PANDORA'S BOX OR A BOX OF DELIGHTS:
NEW WORK PRACTICES AND THE LIVED EXPERIENCE

Paul J.T. Biddis
Adrian Wilkinson
Loughborough University Business School

Contemporary literature concerning new work practices (NWPs) falls into two broad camps: the advocates and the critics. The former focuses on the benefits the latter the costs. In assessing the impact of NWPs at two companies through both quantitative and qualitative methods this article offers a more balanced view of NWPs. It argues that although the findings appear to lend support to the more optimistic view that NWPs can benefit employees both views are limited and the picture more complex than a simple dichotomy of enrichment or degradation.

Introduction: The Debate

While new work practices "have no settled meaning what they have in common is a departure from traditional work systems and labour management relationships" (Ichinowski et al, 1996: 300). Literature on NWPs (including Total Quality Management (TQM), Business Process Re-engineering (BPR), cultures of excellence, empowerment and teamwork) revolves around two broad schools: the advocates and the critics. The former promote the benefits viewing them as being unequivocally good – to paraphrase our analogy, a Box of Delights. In contrast, critics focus upon the costs. For them NWPs are better depicted as a Pandora's Box for they lift a lid that unleashes work intensification, exploitation and (heightened) control.

The Prescriptive School

Although the term new work practices spans an array of initiatives, according to their advocates they all share a common emphasis – they are of benefit to employees and improve the quality working life. Kanter (1983; 1989) sees new forms of work organisation as the key towards an enterprising workforce characterised by a culture of pride rather than one of 'mediocrity' and 'inferiority.' Advocates of 'excellence' assert that such cultures generate enthusiasm and excitement at work which lead to greater employee commitment (Pascale and Athos, 1981; Peters and Waterman, 1982). For Oakland (1995), a total quality environment builds trust, improves communication and develops interdependence, which in turn, leads to commitment. Feigenbaum (1991) believes that the development of a multifunctional workforce, employee involvement and team-based work through a TQM philosophy will make work:

> more challenging and interesting for employees as their knowledge and skills are improved and when they are increasingly able to influence decisions affecting their jobs. (ibid. 207).

Responsibility and accountability foster pride and job enrichment (Hardy and Leibra, 1994). Proponents of BPR make similar claims: Davenport (1993) argues that it offers the potential for a more enriched work environment in which 'the human contribution to work is celebrated and optimised rather than eliminated' (ibid. 316). This is facilitated by innovative process designs that leave room for worker 'creativity and autonomy.' Johanasson *et al.* (1993: 202) believe that

this environment will consist of employees who 'have broadened skills and be highly motivated.' Through the development of a high trust environment BPR will allow workers to gain 'self-esteem in their ability to make the right decisions and actions' (Davenport and Nohria, 1994: 15). Westall *et al.* (1995: 29) argue that giving people the necessary skills, information and authority to take greater responsibility (empowerment) will lead to 'increased motivation, reduced stress and improved performance.' Similarly, Womack *et al.* (1990) argue that NWPs will provide workers with the skills and knowledge that allows their potential to be recognised and fulfilled – 'highly skilled problem solvers' (see also Wickens, 1987).

The Radical School

Critics of NWPs picture a different environment. Charging advocates with 'massive deceit' they argue that NWPs are merely a cloak disguising 'the intensification of work, increased surveillance and management control over labour with cosmetic language of teamwork and personal empowerment' (Webb, 1995: 107). Increased participation and responsibility only extends to being able to make changes when the process exceeds prescribed – management defined – limits (Delbridge and Turnbull, 1992). Only then are employees 'empowered' to act and take corrective action, and even here such actions must be done within accordance of managerially prescribed methods (Klein, 1989). Any genuine freedom and discretion is lost with rhetoric nothing more than a facade towards legitimately imposing managerial rules, procedures and decisions (Garrahan and Stewart, 1992). While increased training and flexibility may increase the net-value of workers this does not develop into additional skills and knowledge for the worker. Flexibility is facilitated because work is broken down into minute parts, a 'standard operation' from which all skill has been removed from 'even the simplest tasks' (Delbridge and Turnbull, 1992: 62). Standardisation is thus an essential part in eliminating skill:

> In order to eliminate parasitism and superfluous work motions, a thorough standardisation that can be immediately understood and observed by everyone is necessary. In order to promote standardisation complicated work tasks must be avoided as much as possible and work simplified. (cited in Dohse *et al.*, 1985).

Work activity has therefore become part of a highly standardised process with worker 'tasks' more interchangeable and workers themselves more expendable (Braverman, 1974). As Klein (1989: 60) notes 'the attack on waste... inevitably means more and more strictures on a workers time and action.' The elimination of (all) waste extends to worker time/activity and consequently they are subject to an increasing and intolerable pace of work (Garrahan and Stewart, 1992; Klein, 1991).

Underpinning critical thought is the belief that NWPs establish 'regimes that both create and demand systems of surveillance, instil discipline and consolidate central control' (Sewell and Wilkinson, 1991: 13). For Delbridge *et al.* (1991) the development of extensive systems of surveillance and monitoring create a culture of compliance where workers are constantly measured on performance and consequently 'under the gun all the time' (Klein, 1989: 64). Through systems of surveillance, workers have become subject to heightened forms of coercive control that plays just as much on their conscience (for fear of being publicly humiliated, letting the team down or made out to be a wrong doer) as on more direct methods (penalised/disciplined). Apart from making production more efficient electronic tagging, quality control and more visual methods of monitoring provide management with detailed information allowing them to trace back any faults to the individual responsible, who will in turn be penalised for their mistakes (Hayes, 1981; Garrahan and Stewart, 1992; Sewell and Wilkinson, 1991). For Parker and Slaughter (1988) rather than creating a more open and trusting

environment, NWPs lead to an environment better depicted as 'management by stress.' As Dawson and Webb note:

> Employees are not merely encouraged but expected to identify process problems, intervene in production to rectify them and to suggest changes in the organisation of production to prevent their recurrence. Far from improving the quality of working life, this widening of responsibility creates extra stress. (Dawson and Webb, 1989: 236).

For the critics, new forms of work organisation achieve mechanisms of self-subordination and self-correction by shifting responsibility onto individuals within the team. Employees, viewing themselves as 'guardians of quality,' will 'identify fellow workers who are perceived as miscreant, responsible for poor performance and quality' (Garrahan and Stewart, 1992: 94). Rehder (1990: 91) argues that the coupling of accountability and team conformity creates an environment where 'everyone seems to be "they", both fellow workers and union representatives.' This is furthered as employees are subject to a system which is designed to identify 'worthless, parasitical and superfluous persons – oneself included' (cited in Dohse *et al.*, 1985). Not only do employees come to feel detached and isolated even amongst their peers but they also develop a mistrust in them as well as in management (Parker and Slaughter, 1988).

> The teamwork package is really a means by which management uses workers' fondly held collective work experiences for the company's own ends… Appealing to workers' class experience of collective effort of community and solidarity, [they] can be used to 'con' workers into accepting what is mostly old wine in new bottles. (Garrahan and Stewart, 1992: 88-89).

As this section has illustrated, for the advocates, NWPs potential for revitalising both production and human related elements within an organisation is vast and beyond doubt. In contrast, for critics, rather than a culture of pride, NWPs offer a culture of stress, mistrust and adversity.

