do not seem to have anticipated how the introduction of new forms of signalling technology would effect the control and distribution of decision-making in rail operations. Their policy to centralize operational control could be said to be an 'engineering led' strategy. The nature of task performance in the new signalling systems seems to have been a secondary consideration. For these reasons the case of railway signalling does not support the labour process view that reductions in labour skills are at the forefront of management strategies.
CHAPTER TEN

SIGNALLING STRATEGY AND LABOUR MANAGEMENT
INTRODUCTION

The strategy to control railway signalling from a small number of large signalboxes was not formed on the basis of detailed management consideration of the potential contours of signalling tasks nor a re-distribution of decision-making between the two main operational control functions. It might be anticipated, however, that managements gave more attention to work organization in the new signalboxes because of the labour relations implications of the new methods of operation.

There are a number of reasons why labour relations and work organization priorities would form a central element of a re-signalling strategy on British Rail. These include the tradition of centralized management functional organization, the geographical interdependence of railway operation, and centralized negotiations on pay and conditions of service. In other sectors, such as banking, centralised management authority and integrated production have resulted in new technology strategies having an explicit labour management component (Child and Tarbuck, 1985). We could expect, then, that a comprehensive re-signalling strategy would integrate labour management policies and objectives to mirror the traincrew strategy that was developed in the late 1970s.

To investigate how far this has been the case requires consideration of the following issues:

a) to what extent have policies been devised at the centre on the
division of labour and work organisation, within power
signalboxes;
b) have labour management policies and practices associated with new
signalboxes displayed innovative features or have they been
largely moulded by existing policies, as writers such as Rothwell
have argued for other industries (1985);
c) what are the structural determinants of the formulation and
nature of these policies and practices?

These questions will be answered through a consideration of
1) work organization policies and practices in large signalboxes;
2) the labour relations response to the changes in signalling
operation;
3) the institutional differences between traincrew and signalling
labour management;
4) the impact of Sector management structures on signalling labour
management.

1. STRATEGIES AND WORK ORGANIZATION

Prior to the fieldwork there seemed good grounds to anticipate that
an element of the central technical/operational strategy would be
comprehensive policies and objectives in the sphere of work
organization in large signalboxes. However, it became apparent
early on from interviews conducted in signalboxes that patterns of
work organization were highly diverse between them. Furthermore, interviews with senior managers indicated that this diversity arose from the absence of central policy. Instead the details and many of the principles of work organization were left by the BRB to the Regions. Within the Regions themselves, the process of staffing signalboxes was largely undertaken by Divisional operating management (1). In many cases Divisional operating management's practices were an amalgam of rules of thumb, precedents and negotiated outcomes. Given the past dominance of the Region in railway management it is perhaps unsurprising that policy was not determined at BRB Headquarters: it is more surprising that Regional policy has been relatively undeveloped.

One feature that is common to all major power signalboxes is the principle that each signalling control panel should have an operator. The basis of this appears to be primarily managerial perceptions of operational necessities rather than explicit concern with work organization. In the early years of the large box strategy it was the practice for each panel to be based on the main areas of operational activity, with each panel based on the area that less large power signalboxes might have embraced. For instance, the Western Western power box has a section of panel to cover the main station area, a set of junctions some miles North of the station, and main lines to the East and West. In this way signalman's workload and the definition of areas of control per signalmen is essentially determined by traditional notions of the main areas of operational activity being reflected in the
engineering specification. As a result the levels of workload can vary substantially between panels. Two of Western's panels demand a high level of decision-making whilst the other two are considerably lighter. Similarly, Central's main panel demands constant attention and complex decision-making whilst the other two are relatively straightforward.

From the early 1970s more attention was given to ergonomic factors and more detailed attention paid to the design of panels. Unequal workloads, high levels of stress amongst some signalmen and constant minor labour relations problems in some large boxes indicated that more attention needed to be paid to panel design (2). In the early stages of planning the box at Bridge it became clear that if the panels were based simply on the geographical layout of the railway, then it would not be possible to fit all of the routes on some parts of the panel and the signalmen would not be able to give sufficient attention to all of it (see Andrews, 1979). Thus the panel area's of control were designed on a 'rate of decision-making basis' and the operating console separated from the display panel so that the signalmen could perceive all the train movements on their 'patch'.

However, greater attention to ergonomic factors by design engineers was not integrated with organization objectives and these ergonomic considerations have in practice made some manpower goals more difficult to achieve. Once operating consoles had been made clearly separate it reduced managements' flexibility in the allocation of
staff since the argument of workforce representatives that each panel should have an operator became more difficult to contest. By contrast, where a set of combined operating panels-consoles form part of a long single panel there is more scope for flexibility in the size of sub-panels. In the late 1970s, however, management were seeking to reduce staffing at night on some panels by getting other signalmen to 'double-up.' The NUR took this up with the Board since it believed this violated appropriate staffing principles. In its reply the Board maintained that the principle of 'one signalman per panel' was invalid since the panel was the operating console in its entirety, and it was inappropriate for the BRB to specify how many people should operate this in each circumstance. However, the trend towards more discrete consoles dictates against the flexibility that the Board was trying to achieve, and makes it difficult for BR management to adjust staffing on the panels themselves.

In practice, then, management and union have tended to adopt the principle that each panel should be operated by a signalmen. There is much greater diversity in the organization of ancillary functions in large signalboxes since it is less clear-cut what these should be comprised of. As a result where management have subsequently sought to adjust staffing, it is primarily in this area. These functions include back-up to the signalmen on the panel, train recording and train announcing.

There is considerable Regional variation over the nature of these posts and who occupies them. In general, on the Western Region
these functions are performed by top-class signalmen, on the
Southern Region by signalmen of varying grades, on the Eastern by a
mixture of signalmen and clerically graded staff, and on the London
Midland by signalmen, clerical and operating staff. The Western
Region was notable for having in the established power boxes,
'standby signalmen' (two in Western, one each in West Country and
Welsh). The function of this job is a loosely-defined and varied
one, and includes the provision of relief for the signalmen on the
panel, and outdoor work such as moving points by hand in the event
of failure.

The outdoor functions are interesting since there are no direct
equivalents on the other Regions. On other Regions work of this
sort is performed either by signalling maintenance staff in
conjunction with the signalbox itself, other operating department
staff or else signalmen based permanently outside the signalbox (3).
These functions seem to have emerged on the Western Region largely
as an ad hoc response to the labour relations pressures encountered
in the implementation process. In a period of low unemployment
achievement of staff consent was premised on creating jobs to
supplement the small number to be employed on the panel itself.
Furthermore, the traditional strength of Sectional Council C on the
Region (testified to by a number of interviewees) gave the workforce
side the resources to successfully press for further staffing. For
signalmen and their union the 'standby' function achieves some
continuity in job demarcations and craft skills since it includes
operating equipment at the lineside which prior to the signalling
centre would have been operated by signalmen.

At the time of the research Western Region management was trying to depart from this practice of including 'standby-signalmen' in the staffing of power boxes, on the grounds that they duplicated functions already carried out to some extent by other groups of staff. They had decided that standby-signalmen would not be created at Stone or Devon. However, their success in this respect was limited. Sectional Council representatives placed strong pressure on management to increase the proposed establishment of Stone since, as the age profile of signalmen in the area was comparatively young, not all surplus displaced signalmen could be accommodated through early retirement. The Divisional operating manager responsible for staff was sympathetic and had agreed an establishment level which included a number of 'spare' signalling posts. Within days a higher tier of management overturned this since it seemed to violate the new Regional policy.

The threat of industrial action that resulted put considerable pressure on management to the effect that the 'supervisory' position on the 'back-row' in the box was re-classified as a signalling post. At the same time local signalling maintenance staff had voted not to have a night shift and as a result there was no fault cover at night. The signalmen's Sectional Council argued that the 'standby' positions were especially relevant because of this, and management conceded that 'back-row' signalmen would perform outside duties as required as long as there was not no alternative work in the box.
The Council though this an unsatisfactory solution from an operational point of view since at the times when outdoor work was needed, it was most likely that the signalmen in the box would need assistance in the box. Nevertheless the the 'standby' principle was retained if in a diluted form.

In addition to the presence of standby-signalmen, Western signalbox and the three large Southern Region boxes visited had signalling posts whose function was to acquire 'long-range information' on train running to give the signalmen and other staff adequate time to prepare corrective action where train operations were disrupted (ie re-time connecting services, provision of relief traincrews etc). Information would come into the box from other signalboxes and then be passed to the signalmen and to other relevant staff such as traincrew supervisors. In other Western and Southern boxes this information came directly to signalmen or supervisors from other signalbox supervisors or from the Control offices. In the small signalbox at University, for instance, most of the long range information came via teleprinter messages from Divisional Controls at Birmingham and Reading. The information acquiring role of large signalboxes duplicates one of the traditional functions of the Control organization, and in those cases where specific information posts were in existence, Control was often bypassed in practice (5).

Where a specific information function existed in Western Region boxes, it was staffed by top class signalmen. The Southern Region's
policy is to employ Information Signalmen, graded at Class D. This job is used as a training ground for work on the main panels and such signalmen can be called upon to work them in an emergency. Unfortunately, insufficient boxes were visited on the London Midland and Eastern Region boxes to gauge whether those visited were representative. At the LM location visited (Central) information on train running was passed through the signalbox supervisor and through an Area Information Centre located away from the signalbox close to the Area Managers office, functioning essentially as a duplicate Control. This centre was staffed by a clerical worker whose main function appeared to be receipt and issue of teleprinter messages. As well as bypassing the Control Organization, of which the Area Operations manager was dismissive (6), this Centre made the telegraph office (located in the signalbox) redundant. Unknown to the researcher at the time, this Centre was an experiment as a prelude to the London Midland's plans to abolish Divisional Control offices and replace them with Area offices.

Another function found in Western Region powerboxes, which was not found elsewhere, was that of train recorder. The object of this job is to note down the times that trains pass certain points. This task forms a continuity with manual boxes using 'absolute block' operation since in these there is a statutory requirement for the signalmen to record the times at which trains enter and leave the area. In the Southern and Eastern Region boxes this was performed automatically by Automatic Train Reporting equipment - the microcomputer based train descriptor equipment could record automatically
where trains were through their occupancy of particular track circuits. The times that trains pass certain points is printed out automatically in the Control offices and the signalboxes themselves (7).

In the Western Region boxes the train recorder position is classed as a main signalling position and is operated on a rotational basis by the panel signalmen. As well as forming a continuity with manual traditions, it also provides a break, once a week, from the stresses of working on the signalling panels. In the London Midland Region box at Central train recording was performed by a junior Railman on the grounds that this gave a useful introduction to the time disciplines of railway operation. In the early 1970s an additional signalman had performed this task but in the early 1980s this extra signalling post was integrated into the main signalling establishment to provide relief for the panel signalmen.

Western Region policy was to eliminate use of the train recorder. In the new boxes at Stone and Devon the passage of trains is recorded automatically. At the time of the research, management was seeking to remove it from other boxes on the Region after advice from the Railway Inspectorate that train recording was not necessary in power boxes using Track Circuit Block operation. The signalmen's LDC and Sectional Council representatives argued that this function was a desirable supplement to the signalmen operating the panel itself even though it was legally unnecessary. When for instance, the equipment failed, leaving signalmen without indications of where
trains are, the train recorder was able to assist from his records.

This issue was a contentious one at the time of the research. Faced with a management deadline in summer 1983, a number of LDCs had threatened strike action across the Region. This stayed management's hand for the time being but, during the period of data collection, labour relations on the Region were often tense (8). Information received after the project was completed indicated that management had removed this function but that the LDCs had responded by requiring that the displaced signalmen stay in the mess room for their entire shifts so that their worth in 'out of order' situations would be clearly demonstrated.

Further diversity in staffing practices between the Regions can be found in the train announcing function. In general train announcing is not performed from manual boxes since it is not a traditional signalling function, and there are no marks allocated to it in the signalmen's grading system (9). In Western Region power boxes train announcing for the immediate station is generally performed in the box (though usually away from the operating console so that signalmen's 'effing and blinding' is not broadcast across the station) by redundant signalmen at retained rates of pay. On the Southern Region platform indications are operated automatically by the train describers and the Master Timetable System (10). In the Eastern and Midland Region boxes the operation of platform indications and presentation of station announcements was undertaken.
from the signalbox by clerical staff.

The lack of a uniform policy between the Regions is found similarly in the sphere of supervision. In manual boxes and early power boxes signalmen worked without direct supervision, their competence being ensured by biennial examinations on the Rules and Regulations, a test of their competence ('passing-out') to work their signalbox and regular visits from the District (now Area) Signalling Inspector. In large 'signalling centres' the opportunity was taken to put supervisors onto the operating floor. As far as could be determined by interviews this policy was not clearly articulated and it was difficult to trace when it had originally been formulated. It seemed that supervision was seen as desirable chiefly because it is the 'normal' thing to do when a number of employees are grouped together, and because it provides a point of responsibility for such an important operating unit.

As far as could be determined there was no clear, widely accepted policy on the allocation of responsibilities between signalmen and box supervisors. Interviews with signalmen, supervisors, line managers and more senior managers on the Western Region suggested that the role of the box supervisor was primarily that of a co-ordinator to assist the signalmen when normal operations were disrupted. On the Southern Region and the Eastern Region box this function was undertaken by Assistant Regulators. Where these were present, the role of the Regulator was weakly defined. The main reason for the Regulator's presence seemed to be to provide a single
point of responsibility that two Assistant Regulators could not provide. At South-Eastern the Area Operations manager was encouraging the box regulator to undertake some managerial functions, such as taking responsibility for the administration of the box, to fill this vacuum.

The Western Region Council's earlier success in maintaining some features of craft autonomy was replicated in the sphere of supervision. In response to Council pressure, Regional policy for some years had been that supervisors should be recruited from signalmen. A similar agreement was found on the Southern Region. In both cases supervisory staff did not perform any signalling functions and their guidance to signalmen was restricted to regulatory as opposed to signalling matters (12). Evidence from the one London Midland Region box visited suggested that the supervisor performed a more directive role and that signalmen's decision-making autonomy was more restricted than on the other Regions. This aspect of the division of labour maintains the Regional tradition that signalmen are more subject to Control's authority than on the other Regions. Certainly there is no management-union agreement that supervisors should usually be recruited from the signalling grade.

