

INTRODUCTION

Technology can only be understood as the aggregate of a series of social choices made in the past; it therefore carries the scars of past struggles and compromises.¹

Writing the history of work is a political exercise. How we understand the past shapes our behaviour in the present and our strategies for the future. John Mathews, quoted above, is concerned to explore appropriate trade union responses to new technologies and innovations in the labour process. He looks to history for guidance on the outcome of previous strategies and responses. Nor is he alone in this project. Trade union officials and workers before him have also looked to history in this way.

Conversely, while employers have been less inclined to look to history for guidance, they have attempted to construct the past in such a way that it legitimises their own position. The portrayal of improved wages and working conditions as the outcome of employer-initiated technological innovation is one example.² By denying the creative role of workers' struggles over work and its remuneration, employers hope to vindicate the reorganisation of production as beneficial to workers whilst negating the importance of workers' responses. History becomes an ideological weapon in the 'struggles and compromises' which determine the nature of work.

Given the reality of these issues, this is no time to abandon 'labour process theory', as some critics have advocated.³ Rather, historians need to respond to the challenge to explain and interpret changes to the way in which work is performed and organised by grounding theory in more empirical research. Harry Braverman's influential book, *Labor and Monopoly Capital*, published in 1974, suggested the possibilities of such analysis by charting the deskilling, or 'degradation', of craft work in the late nineteenth and early twentieth centuries. The interest generated by the so-called 'Bravermania' and its critics

has already produced a plethora of case studies. But despite all this work, the labour process debate is, as Richard Price put it, still in the exploratory stages. Although monographs and case studies have proliferated, they have often been undertaken in isolation from each other.⁴ And while it is now generally admitted that Braverman's thesis is flawed, few attempts have been made to improve it. We still need to know in more detail *how* work has changed and, even more importantly, *why* it has changed. What factors can be identified as determinants of the nature of work? The historian is well placed to offer answers to these questions, since a perspective of changes over time is essential to unravel the dynamics at work. It is to these questions which this book is addressed.

Building on insights from other writers in the debate, I propose a multi-faceted explanation of change in the labour process. Rather than seeking a single factor which can account for labour process formation, this book argues that such formations are produced by the operation of a set of factors. Thus, labour and product markets, technological developments and the availability of capital all directly affect the labour process to varying degrees in different historical circumstances. In a more general way, the activities of organised labour and capital, the state, and racial and gender orders (ideologies and practices) also influence the way in which work is designed and performed. None of these factors is, however, the *determinant* of the labour process. It is not possible to accord theoretical primacy to any single factor; the precise weighting of each contribution can only be established empirically. The resolution of this problem will be a central task of this book. Nevertheless, it can be argued that each factor interacts with the others and, most importantly, is mediated by the social relations at the point of production. Although the operation of these factors structures the options available at any given point, the outcome is determined by the decisions of management, with greater or less input from workers. In the final analysis, work is shaped by people.

Within this general framework, there are a number of specific theoretical points in the labour process debate which require clarification. Braverman contends that industrial work in capitalist societies since the Industrial Revolution has involved the degradation of traditional craft skills, and with this degradation has come a 'real subordination of labour' (in the Marxian sense). He links these changes with the development of capitalism towards monopoly capital, and the quest by the capitalist to control the labour process, the variable part of capital. According to Braverman's analysis, this quest for control led to three major processes. Firstly, by dividing the processes involved in any task and having these performed by different individuals, the skill of the worker was thereby degraded. This ultimately reduced the bargaining power of workers who could no longer rely on their monopoly of skills as a lever in bargaining, while at the same time standardising the way in which tasks were performed.

Secondly, the introduction of what became known as scientific management meant increased control over every detail of the work process. Thus conception and execution were separated, and knowledge and discretion were removed from the worker. Workers performed the manual work while mental tasks were reserved to management.

Thirdly, the development and use of new forms of technology increased direct control of management over production by tying the work process to particular machines. In the twentieth century Braverman points to the adoption of Frederick Taylor's theories and

methods for factory management as the embodiment of capitalist logic and the major element in the process of deskilling of the mass of industrial operatives. Taylor was the most prominent and influential exponent of 'scientific management' in the United States during the Progressive era.

