

DEFINING THE "WORKPLACE" IN WORKPLACE INDUSTRIAL RELATIONS

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INTRODUCTION

The study of the workplace has received considerable attention from theoreticians and policy makers in the last decade or so. Increasingly intense competition for fluctuating markets, with concomitant concern for raising productivity, have resulted in wide-ranging discussion about workplace organisation and labour flexibility as crucial variables for meeting the new economic uncertainty [Nichols, 1989; Frenkel, 1989; Clarke, 1989; Lash and Urry, 1987]. The workplace is given prominence as a means of re-establishing a more stable economic environment. In Australia, the focus on industrial relations processes has traditionally been well beyond the workplace. However, the recent emphasis on microeconomic reform and allied policies to effectively confront economic problems has led to efforts by all the parties to industrial relations to develop new approaches to work organisation and industrial relations. This has been apparent in the higher levels of funding for research into aspects of the employment relationship at the level of the workplace and in the burgeoning academic industrial relations literature on workplace industrial relations [Callus, 1987; Zappala, 1988; Patmore, 1988; Littler, Quinlan and Kitay, 1989]. Since the workplace has achieved such significance it is essential that scholars and policy-makers alike agree on what exactly constitutes the "workplace".

The argument offered in this paper is that the term "workplace" has been used indeterminately in much industrial relations research. Given the new roles ascribed to workplace industrial relations, this indeterminacy needs to be clarified. Otherwise writers and policy makers may find themselves attempting analysis of a concept which may convey different meanings. There is a need, therefore to gain a clearer understanding of this micro unit of production without losing sight of more macro elements.

In this paper I will first consider the problems of defining the workplace. These definitional problems will be highlighted in the subsequent section by examining some literature, primarily Australian, which has attempted to examine workplace

industrial relations. A survey of this literature highlights the fact that discussions of workplace industrial relations have been based on somewhat imprecise definitions of

the workplace. There is thus a need to define workplaces in much narrower terms than has usually been done. This becomes more apparent in the final section of the paper which seeks to demonstrate the importance of achieving a specific definition of the term "workplace" through a comparative case study of two steelmaking workplaces at Port Kembla. The major aim of this paper, thus, is to highlight the fact that each workplace has particular features which differentiate it from others and that these unique characteristics are vital ingredients in workplace analysis.

DEFINING THE WORKPLACE

In this paper, the term "workplace" is used to denote a unit or sub-unit of production or department, often within a larger plant or establishment. The workplace is defined organisationally by the hierarchy of managers, supervisors, and workers. From the technological perspective, the workplace is defined through the production processes which take place in a discrete area of production. Finally the orientations of workers and managers to the particular area define the social limits of a workplace. Such a definition need not be limited to manufacturing. The workplace can also be a department in a bank or university or a school within an education system. What is important is that the work area is discrete, has some technological or production unity which marks it off from other workplaces, and it is recognised as such by workers and managers.

A study of a workplace in its narrowest terms, therefore, is a study of the actions and behaviours of workers and managers within the structures set by the technology, organisation, and the social and rulemaking processes within a defined area of work. To leave it in its narrowest terms however would be worthless, since workplaces are component units within a larger framework, including the plant or establishment in which it may be situated. The terms "plant" and "establishment" are used

interchangeably throughout the paper to mean a place which is at one site, which produces a definable array of products and which is organisationally defined through a hierarchy of managers, technicians and workers. Beyond the plant or establishment may be the "firm" or "enterprise" which owns the plant.

Many studies which purport to be workplace studies are, in fact, studies at plant level or even wider as is shown below. Many writers take the workplace to be all the points of production or the entire shopfloor at a plant [Kriegler, 1980; Beynon, 1973]. These terms "shopfloor" and "point of production" have generally been used in industrial relations to mean the areas in a plant or establishment where production workers have operated production equipment. Even these terms may need some redefinition. In recent years computer technology has changed the nature of production processes. The importance of manufacturing as a source of large scale employment has declined, while the proportion of workers employed in "white collar" areas has increased. Thus, the concepts of shopfloor or point of production may need to be broadened to cover any point of production, where the "product" may be information or a service as much as it may be definable goods in the traditional factory sense. While the analysis in this paper covers traditional metal processing, it perceives the shopfloor to cover more than the areas where workers maintained or operated production equipment. In one of the workplaces studied in this paper for example, the BOS, the locus of production was the control room.

More importantly for this paper, it is clear that the study of the workplace may be different to the study of the shopfloor since the workplace is seen as a particular work area. By contrast, studies of industrial relations at the point of production or at the shopfloor refer to many places within the plant or establishment. In a large scale plant or a firm which provides a variety of goods or services, such as metal processing or provision of public utilities, there will be some or many work areas which invoke different structures and activities from those employed in other areas.

However, a major problem immediately presents itself, in that clear definitions of the workplace have not been generally agreed upon. Much of the literature on workplace industrial relations treats the term "workplace" as meaning those workers or work areas generally seen as the shopfloor or point of production of any plant or firm. In one of the British workplace survey series for example, workplaces are seen as establishments, but in order:

"to provide stylistic variation ...refer interchangeably to establishments ...as workplaces, sites, units or establishments and (when referring to manufacturing establishments) ... refer to plants workshops or factories."