Research Methodology and background

The research adopted a comparative case study approach that incorporated both quantitative (questionnaire) and qualitative (interview) methods. Combining multiple methods helps overcome the methodological weaknesses of single method studies as well as allowing for greater richness and reliability (Webb *et al.*, 1966; Denzin, 1970; Patton, 1990). The findings from the questionnaire complemented the data gained from the interviews and turned out to be invaluable as it illustrated how different the conclusions drawn from the findings can be by the use of a sole method. For example, the questionnaire allowed us to ascertain that employees were working harder – on the surface supporting the critical argument. However, (as we will observe later) the data supplied in the interviews led us to question the arguments and assumptions of the intensification thesis.

Each company provided distinctively different settings: one a manufacturer of defence aircraft operating in an increasingly volatile climate with a strong trade union presence, the other the sales division of a chemical company that is reasonably sheltered from the outside environment with a relatively conflict free industrial relations history. At the first company (Aerospace) 150 questionnaires were issued and sixty-five were returned. Some sixteen interviews were held with management, supervisors and employees. At the second company (Atochem) a total of thirty-nine questionnaires were returned out of seventy distributed. Eleven employees were interviewed again including a range of levels. In addition, at both companies informal conversations were held with employees both within and outside of the company.

Aerospace is part of the defence division of a British-owned aerospace company which in recent years has suffered as a result of a global reduction in defence expenditure. Tallied with a strengthening of the American defence industry as well as the emergence of new competitors – in particular former Soviet Bloc States, the company consolidated many of its interests both within and outside of the aerospace industry. It has also experienced a large-scale rationalisation of its workforce, reducing it by nearly a half since the beginning of the decade. In addition, the company has invested in looking at ways to improve efficiency and competitiveness and from this a number of initiatives under the banner of 'improvement programmes' have been implemented from the early 1990s.

Employing approximately 80 staff and situated in the Northwest, the site is the final stage (final assembly) of production for one of the company's military aircraft. Here the drive for improvement was marked first by moving final assembly into one purpose built hanger; up until eight years ago it was not only divided between three hangers scattered across the site but also under separate management. Aerospace has also invested heavily in updating plant and equipment and the move has significantly reduced costs and time as well as integrated all operations into one central area. It has also introduced a new computer logistics system - the development management system (DMS) that has improved production. The company operates a batch production system and work is organised around four stages (teams) – each reflecting a section of the build process. Headed by a supervisor, teams are responsible for all work activity required in their stage. A batch represents a contract and thus figures vary from one order to the next. There is often a break in production between the completion of one contract and the start of a new one. A key feature of the improvement philosophy has been the setting up of an improvement team whose purpose is to analyse the work process and identify areas where the system could be improved. The team itself comprised of key workers but was headed by the project manager and operated mainly during breaks in production. The company has also promoted flexibility and focused on developing employee training – it has been IIP accredited. All staff now have access to the on-site learning centre and workers have regular assessment meetings with their supervisor who is responsible for overseeing their training needs. There was a strong trade union presence. All questionnaire respondents and shopfloor workers interviewed had membership. However, the role of unions was considered by workers themselves to have played little influence in their work experience (see also Guest 1999)

Atochem is part of a French-owned multinational chemical company producing chemicals and plastics. Its operations span the globe and within the UK it employs 550 staff situated at five locations. The company is structured into seven 'integrated' divisions organised upon product/function lines, each operating as an independent profit centre. In recent years Atochem has grown through mergers and acquisitions. Research took place at the company's UK sales and administration headquarters. Situated west of London, Atochem employs approximately 115 staff and has a high degree of autonomy in its operations. It is split into two divisions: chemical and plastics, the former being itself sub-divided into commodity chemicals and speciality chemicals. Work is structured into product groupings which reflect the company's organisational structure: a division head and under him department manager(s) who are responsible for salesmen and administrators. There was no trade union presence and the company has had a relatively conflict free industrial relations history. Over the past five years the company has become formally committed to ensuring quality in all its operations. The move towards quality originated out of the company's drive to secure the BS5750/ISO 9002 quality assurance awards at its manufacturing sites. Since then 'quality' has permeated to all areas of the company's operations and is now one of its strategic objectives for ongoing development.

> Our customers are the key to our success and future. Our corporate aim is to ensure
> their loyalty to us and anticipate their needs through the *quality* of our *products*, our
> *people*, our *procedures* and *processes*. (Company Mission Statement, emphasis added).

Much of the administration work has been subject to computerisation. All ordering, accounts
and customer queries were now undertaken on the computer. The system overseeing this is
updated every six months to allow for any changes/improvements to be implemented.
Consequently administrators were, for the majority of the time, now situated at their
desk/computer workstation. All staff now have greater discretion and accountability with
customers. Similar to the improvement team at Aerospace, working parties, consisting of
employees and headed by a person from senior management, have been set up which are
designed to assess the company's operations and to look at ways these can be improved. This is
in addition to regular team meetings. Over the past few years Atochem has developed its training
programme focusing on aligning the training needs of individuals with those of the company and
IIP accreditation has been awarded.

The Impact of New Work Practices

Employees at both companies endorsed the introduction of NWPs over the past five years. To
gain an understanding of how worker opinion has developed over time respondents were asked
to indicate both prior and current views. Initial support was strong (*see* Table 1). Moreover,
most who were not in favour were not opposed either. This support has not only remained but
increased (*see* Table 2). Respondents showed a strong awareness of the reasons behind NWPs
(*see* Table 3). Increasing efficiency and improving customer service scored highly at both. Few
saw NWPs as having anything to do with employee satisfaction and only at Aerospace was there
a significant number who viewed them as a means to get employees to work harder.

Table 1: When improvement programmes were first introduced, were you?

	Aerospace %	Atochem %
a) in-favour	58	75
b) indifferent in opinion	26	22
c) opposed	16	3
	n = 62	n = 32

Table 2: If you have changed opinion, have you become?

	Aerospace %	Atochem %
a) more supportive	81	67
b) less supportive/opposed	19	33
	n = 16	n = 6

Table 3: Why, in your opinion, were NWPs introduced (please tick two only)?

	Aerospace %	Atochem %
a) to increase efficiency	77	81
b) to improve customer service	66	91
c) to increase employee satisfaction	11	16
d) to get people to work harder	20	0
	n = 62	n = 32

For the majority of employees work was now more satisfying (*see* Table 4). More importantly, many of those who saw no gain, saw no deterioration either. It would therefore appear that whether or not NWPs have lived up to the claims of advocates, they have provided for a better work environment than that which existed previously. Moreover, few were in favour of reverting to the 'way things were' (*see* Table 5).

Table 4: Since the introduction of NWPs has work become?

	Aerospace %	Atochem %
a) more satisfying	41	64
b) neither	38	36
c) less satisfying	21	-
	n = 61	n = 36

Table 5: If management were to revert to 'the way things were' before the introduction of NWPs would you be?