The Eastern Region attempted to take this further by installing an Area Controller into Sheffield signalbox in the early 1970s (Cornforth, n.d.) Regional management argued that since the information used by Control was now available in the signalbox it
would be most practical to have some of the Control organization in
the box itself. The counter argument of union representatives was
that as it was primarily telephone work the function was more
appropriately seen as a conciliation grade job. Faced with this
opposition Regional management withdrew the proposal and to this
date signalbox supervisors are not part of the Traffic Control
Organization.

The findings reported so far indicate that there has been no central
strategy on the organization of work in large power signalboxes to
match the centralized technical strategy. Instead, the Regions have
been left by BRB Headquarters to their own devices in the staffing
of these boxes. Although this finding contradicts the hypothesis
proposed at the beginning of the chapter, such evidence is
unsurprising given the Regions' traditional dominance in railway
management. What is more surprising is that the primacy of
production and engineering considerations in decision-making has not
been reflected in clearly formulated work organization policies
within the Regions. It has been left to Divisional operating
management to deal with establishment size and the division of
labour within the signalboxes. These managers' work organization
decisions essentially responded to the technical and operational
features of signalling schemes. This both reflected and reinforced
the secondary place of staffing issues to that of the quality of
the technical features in senior managers decision-making. As a
number of union respondents complained, the main problem in the
implementation of signalling schemes was not that management were
hostile to labour (as the labour process perspective would suggest) but that 'human considerations' were almost inevitably neglected by scheme designers.

Since uniform work organization policies were not integrated in the 'big box' strategy at the outset, staffing managers had been susceptible to Sectional Council bargaining objectives (13). Faced with union demands and the relative disinterest of senior managers, these managers drew on Regional traditions to guide them in deciding, box by box, staffing issues. As a result Regional work organization displayed some continuity with those in manual signalling environments. Thus, work organization within Regions displayed both diversity (according to the technical features of the box) and consistency in some respects.

The Western Region representatives have been particularly successful in maintaining craft continuity. In part this seemed to be due to managerial empathy with the sense of craft exclusivity amongst Western Region signalmen. On the London Midland Region the more restricted scope of signalmen's decision-making was similarly reflected in features of box organization. The Southern Region is something of an exception since work organization in the three large signalboxes visited was more systematic. This deviation from the norm elsewhere is explained by a number of features largely unique to the Southern Region, such as the nature of the local labour market and the complex layout of its network. Two of the boxes controlled areas that were managed by two Divisions with the result
that some measure of Divisional policies had taken place. But these features of the Southern Region notwithstanding, it seems to be the case, as Rothwell has argued (1985), that existing practices tend to substantially determine the labour management outcomes of technical change.

2. LABOUR RELATIONS AND THE SIGNALLING STRATEGY

Since the organization of production has been primarily the responsibility of the railway Regions, it is unsurprising that the strategy to concentrate signalling control was not accompanied by detailed work organization objectives. But as a number of key elements of signalling labour relations - such as payment and grading structures - are the subject of national agreements, it could be expected that top strategists would have paid more attention to the labour relations consequences of the signalling strategy. However, the findings to be reported here once again indicate that labour relations management primarily responds to technical and operating priorities.

This argument can be supported by a discussion of the signalling grading structure. Since 1922 signalmen's pay has been determined by a system of classification based on a computation of marks for the use of equipment such as signal levers. Signalmen's pay was thus determined on a sort of piecework basis, linked, in manual signalling, to effort. Since in the 'signalling centres' the
physical effort found in manual systems is virtually eliminated, and
the nature of the task shifted away from the traditional signalling
functions towards a wider operational control function, it is a moot
question whether the traditional grading system is appropriate.

However, partly because detailed attention was not given to the
likely effect on tasks of the new form of signalling, BR management
did not investigate the potential for new systems of grading.
Instead, new grades were added onto those already existing with the
result that a more complex grading system was created. The 1962
signalmen's classification agreement created two 'special' grades
on top of the existing fourfold grading to take account of the
growing size of signalboxes. A separate formula for power signalmen
was added in 1964 which took account of equipment and traffic
movements. This had to be added to in December 1967 to take
account of the growing size of boxes (14). At the end of 1967, then, there were signalmen's gradings 1-4, power signalmen A-C,
power signalmen A plus a number of cash 'bonuses', and two special
classes for very busy manual boxes, as well as a number of relief
signalmen classes.

This structure was rationalized primarily because of the widespread
interest in re-structuring payment systems in the late 1960s (see
Neal, 1970). In the Pay and Efficiency Agreements of August 1968 the
grading system was substantially simplified by eliminating gradings
that overlapped in marks terms, though the classes with cash
supplements were retained for the top end of the range. The grading
The system was vastly simplified in 1972 to provide a simple unified grading system of A-E (plus three relief grades) (15) in part as a response to the acceleration of technical change. A system of marking was adopted which provided for comparability of assessment between manual and power signalboxes. To a certain degree, this was to calm union fears that with the escalating use of ever-large control centres the signalling grade would become progressively fragmented between a small number of very large boxes and a large number of lowly graded manual boxes.

Power-signalmen took industrial action in 1972 against the new agreement on the grounds that duties were not adequately rewarded in the new agreement. As a result an extra grade (F) was created at the top of the hierarchy (16). This reflected the operational importance of the new 'signalling centres' and the power of those employees who operated them. The trend of 'buying-off' these signalmen continued through the 1970s. Regional operating managements had responded to signalmen's power by up-grading a large number of Class E boxes to F under the discretionary clause present in signalling classification agreements. This set in motion a set of claims for upgrading by a number of large signalboxes to restore 'traditional' relativities (17). Once again industrial action was ended through the reaching of a new classification agreement in 1980 (18).

This review indicates that in the sphere of grading structures management decision-making was essentially reactive.
comprehensive changes were made to agreements it was initially in response to changing objectives within the sphere of labour relations itself. Perhaps the most striking feature of labour relations in this area of change is that BR management does not seem to have anticipated that the operational importance of these control centres would pass immense power to the signalmen operating them (cf. Legge, 1978). Once again, the explanation seems to be that the strategists primary concern with the technical features of these large boxes excluded active consideration of their consequences for labour management.

3. MANAGEMENT STRUCTURE AND THE ABSENCE OF STRATEGY

Labour management objectives and policies have been weakly developed in the strategy of centralizing operational control. This provides a striking contrast to the case of footplate staff, where a comprehensive strategy was compiled in the late 1970s to re-organize the work of the latter. The explanation of this difference seems to lie in aspects of management structure.

Interview evidence indicated that there was no managerial function which had specific responsibility for developing labour management policies appropriate to technical change in signalling, and that there was no central institutional source of policy to guide
Divisional managers in their staffing decisions. Personnel managers have no input to the formulation stage of re-signalling schemes, and their practical involvement is limited to that part of the staffing process which allocates individuals to the job positions that have been created by others.

Furthermore there is no function within the operating department that is concerned with developing policy on work organization and manpower policy in the arena of signalling. By contrast, for traincrew functions there is a Traction and Traincrew Manager at BRB Headquarters who is responsible for devising manpower strategies on recruitment, training, promotion and grading. Similarly at Regional level there are Traction and Traincrew Officers responsible for devising Regional policies and implementing strategies devised at the centre. There are no equivalent posts for the signalling function. This institutional focus seems to explain why it has been possible to develop traincrew change schemes more systematically than in the signalling function.

Since this failure to develop labour strategies can be explained by the lack of an institutional focus in the managerial hierarchy, the next question must be why BR management has not developed one. Since answer of this question relies on counterfactuals it is difficult to specify the relevant variables with certainty. However, a number of contextual variables can be identified. These fall into two categories - features of the signalling strategy itself, and more long-run labour relations features.
During the 1970s no pressing need was identified by management for the development of a function concerned with manpower planning and the organization of signalling work precisely because the unemployment effects of the control-centre strategy provided a large pool of experienced signalmen. Thus there is no formalized training facility for signalmen on the Western Region and a small signalling school on the Southern Region was closed down in the 1970s. The consequences of this neglect are now becoming apparent since the pool of signalmen is drying-up. For a variety of reasons it is difficult to attract suitable labour to replace the large number of signalmen who retire in the next ten years (20). Interview findings indicated that a Working Party at BRB Headquarters was considering what to do about this but interviewees were unaware of the content of its deliberations. One possible solution under consideration is making power-signalling the second stage in an operational management career after a period of formal training (Holmes, 1984). The main obstacle to such a solution is that it would require a reversal of the principle of seniority in signalling promotions, to which union agreement would be highly unlikely. To the author's knowledge this Working Party has not so far come up with a set of manpower policies for the signalling function.

The second set of reasons for the lack of managerial interest in signalling labour management can be found in the labour relations sphere. Firstly, the existence of headquarters level specialists can be attributed to train-drivers success in achieving industry-wide agreements pre-nationalization, and national agreements post-
nationalisation, regulating not only basic pay and conditions but also many aspects of work organization. This has become more important since the 1960s as the drivers union has sought agreements to protect its members from the technical transformation of the driving function. Faced with comprehensive regulation of work and employment at this level, BR management needed to develop a management function that could plan for efficient utilisation of human resources.

In turn this raises the question as to why ASLEF has been more successful than the NUR in achieving comprehensive national level job regulation. Much of this must be due to drivers' power in the production process, and the organization of drivers in a craft union. By contrast signalmen have traditionally been isolated from each other at work and they are represented by a union of which they form only one part. It is due also to the need to oversee the utilisation of traincrews above local level since driving work cuts across geographical boundaries. By contrast the organization of signalling work is much simpler, since all that is necessary is the provision of employees to staff boxes for the duration of their shift.

ASLEF's response to technical change in train-driving was to seek national agreements regulating work organization. The NUR was unable to follow this approach for a number of reasons. First, the elimination of steam was an explicit nation-wide strategy, whilst the big-box strategy, though formulated at national level, was put
into effect over a number of years by by Regional managers. Those issues that the NUR took to national level in the 1970s were consistently met by the BRB's insistence that labour management was a matter for the Regions.

Secondly, the pursuit of national regulation was a risky path for the NUR to follow. Since Regional practices varied, an attempt to achieve standardization through national agreement carried the danger that the BRB would insist on standardization on the basis of the least advantageous option. Such a process would cause political problems between the NUR Executive and the section of its membership that would suffer as a result. For instance, there was a claim on the negotiating agenda for much of the 1970s, arising from the Signalmen's Conference, for "grounds frames, shunt frames (ie unmanned signalling equipment) to be manned by signalmen". The NUR was unable to seriously pursue this since if it failed it could have put at risk the Western practice of using 'standby signalmen.'

Secondly, the NUR's signalmen constituency was becoming increasingly fragmented between highly graded control centre signalmen and lower graded manual signalmen and it was difficult to devise a strategy which could balance these two groups. It is at least feasible that the NUR could have taken advantage of the power of control centre signalmen to win major improvements in the conditions of service of that group. To have done so would both have weakened the claim to craft continuity between the two groups and stretched the loyalty of the manual group. The NUR did take a claim to the RSNT in 1980 for
Classes D-F signalmen to be granted salaried status. However, this claim also insisted that the pattern of union representation and promotional paths be unchanged. This claim does not seem to have been pursued with vigour and it was eventually declined by the RSNT.

The main objective of the union was to preserve as many jobs as possible and to maintain traditional craft skills as far as possible. Given the potential problems outlined above it seemed best to leave discussion of technical change to Regional level where advantage could be taken of the fragmented and often ad hoc character of managerial decision-making. In these circumstances it did not seem appropriate or necessary to develop headquarters' functions to deal with the issue of technical change. The role of the NUR's Research Department (established as recently as 1979) is largely to compile information on pay and conditions of service issues (cf. Jones and Rose, 1985). In the NUR, as in ASLEF, the job knowledge and negotiating skills of lay members in the Regions are widely believed by union activists to be sufficient to deal with technical change. Thus, the absence of an explicit management function to develop signalling labour management strategies and policies is mirrored by the lack of a parallel institutional focus on the union side.

4. SECTORIZATION AND LABOUR MANAGEMENT
There is some limited evidence, outlined above, that sections of BR management is beginning to take labour management in the signalling function more seriously. Analysis earlier in the thesis has suggested, however, that current features of BR’s management structure and business strategy contain elements which make the formulation and implementation of consistent labour management strategies more difficult. Investigation of the impact of Sectorization on signalling seems to confirm this hypothesis. This can be demonstrated by attention to two areas of causal relationships: one is the effect of Sectorization on the technical strategy; the other is the more direct impact of Sectorization on labour management. Finally, the additional impact of new forms of signalling technology and the union response to it will be examined.

It soon became clear during the fieldwork that the 'big-box' strategy had fallen apart in the 1980s. Instead new signalling schemes are less ambitious and do not form part of a long-term plan. As one senior engineer put it,

"Resignalling schemes now have to be justified on their individual merits. It's no longer possible to do the big ones just because they are big. If they are not financially viable they are not done. Financial constraints are now far more overpowering than grand planning notions."

Financial stringency is part of the explanation but it is an insufficient one since cutbacks in investment funds in the mid-1970s resulted merely in the postponement of planned schemes or in longer
staging periods for schemes already underway. Instead the reason for
the strategy's demise is provided by the Serpell Report on Railway
Finances and the new organizational structures adopted by British
Rail from 1982 onwards.

Serpell argued that expenditure on railway signalling renewal should
be £30 million (1982 prices) less than the NSA forecast (Serpell,
1983, p.43). It is unclear why the Report proposed this particular
figure, but it provided a number of reasons for this recommendation.
The first was that procedures used by BR to appraise investment
schemes were inadequate, with the result that projects put forward
for authorisation often rested on a financial case that was over-
optimistic. The second was the BR management tended to 'over-
engineer' signalling schemes to meet 'worst case' operational
requirements.

Instead the Report argued that a wider range of options, including
disinvestment, should be evaluated when signalling equipment seemed
due for renewal. Where it was found desirable for renewal to take
place, it should only occur when the existing equipment had become so
unreliable that BR was unable to run trains to the timetable. Until
then a policy of minimum repairs should be adopted.

That Serpell's approach has been translated into practice on BR owes
much to the creation of the Sector management structures in 1982.
Sector management is the institutional mechanism through which
financial restraints have been translated into specific signalling
schemes. The Sector Directors, each with 'bottom line' responsibility for profit and loss accounts for their sector are responsible for investment in the infrastructure allocated to them, and no scheme will now be authorized unless it has the support of the relevant Sector Director (21).