[Daniel and Millward, 1985: 8]

Frenkel and Coolican [1984: 52] take a slightly narrower framework when they state that "Workplaces in the metal industry are generally divided into various shops, departments and sections" but the establishment is still the basic frame of reference. This approach can offer useful illumination of shopfloor industrial relations in the plant or firm, but the difficulty with such a broad definitional basis is that it ignores the individual worker's experience of the plant and enterprise.

The work processes and social relations of production in a highly computerised mill will differ from those of the draftsman in the drawing office, which in turn will differ from labourer in the coke ovens. And while the worker at the coke ovens will share many of the working conditions of the worker in the blast furnace or the steelmaking shop, there will be significant differences too. These will arise because of the local and international traditions which have come about at different times depending on the age and nature of the technology. The ways in which managers have organised the work processes around the technology also influence differences between workplaces. In times when increasing pressures are being placed on workers and managers in specific work areas to perform at new levels of intensity, under changing conditions, the structures and activities within the specific workplaces

deserves closer attention. This requires recognition that workplaces are indeed specific work areas within the plant or establishment.

There are thus several factors which may be necessary in the definition of the workplace, depending on the size and organisation of a plant. A small plant with only a few workers may, of itself, be a workplace. As Frenkel and Coolican [1984: 52] record, only 1.2 per cent (n=56) of NSW metal industry establishments had over 500

employees in 1981. Over 90 per cent of establishments employed fewer than 100 persons. This kind of size distribution of establishments is the norm in Australia [ABS 8103.0]. The basis for some British studies of the workplace are also plants which employ fewer than a thousand workers. Armstrong, Goodman and Hyman [1981] studied factories where the largest workforce was less than a thousand. The studies of Edwards and Scullion [1982], Cunnison [1966], and Nichols and Beynon [1977] draw on still smaller numbers. Nevertheless, even in these studies of relatively small plants, the particular work environment varied to an extent where generalisations about the workplace, were open to qualification. Differences in work and management practices, traditions and technology led to different production and industrial relations outcomes.

In the larger plant, the workplace is first of all a defined unit or sub-unit of production. The subsidiary element may be defined simply in an organisational sense of a department as designated by management for management purposes. On its own, this is not sufficient. At the Port Kembla steelworks in the 1970s the steelmaking department encompassed the electric steel shop, the Basic Oxygen Steelmaking (BOS) and the open hearth shops.

It is to the specific shop or workplace that the employee gives his or her work effort each day; the department is in this case simply a framework for expediting management. Within the workplace, in the sense of a unit of production, there will be a hierarchy of managers and supervisors. Like production and trade trained

workers, they are likely to say that they work in the open hearth or electric steel, rather than in the steelmaking department.

For employees in a workplace, the reality of work is in the material surrounds and social relations of their workplace. That is, the workplace is also defined by technology, work processes, and physical conditions. These set the limits for the social relations to a considerable degree. The technology of the workplace governs the choices of the work processes and working conditions which workplace

managers can implement. The workplace is thus the specific work area defined by the production processes and geographical situation as separate from other workplaces, and with its own managerial organisation [R.K. Brown, 1973: 85-113; Hill, 1981].

These elements which define a workplace, which also implicitly include a final essential element, the social aspects of the workplace. For the workers and their managers the technology and work organisation provide the structural aspect of the workplace which necessarily includes the social and industrial relations processes which result. As Edwards [1986] has depicted in his comprehensive descriptive analysis, the workplace is as much a social construction as a physical entity.

This is not to confuse the workgroup with the workplace. Edwards [1986:81] defines workgroups as "teams of workers who share common work situations and who act as distinct collectivities". Palmer, [1983: 82-93] in noting that these are not necessarily limited to non-managerial employees, [see also Hill 1974; Batstone, Boraston and Frenkel 1977] perceives these groups as, "small groups with an interest in improving employment conditions" [Palmer, 1983:83]. Workgroups are, thus, usually groups of either managers or employees, formally or informally developed to meet particular group imperatives. Within a workplace there may be several workgroups. The organisation and distinctive actions of these workgroups Edwards [1986: 81] says will depend on:

"... managerial behaviour, and on a range of contingencies reflecting the nature of work tasks and technological and product market forces."

Workgroup analysis can aid this investigation because it considers workers and managers within their specific work environments, but by their very nature workgroups are social constructions which involve managers and workers separately.

In a workplace analysis they are part of the same unit. Closer to the demands of this paper is Marsh and Evans' [1973: 354] definition of the workshop which perceives the workplace as a:

"... workshop, department, or other portion of a factory or establishment; [or] sometimes when the establishment is small for the whole establishment."

It is this subsidiary element within a plant which is also essential in defining the workplace. In this there are two defining elements - the workers/workgroups who perceive the workplace in social terms, as being in this department or production unit, and the technology which in varying degrees defines the workplace by the technological processes and also allows management to define the work processes within it.