	Aerospace %	Atochem %
a) in-favour	11	6
b) indifferent in opinion	49	11
c) opposed	40	83
	n = 55	n = 36

EMPLOYEE-MANAGEMENT RELATIONS

The majority of employees at both companies felt relations between themselves and management have improved (*see* Table 6). This was reflected in comments made by them of a 'more open' and 'co-operative' environment. As workers at Aerospace commented: 'I have never known a better employee-management relationship than there is now. Things have got slowly better over the years.' 'This has been about the best management-shopfloor relationship that I have come across in Aerospace'. Few believed relations to have deteriorated – none at Atochem indicated this. Indeed, almost all believed relations were good before. However, although relations were favourable at both companies, only at Atochem did employees indicate that there was a reasonable degree of trust in management (*see* Table 7). At Aerospace, even within the context of a more co-operative environment, NWPs have not been able to dispel mistrust in management let alone translate into commitment and loyalty (*see* Table 8). While at both companies employees expressed commitment, workers at Aerospace differentiated between

commitment to their work and commitment to the organisation. While they were prepared to work hard and make sure contracts were completed on time this commitment did not extend to the company overall. Nor was it automatic or freely given, but dependent upon some reciprocation by management – not being held to strict time keeping or 'watched every minute of the day.' Therefore, even though workers were, at times, willing to work in a manner distinctly to the benefit of the company this was not unconditional or out of any love for the company. This (albeit limited) autonomy:

> can be regarded as part of the broader arrangement between workers and the organisation, in which limited affiliation with the organisation is exchanged for a degree of autonomy. (Katz, 1973: 191).

This distinction was less apparent at Atochem with employees expressing attachment not only to their work but the company as a whole. Perhaps this difference reflects the attitudes of blue and white-collar workers. For the former, there is an obvious separation between work/company and their social life. For the latter, the boundaries are not as clear with the company merely an extension of their private/social life.

> White-collar workers... have a broad affinity for the organisational style of behaviour... [and] can apply elements of their external life to their job in the organisation without having to make fundamental adjustments... The work habits and interests of the white-collar worker spill over into his family and community life. *For the white-collar, the organisation is less clearly differentiated from the culture of his private world than it is for the worker.* (ibid. 195-196, emphasis added).

Table 6: Since the introduction of NWPs have employee/management relations?

	Aerospace %	Atochem %
a) improved	47	81
b) remained the same	36	19
c) deteriorated	16	-
	n = 61	n = 36

Table 7: What is the overall level of trust that exists between employees and management?

	Aerospace %	Atochem %
a) high level of trust	2	8
b) (relatively) high level of trust	21	74
c) (relatively) low level of trust	44	18
d) low level of trust	20	-
e) no trust	12	-
	n = 65	n = 39

Table 8: Do NWPs help establish a sense of commitment/loyalty to the company?

	Aerospace %	Atochem %
a) agree	22	71
c) neither agree nor disagree	33	24
e) disagree	43	5
	n = 45	n = 38

WORK INTENSIFICATION

On the surface, the findings lend support to the labour process argument of intensification; there was a general consensus that work has become harder over the past five years (*see* Table 9). Respondents also felt they were now under greater pressure. They did not however suggest that they felt this has resulted in an unreasonable and intolerable work environment. Only a quarter of those at Aerospace and a fifth of those at Atochem considered they were working significantly harder. Nor did everyone share the opinion that work had indeed become harder; at Aerospace, just over a quarter believed that there has been no noticeable change – a few even felt they were not working as hard (cf Rosenthal *et al.*, 1997). In addition, although employees were now under more pressure, this was felt to be acceptable in relation to their work content (*see* Table 10).

Table 9: Over the past five years has work become?

	Aerospace %	Atochem %
a) harder	69	86
b) neither harder nor less hard	26	8
c) less hard	5	6
	n = 61	n = 36

Table 10: Do you feel that the level of pressure you experience at work is?

	Aerospace %	Atochem %
a) acceptable	78	92
b) unacceptable	22	8
	n = 49	n = 38

Employees were now working harder for a number of reasons. A main development has been improving the efficiency of work. At Aerospace this focused upon reducing work practices that incurred a lot of idle time or what management termed 'non-value activity'. Many of these changes stemmed from suggestions by both workers and the improvement team. Improving the layout of the storage room, erecting shelving and designating specific places for equipment/parts made it easier for workers to find the necessary equipment. Manoeuvrable storage trolleys (designed by employees) that allowed tools and accessories to be moved safely around the hanger have been introduced[1]. For certain jobs, all the parts needed were now contained in a box kit reducing the time spent collecting the relevant pieces of equipment. Old equipment has

been replaced with new (such as power tools and cranes), making work quicker to undertake and physically easier. One employee noted his contribution:

'I've devised this. It's a simple piece of wood that has different colours on it that tell which bolts are which particular size – the colour representing the size. It saves having to go through each one individually until the correct one fits, they are difficult to tell apart. Every time a new tail plane is fitted, the person just goes and fills the piece of wood up again with the correct bits.'

At Atochem, a significant part of administration (processing orders, stock taking or checking accounts for example) was now done on computer which meant less time looking for and physically retrieving the documents from files. Consequently, employees have been given additional responsibilities and are not only doing more of the same work. For salesmen this was signified with being responsible for more important products and special contracts. For administrators this meant being promoted to a supervisory position and/or being given additional projects outside that of their usual work.

There was little evidence to suggest work has intensified purely as a result of increasing pace and few felt that technology determined their level of work effort *(see also* Table 11). The nearest evidence for this was at Aerospace in respect to the introduction of the DMS system that required each job to have a specific time frame. This had never been calculated before but employees recognised the need to have an accurate measure of the length of time it takes to build an aircraft in order to put in realistic/competitive bids. Times were calculated by the workers on the improvement team but the workers themselves did not see the times as a means by which to make them work harder.

'One of the things we were asked to do as an improvement team was to establish times it would take to do the work. In judging the estimated times it would take to carry out the work we took the lowest aircraft value [the longest time it may take to do the job] and used that as a target line rather than make a silly time that people couldn't work to.'

Table 11: Please indicate to what extent the pace of technology determines how hard you work?

	Aerospace %	Atochem %
a) Highly influential	8	8
b) Influential	18	26
c) Some influence	39	56
d) No influence	35	10
	n=49	n=39

Working harder was not necessarily an unwanted development. Most considered it a source towards a better work experience (McArdle et al, 1995); it made work more enjoyable and interesting, helped establish a sense of pride and purpose, relieved boredom and made the day pass quicker.

'I find that working hard stimulates me. It enables me to use my own initiative. I am not the type of person who enjoys doing nothing as I would be bored. At present my working day passes very quickly.'

In addition, for administrators at Atochem undertaking more work in the form of additional responsibilities allowed them to 'get away' from their daily routine. For salesmen, greater

responsibility was taken as a reflection of their ability to handle difficult situations, and as a sign of trust in them by management. As Edwards et al comment on the intensification thesis responses are out of uniform:

> The 'committed' who are working harder and liked doing so; the 'stable' (no change or less effort, and liked this); and the 'pressured' (same or increased effort and disliked this level of intensity). The last category, emphasised by a work intensification thesis, comprised under 20 per cent of the sample, while the committed were in a majority in all cases except one. (Edwards *et al.*, 1997: 12).

One explanation for these positive findings in our cases may lie in the work content. The critical school tend to concentrate analysis of the work within the context of an increased pace of work rather than looking at the nature of work itself. Here we see work incorporated a number of different (though not all challenging) activities which offered workers an (acceptable) degree of variation. Thus, it may not necessarily be increased pace *per se* that is problematic but the scope of work available that allows interest to be maintained and/or fostered – it is not that they are working harder but *how* they are working harder which is important. Moreover, while intensification of work may lead to feelings of exhaustion and stress, the findings show that being under-utilised also has its share of problems – low feelings of satisfaction, boredom and despair.