Subsequent analysis has suggested six major flaws in this argument. Firstly, the deskilling thesis has been criticised as being too sweeping. Rather than a continuous, even transformation, it is claimed that the process was in fact much more uneven, involving reskilling as well as deskilling. Braverman's notion of the 'traditional craftsman' is also criticised as being too romantic. Real subordination, it is argued, was possible without the destruction of craft skills.⁵

At a more fundamental level, the notion of 'skill' itself is now understood as having ideological and political dimensions as well as a technical one. That is, skill is socially constructed in the workplace by the exercise of strategic power by particular groups of workers. Any discussion of 'deskilling' must specify what concept of skill is being employed. Is work 'deskilled' when the operatives lose their status or when the technical content of the work is simplified? For instance, in one sense female bookbinders were deskilled over the period 1750 to 1800 in that initially their work had been a recognised apprenticeship trade, with a seven-year period of indenture. After 1780, however, the status of bookbinding as a skilled trade was undermined by the use of trainee labour taught on the 'learner system' rather than through an apprenticeship. There had been no corresponding change in the actual work performed.⁶

Conversely, in some cases workers can be recognised as skilled workers where the technical content of their work is of a routine nature. Machine minders in the British printing industry, for instance, were called 'machine managers' and paid a 'skilled' rate, while people performing similar work in other industries were regarded as unskilled.⁷ Are machine minders therefore deskilled?

These cases complicate the more usual application of the term to male craft work which has been subdivided and mechanised, with or without loss of status and pay for the worker. Beyond this, there is a major problem in distinguishing between work which has become 'specialised' as opposed to that which has been 'fragmented'. The former term refers to the situation where a worker brings a more general expertise to bear in performing a narrower range of tasks. Fragmentation, on the other hand, refers to a part of a formerly unified process, performance of which requires no knowledge or experience of the process as a whole. Thus, bricklayers who spend their time exclusively constructing elaborate towers would be considered specialists. The labourer who carries the bricks would be performing fragmented work.⁸

The distinctions, however, are not always so clear. Some workers can successfully claim fragmented work as specialised (and therefore more skilled) by insisting on a general period of training before being allocated to a subdivided process. On the other hand, workers who bring a general training outside the workplace to performance of a particular task might not have this general training recognised as skill. For instance, women who acquire expertise at sewing in the home then enter paid work sewing shirts or underwear have not been regarded as specialists. Similarly, when such work is subdivided it is regarded unequivocally as fragmented because of the inability of

workers to define it otherwise. As Cora Baldock has pointed out, 'the issue of deskilling . . . needs to be seen in the context of the power invested in the position'.⁹

These issues have particular relevance for any discussion of women's work. Feminist writers have noted the 'gender bias' of definitions of skill.¹⁰ Men are able to claim their work as skilled while women are not. It is indisputable that historically women have been largely confined to low-paid, low-status, so-called unskilled work. What is less clear is how far this work is technically less skilled than men's or how far it is merely defined as less skilled because women perform it. Discussions of feminisation accompanying deskilling become confused and misleading unless this issue is resolved, as do more general attempts to explain the historical development of the sexual division of labour.

To resolve this difficulty it is necessary to arrive at some objective definition of skill, apart from its social construction. Attempts to formulate objective evaluations of work as skilled have stressed the importance of task range and worker discretion as key criteria. Thus, a skilled worker has a knowledge of materials, tools and methods, and applies these as appropriate to a variety of jobs.¹¹ Such knowledge and judgement require a considerable period of training and it is this training period which gives skilled workers their main weapon in collective bargaining. By restricting entry to training they can secure a monopoly of knowledge and judgement. Any campaign by employers to break this monopoly has to be of a very protracted kind, lasting at least as long as it takes to educate new workers.

While I would agree with much of this argument, I think it underestimates the importance of manual dexterity in the whole process. Skills take time to acquire in the manufacturing context because they involve practice as well as education. Thus, a compositor needs time to learn about principles of balance and spacing, different typefaces, divisions of words, spelling and grammar, and so on, but time is also needed in order to become adept at picking type and setting it quickly.¹²

This dimension of technical skill is important since it explains in part why women's skills are devalued in the market place. Manual dexterity, although often considered a 'natural' female attribute, in reality is acquired by large numbers of women in the course of their training at home and school. Thus, as Chilla Bulbeck has observed, if a skill 'is widely held in the workforce, it is less likely to command high status and rewards, because it confers less bargaining power on those who have that skill'.¹³ The fact that manual dexterity is not generally considered an integral part of skill reflects the common equation of skilled work with men's work. Their skills are acquired through formal on-the-job training.