In examining the specific characteristics of the industrial relations in the Basic Oxygen Steelmaking (BOS) shop and the open hearths in this paper, questions are asked about the links between these factors. To a considerable extent the technology of the workplace is a definitive factor in work processes and management behaviour. As Marx noted:

"By means of machinery... [industry] is constantly changing not only in the technical basis of production but also in the functions of the labourer and in the social combinations of the labour process." [1983: 457]

Or, as Brewster et al [1981] argue, the values and problems of the workplace depend on the ways in which the technology and equipment constrain or enhance the ways in which work and workers are organised. Management literature does not always give explicit recognition of the role of technology in work organisation. A major exception to this is the work of the Tavistock Institute, as exemplified in Mumford's [1980] work on the socio-technical approaches to the organisation of work.

This is not to take the technological determinist view of Sayles [1958] which gives inadequate attention to historical and social factors. A strong body of literature exists, however which demonstrates the significance of technology on work and workplace relations [Beynon, 1973; Zimbalist, 1979; Lazonick, 1983]. As others note [Edwards and Scullion, 1982; Burawoy, 1979; Nichols and Beynon, 1977], it is not the

technology alone which affects workplace relations, but also the actions taken by workers/unions and employers/managers. These two facets of workplace relations, action and structure, continuously interact with each other within the context of the wider environment of the plant, company, industry, and beyond. To pinpoint the exact nature of the workplace therefore requires a clear understanding of both the technology and the work organisation which management puts in place at each sub-unit within the larger plant, (the structure) and the ways in which the workers and managers act to optimise their control over work and work processes [Hyman, 1987: 48-50].

This section began with the aim of defining the workplace and overcoming the vagueness which has characterised such definitions. While the plant or establishment has often been perceived as also being the workplace, such vague boundaries are inadequate for understanding the frame of reference of the workers or managers in larger plants. It is essential therefore to recognise that there are sub-units within larger plants and firms. For the workers and managers within them, the imperatives of their working-lives come from within the workplaces, the units of

production within the larger plant or establishment. As the next section will demonstrate, the plants or establishments, rather than the workplaces themselves have been the centre of attention in many studies which attempt to analyse the workplace. This approach elides some important aspects of work and work relations.

IMPRECISION IN THE EXISTING AUSTRALIAN LITERATURE

In Australian industrial relations, almost all studies which intend to examine workplace industrial relations, take as their guiding principle the point of production. That is, they examine the specific goods or services are produced across a plant or establishment. Zappala and Callus [1988:3] state this specifically in their introduction to the bibliography of Australian workplace relations:

"...workplace industrial relations is concerned with the myriad processes and issues commonly referred to as industrial relations at a plant level or at the point of production".

However, as has been noted already, the point of production frequently turns out to be several points of production within a plant or enterprise, so that workers' specific work environments are ignored or treated as a given universal. Thus, in Frenkel's lucid analysis of workplace rulemaking in the Pilbara, the actual workplaces are ephemeral, and in the final paragraphs, 'workplace' comparisons become company comparisons [Frenkel, 1978].

It is the same with Lumley's [1983] comparative analysis of five workplaces. In this article Lumley takes the shopfloor organisation of unions and their responses to employer strategies for control as the primary focus. While the article provides valuable insights into the diversity of union organisation at shopfloor level, the nature of the workplaces is not considered. In part, this reflects Lumley's [1983:

301-5] uncritical acceptance of the view that the arbitration system has determined the shape of the relations of production at all levels in Australia.

Mason and Muller noted this tendency in their comparative study of two plants, in which they examine aspects such as custom and practice and grievance handling at shopfloor level. They argue that:

"A full understanding of job regulation, the distribution of power and the underlying causes of industrial conflict will only become apparent when more time and space is devoted to the study of industrial relations in the workplace" [Mason and Muller 1978: 16].

Despite this assertion, their study is still in the broader focus of plant and company level industrial relations, albeit from the perspective of the shopfloor. This perhaps reflects the size of Australian firms which, in general, are relatively small in comparison with overseas counterparts [MTIA, 1983].

The problems of defining the workplace is evident in the work of Fells and Mulvey [1985]. In their criticism of the Hancock Report for its failure to address problems of

workplace industrial relations, they offer a definition of the concept. Yet they base their work on Marsh and Evans' [1973: 240] definition of plant, rather than workshop or workplace bargaining. This encompasses: "...all or... significant groups of employees at plant or works level" [Fells and Mulvey, 1985: 16], a definition which they expand upon by reference to "... activities between an employer and his [sic] employees... Workplace industrial relations therefore is a company-based activity" [cited in Fells and Mulvey, 1985: 16].