STANDARDISATION

NWPs lead to standardised work and consequently a loss of skill. At Aerospace, two developments have taken place that may support this theory. The DMS system has meant work is broken down into individual tasks that are set out in step-by-step procedures. In effect, all the worker needs to do is to follow these guidelines, 'the basic system is like building a model, you have diagrams and steps to follow.' However, there is also greater flexibility with workers now expected to work on a range of jobs encompassing different skills – the 'type cast "one job for life" doesn't exist anymore.'

> 'There is now a lot more flexibility and scope at work. When I started if you were a fitter you weren't allowed to touch electrical equipment... *Now they've blurred the edges considerably.*' [Emphasis added].

At Atochem, NWPs have affected people differently: much change concentrated upon the administration side of work and it was thus administrators who were affected most. Spurred on by the need for consistent work practice, those aspects of work that could be computerised were and consequently, become a standard process.

However, these developments have not created the environment depicted by radical texts nor the same reaction from workers. At Aerospace, less than a quarter of respondents felt that work had become uninteresting and monotonous (*see* Table 12). At Atochem, nearly all disagreed with this notion – even though it was generally accepted that core administration work entailed a degree of boredom. Contrary to this, most believed that work had become more enjoyable and interesting. A number of things may explain this. At Aerospace, while much of the work content had technically been reduced to a set of procedures this was seen as little more than a formalisation of what already took place. Workers made comments that 'there is no way you can standardise' or 'deskill' operations – just because it is now formally written down has not meant that the actual job(s) themselves have altered in any way. Work always has been, and remains to be, a highly skilled process that requires highly skilled men. As one supervisor noted:

'Workers can do everything needed. Build it, power it up, do the systems checks, armament tests... they even have to make sure that the guidance systems for the weapons are working properly.'

Table 12: NWPs have led to work becoming uninteresting, tedious and routine?

	Aerospace %	Atochem %
a) agree	26	-
b) neither	15	18
c) disagree	56	82
	n = 45	n = 38

The work is intricate and specialised and heavily reliant on workers knowledge, skill and judgement – aspects that could not be reduced to a standard set of calculated and quantified actions. With a build time of 6,000 hours covered over four stages during which workers will undertake a multitude of jobs it was important that certain aspects of work are broken down into smaller operations in order to for it to be better planned and co-ordinated. Nor did workers feel intimidated by the presence of procedures. Furthermore, during the past five years, workers have been trained in aspects of the build programme that once required specialist knowledge. Weapons guidance, engine running, and putting seats in the cockpit (which requires an explosives license) are now done routinely by staff. Before, these would have been left to the specialist, e.g. the test pilot or manufacturer.

At Atochem, while a certain amount of work was now computerised other aspects have remained unaffected particularly in regard to customer service. Employees have a high degree of direct contact with customers and are not restricted to a set of pre-defined (by management) guidelines in their dealings with them. In addition to this administrators were given additional work apart from regular office activities. As one manager stated:

'We ask them to undertake a host of other work. Market surveys, put together spread sheets and such like. So they get additional jobs and I think its very important that they do in order to make their job interesting and stimulating... with these they have clear ownership.'

Administrators themselves also reiterated this:

'Apart from the routine work I do things for the division. For example stock management, although this isn't the only thing. I look at our stock levels, see how much it is costing us to hold certain levels of stock and how quickly it turns over. In fact that's a project of mine at the moment and it will probably be ongoing... We do various projects of analysis... I find it quite satisfying.'

Employee Involvement

At both companies employees felt they had a reasonable degree of involvement (see Table 13) (cf Edwards et al. 1997; Rosenthal et al., 1997). While a number of employee involvement (EI) techniques existed at each company (see Table 14), few directly related this feeling with a particular initiative. At both organisations, there had been an increase in downward communication and upward problem solving initiatives. Nearly all felt they now had a better awareness of company objectives although fewer believed that they had a better understanding of them (see Table 15). In respect to upward problem solving, employees felt they now had

greater say and that their comments were now taken more seriously. Nearly all those interviewed took a positive view of management's approach:

> 'Management takes note of what we have to say... They have a good listening style, not really a big brother approach, they tend to listen.'

Table 13: Since the introduction of NWPs how would you rate the degree of involvement you have?

	Aerospace %	Atochem %
a) great deal	22	27
b) fair amount	20	46
c) some	29	22
d) very little	19	5
e) none	10	-
	n = 59	n = 37

Table 14: Forms of Employee Involvement and Participation at Aerospace

	Aerospace	Atochem
Downward Communication	Newspaper/Magazine, Briefing System.	Newspaper/Magazine, Employee Report, Briefing System.
Upward Problem Solving	Suggestion Scheme, Attitude Surveys, Quality Circles, Customer Care, Continuous Improvement (TQM), Improvement Team.	Suggestion Scheme, Attitude Surveys, Team meeting, Customer Care, Continuous Improvement (TQM), Working Parties.
Financial EI	Profit Share Scheme	-

At Aerospace, management are now keener to include employees in the process; for example, through the **improvement team.** At Atochem, greater consultation has led to a 'more open culture' that has resulted in 'feelings of trust and inclusion' (Table 15). In addition to regular team/IIP meetings that allow employees to discuss ideas and concerns there are now **working parties** responsible for assessing current work practice and looking at areas for improvement.

Table 15: Do you feel that you now have?

	Aerospace %	Atochem %
a) a greater awareness of the company's objectives	70	96
b) a better understanding of management decisions	26	42
c) employees now have a greater say	46	50
d) employee ideas and suggestions are now taken more seriously	47	39
	n = 57	n = 36

Employees also identified involvement with increased responsibility. At Aerospace, there has been the move away from direct supervision and inspection of work by inspectors, with workers now responsible for checking and clearing their own work. This has been achieved by the use of stamping; once a job was finished they would stamp it off with their individual number as being completed and fit for flight. Workers also had the ability to make alterations to the work process if they felt it necessary. Indeed, the nature of the programme required workers to make daily decisions concerning their work without having to continually seek management's approval. In their view:

> 'Greater accountability isn't wrong because that's what we're being paid for. To do the work to a high standard whether or not an inspector is there. All he did was inspect it and identify faults if there were any and I've always done that.'

Consultation and the ability to make alterations did not extend to all areas of work though. Such involvement focused more upon the work process and minor changes to the product rather than 'flight-critical' element, (usually directly relevant to final assembly). At Atochem, employees saw themselves as a reasonably high level of autonomy. Again, for salesmen this has always been part of their work content; they make decisions concerning the products they manage (including incremental price changes).

> 'Its essential that salesmen have a high degree of discretion and flexibility with the ability to act accordingly upon information concerning the product market.'

The most noticeable development has been with administrators who have taken on board more responsibilities with 'control and ownership cascading down' to all aspects of work. This was a welcomed facet, for providing a high level of service contributed to their satisfaction.

> 'I enjoy the challenges that are thrown up and the satisfaction you get from solving problems for customers. *Customer service is very important to me.*' [Emphasis added].

Employees did feel that on occasions they were still faced with a 'fait accompli' on matters that concerned them with decisions being made without consulting those it affected. Furthermore, the ability to change price was confined to (management defined) parameters/price ranges and any deviation outside of these needed the approval by the business manager.

> 'We have price ranges, if it goes out of a price range then we have to talk to the business manager on the price before it can be accepted and processed.'

At Aerospace, the nature of the product influenced the scope of freedom while at Atochem it was the demands of the market/sovereign customer. While these factors may have merely reduced the visible need for management to impose the limits of discretion (Friedman, 1977), employees did *not* associate this with issues of control.

