

REVIEW ARTICLE

Dealing with Icebergs: Organisation, Production and Motivation in the 1990s

Huw Beynon

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James C. Abegglen and George Stalk Jr., *Kaisha: The Japanese Corporation*, Harper & Row, 1986.

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The dock in Southampton from which the steam liner *The Titanic* sailed on its fateful maiden voyage has been transformed since those days of imperial splendour. Today its main cargo is scrap metal — the cut down remains of engineering shops and steel works; crushed cars and refrigerators whose destination lies not to the West but South, to the steel furnaces and new industries of Spain and Algeria. As they leave so does the tide bring in high tech imports from Japan, the Far East and Europe.

There's a lot in this little story, involving three continents and a century of capitalist development. At its heart is the story of the decline in British manufacturing industry — the 'retardation debate' as it has been termed. In the last twenty years the number of people employed in British manufacturing industry has declined from eight and a half million to near 5 million. Companies like British Leyland and the British Steel Corporation saw their labour forces cut by half in the space of two years at the end of the last decade. Cities like Coventry, built around metal manufacturing and vehicle assembly industries, have been transformed. In 1976 manufacturing industries provided 57% of the jobs in that city; by 1982 this figure had dropped to 29%. Today, in spite of over 3 million unemployed, the UK's balance of payments has gone

into deficit. This was immediately associated with the drop in the price of oil, but it served to draw attention to the underlying weakness of an economy which has its market for automobiles, white goods of all kinds (there is still no domestic producer of dish washing machines) and computer technology dominated by products made in factories beyond its shores.

In assessing this 'retardation' it is worth putting it in some historical context. At the time when the Titanic sailed British industry generally had a competitive advantage over its US producers. This advantage was lost by the 1930s when US industries were producing twice as much from the same sized labour force. Alfred Chandler, in the Harvard collection puts it in this way: 'the failure of British manufacturers to create the organisational arrangements necessary to develop the commercial potentials of the new science based industries meant that the nation lost out on many of the fruits of the Second Industrial Revolution. It was a failure from which Britain never recovered' (p. 60). Chandler was commenting here on the forms of organisation which were built up in the USA in the first half of this century to administer and develop the productive capacities of the physical sciences. That he was doing this at a research colloquium at the Harvard Business School which involved the 'faculty in thinking seriously about the challenges and opportunities ahead' points to the fact that 'retardation' is not a British problem alone. Ever present in the colloquium was an awareness of Japanese business as a competitor of enormous power. A fact reflected in the Pacific Ocean's emergence over the Atlantic as the main carrier of sea borne freight.

An indication of this global shift is made clear in the experiences of the Caterpillar company. In 1976 the US transnational was the world leader in the production of heavy construction vehicles. Its Japanese competitor Kamatsu was well behind. By 1982 Kamatsu held a 50% cost advantage over the US company. In the UK, Kamatsu took over the plant closed down by Caterpillar at Birtley in the North East of England. Throughout the Far East Caterpillar and other Western producers found themselves consistently under cut by Kamatsu in major contracts for earth-moving equipment. As Abegglen and Stalk make clear in their descriptive account of the Kaisha — Japanese business corporations — this experience is not unique: 'throughout the world, many western manufacturers of pumps, electrical equipment, forklift trucks, and automobiles and other products are encountering Kaisha which are consistently underpricing them by 25 to 30 per cent for equivalent products' (p. 67). They add 'the advantage is unbeatable . . . and will destroy important Western firms if they fail to respond' (p. 273). Japanese companies figure centrally in *Forbes* listing of the largest 200 non-US companies. Toyota and Nissan now stand behind General Motors and Ford in the list of world vehicle manufacturers; Nippon steel is now larger than US steel, Hitachi and Matsushita Electric outstrip Philips and Siemens and now stand second and third to General Electric. Kodak's main competitor is Fuji Film; NEC is pushing hard on the heels of Texas Instruments.