In taking this focus, Fells and Mulvey have clearly moved away from the point of production to a much broader definition which takes the plant or the enterprise as the workplace. In part, this view reflects the reality that much formal rulemaking in Australia has taken place at the higher levels. This has occurred as a consequence

of the arbitration system of award-making and the patterns of national wage determination. The dominance of the tribunal system over these processes is not questioned in this paper. However, the assumption that tribunals shape behaviour at the workplace, neglects both the significance of management and unions at all levels in workplace and plant level relations, and the nature of workplace characteristics in shaping behaviour.

For some industrial relations analysts, acceptance of this assumption has meant that the workplace or shopfloor has been presented as less significant than in countries where the degree of involvement of those at the workplace is more obvious. Thus, while the intention of Fells and Mulvey was to emphasise the general shopfloor, they have taken the reality of formal rulemaking at plant and enterprise levels as the basis for analysis.

In this section, we have examined the problems within some Australian industrial relations literature with regard to studying of the workplace. There is general, if sometimes implicit, acknowledgement that the workplace is a point of production, although the differences between points of production tend to be ignored or generalised. Even this generalisation of workplaces within the plant does not always receive adequate attention. Scholars have tended to move their focus away from the

point of production to the level where formal industrial relations processes take place.

To perceive the structural elements of workplace relations as the same across a plant or a company can lead to an incomplete picture. In large or complex plants, especially, the nature of technology and work organisation, can be significantly different within a single plant [Marchington and Loveridge, 1983; Batstone et al, 1979: 5-8].

This is true not of only metal-processing industries, but also public sector organisations such as telecommunications organisations, and public works or transport departments [Hall, 1987; Giles, 1985; Reinecke and Schultz, 1983].

Technological change case studies often highlight the significance of technology as a central structural element at the workplace in a way that many workplace studies ignore. In technological case studies the point to be made is often shown explicitly to be the alteration in the pattern of workplace relations. Giles' [1985] study of technology bargaining in Telecom, and Hill's [1984] analysis of technological change in printing exemplify the centrality of technology for workplace relations. If, as many writers show, the technological change destabilises workplace relations [Markey, 1983; Daniels and Millward, 1987; Cornfield, 1987], then the technology extant is also a central factor in workplace relations. The problem with focussing on the plant or the company or utility as a whole is that the technology may be taken as a given, as the same for all workers across a plant.

This is not to ignore the importance of plant and enterprise level strategies for shopfloor relations. These must be considered as influences on the workplace, perhaps very significant influences as Batstone et al [1977; 1979] clearly demonstrate. Recruitment policies, the nature of pay determination, union strategies, and the like [Edwards and Scullion, 1982; Kerr et al, 1960: 248-50;] are all important factors influencing the nature of workplace relations. The trend towards

increasing centralisation of these kinds of activities removed much of the earlier autonomy of action from the workplace. Indeed, Marginson et al [1988; see also Marginson and Edwards, 1989] argue that the higher level industrial relations decisionmaking is profoundly important. One problem with their analysis however is that as with other surveys in the British Workplace Survey series, the notion of exactly what constitutes the workplace is never very clear. Moreover the sorts of questions they ask are quite rightly those pertaining more to the formal processes, and to allied policy making, related to these processes such as pay bargaining and the formal roles for combined union committees. In the new environment for

industrial relations, where economic imperatives are paramount, these traditional formal aspects must now share precedence with work organisation and other workplace aspects of the employment relationship which are related to productivity and flexibility. The significance of the workplace is hence much greater than it has been accorded previously.

On the other hand, the arguments of Marginson et al point to a further element related to the need for clearly defining the workplace, establishment and enterprise. This is that in the current reforming environment, issues must be dealt with at the most appropriate level. Account must be taken of activities at all levels of the enterprise with a clear recognition of the features and needs of each level. If there is to be employee involvement in non-traditional areas, such as investment decisions or training programmes, then such matters are less appropriate to the workplace and more a matter for action at establishment or enterprise levels. To be sure of what is the most appropriate level for analysis and policymaking we must thus take into account exactly what is the enterprise, the establishment, and the workplace.

Recent trends towards centralised decision making have been offset to some extent by the other trends towards decentralised management organisation and "flexible management strategies". These latter patterns not only reinforce the argument that the nature and imperatives of each level must be more clearly defined. From the perspective of this paper the moves to "flexibility" have also led to apparently greater

autonomy at the workplace. Such new directions which began overseas some years ago became widely expressed in Australia only in the 1980s.

Bongarzoni and Compton [1987] have clearly expressed the new Australian management concern that the traditional industrial relations practices have not been sufficiently concerned with

"improving productivity and employee contributions through the elimination or reduction of non-productive practices, changing job methods and work organisation, and more flexible labour utilisation."

The movement towards more flexible work organisation has led to changing patterns of industrial relations at the workplace. The increasing use of grievance procedures and the preoccupation of some writers with the removal of work practices as a panacea for increasing productivity have led to changing agenda and roles for workplace industrial relations. Some unions have accepted these kinds of changes with a fair degree of alacrity in exchange for greater job security and closer consultation over other policy issues.