Increased involvement has not led to any significant power sharing or influence in higher-level decision-making (Edwards *et al.*, 1997; Wilkinson, *et al.*, 1997). However, employees did point out that this should not cloud the fact that there has been a significant improvement. In addition, while NWPs might not match up to the full ideal of the empowerment rhetoric it should not be assumed that this was to the detriment of the employee or unacceptable. For workers at Aerospace, the product was a highly complex piece of machinery and mistakes could be fatal. As such workers were neither willing nor prepared to take complete responsibility considering the risks involved and accepted the limitations, 'these things are lethal... they fly over your house, my house and if they fall out of the sky they are going to do damage'. Neither was it 'all that difficult' to make a legitimate mistake and not realise it. Despite controls at Atochem,

management recognised that it was important not to have too many controls that restricted employees working as best they could:

> 'You have to put just the right controls in as you don't want to tighten everything so much that you can't actually do business properly.' [Manager].

Employees did not regard having to adhere to the controls and procedures (where they existed) as running against the grain of the quality philosophy.

These findings strongly suggest that problems lay not so much in having controls/restrictions in place, but rather the perception of the extent to which they impose upon individuals. Where they served to undermine an 'empowerment philosophy' or constantly played a role in work activity the more likely employees are to feel frustrated and disillusioned with their ability to use their 'apparent' discretion. In contrast, where they were seen as supportive as opposed to dictating employee action – employees were more favourable, feeling comforted rather than intimidated (see Table 16).

Table 16: While employees should have a certain degree of autonomy they still need a structure upon which to base this?

	%
a) agree	90
b) neither	10
c) disagree	-
	n = 38

TEAMWORK

A teamwork philosophy was promoted at both companies. At Aerospace this was an essential component of production for teams reflected the build stages of the aircraft's development. Each team is responsible for carrying out all the necessary work required by its respective stage. While headed by a team leader (supervisor) the teams take on a semi-autonomous role and are responsible for day-to-day operations. Team meetings are held weekly in order for workers to address difficulties and to plan the work content for the week ahead. Performance is measured on a team basis. At Atochem, although there was a strong sense of team working (*see* Table 17) no formal 'teamwork' programme exists at the company, but the product group was a de facto team.

> 'Working in a team is very important. For me to do my job properly I'm really dependent on what they do in the office, so its vital that everyone works together. Teamwork is essential... without the girls, who are very good and do an excellent job, I would be having to do work that isn't really using the skills I'm employed to do. They take a lot of the mundane work which allows me to take on more.'

Table 17: There exists a strong sense of team working here?

	Aerospace %	Atochem %
a) agree	49	95
b) neither	17	5
c) disagree	37	-
	n= 45	n = 38

The notion of teamwork was actively fostered by the organisations. Aerospace attempted to ensure teams worked effectively and had the 'right' mix of workers. The company sought to ensure employees complemented one another in interests and shared similar attitudes towards work. Those who did not fit in (for whatever reason) were placed elsewhere. In a way, the same exists at Atochem for the jobs themselves complemented each other; the product group (team) consisted of employees who did different jobs with clear boundaries that did not conflict and whose responsibilities did not overlap.

Views of teamwork differed between the two companies. While at Aerospace employees were ambiguous as to whether a sense of team working existed, at Atochem attitudes were favourable. Here, employees enjoyed working together and felt it made for a more satisfying work experience (*see* Table 18). Despite the mixed response at Aerospace, those interviewed felt there was a good working relationship, but this did not mean they were 'great pals'. Only a third of workers felt that relations between colleagues have become more co-operative and a quarter believed they had deteriorated.

Table 18: NWPs create a more co-operative relationship between work colleagues?

	Aerospace %	Atochem %
a) agree	37	95
b) neither	35	5
c) disagree	26	-
	n = 45	n = 38

At Aerospace relations between teams have been adversely affected (Dawson, 1995; Geary, 1995) and may be what led a quarter to indicate an uncooperative relationship between themselves and colleagues. One worker depicted the situation as each team being 'the Englishman's Castle… and there's four of them!' This environment did not appear to affect the quality of work nor the necessary co-operation needed. It did, however, create problems for workers, especially when it came to moving between teams. Being an outsider (not a 'member of the pack') individuals are made to feel unwelcome with established members often being 'real bastards' and 'pretty damn cruel.'

> 'They'll talk behind your back and make sure that you know it … Total ignorance of you, blinkered of you, taking no notice of you when you are talking, just walking away. There are lots of ways they do it… Hiding your tools, stupid things like that.'

MONITORING AND CONTROL

Most employees felt that their work was being monitored to some degree (*see* Table 19). Yet, while nearly all indicated that their work was being monitored, only a third at Aerospace and a fifth at Atochem believed that it was to a great extent. Moreover, only at Atochem do employees feel that they/their work was now subject to greater observation (*see* Table 20). Most at Aerospace felt there had been no change in the level of monitoring or that it had lessened over the past five years. A difference also emerges in respect to developments in the forms of monitoring. At both, employees note that it was a formalisation of existing methods – they have merely become more 'visible' and 'apparent.' At Aerospace however, there has also been a noticeable technological development with the use of new computer systems (*see* Table 21). There has been little change in the methods used at Atochem and few attributed technological developments as having an influence. At both companies, fellow workers scored lowest against any other form of surveillance. Few considered colleagues as a mechanism of monitoring nor did anyone believe that the new environment had led to adversity amongst workers (McKinlay and Taylor, 1996).

Table 19: Compared to before the introduction of NWPs, to what extent are you now observed or monitored?

	Aerospace %	Atochem %
a) more	28	75
b) little or no change	60	8
c) less	12	17
	n = 58	n = 36

Table 20: To what extent do you feel that your work is being monitored?

	Aerospace %	Atochem %
a) great extent	32	20
b) fair extent	42	56
c) some extent	20	20
d) not at all	5	3
	n = 59	n = 39

Table 21: Please indicate from the following areas what form(s) observation and monitoring take (1 = strongest, 4 = weakest)?

☐ Aerospace: n = 55 ▣ Atochem: n = 36	Highest (1)		(2)		(3)		Weakest (4)	
	%	%	%	%	%	%	%	%
Senior management	25	31	16	24	13	18	42	28
Line manager/ supervisor	38	56	36	18	16	-	11	23
Work colleagues	18	13	14	33	27	36	39	18
Technological	38	5	22	13	11	20	22	61

These findings are all the more interesting for there are some similarities with critical literature. Through the use of graphs displayed throughout the hanger employees at Aerospace are reminded of how production vis-à-vis their/the teams performance is progressing. Stamping has made those who make mistakes more identifiable for their number is displayed on the job sheet that contains all the details of work. In addition, workers are now required to identify the mistakes of others:

> 'We have been instructed by senior management that where we normally put an X against a fault we find – don't know whose done it – now it's, if you know whose to blame then blame them. Fail it and quote who did it!'

At Atochem, performance levels and targets are also openly known. Not only are they informed of their own performance but also that of their product group and how well it is doing in respect to the objectives of the organisation. Company objectives are also measured on a departmental basis and are linked to targets that are achievable for the employee. There is also greater awareness on matters such as customer complaints and how these are measured. Much of this data is displayed via the use of graphs placed on notice boards.