For my purposes, then, an objective definition of skilled work in the manufacturing context refers to work which involves a variety of tasks, an element of judgement and a degree of special dexterity (speed, accuracy and particular technique). Work is more or less skilled to the extent that it embodies these features in greater or lesser degree.¹⁴

A second area of debate concerns Braverman's treatment of Taylorism and scientific management. Tony Elger's critique draws our attention to Braverman's failure to explain the timing of the adoption of scientific management. Such dramatic changes were, he argues, precipitated by 'crises of valorisation', or serious difficulties (from the capitalist's

point of view) in extracting surplus value from production. Or, as Eric Hobsbawm explains: 'It was safer if less efficient to stick to the old ways, unless pressure of profit margins, increased competition, the demands of labour or other inescapable facts forced a change.'¹⁵ It was the depression of the late nineteenth century, combined with growing working-class demands, which precipitated the movement to intensify labour in the United States of America.

Others challenge Braverman's assertion that Taylorism expressed *the* management logic of monopoly capitalism. Subsequent writers emphasise other strategies employed by management to minimise the opportunities for collective worker opposition. Friedman, for instance, points to the adoption of 'responsible autonomy' by managements anxious to overcome the contradictions produced by scientific management's tendency to monopolise conception. This attempted monopoly, argues Friedman, produces an inevitable worker resistance. In order to cope with this new form of insubordination, managements were forced to adopt alternative strategies, namely 'the maintenance of managerial authority by getting workers to identify with the competitive aims of the enterprise so that they will act "responsibly" with a minimum of supervision'.¹⁶

Bryan Palmer argues that Braverman's account of Taylorism emphasises its direct control features to the neglect of its more subtle, ideological aspects. Taylorism, he suggests, along with the 'efficiency movement' in general, undermined the populist conception of the worker as creative agent and transformed him/her to a passive factor of production. At the same time, welfarism and 'personnel' initiatives developed alongside Taylorism to strengthen and sustain capitalist hegemony beyond and within production.¹⁷ Littler likewise emphasises the changing nature of Taylorism as it became allied with industrial psycho-physiology (industrial psychology and fatigue studies) in the years between the two world wars.¹⁸ As an extension to these arguments, Beechey draws attention to the importance of the state in affecting the labour process. She criticises Braverman for failing to distinguish between the strategies of individual capitalists in organising the labour process and the strategy of capital in general, 'represented in state apparatuses which are involved in organising the general conditions of production and accumulation and in regulating the supply and conditions of labour'.¹⁹

This point is particularly pertinent in the Australian context where state wage-fixing bodies played a key role in constructing and reinforcing definitions of work. Australian feminists have begun an examination of the role both of state wages boards and of federal arbitration in defining the sexual division of labour.²⁰ Peter Cochrane has looked more particularly at the role of arbitration in affecting workers' responses to technological change. He argues that 'the arbitration system also militated against any ideas about workers' power'. The industrial courts were, he points out, empowered to deal only with 'economist' issues (wages and working conditions) and had no mandate beyond this to interfere with the rights of capital to run business in its own way.²¹ But while the scope for the arbitration system to be used as an arena of struggle over the labour process was thus limited, arbitrators still had considerable influence. In fact, argues Cochrane, between the wars, 'progressive' arbitrators pressed Taylorist ideas on 'sluggish manufacturers', contributing to the 'important part' played by the state in popularising scientific management amongst Australian employers.