The creation of these product management structures has dramatically modified patterns of managerial authority in the planning of signalling schemes. Prior to Sectorization, signalling projects were developed between the operating and engineering functions. The 'business' input was limited to the provision of proposed service patterns by Passenger Managers in the Divisional tier of management, from which the operators constructed an operational plan. Since 1982 the role of the operating function has been much diminished in the formulation of signalling schemes. It has been replaced in some stages of the planning process by more direct contact between engineers and business managers. As interviewees in the engineering function described it,

"The Sectors are very involved in resignalling schemes - you are wasting your time if you haven't got them in from the beginning. You have got to get the scheme supported by the business sector responsible for the line."

Interview data indicated that Sectorization has had a major impact on resignalling policy. The 'big box' strategy has fallen apart under the weight of competing Sector pressures. No formal top-level decision has been taken to end the strategy: as one engineer put it,
"nobody has officially said that the plan has been abandoned but everybody knows it has been."

In its place signalling schemes are now generally smaller and display greater technical and operational diversity. Two schemes in the planning stage at the time of data collection exhibit these characteristics. The Midland scheme, originally costed at £23 million was split into two at Sectorization, with the InterCity element being authorized in 1983 whilst authorization for Stage 2 was sought separately by the Provincial Sector in June 1985. The Northern scheme was planned as a 'big box' in 1980 but in 1982 the 'stops were put on'. The project has now been implemented but on a much smaller scale. The planners' view was that a 'traditional' signalling scheme was preferable but, since renewals were urgent on the core section, it was risky to delay that scheme through proposing a scheme that might not be authorized.

There are sound grounds for expecting that these changes to technical policies will lead to modifications in labour management policies since past policies and practices have been strongly influenced by technical and operational features of signalling schemes. An analysis of this indirect impact of Sectorization on labour management in new signalboxes is inevitably conjectural because only one major signalbox designed since 1982 has so far been brought into operation (this took place some nine months after the main phase of the research had been completed). Nevertheless, it is possible to identify trends in the twin spheres of work organization and labour relations.
Since post-Sectorization signalling schemes are less extensive than those planned in the 'big box' era, staffing levels and gradings are likely to change. The number of signalling staff needed to operate new signalboxes is likely to be much smaller than in the 1970s because the shift away from 'control centres' reduces the need for ancillary and back-up staff. Since the grading scheme for signalling staff is based on a computation of levels of traffic and amounts of equipment, the classification of new signalboxes will tend to be lower than those of 'signalling centres'.

Furthermore, since the operational characteristics of new signalboxes are likely to be more strongly determined by financial objectives than in the past, signalboxes are likely to display greater technical and operational diversity. In turn, this seems likely to inhibit the formation of new work organization policies, given the absence of an institutional function within management to develop signalling labour policies. Instead, a likely scenario is that the staffing principles of each new signalbox will be determined in an ad hoc way, just as in the early years of the 'big box' strategy.

The conflicting pressures that managers responsible for staffing face seem set to be greater than those experienced previously. They have to take into account not only the diverse features of signalling schemes and the objectives of union and workforce organizations but also the imperatives presented by Sector managers. Large signalboxes are allocated to specific Sectors and thus contribute to Sector 'bottom-lines'. As a result Sector managers take a close interest in
the formation of new cost centres, such as new signalboxes. At the same time they are relatively uninterested in the labour relations implications of their decision, since, they argue, that is an issue for production managers not business strategists.

The difficulties that this can cause production managers in designing work organization is well illustrated by the Stone case cited earlier. The Western Region policy to eliminate the function of train recording and 'standby signalmen' was the result of pressure from a number of Sectors. In the staffing of the new box at Stone, operating management had been presented with a budgetary framework by the relevant Sector which precluded the appointment of standby signalmen as the Sectional Council wanted. When signalling maintenance staff voted not to have a night shift, the Divisional operating manager was apparently let off the hook since extra signalling staff were now desirable and could be accommodated in the staffing budget overall. However, this solution was unacceptable to the Sector because of strong market pressures to cut costs. Within two days the decision was overturned by higher levels of management. In consequence workforce representatives voted for strike action. This was averted by a compromise solution that additional signalmen would be appointed to the box on an experimental basis.

The direct and indirect effects of Sectorization on signalling schemes seem likely to offer fewer jobs, lower grades and even less standard work organization policies than in the past. These features are likely to be intensified by technical developments during the
1980s. Microprocessor technology permits a variety of new forms of operation by signalmen including light pens on a VDU diagram, touch screens, computer keyboards in conjunction with VDUs, radio signalling using a combination of keyboard, VDU and radio transmitter/receiver, and Automatic Route Setting (ARS) where operation of points and signals can be completely automated (see RGI, 1984b). Which of these, if any, are adopted as standard is uncertain but what is certain is that the 'traditional' operating panel/train describer will be superceded since it forms the single most expensive piece of equipment in a signalling scheme (22).

The union response to these developments is likely to be less effective than in the past, despite the degree of success at Stone Stone. In the 'big box' era, Sectional Councils were often able to exploit the fragmented and ad hoc character of management decision-making in the staffing process. Now that the contours of decision-making are established at BRB Headquarters, the discretion of local production managers is limited. However, it is difficult for the national union organization to respond to the centralization of managerial authority since BRB managers argue that signalbox design and staffing are production matters appropriate to Regional level and below. Anyway, the NUR head office does not appear to have fully identified the processes at work in the management hierarchy. Instead, instances such as that at Stone are believed to be the outcome of more aggressive management approaches (that result from the changed economic and labour relations climate) rather than from changes in the structure of managerial decision-making. But even if
the significance of these latter processes had been identified they are difficult subjects to deal with in traditional bargaining institutions.

The capacity of the NUR to pro-act to the new forms of technology currently on trial is also limited by the prevailing grading system and the pressures from signalmen to retain the integrity of the current grading and promotional arrangements. New forms of equipment pose profound difficulties for the current grading scheme. The allocation of marks for equipment has for some years been based on lineside equipment (ie points and signals) and on discrete pieces of equipment within the signalbox operated by the signalman such as route-setting buttons, over-ride switches, levers etc. Thus, a continuity is provided in the grading system between the simple manual functions the operator performs in a manual box and those found in a power-operated signalbox. The VDU forms of operation dispense with a number of panel buttons for which credit is included in the 1980 Signalmen's Agreement. Furthermore, the 'electronic token block' form of operation dispenses with lineside signals with the result that a signalman can control a high mileage of track but be accorded a classification near the bottom of the scale.

However, if union negotiators propose alternative payment structures, then the integrity of the existing grading system could well be threatened. A successful union response is further obstructed by structural features of the labour relations system. Whilst executive committee members negotiate at national level for marks for
equipment, it is Sectional Councillors who deal with the implementation of signalling schemes in the Regions. This mis-match of bargaining structures, coupled with overloaded institutions at national level, means that it is difficult for Sectional Councillors to get a sufficiently speedy response on new equipment. This is now especially marked because the reduced size of headquarters' labour relations functions makes it more difficult to arrange meetings to deal with issues that are not of primary importance in the range of negotiating issues overall.

In 1983-84 the NUR sought to overcome some of the difficulties arising from new technology by signing a New Technology Agreement with the BRB. However, the Board refused to proceed with negotiations on the basis that the undertakings the NUR sought would prevent management from exercising its right to manage (see Transport Review, 11/2/83, 24/6/83, 13/1/84). Since then this approach has slipped from the NUR's priorities (cf. Williams and Steward, 1985). Initially the NUR responded by voting not to co-operate with the introduction of new technology but interview evidence indicated that this policy has rarely been observed by Sectional Councils since they are fearful of damaging the job or redundancy prospects of those affected by management change schemes.

SUMMARY

Although Sectional Councils continue to participate in the
introduction of signalling schemes, it seems likely that the attitudes of signalling staff and their representatives to technical change will shift over the coming years. Since the early 1970s the passive consent of rail workers and the active consent of Sectional Councillors to employment-reducing changes has been based on changes providing a number of very well paid (in railway terms) jobs, a broadly predictable (within the Regions) and humane approach by management to the implementation of change. Furthermore, the absence of a management function concerned with developing signalling labour management strategies has meant that Sectional Councils have often been able to win significant concessions in the staffing of new signalboxes. This is reflected in diverse patterns of signalling work organization between the Regions. The Western Region Sectional Council appears to have been particularly successful in achieving some measure of craft continuity in large power signalboxes.

Sectorization, the pressure on costs, and the opportunities provided by new technology could undermine the consent of the signalling workforce and their representatives to re-signalling schemes. The smaller boxes arising from Sectorization are likely to lead to fewer jobs (proportionally) and lower gradings, a development reinforced by the potential of micro-electronics technology. The change in the pattern of management decision-making seems set to stimulate diversity in signalling schemes and to increase the variety in approaches to work organization. The policies of operations/personnel management could well become less predictable particularly where they are faced with conflicting demands from the business
Sectors. It is a fair bet that, taking all these factors together, the hitherto consensual approach to resignalling will be compromised.

Despite the differences it is possible to trace continuity in signalling labour management. The main element of this is that labour management has to respond to other management priorities. In the era of the 'big box' strategy, staffing managers' decisions essentially responded to the technical and operational features of signalling schemes. Similarly, these managers now have to respond to both these technical elements and to objectives formulated by groups of management who have no direct involvement in staffing or production issues. Because the impact of these Sector managers has been to diversify signalling schemes and since the budgetary control systems on BR are now very tight, it is likely that labour management decisions, far from becoming strategic, will become progressively more *ad hoc*. 
CHAPTER ELEVEN

CONCLUSIONS
If this thesis has been at all successful some contribution will have been made to the study of the managerial role in industrial relations. Despite the now frequent exhortations by industrial relations academics to pay closer attention to management, much of the literature charting contemporary changes in industrial relations and labour management either tends to take management objectives more or less for granted or else focuses on management to the exclusion of union organizations and the dynamics of workplace industrial relations. At the outset there seemed to be a good case for examining both since attention to the latter enables some assessment to be made of the success of managements' objectives or strategies. The subject of the thesis, then, has been both objectives and outcomes.

Prior to summarizing the main conclusions that emerged from the study, it is worthwhile briefly outlining the main hypotheses that guided the research. These were,

1) the increasing importance in the 1980s of achieving commercial targets and adopting private sector styles of management decision-making would change the character of the conduct of labour management. The traditional tendency towards standardization would be steadily replaced by variety in management policies and practices. Variation in labour management would be underpinned by the subjugation of production management to new management structures created by organizational strategists to achieve business goals;

2) contrary to what might be anticipated, the involvement of
government in labour relations would not bring about consistent strategies and practices in the arenas of labour relations and work organization. This is because government priorities could well differ from those of the industry's senior managers. Furthermore, the product market strategies adopted in response to financial targets set by central government could well be incompatible with consistent attempts to steadily reduce the involvement of union organizations in management decision-making;

3) taking (1) and (2) together, the management of labour on British Rail will become more variable in ways that do not uniformly enhance managerial control of labour.

These hypotheses direct attention to the formulation of management strategies and policies, the degree of integration of business and labour management, the mediation of strategies and policies through organizational structures, and the outcomes of management plans.

Since governments have a major influence on the formation of nationalized industries' objectives, it is appropriate to consider the second of these hypotheses first. One school of thought suggests that the autonomy of public sector managements in industrial relations has been progressively diminished during the Thatcher Governments. The epitome of this development is seen to be the miners' strike of 1984-5 when Government strategy seemed to be faithfully reflected in a management offensive to re-structure labour relations and the organization of production (Beynon and McMylor, 1985). In BR's case the evidence suggests that this perspective over-states the consistency of Governmental objectives and
interventions. As far as could be determined interventions were often *ad hoc* and opportunistic and, though linked by an unchanging labour relations philosophy, failed to exhibit those characteristics of careful construction and execution necessary to demonstrate the presence of strategies.

An adequate explanation for the form that government interventions have taken cannot be provided here since this question lies largely beyond the remit of the empirical investigation mounted here. Nevertheless, one feature of the Thatcher Governments is worth briefly mentioning here. The degree of centralization within these Governments has sometimes made it difficult for government Departments to construct and maintain consistent policies in areas in which senior members of the Governments have had strong convictions. This is well illustrated by the Government's approach to public sector organizations. Until 1981 the first Thatcher Government had no clear policy objectives for the nationalized industries. It was not until 1983 that a policy towards the railways emerged. Given this lack of direction, nationalized industries have been subject to interventions at the behest of senior politicians for a variety of pragmatic, political reasons. For instance, at the point when the joint BRB-rail union calls for increased government investment in the railways seemed to be making political headway, BR's financial dependence seems to have been exploited by senior members of the Government to re-direct management attention away from the maintenance of good relations with the rail unions.
A major problem with interventions of this sort which the miners' strike inevitably obscures, is that they can disrupt management strategies that are already in the process of implementation. A good example here is the BRB's strategy to increase traincrew productivity. Once the Government decided that the BRB had to achieve a symbolic victory over the rail unions, the strategy fell apart. A comprehensive work re-organization strategy was replaced by a confrontation over a relatively minor element of the initial strategy. Since this measure became insulated from a broader strategic context, it failed to achieve the flexibility it had been designed to, failed to substantially increase traincrew productivity and failed to reduce the involvement of ASLEF representatives in work scheduling.

A counter argument could be that the outcomes of particular issues in labour-management relations are less important than the achievement of the Government's objective to diminish more generally the 'indulgence' of public sector managements towards organized labour. As a result, it is argued, the pace of change in work organization has been accelerated. With the break-up of the 'tacit alliance' at top level and the fragmentation of traditional railway culture at lower levels, it is indeed the case that workforce representatives are gradually being excluded from management decision-taking. But it is highly doubtful that the implementation of change has been quickened by this process. Some productivity items, such as the Trainman Concept, are little nearer implementation than they were in 1981, whilst extensions of single-manning of locomotives (another of
the major issues in 1981) has still not been agreed.

The forcible extension of Driver-Only-Operation in the summer of 1985 seems to be an exception to the argument presented here. Indeed, it may well be that it invalidates the arguments put forward in this thesis. Since this took place after data collection was completed, it is difficult to subject this episode to detailed analysis. However, a cursory examination indicates instead that it provides further support for the contentions presented here. In the spring of 1985 the BRB appeared to be content with the pace of negotiations on this issue. It certainly wanted to avoid a confrontation with the unions because of the need to win back traffic that had been lost during the miners' strike. However, the Government, freed from the constraints of the miners' strike, seems to have turned its attention to the railways, exploiting BR's poor financial results for 1984-5 (in large part due to the miners' strike) to force a confrontation over Driver-Only-Operation.