To what extent can management's harness peer pressure via such surveillance tactics? There is little evidence to support this. It would appear that there is a danger of both overestimating the fickleness as well as underestimates the resilience of employees to the extent to which such 'control' tactics work upon them. This in itself highlights the dangers of making judgements or assumptions of how employees will (re)act. Here it appears that the issue is not whether individuals are monitored, but how this manifests itself in the workplace. Despite the changes in the levels or forms of monitoring, few felt intimidated by such tactics. Neither were they regarded as part of a management strategy intended on extending control, even at Aerospace where a relatively low trust environment exists. In regard to the identification of mistakes, workers at Aerospace were more willing to accept criticism and identification given the consequences – 'if a mistake were to go unnoticed it could be catastrophic.' Workers also developed ways to undermine the 'gaze of management.' A common tactic adopted by workers was to inform the person responsible rather than to log the fault onto the system who would then rectify it before it went any further. This was not however ubiquitous and if individuals persisted in making mistakes colleagues would not continue to support them. It was also general practice that workers would still mark snag sheets with 'X' (unknown) when a fault was found instead of identifying the person concerned. Furthermore, although faults are technically easier to identify, in practice this was not a simple process:

> 'It would be very difficult to find out who did something without spending an awful lot of time going back into the archives to retrieve the necessary paperwork... So you would only recover something if it was of severe importance or consequence.'

Thus, apart from forms of collective resistance, workers exploited faults that were inherent within the system as means for adjustment and defence (Watson, 1995).   At Atochem, employees considered targets as being realistic, based upon previous performance rather than department objectives, and set in consultation with employees.   Management and employees also accepted that unanticipated circumstances may mean they are not met.

If NWPs are synonymous with enhanced control, deskilling and exploitation, as argued by radical texts, then this argument is certainly not supported here.   While the techniques exist to help enable management to control and exploit labour this does not mean that this will necessarily occur.   There was no evidence to suggest that NWPs were seen as a means used to increase control over them.   As Ackroyd and Proctor note:

> What saliency the idea of high surveillance has... Such accounts are based on the idea that good-quality management information of this nature is available and that the managerial expertise exists to make use of it.   For one thing, it appears that the opportunities offered by systematic surveillance can be under-utilised. (Ackroyd and Procter, 1998: 176).

Discussion and Conclusions

Our cases suggest that overall there has been a betterment of work over the past five years.   This position would lead us to agree on the surface more with the optimistic beliefs put forward by the advocates rather than the pessimistic views of the critics.   At both companies employees are happier at work, can (to a large(r) degree) influence/make decisions concerning their work/work process) and are (to varying degrees) committed to their work.   These responses could be associated with the enrichment thesis.   However, we offer some notes of caution.

Perhaps one of the most significant observations is that arguments from both schools have been witnessed; they do no hold exclusivity in the work place.   While elements of the enrichment thesis exist so too do elements of critical argument.   Our basic support for the former should therefore not be taken as a dismissal of all that is part of the critical perspective.   This observation brings to the surface a limitation of contemporary literature that is often based around one-dimensional arguments.   This framework suffocates debate and limits any real appreciation and understanding of employee experience.   If its not empowerment it's emasculation, if it's not enrichment it's degradation etc. (Wilkinson *et al.*, 1997).

> There is a considerable limitation in the debate that is currently emerging' for 'in response to the gurus' hype about the benefits, critics offer a pessimistic counter-interpretation. (Knights and McCabe, 1998b: 165).

These findings have clearly shown that the impact cannot be readily explained in the context of polar opposites; they can coexist and indeed go hand-in-hand, one reason why employees are more satisfied (enrichment argument) is because they are working harder in their job (radical argument).   In addition to this, the extent to which NWPs have an impact upon work also goes unquestioned.   Although the two camps arguments dialectically differ, their unquestioning belief in the all-embracing ability is the same: NWPs have a magical ability to transform the work experience and attitudes.   There was also evidence to indicate that the impact of NWPs has not

been as far-reaching as each side suggests. At both companies the findings were far less overwhelming or conclusive.

> There is a growing acceptance that [NWPs] mean neither extreme empowerment nor straight intensification. (Edwards *et al.*, 1997: 3).

Our case studies suggest that the two schools of mainstream debate are not necessarily wrong but narrow in their interpretation, selective in their analysis and sweeping in their judgements (Wilkinson *et al.*, 1997). The debate is fuelled by theoretical critique rather than empirical evidence (Hackman and Wageman 1995). Where advocates underestimate the difficulties involved claiming that problems are *simply* overcome, critics are all too convinced that NWPs are fraught with problems that are based upon a fundamental conflict of interests that because they *cannot* be overcome it is therefore pointless to address. Whilst accepting the view that NWPs have at least in the cases of Aerospace and Atochem led to a general betterment of work this development falls short of the enrichment thesis.

The findings also highlight the danger in associating particular outcomes/responses with particular work practices/environments. This comes into further question when such assumptions are based upon limited empirical evidence. When this exists it is limited to a handful of 'success' stories (which have proven to be difficult to sustain over time) or to particular sectors.

> It is clear that [our] understanding of what is happening in British manufacturing has been significantly distorted by the concentration of many [radical] researchers on foreign-owned transplants – especially firms in the automobile industry, which are not at all typical of the manufacturing operations undertaken by British firms. (Ackroyd and Procter, 1998: 165).

Much criticism levied at optimistic literature centres on its taken-for-granted view of how organisations should work. There is consequently a lack of attention paid to the political and organisational implications (Wilkinson *et al.*, 1992) – oversimplifying the issues and trivialising the dynamics involved (Marchington, 1995). Managerialist texts generally assert that more efficient and involved work practices *will produce* enjoyment at work that in turn will *automatically* lead to commitment. Yet, critical thought can be seen as a mirror image of this. Any positive perceptions of employees are dismissed as being of only token in value and (more often than not) regarded as a tool by management to disguise more fundamental and important issues that are to the detriment of the worker. Thus increased involvement *will result* in (much) higher – intolerable – work effort that *brings* stress and exhaustion. The responses we have seen from Aerospace and Atochem show the need to separate assumed responses and actual outcomes. Working harder has not led to feelings of exhaustion and stress nor have increases in the level of monitoring be interpreted as leading to complete – totalising – systems of surveillance. This discrepancy serves well to illustrate variability in interpretation.

> Such prescriptions are generally centred on a misguided faith in the ability of plans to produce predictable outcomes. But even where attempts have been made to break free of this instrumentalism and to acknowledge the "situated" nature of plans and actions there remains an instrumental dependence on deep-rooted assumptions of [NWPs], perceptions of organizations and understandings of the relations within them. (Coombs and Hull, 1995: 129-130).

So what do the findings mean to understanding the impact of NWPs? To start, we need to change the baseline upon which we try to understand the impact; shifting away from an either/or framework to one that allows for a more complex and richer analysis. Our, and more recent,

evidence has shown that the effects of NWPs and the implications they have upon the workforce are not only different shades of grey but multicoloured. The need for a more balanced framework that allows us to explore the issues involved must therefore be called upon. We have already mentioned that the degree of impact is not a far-reaching as either school suggest. This asks the question whether one should judge in extremes. If they have not resulted in the all enriched environment as claimed by advocates does this necessarily mean they should be dismissed as a failure? Surely, a programme cannot be assumed a failure:

> just because it doesn't solve every problem or move the organisation all the way...
> [even] some remediation of problems is better than none. (Pfeffer, 1994: 206).

Some improvement must be better than none and thus when studying the impact of NWPs upon the workforce one should not treat what has occurred as 'small beer' (Wilkinson, 1997). Neither should improvements be considered irrelevant just because they have not lived up to their proclaimed expectations. While comparing actual experience against ideology may to a certain extent help understand what is happening within industry, it application is limited when trying to understand the more 'prosaic' world [and] its part in management strategy (Ackers *et al.*, 1992: 274).