Richard Edwards acknowledges the range of strategies employed by capital in the period coinciding with the emergence of monopoly capitalism. He argues, however, that all these attempts failed. There was, he maintains, a shift to structural forms of control through bureaucratic and technical means. Most importantly, dual labour markets were created in a strategy to 'divide and conquer' worker opposition.²² As this idea is expressed in the later work by Edwards, Gordon and Reich, large firms 'aimed to divide the labour force into various segments so that the actual experiences of workers would be different and the basis of their common opposition would be undermined'.²³

The work of Hagan and Fisher on Australian coalminers and compositors suggests a variation of this 'divide and conquer' theme. They argue that different methods of payment encourage different levels of class consciousness. In the case of coalmining and printing, 'piecework acted to diminish the chance of the union members developing a loyalty to a large entity like the working class'.²⁴

Different methods of payment clearly do have different effects on workers' attitudes to each other and to their employers. However, it is important to note that it is not possible to deduce these effects in any direct way. For instance, in some circumstances workers can combine in defence of the independence associated with piecework. (Indeed, the evidence from Hagan and Fisher also supports this contradictory aspect of the system.) Similarly, persistent cutting of piece rates can engender an enhanced sense of collective exploitation amongst workers. Nor is it necessary for workers to be paid by the piece for them to recognise a degree of self-interest in the prosperity of the industry which employs them.²⁵

When discussing methods of payment it is important to bear in mind Hobsbawm's warning about the dangers of generalisation, 'especially in view of the incredible complexity of the industrial scene'.²⁶ The ramifications of any particular method depend very much on the circumstances and conditions under which it is implemented. There are many factors, such as quality control; regularity of work; the need for careful use of machines and materials; ease of accounting; the necessity of supervision; flexibility in working hours; the existence of outwork; the need for apprenticeship training; the imposition of tasks for time work, and how these are decided; methods of determining levels of piece rates; whether pieceworkers are paid for waiting time and compensated for other difficulties in the physical working environment; the sex of the workers; and the effects of government regulations. All these can affect whether or not a particular scheme is advantageous to either employees or management. With these qualifications in mind, it is nonetheless true that methods of payment do have the potential to enforce greater intensity, or speed-up, in the workplace and can thus be seen as a method of control over labour.²⁷ And they also have the potential in some circumstances to deflect worker opposition to management into competition with other workers.²⁸

Michael Burawoy also investigates the ways in which potential worker opposition to management is deflected into conflict or rivalry between workers. He shows how workers' methods of adaptation to work can produce acquiescence in the capitalist system itself. He points in particular to 'games' constructed by workers, such as speed competitions, which legitimise the labour process. As Burawoy says, 'one cannot play a game and question the rules at the same time; consent to rules becomes consent to capitalist production'.²⁹

Several British writers have investigated other ways in which workers' techniques for adapting to industrial work can serve the interests of management. Paul Willis has shown how definitions of masculinity which emphasise performance of 'tough' work help to reconcile male workers to heavy, dirty, noisy, boring factory jobs.³⁰ Anna Pollert's study of tobacco workers shows how feminine cultures also serve the interests of capital. The world of romance, brides and babies imported into the factory with female workers helps them cope with the rigid format, supervision and general tedium of modern factory work. At another level, firms draw on family ideology and patterns of hierarchy in an attempt to bolster the authority of employers over employees with the patriarchal authority of men over women and older workers over younger workers. Thus, 'class control was mediated by patriarchal control'.³¹

What all these writers share is an emphasis on the inadequacy of Taylorism alone as a method of securing control of labour. This relates to a third area of criticism of Braverman: his failure to allow for the strength of workers' resistance in the shaping of the labour process. Numerous writers have shown how important such resistance was, as was the opposition of overseers and middle-level managers.³²

While workers' resistance was often important, it is wrong to assume that the workforce will always be oppositional. To assume that conflict is always the major characteristic of the relationship between labour and capital is misleading. This relationship is ambivalent and interdependent. There is potential for co-operation and compromise as well as conflict. What is of interest to historians is the particular set of historical circumstances which affect the balance between these tendencies at any given time.

One can apply the same argument to the critique of participants in the labour process debate who argue for the primacy of either control or exploitation as the source of conflict between workers and management over the labour process.³³ For example, at one extreme are writers such as Storey who argue for 'control' and 'resistance' as the dialectic in the development of the labour process. Thus,

... a key structural element of management is control. But because perceived interests are thereby potentially threatened, workers do in varying degrees resist this control both individually and collectively, passively and actively. This dynamic of contestation constitutes the basis for a dialectical interplay between control and resistance.³⁴

At the other extreme is Sheila Cohen's assertion that workers' struggles within the labour process 'are not about "control" but about exploitation; not about "bossing" but about the relationship between effort and reward, labour intensification and work measurement'.³⁵