However, this intervention disrupted negotiations that had been taking place over the introduction of D.O.O. in Glasgow as part of a Strathclyde Rail Strategy. This strategy aimed to secure the future of the suburban network in Glasgow by boosting rail patronage and reducing operating costs. As an element of the latter, the role of train guards was to be re-defined to that provision of on-train customer service and revenue protection, thereby enabling a reduction in station platform staff establishments. Since management had guaranteed that no redundancies would result, this change in working
practices could probably have been introduced peacefully. Because Glasgow was chosen as the site for the Government-inspired confrontation, the overall rail strategy for the region was nearly wrecked by the decline in traffic levels that resulted.

With the proviso that the D.O.O. issue may prove an exception, the hypothesis that government interventions would be inconsistent with the industry's own plans to reform aspects of labour management has been largely borne out. Furthermore, this episode supports the contention that government interventions will often conflict with business strategies as well as labour management objectives. The major confrontations in the 1980s have led to large losses in revenue which so far have not been counter-balanced by reductions in costs. In this way achievement of the Government's financial targets has been made even more difficult than it was already. The strategies that have been developed by the Sectors in response to these targets in some instances possess implications for labour management which conflict with Governmental philosophies towards labour. InterCity's strategy of moving 'up-market', through provision of improved customer service, demands a more consensual approach to work organization and labour relations than is deemed desirable by Government. In this way persistent instability has been introduced into labour-management relationships. It is only in the Freight Sector, where cost competition has been particularly severe, that the strategies derived from government targets have complemented government-defined labour objectives.
Turning to the first hypothesis, the objective was to focus the investigation on the impact of organizational strategies and structures on the conduct of labour management. It was inspired by the belief that a number of current features of BR's business strategies would lead to intra-organizational diversity in management approaches to labour issues. In this way, the diversity that arises from the Government's interventions directly in the labour relations sphere would be intensified by the 'knock-on' effects of the financial targets set to guide rail management strategies. Though this hypothesis was developed in the context of BR, it could probably equally apply to many private sector organizations since BR's strategic and structural response to its market and political environment is currently similar to that of many management organizations in the private sector.

This hypothesis was borne out by the data gathered during the project. The financial targets set for BR in 1983 have contributed to growing variation in work organization and labour relations practices. In theory financial stringency is compatible with a variety of labour management practices and objectives. However, line manager have tended to resolve budgetary difficulties by varying labour practices because staffing is by far the largest component of Area budgets and is most amenable to management action in the short term. That such pressure has been keenly felt at Area level is due to a number of institutional changes that have taken place in the 1980s. Significant here are the new corporate planning and budgetary control procedures which have greatly increased central financial
control by BRB Headquarters, and the elimination of the Divisonal
tier of management. Removal of the Divisions has both made local
management units more directly accountable to higher tiers of
management and has removed an important mechanism for enforcing
standardization of labour management at ground level.

Growing variation in the practice of line management has been
reinforced by the imposition of product management structures on BR's
organization. Since each of these management units operates in a
different market environment, with separate 'bottom-lines', there has
been a move away from the traditional railway ethos of standardization
towards greater diversity in labour management practices. The
Freight sector, for whom the market context is most cost competitive,
has often paid little heed to traditional practices and, furthermore,
appears to be developing its own traincrew work organization
strategy.

The institutionalization of product management in the Sector
structures results in Headquarters' managers being more closely
involved in the establishment and monitoring of ground level
management budgets than hitherto (cf. Kinnie, 1985a). The competing
interests of the Sectors has also made the formulation and
implementation of production strategies, of which labour management
is a very important element, much more difficult. Having said this
the consistency of work organization and labour relations management
prior to the 1980s should not be over-estimated. The organization of
signalling work shows considerable diversity, whilst in the traincrew
function, where greater consistency was achieved by extensive national agreements, the involvement of union headquarters and the presence of a specific managerial function concerned with traincrews at both Regional and Headquarters level of management, depot practices nevertheless varied.

As well as growing variation in labour management, the ideological importance currently attached to taking decisions on 'business' criteria has resulted in labour management becoming more dependent on immediate business priorities. Because the authority of senior production managers has been subordinated to Sector managers, it is now difficult for the former to enforce uniform practices on the various Sectors. The 'creative tension' of Sectorization, then, has often led to ad hoc patterns of labour management since the formulation and implementation of uniform strategies has become more difficult. This is compounded by the impact of Sectorization in other areas of managerial decision-making. In the technical sphere the strategy of centralizing operational control in large signalboxes has fragmented under the pressure of competing Sectors. In turn, the diversity of signalling work organization seems likely to be stimulated.

On one interpretation the subordination of labour management considerations to business priorities could be seen as desirable since, it could be argued, production has been made to flexibly respond to commercial considerations. This could be the case if there were no impediments to the translation of business into production
objectives. But on BR the continuing strength of union and workplace organizations prevents this from happening. Instead, the variations in labour management provide a continuing supply of grievances into the labour relations machinery. In turn, the deterioration in labour relations that has arisen has resulted in workforce organizations taking a less cooperative attitude to management change schemes than in the past. At the same time, where radical work re-organization strategies are developed by individual Sectors, the chances of them being fully implemented are minimal since union organizations are unlikely to consent to them. In some circumstances there will be restraints imposed by other Sectors on their forcible introduction since the potential costs of disruption would significantly outweigh any benefits that accrue to them.

The pressures arising from the management re-organization have made management's organization of work more ad hoc in character, whilst at the same time have led to a deterioration in labour relations. This has been accentuated by periodic pressure from Government on the BRB to make stands on labour relations issues.

This process has directly conflicted with the Government's objective to diminish the organizational salience of 'traditional' labour relations. To respond to Government pressures, the BRB compiled a number of reforms to the labour relations machinery (which were presented to the rail unions towards the end of the period of data collection). These included tighter restraints on the movement of issues between levels of the machinery and the abolition of the
Railway Staff National Tribunal. However, these changes have not been implemented because the progress of issues through the machinery provides higher levels of management with some capacity to enforce some degree of standardization on labour management, whilst the traditional function of the RSNT as an escape valve has become especially important as labour relations tensions has steadily risen (cf. Chadwick's comments (1983) that resort to arbitration is still seen as valuable to managers and stewards as a means of saving face in difficult labour relations situations).

BR has not always been able to respond adequately to labour relations tensions because of the diminution of the role and executive authority of the personnel function in the 1980s. As in many private sector organizations, the personnel function has been re-structured so as to promote business considerations in management activity and to increase the pace of management decision-taking. In the decentralization of personnel management to Area level and the weakening of personnel's organizational status, one source of standardization of labour management practices has been removed. The ground level personnel function has been unable to take on this task because the conception of the role is to provide support for resourcing management, whilst modifications to career patterns have removed a source of knowledge of agreements.

At the same time, the weakness of the personnel function has made it difficult for BR management to formulate and implement personnel policies with that degree of sophistication and consistency necessary
to channel the conduct of employee relations away from traditional patterns. Although senior BR managers would like to move towards a more consultative mode of employee relations, the combination of tight financial controls and looser controls on personnel issues, results in local managers often reducing, rather than extending, the scope of consultation. At the same time the weakness of the personnel function has meant that consistent strategies to build up alternative forms of employee participation and communication, such as quality circles and team briefings, have not been formulated. At the time of writing (June 1986) there is some evidence that individual managers are attempting to introduce institutions of this kind but since they are introduced in a context of deteriorating labour relations, without the broader support of other personnel policies, they are easily stymied by union opposition.

The second hypothesis was decisively borne out, then, by analysis of the data collected from BR. The third hypothesis postulated that because of the developments outlined so far management control of labour management may well be diminished despite the apparently favourable conditions for management in the 1980s. It is not possible to decisively answer this hypothesis since it has been argued that the notion of a uni-dimensional 'frontier of control' is not meaningful. Instead a number of dimensions of control can be identified but which do not add up in any simple calculus of control. Furthermore, changes to the status of particular controls do not have any obvious consequences for control. What can be stated with some certainty as a result of the project are the following. First, the
removal or reform of workforce job controls, as in the case of flexible rostering, may not lead to an increase in management's control of work organization. Second, increases in senior managers' control of their subordinates, may lead a loss of broader managerial control of labour management.

Drawing these findings together, the main conclusion that emerges from the research is that the management of labour on BR during the 1980s has become less consistent and that in many ways it is coming to display an *ad hoc* character. This conclusion has a number of implications for the literature on management strategies and the management of labour. It seems likely that the 'management offensive' perspective is mistaken because however aggressive management conduct is at certain times, management approaches to labour relations and work organization do not display the degree of consistency this perspective ascribes to them. Leaving the major confrontations aside, the widespread changes in working practices on BR appear to be the sum of unconnected managerial actions rather than the outcome of a carefully constructed over-arching management strategy. Indeed, the current form that the organizational structure takes appears to make the formulation and implementation of coherent labour management strategies problematic. Since the direction that BR management is taking in strategy and structure is mirrored by many private sector organizations, it seems possible that labour management in these firms could come to display similar characteristics, particularly now that the labour market power of skilled workers is rapidly increasing. Thus, many of those accounts
in the business press which point to enhanced strategic capabilities of many firms and the new management structures associated with them may be painting something of a rosy picture of the practical outcome of these in the internal operations of them. Similarly, those more academic accounts, such as that of Kinnie (1985a), which argue that the reformulation of management authority has heightened central control of labour relations may well be wrong.

The new structures certainly heighten budgetary control of lower tiers of management. But it is precisely these pressures which, in BR's case, are leading to diversity in the conduct of labour management. Some may wish to argue that this is a secondary issue compared with the long-term health of British industry. But if BR's experience is representative, and if managerial ability to formulate labour and production strategies is not improved, it could well be that over the coming years many British companies will not be able to adequately adjust their internal operations to meet the rapidly changing challenges of the external environment.
Chapter One.

1. Batstone, Ferner and Terry (1984) make a similar point about the labour process perspective. They point out that writers in this school tend "to see labour strategies flowing unproblematically from the goals of the capitalist firm" (p.2).

2. Kinnie (1982) suggests that it is not worthwhile for management to create bargaining structures away from the main source of management authority since union representatives will bypass them once they discover the managers involved in them have restricted discretion.

3. The project conducted by Michael Rose and Bryn Jones is 'Procedural and Organisational Frontiers in British Industrial Relations', ESRC Grant Number HR 7504.

4. No progress has been made on the Trainman Concept and it seems unlikely to be implemented in the near future. Following protracted discussions on the revision of the Manning Agreements to extend single manning, the BRB submitted their proposals in late 1985 to the industry's arbitrating body, the Railway Staff National Tribunal. Since the rail unions argued against the BRB's proposals on safety grounds which the Tribunal members felt unable to pass judgement, they proposed in May 1986 that the issue be submitted to the Railway Inspectorate of the Department of Transport since that institution is responsible for overseeing railway safety (see Financial Times, 20 May 1986).
5. The functions of railway guards and signalling maintenance staff were also briefly examined since the opportunity arose on four occasions to conduct a small number of interviews with such staff. Fieldwork results suggested that these groups would provide a focus for future work re-organization schemes (after data collection had been completed). These findings were confirmed by the dispute over the displacement of guards on Driver-Only-Operated trains and the threat of industrial action against reorganization of signalling maintenance in summer 1985.

6. The National Signalmens' Conference is one of eleven grade conferences that take place within the NUR annually. They have been held since 1932 and provide a limited forum for specialist organization within the industrial union. The conference can deal only with issues specific to the individual grade, and make recommendations to the union's Executive Committee (see Bagwell, 1982, pp. 106-8).

Chapter Two

1. Clegg argues that there is not much to choose between pluralist and Marxist approaches to industrial relations since both are able to examine processes as well as institutions (Clegg, 1979, Ch. 11). However, since radical approaches tend to group a wider range of management-labour relationships under the heading of 'industrial relations, they sometimes tend to imply a degree of
consistency between work organization and labour relations practices which is not actually present

2. Richard Edwards notes that most practices that form strategies of bureaucratic control are introduced in a piecemeal way in response to events.

3. Indeed, the main trend in organization theory in the 1970s has been a critique of the assumption of rationality in management writings. See Bryman (1984) for a useful review of this literature.

4. One recent article has suggested that 'control' provides an ideal concept with which to bridge the separate disciplines of industrial relations, organizational studies, management science and industrial sociology (Storey, 1985b).

5. Some accounts have shown how employees adopt methods of 'making out' (ie of subverting managerial controls) to cope with the pressures of 'Taylorist' work environments which in effect result in self control (Buurawoy, 1979).

6. It is this point that management decisions can have significant effects on labour management even though they not aimed at labour that lies behind Child's rejection of the stringent approach to 'strategy.'
Chapter Three

1. Ministers have often argued that industry Boards are responsible for day-to-day management as a reason for failing to supply detailed information on industry performance to Parliament (Minkes, 1985).

2. A welcome exception to this is Channon's review of service industry structure (1978).

3. Much of the deliberations of the Select Committee on Nationalized Industries' investigation of British Rail was taken up with this question of labour productivity. See SCNI (1977).

4. The structure that nationalized industries were given was called the 'Morrisonian Corporation' after the Labour politician Herbert Morrison. The London Passenger Transport Board created in the 1930s by Morrison was the first corporation to embody the division of responsibilities between the elected authority and the industry Board subsequently adopted by the 1945-50 Labour Government for running the nationalized industries.

5. Commencing with the Report and Accounts for 1984-5 (BRB, 1985), the main statutory obligations on the Board have not been published in the Report and Accounts. It is not clear whether any significance should be attached to this. However, the requirement established by the government in 1983 for the InterCity Sector to
run on entirely principles could be seen to conflict with the statutory obligation (and EEC law - see note 6 below), enshrined in the 1974 Railways Act, on the BRB. With the current emphasis by the BRB on running the railway as a business it may have been thought best not to draw attention to such inconsistencies.

6. The 1974 Railway Act was the legislative response to EEC Regulation 1191/69 that railway administrations should provide an adequate transport service and that compensation should be paid to them for any financial burdens that arose in consequence.

7. The meaning of 'socially desirable' was never defined and was essentially decided, case by case, by the Minister of Transport. Cost benefit analysis of unprofitable lines was first used in 1969 to analyse the Cambrian Coast line but, though used on a number of occasions in the early 1970s (Dodgson, 1984), it was never systematically used to guide rail policy. With the exception of the Victoria tube line in London, rail investment has never, unlike road expenditure, been subject to such forms of evaluation.