This article has highlighted the need to recognise the views of those whose lived experience is being investigated – through the eyes of the beholder (the employee) when attempting to understand the impact of NWPs at the work level. We have noticed considerable differences in understanding between different interest groups. Through gaining employee views and using this as the basis for our understanding we have seen a much richer and complex picture than that offered by advocates and critics alike. It also shows the danger of arguing the 'lived experience' without recognising (or holding in value) the views and opinions of those whose experience is being investigated. When employees views are taken into consideration if they go against the grain, it is too easy too dismiss them on the premise that employees are 'duped' or coerced into buying management rhetoric. To this extent both schools sometimes fail to take the findings 'for what they are.'

If, as we have discussed above, it is not the NWPs in themselves that lead to favourable/less favourable responses what factors do contribute to it. We have seen how such factors as the nature of work itself the style of local management, the nature of work and the workplace itself have helped towards the betterment of work at the two companies. The determinants of the success/failure of NWPs are therefore particular to the context into which they are introduced – and indeed how they are introduced. What is interesting when considering the various responses of employees *and* management is how they put their experiences and views into context when judging NWPs. They do not focus on specific issues but rather on an overall level. The findings also showed how the rules for such practices were not set in stone but adapt to the situation at hand; at both case studies work operated because there was 'give and take' and bargaining on both sides. The necessary responsibility and support employees exercised was often at the discretion of their immediate manager rather than any 'formal' company policy. In return, employees repaid this with commitment to their work. Given this 'bargaining' (which may be implicit rather than explicit) it is not too difficult to conceive that, irrespective of management directive, at the work level managers may have to sacrifice certain aspects (such as the control objective if this existed), in order to handle the immediate needs and issues they confront at work (Marsden *et al.*, 1985; Coombs and Hull, 1995; Edwards, 1995).

This article has looked at the impact of NWPs and offers an alternative view than that of prescriptive and critical literature. This account does not discover a picture of workers cowed into submission by a powerful intimidating management. Nor does it find workers buying

unconditionally into management rhetoric. Indeed they were quite well disposed towards the initiatives but shrewdly aware of the underlying motives. What is clear that workers do appear to recognise that the world has changed and that their prospects depend on the organisation's ability to compete in the marketplace. Initiatives are not seen or judged against idealistic notions of participation but in more pragmatic terms.

The findings from Aerospace and Atochem lend support to the more optimistic views of NWPs in that they are of benefit to employees as well as management. Moreover, where management intentions are met, this has not been achieved at the cost of employees – via some 'combination of sham empowerment, work intensification and increased surveillance' (Rosenthal *et al.*, 1997: 481). However, the findings have also shown that the debate is far more complex than a simple dichotomy between enrichment/degradation and cannot be adequately explained by using this limited framework. As Jacques observes (1999)

> "American management theories (of which HRM writing is representative) tend toward a feel-good 'win-win' perspective that leaves no place for incommensurable differences or conflict. At the same time, I find many of my colleagues, especially those in the UK, to be uncomfortable with even momentarily decentring conflict.... it further inscribes the idea that the opposing teams of the factory - management and labour-are relevant today and embodies a construction of the workplace that may have little to do with meaningful distinctions between groups in knowledge-intensive work sites where discretionary activity, fluid task interdependence and flexibility are key structuring factors of work and key determinants of power and voice...
>
> Critical academics tend to see engagement with managerial initiatives as cooptation. I have seen TQM, empowerment and BPR, for example, dismissed this way. I have sometimes found it easier to work with joint union-management initiatives in practice than to talk about their possibility among nominally pro-labour critical theorists. Eventually, however, merely defending actions to maintain narrow and outdated job definitions, automatic opposition to workforce reductions, or carte blanche dismissal of initiatives such as TQM results in a non-viable system. A precondition to struggling for the fair distribution of wealth is generation of wealth in the first place" (Jacques 1999: 210-211).

Endnotes

1.   Before this system workers had to go back and forwards every time they needed something for it was essential that the production floor was kept free of any unwanted items or foreign object debris (FOD) that could threaten the safety and functioning of the aircraft. Only equipment and parts that were needed for the particular job in hand were allowed on to the floor for use.

References

Ackers, P., Marchington, M., Wilkinson, A. and Goodman, J. (1992), ''The Use of Cycles?' Explaining Employee Involvement in the 1990s,' *Industrial Relations Journal*, 23(4): 268-83.

Ackroyd, S. and Procter, S. (1998), 'British Manufacturing Organization and Workplace Industrial Relations: Some Attributes of the New Flexible Firm', *British Journal of Industrial Relations*, 36(2): 163-183.

Braverman, H. (1974), *Labour and Monopoly Capital.*

Coombs, R. and Hull, R. (1995), 'BPR as 'IT-Enabled Organisational Change': An Assessment', *New Technology, Work and Employment*, 10(2): 121-331.

Davenport, T.H. (1993), *Process Innovation: Reengineering Work through Information Technology*, Boston, MA: Harvard Business Schools Press.

Davenport, T.J. and Nohria, N. (1994), 'Case Management and the Integration of Labour', *Sloan Management Review*, Winter: 11-23.

Dawson, P. (1995), 'Managing Quality in the Multi-Cultural Workplace,' in A. Wilkinson and H. Willmott (eds), *Making Quality Critical*, Routledge, 173-193.

Dawson, P. and Webb, J. (1989), 'New Production Arrangements: Totally Flexible Cage?' *Work, Employment and Society*, 14(2): 115-46.

Delbridge, R. Turnbull, P. and Wilkinson, B. (1991), 'Pushing Back Frontiers: Management Control Under the JIT/TQM Factory Regimes', Paper presented to the 9th Annual Labour Process Conference, UMIST, April.

Delbridge, R. and Turnbull, P. (1992), 'Human Resource Maximisation: The Management of Labour under Just-in-Time Manufacturing Systems', in P. Blyton and P. Turnbull (eds.) Reassessing *Human Resource Management*, Sage Publications, 56-73.

Denzin, N. (1970), *The Research Act: A Theoretical Introduction to Sociological Methods*, Engelwood Cliffs, New Jersey: Prentice-Hall.

Dohse, K., Jürgens, U. and Malsch, T. (1985), 'From "Fordism" to "Toyotism"? The Social Organisation of the Labour Process in the Japanese Automobile Industry', *Politics and Society*, 16(3): 115-46.

Edwards, P.K. (ed.) (1995), *Industrial Relations*, Oxford: Blackwell.

Edwards, P., Collinson, M. and Rees, C. (1997), 'The Determinants of Employee Responses to Total Quality Management'.

Feigenbaum, A.V. (1991), *Total Quality Control*, McGraw-Hill: International Editions.

Friedman, A. (1977), *Industry and Labour: Class Struggle at Work and Monopoly Capitalism*, London: Macmillan.

Garrahan, P. and Stewart, P. (1989), 'Working for Nissan,' Paper Presented at the Conference of Socialist Economics, Sheffield Polytechnic, July.

Garrahan, P. and Stewart, P. (1992), *The Nissan Enigma: Flexibility at Work in a Local Economy*, London: Mansell.

Geary, J.F. (1995), 'Work Practices: The Structure of Work,' in P.K. Edwards (ed.), *Industrial Relations*, Oxford: Blackwell, 369-396.