I would suggest that it is not theoretically necessary to choose between control and exploitation in this way. From the workers' point of view, some struggles are about control, particularly those which involve craft workers conscious of their traditions and status as artisans. One could also hypothesise that 'bossing' itself would become an issue where workers felt they were being exposed to unreasonable or offensive authority. The case of female workers subject to the closer scrutiny of male overseers is one obvious situation where conflict would be about bossing rather than exploitation of labour. On the other hand, exploitation would appear to be the most likely cause of friction when changes in production methods clearly resulted in workers having to work harder for

fewer rewards. This would seem to be more applicable to semi-skilled workers where subdivision and mechanisation are more obviously aimed at intensifying labour rather than undermining control. And, in a sense, the distinction between control and exploitation is a false one: loss of control usually implies greater exploitation. It is generally impossible to struggle against one without struggling against the other.

The issues from management's point of view are likewise not amenable to such reductionism as the dichotomy between control and exploitation implies. The capitalist imperative to extract increasing levels of surplus value is clearly the major reason why capitalists seek innovations in the work process. But the motive to effect changes as well as the ability to carry out such plans is often closely related to the question of control in the workplace. For instance, capitalists may introduce machinery and subdivided work processes as a strategy to undermine or co-opt the power of skilled workers who are resisting employer efforts to reduce their wages. For such employers, securing additional control over the labour process is essential to increasing the rate of valorisation. The issues of exploitation and control are thus often inseparable for employers, as they are for workers.

The final relevant area of criticism of Braverman's thesis is that provided by feminists. We have already noted the connections made between patriarchy and capitalism in the context of the 'control' debate. We have also seen how feminists, along with others, have questioned definitions of skill which do not allow for its 'social construction'. This is related to the question of 'feminisation' of occupations which had been predominantly male. Thus, any discussion of women entering 'male' jobs which have been deskilled must be sensitive to the possibility that such jobs are not so much technically deskilled as, rather, redefined as unskilled because women do them.³⁶ Or, as Beechey puts it, when discussing feminisation, 'it is important to investigate the extent to which it is the same occupation which is being "feminised", or whether the process of deskilling results in the creation of a new occupation or function within the collective labour process'.³⁷

I would also add that it is important to determine the extent to which women are entering existing jobs previously performed by men, or whether they are performing new work created by changing technologies and market requirements. Thus, women entered the Australian meat-processing industry in large numbers in the 1950s and 1960s via packaging departments. This was new work created by the growing demand for boned meat packed in cartons for the US market rather than the export of whole carcasses.³⁸

Feminists have also drawn attention to the importance of the inter-relationship between the position of women as wage-labourers and as domestic labourers within the family in affecting changes in the labour process. Thus, state policies, male trade union exclusivism and ideological assumptions about women's place affect the sexual division of work in ways which cannot be understood by reference to Braverman's models of family transformation under capitalism.³⁹ Braverman posits the destruction of the social and productive roles of the family under capitalism, leaving only an expanded role as a unit of consumption.⁴⁰

One can question whether the family under capitalism has been stripped of its social functions. And while, in general, the trend from production to consumption is true, it overlooks the continuing role of the family in the daily reproduction of labour power and

the biological reproduction of the species. This oversight underestimates the continuing amount of domestic labour performed in the home, in addition to the 'labour of consumption'. And as this labour falls mainly on women, their role in the paid workforce is inevitably affected.⁴¹

The importance of this qualification is that it helps explain why it is women who occupy the lower-paid, lower-status jobs in the workforce. As Curthoys expresses it:

the sexual division in the labour market . . . is neither a simple reflection of earlier pre-industrial, household divisions, nor something independently generated within the workplace or the labour market. Rather, it arises from an interaction between bio-cultural tradition and practices, on the one hand, and the specific institutions of individual capitalist production on the other. [It] is the product of a fundamental contradiction between the continuation of a family household structure and capitalist relations of production.⁴²

Thus, the biological and cultural association of women with childbirth and child-care placed them at a disadvantage in the labour market. Their lower participation rates meant they were in a weaker position to bargain for high wages and the recognition of skills than were male workers. Their lower wage rates in turn provoked exclusionary tactics from male workers (supported by some women) in defence of higher male wage rates which were often used to support women as unpaid labourers in the home. These tactics were reinforced by the state through protective legislation and the decisions of wage-fixing tribunals, as well as through educational services which channelled workers into different occupations according to sex. The sexual segmentation of the paid workforce then reinforced the sexual division of labour in the home as women, restricted to low-paid work, were unable to challenge men's position as family 'breadwinners'.