9. As one historian put it, "we can only assume that their (the Stedeford Committee) criticisms were so frank and brutal that the position of the Transport Commission would have been rendered
It is questionable how original the proposals in the Beeching Report for the creation of liner freight trains were. An account by a former General Manager of the London Midland Region suggests they were already well in hand (Pearson, 1964). Similarly, Beeching's claim that railway costs had never been systematically analysed by railway management was not strictly true since a Traffic Costing Service had been set-up in the 1950s. As Pryke (1971) has suggested Beeching was probably trying to emphasize that the new policies were a decisive break with the past.

Sir Peter Parker had pressed the Government for some time to establish a comprehensive inquiry of railway finances and objectives. It seems to have been anticipated that the outcome of such an inquiry would put the Government-Board relationship on a clearer and firmer footing, possibly through the passing of a new Railways Act (see Parker, 1982).

Strongly influencing the Secretary of State was pressure from Conservative back benchers with Parliamentary seats in rural areas. See Financial Times 21/1/83.

The NEDO investigation suggested that the Heath Government's pricing policy towards the nationalized industries was a very significant cause of the deterioration of government-industry
14. The Modernization Plan proposed that £1200 million be spent to reequip the railways (BTC, 1956). The scale of the programme was subsequently revised downwards after the highly critical report by the Select Committee on Nationalized Industries in 1960 (see BTC, 1961).

15. Government approval is required for individual investment projects costed at more than £5 million. There is also a 'courtesy' arrangement that the Board supplies the Department of Transport with details of all projects costing more than £1 million.

16. Governments have not been averse, however, to 'massaging' the presentation of financial information where it suited them. One managerial respondent noted that expenditure on Continuous Welded Rail (to replace jointed track) had been debited to Capital Account at the end of the 1960s rather than Revenue Account (as was the usual practice with such types of expenditure) so as not to detract from the claim that the 1968 Transport Act had put railway finances on a sound footing.

17. See Bagwell (1982, Ch. 7) for an account of the disputes between the rail unions and the Board in the era of the Industrial Relations Act.
18. See Joy (1973) for a comprehensive account of railway management costing techniques in the 1950s.

19. This analysis was less explicitly made by managerial respondents. There are a number of reasons for this. As is widely found, managerial respondents tend to be more circumspect generally in responses to research investigation (Wood, 1982). In the specific case of the railways, most of the most senior rail managers of the 1970s have now retired as it has traditionally been the practice that senior headquarters positions are occupied by managers towards the end of their careers. By contrast, senior positions in the rail trade unions seem to be gained at an earlier age, and, since many of them are elective, it is more difficult for the union organizations to formulate such selection criteria.

20. Around 70% of local BR managers interviewed in a survey conducted by Christine Edwards (1982b) said that they could rely on staff to put in extra effort or change their rostered duties 'always or most of the time'.

21. There are, of course, difficulties associated with the notion of 'culture' as a unitary concept. It is difficult to define and hence to operationalise. As Pettigrew (1979) has noted, it is best regarded as a family of concepts, embracing symbol, language, ideology, ritual and myth.

22. See ASLEF (1980) for accounts of the 1955 footplate strike.
23. Similarly major reductions in workforce size in the coal industry have been achieved since the 1960s without conflict (until 1984). Good relationships between Coal Board and mining industry unions similarly seem to be responsible (see Turner, 1984).

24. This view is well expressed in the Financial Times of 29/8/81.

25. The government believed that the Serpell Report was 'rubbished' pre-publication by a 'dirty tricks' propaganda unit operating within the BRB Press Office (see House of Commons Transport Committee, 1983).

26. Even many ardent supporters of privatization believe that privatization of core railway activities are not feasible. Since railway operations make widespread use of large fixed assets (such as earthworks and bridges), and hence incur high fixed costs, it is conceded that railways could be a natural monopoly (Starkie, 1984).

27. The wording in the 1984-5 Report and Accounts (BRB, 1985), which makes no reference to a definite timescale suggests that this requirement may have been dropped. Certainly, interviews conducted by Isaacs (1985) indicate that senior BR managers thought the government would adopt a lenient approach if Intercity failed to reach its profitability targets.

28. Until 1983 authorization was on occasion given to investment which
did not meet the Required Rate of Return if it was essential for the operation of the 'social' railway since BR was under a statutory obligation to maintain passenger services at a similar level to those in 1974 (see Monopolies and Mergers Commission, 1980).

29. The Ridley Report was leaded to the Economist, appearing in the issue of 27/5/78. It advocated a process of privatization and commercialization of the nationalized industries. To cope with the labour relations consequences of this it proposed that large stockpiles of coal be built up at power stations, that plans should be made for importing coal and oil in the event of a long strike in coal mining, that transport haulage firms should be encouraged to recruit non-union drivers, that strikers' welfare benefits should be restricted and that a large mobile force of police be formed to deal with picketing and social disorder.

30. Jessop, Bonnett, Bromley and Ling (1984) argue that the content of the Thatcher Governments' actions is not as consistent as the style of the Prime Minister may suggest. Similarly, Riddell argues that "these Marxist commentators (Hall and Jacques, 1983) have conferred on Thatcherism greater coherence and consistency that it has had in practice. Many of the actions taken since 1979... were much more a response to the failures of earlier policies and to short term pressures than the implementation of a carefully worked out blueprint" (Riddell, 1983, p. 19).
31. In the 1984 pay round the Board insisted that the pay award be tied to commitments by the rail unions to make progress on extension of driver only operation on passenger and freight trains and the extension of single manning of locomotives. Faced with an overtime ban and work to rule by the NUR and ASLEF, the Board eventually climbed down. It was subsequently revealed in the Daily Mirror that the Government had intervened to achieve this since it was fearful of solidarity action with the miners being extended.

32. In the 1985 pay round the Board, contrary to standard practice in recent years, did not table any productivity commitments to be tied to the pay award. Since this took place after fieldwork was completed it was not possible to get any 'inside' information on why this was the case. It seems a reasonable hypothesis that the Board was anxious to avoid conflict with the rail unions since now that the miners' strike was over the Government may have taken such an opportunity to place additional demands on BR management. On this interpretation the dispute in summer 1985 over driver-only-operation was the result primarily of the Government taking advantage of BR's poor financial performance in 1984-5 to press home its belief that rapid progress should take place on productivity issues.
Chapter Four

1. For a contemporary account of trade unionism and labour relations on the railways in the early part of the century see Cole and Arnot (1917).

2. The railways were by far the biggest road haulier and bus operator by the outbreak of World War Two (Thomson and Hunter, 1973, p.130).


4. Source: personal communication from TSSA, February, 1986. Seglow, Streeck and Wallace (1982) found that in 1975 20% of TSSA's membership was employed outside the British Railways Board. The growth in membership employed outside the BRB seems to owe a lot to the privatization of Sealink and British Transport Hotels. The TSSA was unable, however, to supply details of the impact of this.

5. For histories of ASLEF see Raynes (1921) and McKillop (1950).

Specialist enginemen's unions are found in numerous other railway administrations (see Seglow, Streeck and Wallace, 1982 for the German case), though in France the locomotive drivers' union merged with the industrial union during the period of syndicalist fervour just before World War One (Stein, 1978).

7. Since the function of the Rule Book is to maintain safety in railway operations, this set of instructions as accepted as beyond the scope of negotiation by the rail unions. In turn, railway managements have not generally sought to achieve reform of working arrangements via changes to the Rule Book.

The NUR and ASLEF's trust in rail management's integrity here has been shaken by events in the driver-only-operated trains episode. In response to ASLEF's claim that driver-only-operated freight trains BRB managers claimed that the Railway Inspectorate (responsible for overseeing railway safety) had suggested to the Board that this was not necessary. It subsequently transpired in a meeting between the two unions and the Inspectorate that the latter had merely noted the BRB's plans and had not made any judgement on their safety aspects.

8. This figure is based on a computation of the number of footplate staff employed on BR in December 1983 (see BRB, 1984c) and the number of members on BR claimed by ASLEF in the EC Report to the Annual Assembly of Delegates, 1984.


10. A breakaway union of signalmen from the NUR - the Union of Power
Signalmen - was formed after the Second World War but with the death of its founder it seems to have collapsed (Bagwell, 1982). The records of the union are deposited in the Modern Records Centre at the University of Warwick.

11. This legislation amalgamated the railway companies into the 'Big Four'. Grade councils, similar to the present-day Sectional Councils, were created in each of the new companies to deal with work arrangements whilst industry-wide bodies, the Central Wages Board and the National Wages Board, dealt with issues of pay and conditions. These statutory arrangements were largely a continuation of wartime practice when the railways had been under government control. See Bagwell (1963, Ch. 16).

12. Issues of lesser importance, arising from ambiguities in national agreements can be submitted to the RSNT Chairman for interpretation.

13. The 1978 Warwick survey found that 11% of manufacturing establishments were subject to company level agreements (see Brown, 1981, p. 8).

14. At some footplate locations collective interviews took place in which it was not always possible to establish the branch involvement of all those present. Since the basis of signalling LDC representation is not the same as in the case of the footplate grades - with often only one signalling member on the LDC branch -
involvement overall is likely to be lower. However, the fairly high involvement reported here is probably due to the fact that most signalboxes visited had their own specific LDC.

15. The approach to trade union democracy here is not a rigorous one. Martin's (1968) argument that democracy varies according to "the status of the opposition", in effect the constraints on the leadership ignoring opposition, is not entirely helpful since factional competition is formally discouraged in the NUR and is inhibited by a sense of craft loyalty to the existing leadership in ASLEF. Furthermore, it takes little account of how leaders can defeat oppositions politically, possibly through playing-off different factions against each other. The main element of the democratic ethos identified here is that individuals have fairly easy access to the institutions and positions where union policy is created or strongly influenced.

16. The bargaining teams are usually composed of two or three Executive members and an Assistant General Secretary.

In the NUR Executive members are elected for three years. At the end of this period, these members are not eligible to stand again for another three years. Elections for the NUR Executive are staggered so that the composition of the Executive changes every year. ASLEF Executive members are elected for three year periods but are eligible to stand for re-election. In the TSSA Executive members are eligible to stand for re-election once before
returning to full-time employment.

17. A comparison of total union income with levels of expenditure incurred on administration illustrates the small size of the full-time NUR organization. Whilst in 1983 the TWGU spent 72% of its income on administrative expenses, the GMWU 65% and the NUM (like the NUR, an industrial union) 59%, the NUR spent only 43%.


18. See Financial Times 8/7, 10/7, 23/7, 5/8, 10/8, 13/8/85.


20. This question was not specifically put to LDC respondents but the answers to other questions on workplace labour relations strongly indicated that LDCs function separately.

21. Shortly before the interview took place the joint LDC committee had threatened strike action against a managerial proposal to withdraw a nursing post at the workplace.

22. Railway Staff Joint Council (Locomotive) Minute L574.

23. Edwards recognises that the access of LDCs to Sectional Councils and higher levels of management is an important dimension of workgroup power but it is treated as an exogenous variable. The
contention here is that the involvement of these higher levels is an integral part of workplace labour relations.

24. Other research in progress whilst this project was being conducted includes work undertaken by Southampton University's New Technology Research Group into computerised freight traffic monitoring and changes in freight yard supervision (see Dawson, other refs), and research into re-signalling schemes and new forms of footplate work organization by the Jim Conway Foundation. As far as can be established, neither group has paid any attention to the involvement of Sectional Councils in the implementation of change.

25. See Bagwell (1982, Chs. 5 and 6) and McLeod (1970, Chs. 9 and 10) for extensive discussion of the Pay and Efficiency Agreements.

26. At the two negotiations sessions attended by the author, 31 out of 52 and 10 out of 15 items related to claims that the allocation of staff had been done incorrectly by line management.

27. The Secretaries and Chairmen of all Councils are booked-off normal duties full time.

28. The drivers' Councils refuse to arbitrate in the allocation of work between depots on the basis that it is management's job, not the union's, to allocate work. Traffic Councils are generally prepared to liaise with service planning managers to settle issues
of work allocation between depots.

29. Two Councillors interviewed recorded the reluctance of district officials to get involved, and stated that management often turned to the Council for assistance in such matters.

30. This definition is the one adopted by Christine Edwards in the North East London Polytechnic study (see Edwards, 1982a).

31. This finding could have been influenced by strong personal antipathy between the managers concerned and the drivers' LDC Chairman. Labour-management relationships at this depot were of some concern to both Sectional Council representatives and Regional industrial relations management. It was decided to establish a Joint Enquiry into this depot at a negotiations session attended by the author.

32. Both guards depots visited had their own LDCs separate from other grades of staff.

33. On the Western Region it seemed to be the practice for signalmen in power boxes to have their own LDC whether or not there were sufficient numbers of staff at the location to formally justify separate representation. To achieve the requisite number of staff signalling staff at other locations were included. At the London Midland power box where there were insufficient numbers of signalling staff in the power box to justify a signalling LDC,
the signalling staff shared an LDC with platform staff.

34. Whilst footplate LDCs generally insist on covering vacancies on a daily basis, with each allocation decision being made on the basis of seniority, the guards' LDCs interviewed were happy to re-allocate staff on a weekly basis according to personal choice.

Chapter Five

1. The Scottish Region adopted a two-tier structure of Region and Area in 1968.

2. It is said that when Mrs Thatcher visited BRB Headquarters shortly before being elected to power she strongly implied that any manager worth his or her salt would not work for an organization as inefficient as British Rail (Taylor, 1981).

3. As Chandler puts it in *The Visible Hand*,

'It meant the employment of a set of managers to supervise these functional activities over an extensive geographical area; and the application of an administrative command of middle and top executives to monitor, evaluate and co-ordinate the work of managers responsible for day-to-day operations. It meant, too, the formulation of brand new types of internal administrative procedures and accounting and statistical...
controls. Hence, the operational requirements of the railroads demanded the creation of the first administrative hierarchies in American business (1977, p.87)

Some of the earliest works on management organization took the railways as their subject. See, for instance, Findlay (1891).