Others [Guille, Sappey and Winter, 1989: 35-6ff] have expressed concerns that new industrial relations practices may further weaken the rights of workers at the workplace. As Storey [1980: 13] noted of the efforts in Britain to formalise hitherto informal elements of workplace industrial relations, plant and workplace level bargaining is a two way process. In the new industrial relations climate, management may negotiate with unions over employment levels and technological change, but also over custom and practice which was previously not on the formal industrial relations agenda. Once it becomes part of management's agenda custom and practice "may become attenuated when Industrial Relations managers add them to their shopping lists". [Storey, 1980: 13-4] The new approaches therefore demand careful responses and changing structures from unions if they wish to act effectively within the changing system [Ewer et al, 1987: 96-118; Frenkel, 1987].

By the end of the 1980s, the areas of employer concern expressed by Bongarzoni and Compton [see also Blandy, 1988] had begun to be addressed within the industrial relations system, in Australia often within a corporatist framework. [Rimmer and Zappala, 1988] As Frenkel [1989: 25] notes, "the existing tension between dualist (or decentralised) and corporatist tendencies are likely to persist." If

they do so, then the need to understand the workplace in much closer detail than has generally been attempted, will also remain.

As this section has shown, while there has been a recognisable body of literature which has explored aspects of workplace industrial relations, there has not been a great deal of coherence in approaches to workplace industrial relations because of a lack of clarity of exactly what constitutes the workplace. As Callus has noted,

"... our understanding of the forms, changes and outcomes of workplace industrial relations remains at best sketchy and often misinformed and confused." [Callus, 1988: 2]

Recognition that workplaces may be discrete units within the establishment can clarify where the focus of investigation should be. Given the close focus on workplace matters for economic reasons, it is important that all factors which affect workplace industrial relations are included in any analysis or policy. Investigation at plant level may omit essential aspects of the workplace as the brief study below demonstrates.

CASE STUDY: STEELMAKING WORKPLACES AT PORT KEMBLA STEELWORKS

The case study approach has much to offer as a means of clarifying and illuminating general propositions. Where surveys rely on interviewees' perceptions of what has happened, the case study allows the opportunity of exploring more thoroughly and from a variety of perspectives. The study which follows compares two workplaces within the same establishment, the Port Kembla steelworks, owned since 1935 by

the Broken Hill Proprietary Limited (BHP). Both of the workplaces studied evinced patterns of industrial relations which were different from each other, and from the aggregated pattern of industrial relations at the plant as a whole [BHP Review

(various issues); AI&S Six Monthly Reports; New South Wales Industrial Commission, Transcripts and Decisions].

The international economic environment for steel altered markedly over the two decades from 1967 [Kelly, 1988]. The changing pattern of industrial relations in Australian steel plants reflected the changing product market, and the concomitant changes in managerial styles and strategies. Of themselves, however, the effects of higher level management policies cannot explain why there were differences between the two workplaces, or between the workplaces and the plant.

Port Kembla steelworks is a large integrated steel plant which processes not only steel, but also its own iron, coke, lime, and to a large extent its own power. The steel which is produced at the plant is also rolled, shaped, and treated within the plant. The two workplaces discussed in this paper produced the same goods, raw steel. Thus these two workplaces were in the middle of the conversion operation from iron ore to rolled steel. The open hearths which were based on a nineteenth century technology of steelmaking had been in their heyday until the early 1960s, when Basic Oxygen Steelmaking (BOS) became the dominant process internationally. The first BOS furnace at Port Kembla was commissioned, that is put into trial production, in 1972. Ten years later the last open hearth shop was closed during the flurry of closures in the Australian steel crisis of 1981-3.

At that time a rapid reduction in productive capacity and the workforce was effected, with overwhelming effects on workers' morale and the steel region economies of Kwinana, Whyalla, Newcastle and Wollongong. The reconstruction process which followed was partly an outcome of the Steel Industry Plan, a tripartite rescue operation which centred on major new investment in equipment, reduced employment levels, and closer communication between the employer and unions.

From an industrial relations perspective the Steel Industry Plan provided some formal structures for closer consultation between the employer and the trade unions.

These stood in marked contrast to the confrontationism and mutual suspicion which pervaded plant level industrial relations at Port Kembla in the 1970s.

Prior to and during the 1970s management policies in industrial relations were characterised by an expressly aggressive approach to unions and a very ready recourse to the New South Wales Industrial Commission (NSWIC), which was where the steel award was registered. Plant industrial relations were strongly influenced by BHP's Central Industrial Relations Directorate, although there is evidence that Port Kembla's management of industrial relations was never quite so aggressive as in other BHP steel plants. In part the plant's reputation for hostile industrial relations came from the active stance taken by the unions themselves.

Of the dozen or so unions represented at Port Kembla, the most important were, and continue to be, the Federated Ironworkers' Association (FIA) and the Amalgamated Metal Workers' Union (AMWU). Other important or active unions at the plant were the Building Workers' Industrial Union (BWIU) and the Electrical Trades' Union (ETU). The FIA covered over three-quarters of the "wages" workers at the plant, most of whom were production workers and tradesmen's assistants with no formal or recognised post-school qualifications. For over a decade prior to the steel crisis, the FIA (Port Kembla Branch) had been highly active in working to redress problems in the employment relationship at the Port Kembla steelworks. This FIA branch stood at odds with the National Office of the FIA which has for many years practised a conciliatory brand of industrial relations.