Guest, D. (1999), 'Human Resource Management: The Workers' Verdict', *Human Resource Management Journal*, 9(3): 5-25.

Hackman, R. and Wageman, R. (1995), 'Total Quality Management: Empirical, Conceptual and Practical Issues', *Administrative Science Quarterly*, 40(June): 317-42.

Hardy, L. and Leibra, S. (1994), *Managing Strategic Action*, Sage Publications.

Hayes, R.H. (1981), 'Why Do Japanese Factories Work', *Harvard Business Review*, July-August: 57-66.

Ichniowski, C., Kochan, T., Levine, D., Olsen, C. and Strauss, G., (1996), 'What Works at Work: Overview and Assessment', *Industrial Relations*, 35(3): 299-333.

Jacques, R. (1999), 'Developing a Tactical Approach to Engaging with 'Strategic' HRM', *Organization*, 6(2): 199-222.

Johanasson, H., McHugh, P., Pendlebury, A.J. and Wheeler, W.A. (1993), *Business Process Reengineering: Breakthrough Strategies for Market Dominance*, Chichester: John Wiley.

Kanter, R.M. (1983), *The Change Masters: Corporate Entrepreneurs at Work*, Unwin Paperbacks.

Kanter, R.M. (1989), *When Giants Learn to Dance*, Unwin.

Katz, F.E. (1973), 'Integrative and Adaptive Uses of Autonomy: Worker Autonomy in Factories', in K. Thompson and G. Salaman (eds.), *People in Organisations:* 190-204.

Klein, J.A. (1989), 'The Human Cost of Manufacturing Reform', *Harvard Business Review*, March-April: 60-66.

Klein, J.A. (1991), 'A Re-Examination of Autonomy in the Light of New Manufacturing Practices', *Human Relations*, 44(1): 21-38.

Knights, D. and McCabe, D. (1998a), '"What Happens When The Phone Goes Wild?" Staff, Stress and Spaces for Escape in a BPR Telephone Banking Work Regime', *Journal of Management Studies*, 35(2): 163-193.

Knights, D. and McCabe, D. (1998b), 'When "Life is but a Dream": Obliterating Politics Through Business Process Reengineering?', *Human Relations*, 51(6): 761-798.

Knights, D. and McCabe, D. (1998c), 'Dreams and Designs on Strategy: A Critical Analysis of TQM and Management Control', *Work, Employment and Society*, 12(3): 433-456.

Marchington, M. (1995), 'Fairy Tales and Magic Wands: New Employment Practices in Perspective', *Employee Relations*, 17(1): 51-66.

Marsden, D., Morris, T., Willman, P. and Wood, S. (1985), *The Car Industry: Labour Relations and Industry Adjustment*, Tavistock: London.

McArdle, L., Rowlinson, M., Procter, S., Hassard, J. and Forrester, P. (1995), 'Total Quality Management and Participation: Employee Empowerment or the Enhancement of Employee Exploitation', in A. Wilkinson and H. Willmott (eds.), *Making Quality Critical*, London: Routledge, 156-172.

McKinlay, A. and Taylor, P. (1996), 'Power, Surveillance and Resistance: Inside the 'Factory of the Future'', in P. Ackers, C. Smith and P. Smith (eds.), *The New Workplace and Trade Unionism: Critical Perspectives on Work Organization*, London: Routledge, 270-301.

More, C. (1982), 'Skill and the Survival of Apprenticeship', in S. Wood (ed.), *The Degradation of Work: Skill, Deskilling and the Labour Process*, London: Hutchinson, 109-121.

Oakland, J.S. (1995), *Total Quality Management*, Oxford: Butterworth-Heinmann.

Palmer, G. and Saunders, I. (1992), 'Total Quality Management and Human Resource Management: Comparisons and Contrasts', *Asia Pacific Journal of Human Resources*, 30(2): 67-78.

Patton, M.Q. (1990), *Qualitative Evaluation and Research Methods*, Newbury Park, California: Sage Publications.

Pascale, R.T. and Athos, A.G. (1981), *The Art of Japanese Management*, New York: Simon and Schuster.

Parker, M. and Slaughter, J. (1988), *Choosing Sides: Unions and the Team Concept*, A Labour Notes Book, Boston, MA: South End Press.

Peters, T.J. and Waterman, R.H. (1982), *In Search of Excellence: Lessons from America's Best-Run Companies*, New York: Harper and Row.

Pfeffer, J. (1994), *Competitive Advantage Through People*, Boston Mass, Harvard Business School Press.

Rehder, R.R. (1990), 'Japanese Transplants: After the Honeymoon', *Business Horizons*, January-February: 87-98.

Roberts, K. and Cochran-Nantes, Y. (1995), 'TQM, The New Training and Industrial Relations', in A. Wilkinson and H. Willmott (eds.), *Making Quality Critical: New Perspectives on Organizational Change*, Routledge, 194-218.

Rosenthal, P., Hill, S. and Peccei, R. (1997), 'Checking Out Service: Evaluating Excellence, HRM and TQM in Retailing', *Work, Employment and Society*, 11(3): 481-503.

Sewell, G. and Wilkinson, B. (1991), '"Someone to Watch Over Me": Surveillance, Discipline, and the Just-in-Time Labour Process', Paper presented at the 9th Annual Labour Process Conference, UMIST, April.

Waddington, J. and Whitson, C. (1996), 'Empowerment Versus Intensification: Union Perspectives of Change at the Workplace', in P. Ackers, C. Smith and P. Smith (eds.), *The New Workplace,* London: Routledge.

Watson, T. (1995), *Sociology, Work and Industry*, London: Routledge.

Webb, J. (1995), 'Quality Management and the Management of Quality', in A. Wilkinson and H. Willmott (eds.), *Making Quality Critical*, London: Routledge, 105-126.

Webb, E., Campbell, D.T., Schwartz, R.D. and Secrest, L. (1966), *Unobtrusive Measures: Nonreactive Research in Social Sciences*, Chicago: Rand McNally.

Westall, D.G., White, P. and Kawalek, P. (1995), 'A Methodology for Business Process Redesign: Experiences and Issues', *Journal of Strategic Information Systems*, 3(1): 23-40.

Wickens, P. (1987), *The Road to Nissan*, London: Macmillan.

Wilkinson, A. (1998), 'Empowerment: Theory and Practice', *Personnel Review*, 27(1): 40-56.

Wilkinson, A., Marchington, M., Goodman, J. and Ackers, P. (1992), 'Total Quality Management and Employee Involvement', *Human Resource Management Journal*, 2(4): 1-20.

Wilkinson, A., Allen, P. and Snape, E. (1991), 'TQM and the Management of Labour', *Employee Relations*, 13(1): 24-31.

Wilkinson, A., Godfrey, G. and Marchington, M. (1997), 'Bouquets, Brickbats and Blinkers: Total Quality Management and Employee Involvement in Practice', *Organization Studies*, 18(5): 799-819.

Willmott, H.C. (1994), 'Will the Turkeys Vote for Christmas? The Reengineering of Human Resources', in G. Burke and J. Peppard (eds.), *Examining BPR: Current Perspectives and Research Directions*, London: Kogan Page, 306-315.

Womack, J.P., Jones, D.T. and Roos, D. (1990), *The Machine That Changed the World*, New York: Rawson Associates.

Wood, S. (ed.) (1982), *The Degradation of Work: Skill, Deskilling and the Labour Process*, London: Hutchinson.