4. The railway companies were forced to give considerable thought to their managerial structures after the amalgamations of the 1921 Railways Act. Three of the 'Big Four' continued to use the departmental form, whilst the London and North Eastern Railway (LNER) adopted a decentralised management structure based on four (later three) areas (see Bonavia, 1971, Chapter 2; Bonavia, 1981, Chapter 1). Indeed, the LNER can be counted amongst the pace-setters in British organisations in adopting divisionalised structures. Its adoption of a decentralized structure based in large part on the main constituent companies avoided some of the problems of managerial rivalry arising from the amalgamation. By contrast, the highly centralized departmental structure adopted by the London, Midland and Scottish Railway (LMS) was aimed at enforcing standardization of operating practice on its diverse constituent companies.

5. Gunz and Whitley's research on managerial cultures (1985) finds that organizations characterised by a 'specialist' managerial culture, exemplified by those with strong departmental structures, have responded to the current recession by either consolidation of
their existing activities or retrenchment, whilst organizations built on a 'generalist' culture have behaved in an entrepreneurial mode and have generated new business strategies.

6. The relationship between the British Transport Commission and the Railway Executive was marked by intense rivalry. Whilst the BTC perceived its role to be to integrate the various modes of transport grouped under its aegis, the Executive viewed itself as the inheritor of the railway companies traditions. As a result the Executive believed it was best qualified to run the railways and hence attempted to minimise the involvement of the BTC in formulating railway policy. The Railway Executive largely excluded the Commission from the locomotive building programme with the consequence that new classes of steam locomotive were being built long after the technical and economic superiority of diesel traction had been recognised. When the strategy of dieselisation was formulated after the demise of the Executive, it was decided to make up for lost time by rapid dieselisation. The result of this was that a large number of unproved and unsatisfactory classes of locomotive were ordered, many of which saw only a few years service before being withdrawn. See Joy (1973) and Bonavia (1971).

7. Fiennes was asked to resign from British Railways after the publication of his book, *I Tried to Run a Railway*, (1967a), since it was highly critical of railway management policy.
After the abolition of the Railway Executive, the British Transport Commission requested the Regions to draw up plans for re-organisation. The Eastern and London Midland Regions adopted a 'Line' scheme whereby Line Managers reporting directly to the Regional General Manager were responsible for specific lines of route with functional managers to assist them. The other Regions created geographically-based Divisions which in the case of the Scottish and Southern Regions were based upon virtually self-contained railway systems. Beeching standardized the pattern of federal decentralization within the Regions upon such geographically based Divisions (see Bonavia, 1971).

The structure has been criticised for embodying the pretence that the BRB is a 'genuine' diversified conglomerate whereas in reality it is a primarily a railway business with a number of ancillaries (Modern Railways, 1976a).

Many British M-Form firms differed from their American counterparts by possessing three rather than two tiers of management organization above the workplace. The relative importance of growth through merger in the British case seems to lie behind this. When levels of unemployment were low compared with those of the 1980s it was often difficult for firms to fully digest their amalgamations through creation of more 'rational' structures because the potential unemployment effects would have been politically unacceptable. See Child and Francis (1981).
11. 60% of the Freight Sector's turnover comes from trainload 'merry-go-round' coal traffic from pit to power station. This traffic is forecast to decline and Sector managers have sought to develop the wagonload Speedlink service. However, the unit costs of this activity are currently around 30% higher than road haulage, whilst the severity of price competition offers limited scope for competing on quality. As a result the Sector has to pay particular attention to cost containment.

12. Some idea of the magnitude of InterCity's task is revealed by the loss of £232.6 million on a turnover of £577.2 million in the fifteen months to March 31st 1985 (BRB, 1985).

13. The Serpell Committee was particularly critical of the process of corporate planning and indeed rejected the 1982 Corporate Plan prepared especially for their investigation for a combination of the reasons outlined here. See Serpell (1983).

14. The method of allocating joint indirect costs prior to 1969 was that of allocating out all costs of track, signalling and overheads according to the use made of them. It was given up as a guide for management decision-making because it gave misleading information on service profitability (Lazarus, 1978; Fowler, 1977). It nevertheless continued in use for the assessment of joint costs required by the Ministry of Transport in respect of grant-aided services.
This basis of costing was modified by the 1974 Railways Act. Since this legislation defined the prime function of BR as that of a passenger railway, freight and parcels were only to be charged their avoidable costs ie that share of joint indirect costs that could be specifically attributed to them. For passenger services the BRB adopted a system of contribution accounting whereby the direct costs of a service were subtracted from the revenue and the balance viewed as a net contribution to joint costs.

15. cf. Brown and Sisson's suggestion (1983) that more aggressive management of labour relations probably owes more to desperate market situations than a purposeful 'management offensive'.

16. At mid-April 1984 there were 255 footplate depots on British Rail. Source: ASLEF Circular, 144/1984. The long term plan is to reduce this number to 35 'super-depots'. A review of depot strategy took place between the rail unions and the BRB in summer 1984 at which information was supplied on depots that were safe, those that were scheduled for closure, and those whose future was uncertain.

17. Freight management is also apparently considering the reintroduction of overnight stays away from home for traincrews (see Locomotive Journal, May 1986) but such a measure seems highly unlikely to be implemented since the rail unions are unlikely to agree to it, and it is not in the other Sectors' interests for it to be implemented forcefully. InterCity, for instance is unlikely to want its services interrupted by industrial disputes over an
issue of this sort because of the need to win customer confidence to achieve the Sector strategy and because the current location of traincrew depots is largely satisfactory for the Sector's services.

18. On the Southern Region functional management teams had to be constructed prior to two-tier.

19. Between 1978 and 1982 loaded train miles fell from 246 million miles to 212.2 (see BRB, 1983). Many Areas in the late 1970s were composed of around 1000 staff. In many cases this was down to around 600 by the time of two-tier. As a result it was possible to amalgamate Areas as an element of two tier and for the Areas to be managed direct from Region without the Regional General Manager's span of control becoming too wide.

20. The application of micro-electronic technology to operating and management functions appears to offer the potential to cut out those middle ranking managerial functions which were concerned with information processing (Child, 1984).

A good example is the Manpower Information System (MANIS) for personnel records. Traditionally, a major element of the Divisional personnel function's role had been the maintenance of personnel records. With MANIS retrieval of staff information could be done directly from Area. At the time of the research, input of personnel information had been concentrated away from
Division to Regional level but it was planned that this would be centralized to Areas.

21. This experiment has now been ended with the result that Western practice has been brought more into line with the other Regions.

22. See BR London Midland Region, 'Precis for the re-organization of the Euston, Watford and Willesden Areas', (1984). See also Modern Railways (December 1985). A former operations manager has strongly criticized this move to sector-specific Areas on the grounds that the function of the Area is to coordinate the needs of all the Sectors in production terms. See Rayner (1985).

23. Operational statistics are hard to come by on the grounds that they are sensitive commercial information. The breakdown of figures that BR publicly provides does not correlate with Sector definition of services so it is difficult to evaluate the true picture. Some interview responses suggested that there was concern in top management circles at a deterioration but how far this was the result of the re-organization is hard to say. The level of public complaints rose significantly in 1985 but once again it is not easy to determine how far this can be attributed to two-tier. See Central Transport Users Consultative Committee (1985).

24. The new form that the disciplinary process has taken was strongly criticized by union respondents in interview. They argued that,
with the elimination of the Divisional role, Area Managers could become prosecution, judge and court of appeal. Legal action has recently been threatened by ASLEF on the grounds that in certain cases this could breach 'natural justice', in that no person should be the judge in their own case. See Daily Mirror (21 April 1986). The Board now seem to be taking this issue seriously.

25. Many current senior managers have this background. Of those interviewed only two were graduates. All the others had commenced their working careers in clerical or blue collar jobs.

26. Of the two that weren't ex-footplate staff, one was an appointee since the two-tier re-organization.

Chapter Six

1. MacKay argues that 'macho-management' is widespread on the basis of responses that managers are more 'bullish' in the conduct of labour relations. This response could indicate that managers are more confident in their conduct of labour relations than hitherto but it does not necessarily show that managers are becoming consistently more aggressive against labour.

2. The two factors Manning mentions as contributing to this decline is falling demand for recruitment work and a loss of faith in
existing management development principles and schemes.

3. The employee relations component of personnel work includes sevicing forms of employee representation and involvement additional to the traditional institutions of labour relations.

4. The consequences of the failure to distinguish labour relations from other personnel management is shown by explanations for the growth in personnel management during the 1970s. The survey evidence indicates that the extent of collective worker organization is not a significant factor behind the increased specialization of management organization in personnel affairs (see Brown, 1981). Yet there are strong intuitive grounds for suspecting that there will be strong causal relationships between workforce organization and specialist labour relations management.

5. In the railways case, John Benstead, the General Secretary of the NUR, was appointed to the BTC whilst ASLEF General Secretary William Allen was appointed to the Railway Executive.

6. All personnel managers interviewed bar one had joined British Rail in clerical or blue collar positions. One area traincrew manager interviewed had been a Sectional Council representative. Cliff Rose, the Board Member for Personnel at the time of the 1982 strikes had started work on the railway as a booking office clerk.

7. Analysis of survey evidence indicates that the influence of
personnel managers steadily decreases the further the subject is removed from immediate industrial relations concerns (Batstone, 1984).

8. Batstone 1983 survey finds that the proportion of firms with specialist personnel Board representation was unchanged from 1978 (Batstone, 1984). In two organizations studied by Purcell, the retiring personnel director had not been replaced in either case (1985).

9. The evidence on trends in the location of pay bargaining is inconclusive so far. An IDS study in 1981 found that some firms were centralizing whilst others were decentralizing (IDS, 1981). Batstone's survey finds a decrease in the importance attached to establishment level bargaining between 1978 and 1983, and smaller corresponding increases in company and multi-company bargaining (the balance being taken up by an expansion of unilaterally awarded pay deals (see Batstone, 1984, p. 203). Kinnie, by contrast, suggests that a decentralization of the location of pay bargaining is taking place (Kinnie, 1985b).

10. Prior to this there was a Board Member for Personnel. Reporting to this position was a Director of Industrial Relations and a Director of Personnel Development. Directors of Employee Relations and a Director of Management Services now report to the Managing Director, Personnel.
11. It is believed the appointment of part-time outsiders will encourage the creation of more business-oriented strategies since such members will not have any loyalties to current organizational practices.


13. Since two-tier personnel work for the engineering functions has been undertaken by personnel managers located within each of these functions. See British Rail, Eastern Region 'Precis on the two-tier re-organization; personnel function' (1984).

14. Whilst the fieldwork was underway, two Regional Personnel Manager posts that came vacant were filled not as traditionally by managers already reporting to them but by 'outsiders'. In one case the incoming Personnel Manager had been a member of the Soane Committee at BRB HQ that had devised the two-tier re-organization.

15. Footplate representatives were particularly critical of this since the footplate promotional arrangements are especially complex.

16. In some cases local workforce organization have taken industrial action for the first time. Certainly the number of disputes on the railways increased dramatically in 1984 from an average of 13 per year between 1978 and 1983 to 33. Source: Department of Employment Gazette, various issues.
17. The thinking of a number of BRB strategists was strongly influenced by Peters and Waterman's book on excellence (1982). A good critique of the corporate culture 'craze' is provided by Thackray (1986). He argues that it is difficult, probably impossible, for managements to create a single organizational culture. Peters and Waterman were strongly criticized earlier in an article in the *Harvard Business Review* (Cornell, 1983) which argued that the mechanisms by which Peters and Waterman's corporate objectives were achieved was left entirely unclear.

18. These claims for mileage bonuses were from drivers whose normal turns had been disrupted by the consequences of an earlier strike by drivers from other depots. Top management exploited a clause in the mileage agreements which restricts its payment in the event of industrial action.

19. MacInnes (1985) argues that the 'renaissance' of consultation is illusory. He argues that aggregate coverage of consultation has been stable since the end of World War Two. The growth reported in a number of surveys has been counterbalanced by it falling into disuse elsewhere. Part of his argument rests on the contention that ambiguous survey questions indicate that consultation arrangements are still present even when use of them has been discontinued.

20. The decisive change came with the stipulation of new government objectives in October 1983. In a special meeting of the Rail
Council in January 1984 the union dissented strongly from the Board's plans to adapt to these objectives through service cuts and fares increases. The NUR argued particularly strongly for a low-fares policy on BR (see Railnews, 1984a).

21. Two depot managers interviewed managed more than one depot. This development came out of the decrease in the number of Areas and the expansion in Areas' geographical size in the move to two-tier.

22. The consultation was organized by Divisional managers. Subsequent contact indicated that the management approach had significantly changed when responsibility for organizing the consultation process had passed to the relevant Area.

23. Regional General managers are steadily being replaced by managers committed to Sectorization. In 1986 the London Midland General Manager is a former Sector Director, and it is said that the Eastern Region General Manager was 'forced out' because he was unsympathetic to Sector Management.

24. One traincrew depot at which interviews were conducted has recently been listed for closure 'out of the blue'. As far as can be determined from newspaper sources, management decisions on the re-allocation of this depot's work seem to have been already taken and do not seem to be the subject of the usual Consultation process of re-allocating drivers and work to other depots. At the time of writing (June 1986) these same sources indicate that no
further details have so far been given to the trade unions.

Chapter Seven

1. Total working days lost on the railways in 1982 were 1,116,000 of which 1,007,900 can be attributed to the flexible rostering strikes. The remainder are accounted for by the brief NUR national strike in June. Source: Department of Employment Gazette.

2. Drivers had no formal training for the job. Instead progression through the grades of engine cleaner and fireman gave drivers intimate knowledge of how locomotives worked and performed (see McKenna, 1970). As firemen, footplate staff would be expected to be allowed turns at the driving controls to gain driving experience. Additional knowledge, such as of the Rules and Regulations, was gained through attendance at Mutual Improvement Classes run by experience drivers.

3. For an interesting account of the impact of dieselization on a community see Cottrell (1951).

4. Train drivers were overtaken as the top blue collar earners on the railway in the early 1970s by top-class signalmen and signalling maintenance staff. In the current pay structure, Signalmen Classes E and F and Technician Officers have higher basic rates.
than drivers.

5. Hyman (1984) notes how production strategies are difficult to draw up because of the decentralized pattern of production planning in manufacturing.

6. For instance the limitation of driving express passenger trains single-manned is 350 miles or 6 hours, and for local freight trains 100 miles or 7 hours.

7. Ballast train workings are eagerly sought after since not only do they require two crew members, but they also generally operate on Sundays when pay is at double time. Train planners have to be careful not to violate 'spheres of influence' in planning these trains for fear of causing labour relations difficulties.