From the early 1980s, as local unions and workers sought to deal with the massive workforce reductions, there was a change in local union tactics, albeit still within a framework of overt promotion of workers' interests. By the end of the 1980s the steel unions were consulted more frequently over a range of issues, many of which management had previously insisted were inarguably managerial prerogative. These

included the introduction of technological change, employment levels, and aspects of workforce restructuring and multi-skilling.

These changes were in large part a consequence of changing management tactics, as managers came to realise that in the new economic environment for steel, reliance on a smaller workforce required a more human relations approach to workers, and a more consultative approach to unions. If the very significant drop in strikes at Port Kembla from the beginning of 1983 [see Graph 1] is any guide, the collective response of workers and unions to the workforce reductions and speculation over plant closure was one of apparent commitment to the goals of BHP, together with the structures of the Steel Industry Plan and fears for further job losses.

TABLE 1
STRIKE LEVELS - PORT KEMBLA STEELWORKS
COMPARISON - PLANT AND STEELMAKING WORKPLACES 1966 TO 1986

HLWW: Hours lost per wages worker
n.a.: Not available
n.o.: Not operating
Source: Company strike data
Workplace strike data may be slightly understated. Strike records have been on workplace/data or occupational basis, so, for example, strikes by riggers not in the open hearth may not have been recorded as open hearth.

However, it is important to consider the differences between the plant and the workplace. The industrial relations of a plant or establishment is the sum of industrial relations at all of the workplaces within that plant or establishment. This

does not necessarily mean that each workplace is an average representation of the plant. In some, unionists are more militant than in others, in some, supervisors have a more "insensitive and intransigent attitude" [SIA, Review, 1988:76] than others. This is apparent in the strike levels of the two workplaces studied here.

In this paper strikes are taken as an adequate measure of overt conflict which is especially useful when considering a plant where management for many years did all that it could to repress and penalise strike activity [Quinlan, 1986]. The measure used is Hours Lost per Wages Worker (HLWW), where "wages" workers are those employees who are paid on the basis of wages set under the steel awards, rather than supervisory, technical and some office employees, who are designated as "staff". In general staff were not expected to be active unionists, and indeed this was discouraged, particularly in production areas. The proportion of strikes per wages worker has been chosen in order to get a clearer picture when comparing workplaces and the plant. As Graph 1 demonstrates, the significant differences between the two indicate the value of analysis which concentrates on specific workplaces.

STRIKES PORT KEMBLA, 1966 to 1986

PLANT, BOS AND OPEN HEARTH (HLWW)

Graph to go here

At the older open hearth shops strike levels were low during the latter 1960s, as they were in the rest of the plant. With the exception of 1971, strike levels remained low

and even decreased during the 1970s, despite an overall increase across the plant. Even in a the high strike year of 1980, only two years before all open hearth steelmaking ceased, there were only 11.3 Hours Lost per Wages Worker, whereas the figure for the plant as a whole was almost 19. By contrast, at the BOS in the same year there were almost 27 Hours Lost per Wages Worker. Indeed strike levels at the BOS were very high from the third year of operation when they were roughly double those of the plant dispute levels, in terms of Hours Lost per Wages Worker. These levels remained very much higher than the plant average until 1982 when BOS Hours Lost per Wages Worker peaked at 391% of plant HLWW. This level fell steadily in 1983 and 1984, then dropped sharply. By 1986 BOS Hours Lost per Wages Worker was a mere 26% of plant level rates, a fall which was sustained through to the end of the 1980s when disputes were almost non-existent.

No matter what the product market for steel or the style of management, Graph 1 shows that there were significant differences between the two workplaces when both were operating simultaneously (see also Table 1). Neither fitted the plant dispute levels most of the time in any case. Yet the two workplaces were subject to the same company and plant management structures and tactics. Both were liable to the same policies for industrial relations handed down by BHP's Central Industrial Relations Directorate, as practised by plant level management and the plant industrial relations department. Both workplaces produced the same goods, steel, and indeed many of the former employees of the old open hearths found their way to the BOS. The reasons for this disparity must be found in the nature of the workplaces.

The Open Hearth

This section aims to explain briefly the links between the historical traditions of the outdated technology of open hearth steelmaking and the function of management

emphasis on workplace identification. The role of the internal labour market, in enhancing core workers' identification with their workplace, is given considerable weight. Work processes in this very demanding work environment also affected the nature of workplace relations. The open hearths were little changed from their

original nineteenth century design, except for incremental changes, such as oxygen injection during the conversion process which had been introduced early in the 1960s.