Analyses by other writers offer variations on this theme, with the major disagreement being over the extent to which male worker exclusivism was a defence of male patriarchal privilege or of the 'working-class family'.⁴³ This is an issue which can be illuminated by historical research, bearing in mind that there was always more than one version of 'the family' in the working class. Households headed by women were not unusual. One must ask whether they were also defended by such strategies.

Work such as that by Cynthia Cockburn also indicates that the stakes were more than monetary. The erosion of job segregation by sex was a challenge to men's sense of masculinity as well as to their capacity to earn high wages.⁴⁴

The emphasis on the connections between family and paid work also feeds into analyses of the 'reserve army of labour'. Originally posited by Marx as a category undifferentiated by sex, the idea was taken up by Braverman. He argued that women formed part of the 'floating and stagnant' sectors of an industrial labour reserve, drawn into the workforce by the inadequacies of the male wage. They formed a pool of labour which could be drawn on in times of economic expansion and repelled in times of recession.⁴⁵

Feminists, however, have criticised this analysis as being sex-blind in the same way that Marx's was.⁴⁶ Braverman's concept fails to take account of the sex-segregation of the labour market which prevents women's labour from being interchangeable with men's except in extreme circumstances (for instance, in wartime). Some would therefore argue for its rejection altogether as a useful category of analysis.⁴⁷ I would argue, however, that

the concept is a useful one, but that it is more appropriate to conceptualise women as a pool of potential wage-earners who can be provided for the labour market under certain circumstances. This concept emphasises changing factors in the supply of female labour rather than fluctuations in demand alone. Combined with a notion of household economic strategies, it can explain shifting levels of female workforce participation in terms of shifting requirements for the labour of women (both married and unmarried, mothers or not) as unpaid labourers in the home.⁴⁸ Thus, patterns of fertility, shifts in household production and domestic technology, and fluctuating male incomes determine whether a woman's labour is of more value to the household unit in the home or in the workforce. And the decision for women to enter paid work outside the home is mediated by the strength of ideological prescriptions about 'woman's place'.

A focus on the labour process can illuminate these processes. It can also provide a new angle of vision on other aspects of social history: on the changing role and status of women within industry and society as a whole; on definitions of masculinity and femininity; on the role of the state in constructing and reinforcing sexual divisions both in the home and in the paid workforce; on the quest for social justice for workers, both male and female; on the relationship between radical ideologies (such as anarchism, socialism, communism, syndicalism and feminism) and the workplace.

This study focuses on the years between 1880 and the outbreak of World War II. This period coincides with the rise of Victoria's manufacturing industry as an important part of both the Victorian and Australian economies. Victoria led the way in the establishment of manufacturing industries in the period between 1860 and 1890. Even when New South Wales overtook it in terms of total manufacturing output in the 1890s, Victoria continued to be the leading employer of female labour and the most important centre for the production of clothing and footwear. The time-span covers periods of expansion, depression and war. It was in this period that industrial capitalism was both established and tested. Over the same time, workers became organised and governments entered the industrial arena in an unprecedented way, not only fixing tariffs but also regulating the price and conditions of labour and, in some cases, directly engaging in manufacturing. And, while paid work was being transformed under these influences, domestic labour was changing. As the birth rate fell, domestic production increasingly moved into the factory. In short, these were formative years in the development of Australian urban society and culture. The time-span thus offers a broad field of view in which to observe the historical unfolding of patterns of change.

The industries selected as case studies also offer a range of types and experiences. First there is the clothing industry, with its overwhelming female workforce (over 85 per cent), labour intensity, multiplicity of productive units, and an extremely varied and highly protected product market. In sharp contrast is the printing industry, traditionally a male industry but increasingly employing females (one-third were women by the 1930s), increasingly capital-intensive, a smaller number of firms, a relatively homogeneous product market and little import competition. The boot and shoe industry falls somewhere between the two: a recognisably male trade but one which employed a significant number of women (between one-quarter and one-half of workers); and a combination of