8. All but one traincrew manager interviewed argued that there was no need for them to have any detailed involvement since the LDCs are highly skilled and experienced in work allocation, and they perform it in a 'sensible and responsible' way.

9. Some depots allocate spare drivers to each link; others have a special link composed solely of spare drivers. The benefits to footplate staff of a specific spare link is that, if it is conceived of as an 'entry' link for newly-qualified drivers, it ensures that these drivers receive the widest route and traction training (so they can cover all the jobs in the depot). The spare
link used to be known as the 'control link' since daily deployment of staff in it was under the control of the District Control Office to supply traincrews for special services, late running trains etc. (Fleming, n.d.). The advantage of allocating spares to specific links is that it generally results in a more regular work pattern for junior drivers.

10. After 200 miles bonus payments come into operation. Footplate staff receive 30 minutes pay for each 15 miles run over this. Since 1919, when mileage payments were introduced, drivers working on a mileage bonus can agree locally to book on less than five times per week if they can get more than equivalent to a week's pay. This arrangement is known as 'contract mileage.'

11. A host of subsidiary principles cover the procedures to be followed where the supply of spare drivers is exhausted, the use of drivers' assistants 'passed' for driving duties (relief drivers), and the period of notification for changes to rostered duty.

12. The difference between footplate hours of work and those of other conciliation staff is substantial. Footplate hours of work are usually between 43 and 44.5 hours per person per week, whilst those of other staff are always in excess of 50, making these staff second only to prison officers in the hours worked in the public sector. Source: New Earnings Survey, various issues.
13. The BRB has made such requests in the past to cover exceptional circumstances such as where a temporary acute shortage of drivers has arisen. Permission is usually given by ASLEF Headquarters. However, given the declining state of railway labour relations and changing patterns of depot allocation arising from Sectorization, permission is now less likely to be given. See ASLEF EC Report to the Annual Assembly of Delegates, 1985.

14. ASLEF has argued that an increase in depot establishment is the answer to this problem. The BRB in turn has sought to solve it by introducing Rest Day working. ASLEF Headquarters recently declined this request. See Note 13 above.

15. Source: ASLEF Headquarters' Movements Department.

16. BR faces chronic problems of retaining guards in some areas (see Monopolies and Mergers Commission, 1980). The basic rate (after the 1986 pay award) of £104 per week puts guards near the bottom of the railway pay structure.

17. Each member of BR's staff worked on average 2,200 hours per year, whilst those of other European railways worked in the region of 1,700 (BRB/Institute of Transport Studies, 1980).

18. That such a large pay agreement was allowed by the Government was because of it's adherence to the monetarist belief that the size of pay settlements are irrelevant to the treatment of inflation.
(see Keegan, 1984). More conspiratorially, Soskice (1984) suggests it was an element of a government strategy to 'buy-off' the public sector.

19. RSJC (Loco.) Minute L760.
Chapter Eight

1. For instance, the BRB's 'hard line' in the first round of strikes was softened because of a Cabinet belief that it was the wrong time at which to seek a confrontation (see Bagwell, 1984, p. 98).

2. This contrasts with evidence from the scrutiny of bargaining records on footplate and signalling issues over a fifteen year time span. The usual practice was for exhaustive, joint consideration of the full ramifications of proposals to change national agreements.

3. Initially a Court of Inquiry took place outside the Machinery of Negotiation at BR's insistence. ASLEF refused to attend on the grounds that the normal procedures had not yet been exhausted. The Court laid down a series of procedures to resolve the issue, the final stage of which was reference to the RSNT. Since 'failed to agrees' were subsequently recorded in the normal institutions, the issue was duly referred to the RSNT in March 1982.


5. As a result of the 'fudge' that was seen to result, two senior managers argued in interview that pendulum arbitration would be a more satisfactory form of arbitration.


8. Two of the three freight depots visited now worked throughout to a number of destinations where prior to flexible rosters crew changes had been necessary very close to the final destination.

9. An IDS study (1984) found that a common approach to implementing the shorter working week where production was continuous was for more rest days to be taken, leaving the basic shift pattern unchanged.

10. The total number of hours worked per footplate person per week is remarkably constant in the period 1979-85. But since the standard working week has been reduced by one hour, overtime per person has increased by one hour per week. Source: New Earnings Survey, various issues.

11. Some depots that accepted flexible rosters early on managed to create two extra rest days per cycle.

12. Similarly, interviews with guards suggested that there are major political differences between guards in main-line passenger depots and freight depots, with the former being considerably more militant.
Chapter Nine

1. Much of the material presented here was earlier presented in a paper 'Managerial strategy, new technology and industrial relations: the case of railway signalmen' delivered at the Second Annual Conference on Organization and Control of the Labour Process, University of Aston, March 1984; and in a talk to the Department of Management and Administrative Studies, Huddersfield Polytechnic in October 1985 on 'From block-bells to microprocessors: the revolution in railway signalling.'

2. Signalmen are often referred to as 'bobbies', reflecting their origins as railway policemen.

3. Britain's first signalbox was opened at Bricklayers Arms in South London in 1842.

4. This Plan has since been renamed the National Signalling Assessment.

5. A number of respondents argued that the adoption of this comprehensive approach to re-signalling comparatively early reflected an institutional strength to the engineering departments which derived from Brunel's pre-eminence in the Great Western.

6. Andrews (1979) argues that there are three generations of
signalboxes in ergonomic terms. First generation boxes are mechanically operate, whilst second generation boxes contain more equipment and control a greater number of train movements. In third generation boxes signalling staff do not need that much greater knowledge of equipment since much of it is automated, but require much greater knowledge of train services.

7. Source: Bagwell (1982, p. 44). Part of this fall in employment numbers is due to line closures in the 1960s (ibid., p. 59). The more recent statistics are taken from the Board's accounts for 1978 and 1984-5.

8. Most large signalling schemes cost in excess of £20 million.

9. The main cause of serious railway accidents in the twentieth century has been signalmen forgetting they have a train on their section, particularly at night (Rolt, 1966, p. 194).

10. Railway managements have encouraged job rotation in signalboxes since it increases their scope for flexibility.

11. At Eastern and Bridge there was a limited form of fully automatic operation, enabling platform selection to be done without the signalman's intervention. The signalmen at Bridge rarely used this facility since it took considerably longer than when directly controlled by the operator.
12. At the time of the research, trains additional to those specified in the data-base had to be signalled in the conventional way.

13. Scrutiny of documentary records confirmed that this issue had not been discussed in national level labour relations institutions up to mid-1984.

14. Dawson and McLoughlin's study of freight supervisors found that after the implementation of TOPS, yard supervisors benefited from an expansion of their authority and responsibility at the same time as centralized control of freight operations was increased (Dawson and McLoughlin, 1986).

15. An element of the two-tier re-organization, the role of the Control Office in the allocation of relief traincrews was formally ended.

16. The Controllers and their union fought a sustained campaign against the decentralization of Control to Areas. The issue was seen by a number of respondents to be the most contentious to arise from the re-organization.

17. Burtt argued that the relationship between Controllers and signalmen was positive sum since information supplied from one to the other enabled each to perform their jobs better (1926). In practice, as the analysis in this chapter has shown, the two functions compete in the area of judgements on train running.
priorities.

Chapter Ten

1. Area management have so far had little involvement in the implementation of large signalboxes. A member of the Area Manager's staff usually attends progress meetings but as far as could be determined their role is usually limited in practice.

2. A number of crass mistakes were made in the early years. For instance, Central’s main panel is too high for smaller signalmen to operate.

3. On the London Midland Region other signalmen perform any signalling duties on the main-line whilst other traffic grades can operate signalling equipment off the main line.

4. The other Western Region signalboxes which were commissioned prior to the big-box strategy controlled a much smaller area than Western.

5. Dawson and McLoughlin found that the Area Freight Assistants created by TOPS tended to work directly with each other rather than via Control (Dawson and McLoughlin, 1986).

6. This Area Operations Manager started his railway career as a
Controller. He transferred to signalling work in the 1960s because, as he put it, "the writing was on the wall" for the Control Organization.

7. This information is little used by signalmen for immediate action purposes. They tend to rely on their knowledge of train services rather than on this material. In the Southern and Eastern Region boxes there was a facility to access other signalboxes' train describers (ie route layout and train locations). This was installed to provide long range information. It seemed to be little used in the boxes visited. Instead signalmen acquired their information on train running from other sources.

8. Access to signalling staff was declined by local management in two cases whilst in two others it was difficult to obtain adequate interview responses.

9. Towards the end of the project documentary evidence suggested that a number of Area Managers were attempting to install Public Address equipment in a number of manual signalboxes. Some of the signalling staff involved were prepared to 'black' it since its operation was not a signalling function. Union headquarters advised against this since there is provision in the Signalmen's Classification Agreement for equipment to be installed prior to credits being given for it.

10. This is a data-base of all planned train services.
11. Brewster and Richbell note that management policies are often implicitly held (Brewster and Richbell, 1983).

12. Where as signalman wants his work checked it is done by another signalman not the supervisor.

13. Implementation of signalling schemes is remitted to the consultation procedure but in the past a considerable degree of negotiation has taken place.

14. The agreements are Railway Staff Joint Council (RSJC) T558, RSJC T1010.

15. RSJC T1141

16. RSJC T1193

17. An especially difficult element of the problem for management was that in London these relativities cut across Regional boundaries, and that any action to meet the signalmen's claims set in motion relativity claims across all four Regions with terminii in London.

18. T1356

(19. Not used)

20. The qualities that management look for in signalmen are
intelligence, maturity, reliability and a strong sense of responsibility. Young workers with these qualities are often able to get significantly greater rewards than Class A signalmen (in effect the entry grade). After the 1986 pay award the basic rate for a Class A signalman is £97.95 per week.

21. For example a planned £20 million signalling scheme at Leeds was rejected by the InterCity Director on the grounds that it was too ambitious.

22. In the scheme underway at London Waterloo ARS is to be used to control a number of major junctions. In the Midland scheme VDUs will be provided as an alternative means of operation to supplement the traditional signalling panel.
APPENDICES
APPENDIX ONE INTERVIEW SCHEDULES

These interview schedules were used as guides to the main issues to cover in interview. Responses to each main question were probed where necessary, and supplemented with more detailed questions according to the issue.

INTERVIEW SCHEDULE FOR TRAINCREW MANAGERS/SUPERVISORS AND ADMINISTRATORS

1. Nature of individual's job

2. Nature of work operations at depot
   - number of drivers, relief drivers, drivers' assistants etc.
   - number of links, link structure, link content, mileage turns
   - balance between freight and passenger, destinations, 'sphere of influence'.
   - any recent changes in link structure, including work gained/lost
   - relief arrangements, any supply relief undertaken
   - policies and practices on route and traction knowledge
   - any restday, overtime working. If so, how allocated
   - frequency of programme alterations, special notices etc
   - any starred fireman - effects
     (repeat for guards)

3. LDC
   - organization of them
   - how often meet
   - type of issues discussed
   - who sits on staff and management side
   - style of staff side
   - how far traincrews get their way
   - relationships between LDCs
   - how far do LDCs initiate work organization
   - how much Sectional Council involvement in depot affairs

4. Flexible rosters
   - when implemented
   - what sort of changes did they involve
     - affect all depot? What sort of turns mainly affected
     - any change to existing practices in local agreement (and custom and practice)
     - 'knock-on' effects
     - any major differences between drivers and guards
     - any modification or addition to agreement at national level
   - effect on industrial relations
   - any problems in implementation, remaining problems
   - satisfaction with FR (has it led to increased management control?)
   - any workforce counter proposals during implementation

5. Management philosophy and style in labour management

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6. Impact of two-tier re-organization
   - effect on own job
   - effect on relationship with other line managers
   - effect on relationship with other levels of management

7. Impact of Sectorization

8. Likely effect of implementation of other productivity proposals

9. Perception of union objectives

10. Biography

TRAINCREW AND TRAINCREW LDC MEMBERS INTERVIEW SCHEDULE

1. Nature of individual's job

2. Nature of work operations at depot
   - number of drivers, RDs, DAs, etc
   - number of links, link structure, link content, mileage turns
   - any recent changes in link structure, including work gained/lost
   - relief arrangements, any supply relief undertaken
   - any restday, overtime working. If so, how allocated
   - nature of supervisors jobs
   - how acquire route and traction knowledge

3. LDC
   - organization of them
   - how often meet
   - type of issues discussed
   - who sits on staff and management side
   - style of management
   - how far traincrews get their way
   - relationships between LDCs
   - how much Sectional Council involvement in depot affairs
   - what think of Sectional Council
   - usefulness of trade union policy and facilities
   - relations with other traincrew depots
   - relations with management/supervisors

4. Flexible rosters
   - when implemented
   - what sort of changes did they involve
   - affect all depot? What sort of turns mainly affected
   - any change to existing practices in local agreement (and C and P)
   - 'knock-on' effects
   - any major differences between drivers and guards
   - any modification or addition to agreement at national level
   - effect on industrial relations
- any problems in implementation, remaining problems
- satisfaction with FR
- are you still able to exchange turns, any change to booking times, effect
- effect on shift balance ie on am/pm balance
- any counter proposals during implementation

5. Management style, philosophy

6. Impact of two-tier

7. Impact of Sectorization

8. Likely effect of implementation of other productivity proposals. Attitudes towards.

9. Union philosophies

10. Biography

INTERVIEW SCHEDULE FOR SIGNALLING MANAGERS/SUPERVISORS

1. Nature of job

2. Nature of signalling operations
   - number of signalboxes, manual/power, classifications, traffic levels
   - staff numbers, how relief organized, ancillary posts
   - number of supervisors, how organized

3. LDC
   - organization of them
   - how often meet
   - type of issues discussed
   - who sits on staff and management side
   - style of management
   - how far signalling staff get their way
   - relationships between LDCs
   - how much Sectional Council involvement in depot affairs
   - what think of Sectional Council
   - usefulness of trade union policy and facilities
   - relations with other signalboxes
   - relations with management/supervisors

4. Signalling change schemes
   - when implemented
   - where did scheme originate
   - objectives of scheme. Part of wider strategy?
   - what sort of changes did they involve
     - affect all boxes in Area
     - any change to existing practices in local agreement (and C and P)
- 'knock-on' effects
- any modification or addition to agreement at national level
- effect on industrial relations
- any problems in implementation, remaining problems
- satisfaction with scheme
- any counter proposals during implementation
- effect on signalling skills

5. Management philosophy/style
6. Impact of two-tier
7. Impact of Sectorization
8. Other signalling policies and strategies
9. Perception of union objectives
10. Biography

INTERVIEW SCHEDULE FOR SIGNALLING LDCS

As for signalling management. This information was supplemented by observation of working methods in signalboxes and informal conversations with signalmen, making use of a standard checklist.