For the workers in the late 1960s and 1970s, the intense heat, heavy manual work, and omnipresent graphite dust in the open hearth atmosphere, would have been little different to that experienced by earlier generations of steel production and maintenance workers. There had also been little change in either the tasks of workers in particular jobs or in many of the customs and practices which defined work content and allocation of tasks of the production workers, those skilled and unskilled employees who had no trade training or other portable qualifications. The fixity of the open hearth technology and the clear role ascribed to work practices offered a source of workplace identification for many of those who worked there.

In interviews, former open hearth workers who had developed workplace-specific skills expressed pride in the kinds of cooperative work patterns present in the open hearth. Both the cooperative patterns and the pride in their existence in turn fostered the strong feelings of identification with open hearth production and the shops themselves. These feelings were strengthened for many workers by the working of strong internal labour market which offered these workers movement from unskilled labouring work through a series of steps to the highest "wages" classification and beyond to the "staff" level of foreman. Workers in the higher margins of the "wages" classifications were able to exercise a fair degree of individual decision making over their work processes. Indeed the "rule of thumb" nature of open hearth steelmaking relied on the skills of these most experienced workers whose ability to "read" the metal was widely admired by co-workers. In these kinds of ways the internal labour market enhanced workplace identification.

These open hearth traditional customs and defined job areas were generally accepted by the managers and foremen. Many of the latter had moved to this supervisory position from the "wages" levels. However, the power which accrued to the foremen was not simply from their experience at the workplace. Traditionally at steel plants in Australia, foremen had significant disciplinary powers, until well into the 1970s, and they wielded their authority with great relish. Open hearth

management above foremen level also identified with the stable, familiar technology. Since most of them had risen to their management positions as engineers, their interest was in the technology and the nature of the production process itself. They had become managers as a consequence of their technical qualifications and experience as engineers rather than from any professional skill or training in management. Their style of management thus tended to reflect their preoccupation with the technology and accepted custom and practice as long as it did not impinge on technical processes.

It is also evident from some high labour turnover data available for some years, that not all workers at the open hearth identified with the technology and goals of the workplace. Rather this identification was largely confined to those workers who chose to gain workplace specific skills as they moved up the job classification hierarchy. Those who received the highest margins were responsible for the melting or tapping of steel or drove the cranes carrying molten metal. These were part of the "stable core" of the open hearth workforce. Beyond this core, was a periphery of labourers and perhaps those on skill lower margins. They were unorganised, partly through the lack of a common language and a relatively high turnover. Many of these "periphery" workers were recent migrants of a great many nationalities who fed the seemingly insatiable demand for labour at the steelworks throughout most of the postwar years. Some gained skills to join the "core" workforce, many stayed only until they could find jobs in less unpleasant work environments.

The mildness of the open hearth industrial relations was thus in large part an outcome of the technology. Open hearths relied on traditional patterns of work

organisation and precedents which provided many clear rules, the acceptance of which was largely assured through the function of the internal labour market wherein most foremen had risen to their positions by moving through the traditional skill ranks. The very presence of workplace rules and widely accepted work practices enhanced the acceptance of this form of job regulation. The significant degree of workplace identification by many open hearth "wages" workers and by their supervisors and managers increased employees' commitments to this difficult and demanding work environment. The low level of strikes was further strengthened by

the high turnover, and language barriers between those at the periphery of the workforce. Moreover, those at the periphery were no match for the authoritarian foremen. As Graph 1 shows, until cessation of all open hearth steelmaking in December 1982, it was only an occasional year when strike levels reached anywhere near plant levels, much less the very high dispute rates in the BOS.

Basic Oxygen Steelmaking (BOS)

An examination of the BOS presents a different set of reasons for the peculiarly high level of strikes and notified disputes. Since this workplace contained many former open hearth production workers, the reasons for strike levels, which were generally very much higher than the proportionate plant strike levels, again originated from the specific characteristics of the particular workplace. For example, in the BOS the greater pace and intensity of work offered greater bargaining leverage to ironworkers. This came about through the requirement on workers for close coordination in tasks which led to greater management dependence on the workforce operating as a team. The pace and constancy of work, together with the enforced coordination at the BOS was derived from the capacity of this newer steelmaking technology to produce steel more exactly and more quickly. Not only did the newer steelmaking technology make greater demands on the workers, but also the new technology was capable of taking a wide range of incremental technological changes. These changes were introduced by management with little reference to the workers at the plant.

As a consequence, workplace relations were highly unsettled almost from the first. The early deterioration of workplace industrial relations was also hastened by the continuation of the authoritarian style of management and supervisors, despite the apparent commitment to teamwork rather than coercion. Matters were perhaps also exacerbated by the foreshortening of the internal labour market, together with the centralisation of control via the control room and a pervading public address system. Workers could no longer move through to foreman level, because only foremen with post school technical qualifications were employed at the BOS. Another significant factor in the unsettled or aggressive patterns of industrial relations at the BOS was

the absence of customs or practices which might mitigate the more demanding aspects of work. Some of these aspects of work organisation included the closer control over work processes, the destabilising effect of incremental technological changes, reduced opportunities for advancement and job security, and the greater pace and continuity of work.