Checklist
- nature of train running/volume
- number of signalmen and other ancillary staff
- how tasks split up in practice, jobs rotated/shared
- nature of shift system, levels/allocation of overtime
- equipment type
  - automatic train reporting
  - passenger information equipment
  - automatic route operation
- procedures that are followed when
  - train fails
  - equipment fails
  - out of sequence operation
  - 'incidents on the line' etc

INTERVIEW SCHEDULE FOR SIGNAL ENGINEERS

1. Nature of individual's job
2. Nature of signalling strategy and objectives
3. Nature of particular schemes
   - rationale
   - nature of scheme
   - new features
INTERVIEW SCHEDULE FOR OPERATIONS MANAGERS

1. Nature of individual's job

2. Nature of operations strategy/main policies

3. Nature of traincrew/signalling strategies
   - rationale
   - nature of schemes
   - new features
   - satisfaction with outcomes
   - involvement of other management specialisms

4. Role of BRB/Region/Division/Area in schemes

5. Effect of Sectorization

6. Effect of two-tier

7. How far work organization/manpower management taken into account in schemes
   - signalmen and regulators
   - S & T maintenance
   - anything built into equipment

8. Any industrial relations considerations behind particular form of scheme.

9. Involvement in implementation process

10. Involvement with Sectional Councils/union organisations

11. Organization of engineering function

12. Relations with other management specialisms

12. Biography

- ancillary information technology
- satisfaction with outcomes
- involvement of other management specialisms/tiers
9. Involvement with Sectional Councils/union organisations
10. Organization of operations function
11. Relations with other management specialisms
12. Biography

INTERVIEW SCHEDULES FOR PERSONNEL MANAGERS
1. Nature of individual's job
2. Nature of personnel strategy/main policies
3. Involvement in traincrew/signalling strategies
4. Involvement in traincrew/signalling schemes
5. Role of BRB/Region/Division/Area in traincrew/signalling/personnel schemes
6. Effect of Sectorization
7. Effect of two-tier
8. Involvement of personnel function in manpower and work organization policies
9. Nature and organization of labour relations functions
10. Involvement in implementing change schemes
11. Relationships with trade unions and workforce representatives
12. Organization of personnel function
13. Relations with other management specialisms
14. Biography

INTERVIEW SCHEDULE FOR SECTIONAL COUNCIL REPRESENTATIVES
1. Nature of job
2. Nature of Sectional Council activity
   - main issues arising
   - method of working
   - main focus of work
   - how much time spent on Council business
- which management functions deal with

3. Relationship with LDCs/other Councils/union organization

4. Involvement in change schemes
   - type of issues
   - management and Council objectives
   - at what point Council involved
   - relevance/usefulness of national union
   - effect of schemes

5. Nature of management approach to labour relations
   - differences between functions/levels
   - management style and philosophy

6. Impact of two-tier

7. Impact of Sectorization

8. Biography
This depot provides traincrews for main-line passenger trains. Much of the work is long distance InterCity work and there are a large number of jobs at the depot that carry the mileage bonus. The depot was opened in 1966 at the commissioning of an extensive electrification scheme. Since the depot is an attractive one to work at financially it attracts a large number of footplate staff from other Regions who, in many cases, have not been trained beforehand on the electric locomotives used at the depot. There is thus a chronic shortage of trained staff at the depot.

The staff establishment at the time of the interview was:
184 drivers grouped into four large links, one medically-restricted link, a local shunt link and a training link;
49 drivers' assistants grouped in one link;
80 guards in two links.

Interviews took place with the Traincrew Manager and the secretary of the drivers' LDC.

Date of interview: 2nd August 1984.
Freight

This is a medium-sized depot situated in the East Midlands and, as its pseudonym suggests, it deals exclusively with freight work. Although traincrews from the depot work over a large number of routes, there is very little milege bonus work at the depot.

The staff establishment at the time of the interview was:
109 drivers organized into 7 main links, a large link composed of spare drivers, and a number of small shunting and yard-work links;
46 drivers' assistants grouped into 2 links;
57 guards organized into 5 main links, a spare link and a local ballast-train link.

Interviews were conducted with the Traincrew Manager, the Traincrew Supervisor, two members of the guards' LDC, and one member of the drivers' LDC (on a separate occasion).

Date of interviews: 29th August 1984.

Junction

This depot is situated in Wales and deals exclusively with freight traffic. The work is both heavy iron and coal bulk trains and the long distance Speedlink services. The depot had absorbed a large number of staff made redundant by the closure of an adjacent depot.
It was announced in February 1986 to some surprise amongst the staff that the depot would close in 1987 (Transport Review, March 1986).

At the time of the interview (7th August 1984) the establishment was as follows:

139 drivers organised into 6 main line links and a pilot link;
52 drivers' assistants organised into 1 link;
Information was unavailable on the number of guards.

Interviews were conducted with the Traincrew Manager, the Roster Clerk, and all four staff side members of the drivers' LDC. More informal comments were supplied by the staff side secretary of the guards' LDC.

Mixed

This depot is located in the East Midlands, about ten miles away from Freight. It is a medium-sized depot and undertakes a mixture of InterCity, local passenger and freight work. There is a fair amount of mileage bonus work at the depot. Shortly before the interviews took place railway management had planned to close the depot. The intention was to redistribute the freight work to Freight and the passenger work to a main-line passenger depot some fifteen miles away. After a lengthy campaign by the LDCs at the depot it was reprieved. The LDC claimed that the economic case for closure was bogus and had been constructed to achieve other objectives. It was
neither possible to verify this claim nor to establish the main reason for the reprieve.

Staff numbers were as follows:
131 drivers grouped into 4 links and a 'spare' link;
64 relief drivers (ie drivers' assistants 'passed' to drive) of whom 56 were 'starred' (ie ex-firemen whose earnings as firemen were protected by the 1965 Manning Agreement);
104 guards grouped into 4 links.

A feature of the staffing at this depot was that for all three groups actual staff numbers were above establishment.

Interviews were conducted with the Traincrew Manager, all four members of the drivers' LDC, a traincrew supervisor, and a guards inspector.

Date of interview: 30th August 1984.

Northern

This is one of the largest traincrew depots in the country. It's traincrews are required to be familiar with a large number of locomotive types and lines of route. The drivers' LDC at Northern is notable for it's influence in ASLEF policy-making and its use of the Machinery of Negotiation to test out loopholes and interpretations of
agreements (cf. Sayles' 'strategic work groups' (1958)). The depot undertakes all kinds of work but it is predominantly as passenger depot.

Staff numbers are;
298 drivers grouped into 7 main links, a spare link, and eight medically-restricted links each with a small number of drivers;
98 drivers' assistants (of whom 85 were 'passed' to driver and 67 were 'starred' by the 1965 Agreement) grouped in one link;
161 guards in 9 links of varying sizes (the number of guards is well below establishment).

Interviews were conducted with the Traincrew Manager, a traincrew supervisor, the head of the rostering section and the four members of the drivers' LDC.


Stone

This depot is a medium-sized freight depot in the West of England which provides traincrews mainly for operating stone trains (hence the pseudonym) out a number of nearby quarries. This depot experienced recurrent labour relations difficulties (which seemed to arise from a clash of personalities) and was the subject of some concern by Regional management and Sectional Council representatives.
Detailed information on depot work organization was not obtained but two interviews with the Traincrew Manager (on 21st May and 11th November 1983) provided a wealth of data on the impact of flexible rostering.

**Western**

This diesel depot is situated in the West of England. The bulk of its work is long distance passenger services. There is some freight work. The depot also provides crews for holiday specials during the summer, and hence the workload of the depot is uneven throughout the year. It is often necessary to 'farm' driving work out during the summer months to adjacent depots.

At the time of the visit (17th July 1984) the number of staff were as follows:

- 266 drivers organised into 16 links;
- 64 drivers' assistants grouped into 2 links;
- 12 traction trainees;
- 168 guards, organised into 6 conductor links and 4 freight links.

Interviews took place with the Traincrew Manager, the Roster Clerk, and the guard's LDC staff side secretary. The driver's LDC secretary was unwilling to be interviewed. Relevant information on footplate matters was obtained from other sources knowledgable about the depot.
APPENDIX THREE SIGNALLING LOCATIONS

Welsh

This power signalbox situated on the Western Region was opened in 1966. Staffing on each shift consists of three signalmen on the panel, a supervisor, a train recorder, a station announcer and one standby signalman. All posts other than that of the supervisor are occupied by signalmen. The signalbox was classed F (at the top of the grading scale)

Interviews were conducted with the Area manager, Area signalling inspector, and the supervisory and signalling staff in the box. The data from the interviews with the signalmen was patchy due to management fears about discussing the issue of eliminating the train recording position.

Date of interview: 10th August 1983

Central

This signalbox was similarly opened in 1966 as part of a comprehensive electrification scheme. It controls a very busy station, and its central operating console is said to be one of the busiest in the country. Staffing at the time of the interview comprised a supervisor, three signalmen on the panel, a train
recorder, two platform announcers, and a spare signalman. Unlike any other signalboxes visited the platform announcers were female. The age profile of the signalmen was notably younger than at any of the other boxes also. The box grading was graded F.

Interviews were conducted with the Area operations manager, the supervisor and one signalman.

Date of interviews: 24th August 1983

West Country

This box opened in 1960 and stages subsequently added up to 1979. It controls mainly plain line, and is operated by two signalmen on the main panels and another signalmen who acted as train recorder and performed functions which elsewhere are performed by supervisors. One standby signalman is attached to the box. The box is graded E.

Interviews took place with the Area signalling inspector and very briefly with two of the signalmen. Once again the sensitivity of the issues of train recording and standby signalmen precluded in-depth interviewing.

Western

This signalbox was opened in 1970 and, at the time, was the largest signalbox in terms of area controlled on the whole of BR. Its'
signalmen are perceived to be the most militant in the Western Region and its activists certainly saw themselves as the standard bearers of signalling organisation on the Region. The box had been plagued by labour relations problems since its opening. This seems to be partly due to an attempt by management before it opened to exclude a number of signalmen from the new box on the grounds that they were not suitable.

The signalbox at the time of the visits was staffed by four signalmen on the operating consoles, a train recorder, a supervisor, an information signalman, and a train announcer. Two standby signalmen were attached to the box. The box is classified as F.

Interviews were conducted with the Area manager, 2 supervisors, and seven signalmen. Three of these were LDC representatives who were met subsequently on a number of occasions.

Dates of interviews: 1st March 1983; 8th July 1983.

**Eastern**

This was the only signalbox visited on the Eastern Region of BR. It was opened in 1977 replacing 50 signalboxes on the East Coast Main Line. The operating console is staffed by 5 signalmen, supported by an assistant regulator, a supervisor, a meal relief signalman and two station announcers.
Interview were conducted with the Area operations manager and a former signalling supervisor. Informal conversations were held with a number of signalmen.

Date of interviews: 12 January 1984

**Bridge**

This signalbox controls a busy terminus in London. Like *Suth-Eastern* it controls two largely separate railway networks. It was the first signalbox on BR where detailed consideration was given to ergonomic factors in the design of the operating consoles. Altogether there are ten operating positions, backed by two assistant regulators, a supervisor and two information signalmen.

Interviews were conducted with the Area manager, an assistant regulator and two signalmen.

Date of interviews: 19th April 1984

**Suth-Eastern**

This signalbox was brought into operation in the 1980s and is the largest signalbox on BR in terms of staffing. Altogether there are twelve panels. The signalmen rotate around all these panels whereas
in Bridge the signalmen are organized into two groups. There are in addition two assistant regulators, a regulator and two information signalmen.

Interviews were conducted with the Area operations manager, two assistant regulators, one information signalman and two signalmen.

Dates of interviews: 27th July 1984

Airport

Like Bridge and South-Eastern this signalbox is to be found on the Southern Region of BR, and is a similar design. There are nine operating panels, supplemented by similar 'back-row' positions. This signalbox is notable for its trial use of Automatic Route Setting, whereby a micro-computer makes the routing decisions, by comparing information from the signalling computer with a data base of train services.

Interviews were conducted with the regulator, a training signalmen (a position unique to the erstwhile Central Division of the Southern Region), and two signalmen, one of whom was overseeing the ARS equipment.
University

This is a small Western Region box that was constructed half-way through the 'big box' signalling strategy. It was viewed as the core of a large box in the future but with the demise of the strategy it will probably stay unchanged for some years to come. It has one operating console, operated by one signalman. The box is staffed by two signalmen since an additional signalmen is believed to be necessary to monitor a TV screen present in the signalbox.

Interviews were conducted with the Area manager and two signalmen.

Date of interviews: 17th August 1983.

Cathedral

This signalbox is very similar to University. It is operated by one signalman for most of the day, supplemented by a back up signalman for the busiest part of the day.

Interviews were conducted with the Area Manager and two signalmen.

Date of interviews: 24th September 1983
**Stone**

This signalbox was in the process of being built for most the period of data collection. Initially management planned to operate it with two signalmen (one per panel) plus a supervisor. However, because of the dispute over standby signalmen recorded in the main text of the thesis, at the time of commissioning it was operated by four signalmen per shift on an experimental basis. Unlike other large Western Region boxes at the time train recording was done automatically.

Interviews were conducted with the Area Operations Manager and two signalmen in the box to be replaced.

Date of interviews: 21st May 1983.

**Devon**

This scheme was a sister scheme to that of Stone. The box was not commissioned until some time after the research was completed, and no information is held on the details of staffing. This box could be said to be the last signalbox on BR designed when the 'big box' strategy was in operation. The location was visited when the signalbox was being built and an interview was conducted with the Area operations manager on 15th August 1983.
Northern

This box was designed after the signalling strategy had broken down in the early 1980s and was brought into operation in 1985. The location was not visited but extensive information was gained from other interviews on the principles behind its design.

Midland

This was the first large box to be authorized after the breakdown of the strategy. It has not been completed yet and details on staffing are unknown. An interview was conducted with the Area operations manager and, as with Northern, detailed information was gained from other, more senior, management sources. This scheme is notable for supplementing the traditional operating consoles with VDUs and keyboards.
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