By the beginning of the 1980s, the world steel crisis began to have effects on the Australian steel industry. At Port Kembla it was becoming apparent that despite its remarkably good industrial relations and production records, the open hearths were becoming economically non-viable. The BOS was now the only large scale steel production unit at the plant. In the competitive steel market, where customer specifications were increasingly exact, the old forms of management were no longer appropriate. At the steelworks a variety of new strategies of management were implemented by managers and foremen, many of whom had received intensive training in the new management styles. The impact of the retrenchment shocks on workers and union efforts to facilitate labour relations enhanced the effectiveness of this new approach. A new emphasis on multi-skilling of workers by the last years of the 1980s offered an updated version of the internal labour market for the BOS workers. In this new environment they were encouraged to develop new skills or gain post-school qualifications so that they might be:

"... fit for a variety of labours, ready to face any change of production,..."
[Marx, 1983: 458]

For all these reasons the workplace relations in the BOS in the latter half of the 1980s had become as notable for its peaceful industrial relations as it had been notable for its high dispute levels from the 1970s.

CONCLUSION

The current concerns with workplace industrial relations make it essential that a clear definition is developed of exactly what constitutes the workplace. An approach which simply takes the shopfloor or all points of production as the workplace will diffuse the impact of specific characteristics of work and management issues. Any analysis of workplace industrial relations therefore needs to deal with specific workplaces because it is interrelationship of the technology, work and management which will determine to a very large degree the labour relations extant. This was apparent in the case study discussed here. An examination of shopfloor relations across the plant may have identified some of these kinds of workplace influences on industrial relations processes. However, they would not have been seen in the context of the particular technology, historical features of the workplace or work organisation which was peculiar to the two steelmaking workplaces. These particular characteristics were inextricably linked with each other to create particular patterns of industrial relations. The role of the arbitration system, was simply as an external variable which only influenced workplace rulemaking to the extent that decisions were made only over those disputes which could not be dealt with through invoking workplace precedents. These were few in the open hearth. Central to developing new approaches to workplace industrial relations therefore lies an understanding of the specific characteristics of the workplace.

This kind of analysis is not simply limited to the steel industry. The need to recognise that workplace technology, management behaviour, work organisation,

and workplace industrial relations are inextricably interwoven is capable of much greater generalisation. Such analysis can be widened to include other industries - not only large scale metal processing but also for example the public transport industries. This sort of industry is similar to the steel industry in that there is a wide variety of workplaces requiring different skills and skill mixes.

An examination of the workplaces offers insights into the ways in which industrial relations at the higher levels can be illuminated. Managements have discovered the values to output of closer focus on particular work areas. Unions too must revert to focussing also on particular workplaces so that they can plan and respond to the

changing environment to the benefit of their workers and the union movement as a whole.

This raises the question of the extent to which workplace industrial relations is linked to that of plant and enterprise industrial relations. The argument of Marginson et al that greater account must be taken of enterprise industrial relations policy when evaluating establishment or plant level policies fits uneasily at first sight with the issues raised in this paper. Yet, there is not necessarily a contradiction between the two perspectives. As noted earlier, there are aspects such as union and employee participation in investment decisionmaking which are clearly issues to be dealt with beyond the workplace. Moreover, as Graph 1 shows, while there are differences in the industrial relations patterns of workplaces within the same establishment, there are also clear plantwide trends such as the largely sustained fall in disputes after the 1981-3 steel crisis. These were the outcome not only of the retrenchment shocks, but also the shift in management tactics. Their impact on BOS industrial relations was to reinforce the move to more stable workplace relations as labour and management came to grips with the new technology and its related patterns of work organisation. Nevertheless, these changes occurred in a particular context and the ideas raised need to be more thoroughly tested. This raises the question of conceptualising management's role at establishment and enterprise industrial relations vis a vis workplace relations, and would provide fruitful ground for further

research. Similarly the role of unions at different levels deserves further attention. Such research would do well to be premised on the hypothesis that there needs to be wider agreement of the differences and definitions of the workplace, the establishment, and the enterprise.

Thus, the paper has highlighted the value of the ways in which a close focus on the particular characteristics of the workplace may expand the knowledge of industrial relations for policy makers and analysts alike. It has shown that within the same plant or establishment, workplaces can evince different industrial relations characteristics. These arise out of differences in the nature of work organisation and workplace culture. In turn, these factors are in large part a consequence of the technology that is in place. This is not a technological determinist view, but one

which argues that to ignore technological differences within a plant is to ignore the material circumstances which invite or constrain the actions and responses of managers, supervisors and workers. The effect of contextual influences may thus have different consequences for different workplaces, just as the boom years of the 1970s led to different patterns of industrial relations in the open hearth and the BOS. In the current economic and industrial relations climate, it seems likely that the emphasis on the workplace as a source of attaining improved economic stability, productivity or efficiency will remain a priority. If this is so, the nature and impact of changes on workers need to be more fully explored, so that the basis for work reorganisation is not simply economic rationalism. This is why the trade union movement will need to retain its essential role, if it is to promote the interests of workers, not only at the national level, but also at the workplace.

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