This rapid rise of the Japanese corporation is significant in a number of important respects. It indicates the speed with which centres of capitalist production have changed since the last war and the extent to which competition is now a truly global phenomenon. In this world it matters not so much that UK productivity growth is increasing; what matters is its *comparative* increase. In itself this serves to raise deep and intriguing questions about the nature of industrial expansion; the explanation for the rise and fall of particular industries and firms; the reasons why profitable production is established successfully in particular locations while others fail; the role and significance of nation states of history, and of organisational structures in this process. It has taken time for these questions to filter through. Ten years ago the response to the 'Japanese threat' was to dismiss it with talk of conspiracies, of dumping; of 'Jap crap'. Today the debate has shifted. British workers have come to value and accept the reliability of Japanese colour t.v. sets and motor cars that are cheap, functional and start in the morning. It has shifted inside business circles too. Five years ago, Bill Hayden, head of Ford Europe, returned from a fact-finding visit to Japan reportedly in a state of shock. Up to that time, Hayden — and Ford executives generally — had associated Japanese expansionism with automation on the one hand and unprofitable dumping on the other. In 1980 however his views had changed: 'I have to say quite frankly that I do not now believe (those accounts) . . . They are vastly more efficient than we are'. This admission (which applied to Ford's US plants equally) was a bitter one for a Company which prided itself, above all else, on the efficiency of its work organisation and practices.

This situation brought forth an interesting evaluation by William Abernathy, Kim Clark and Alan Kantrow in their book *Industrial Renaissance: Producing A Competitive Future For America*. Here they assessed the threat to US industry, and the reaction of the companies to it ('get down on the floor and knock a few heads'). They made this comment; 'the Japanese have changed in a fundamental way the terms on which competition in the automobile industry must be carried out . . . In this new environment, what passed for an American labour force policy in previous years is not only out of date; it is poison. It is not merely a relic of another era; it can be lethal to those who rely on it.' (p. 90). In this book they write of history dealing unkindly with those who fail to analyse their mistakes and shortcomings, and quote from that keen observer of the American rich, Scott Fitzgerald. In this piece of dialogue from *The Great Gatsby* Nick Carraway confronts the rich, young Jordan Baker:

'You're a rotten driver' I protested. 'Either you ought to be more careful, or you oughtn't to drive at all.'

'I am careful.'

'No you're not.'

'Well, other people are,' she said lightly.

'What's that got to do with it?'

'They'll keep out of my way,' she insisted, 'It takes two to make an accident.' 'Suppose you meet someone as careless as yourself.' 'I hope I never will,' she answered.

This, together with the image of that remarkable product of British ship engineering being directed full steam for the icebergs, is a useful comment on the arrogance of power, and of its dangers. In an increasingly competitive world capitalist economy, corporations in Britain and the US are either going to change their ways, or they're going to sink. This is the message, and it comes from the Harvard Business School.

It is important to quote Abernathy at this point for another reason. His work provided an impetus to the Harvard colloquium and was deeply influential upon the MIT study and the work of Willman and Whipp and Clark (the latter two researchers describing him as their mentor). Until his tragically early death he was resident at Harvard, the home of Elton Mayo and Chester Barnard. He as such represented an interesting and important development in that line of industrial research which gave emphasis to social organisation and became known as the Human Relations School. This tradition for all its faults has always understood that production involves more than a technical division of labour, and that economics are no mere abstraction but involve social processes. As the editors of the Harvard colloquium make clear, the *general* failure to appreciate this had led to a crude academic division between *economic* analysis and *management* research. As such they share with Theo Nichols an irritation with the fact that 'few economists have been interested in, or studied closely the impact of specific management activities on firm behaviour and performance' (p. 21). Yet, as Nichols notes, 'the study of productivity has virtually become the property of economists' (p. 37). In this and other ways it becomes clear that the authors of the books in this collection share a series of common assumptions. They all value empirical research into industrial behaviour; they see the importance of research that is both comparative and historical; they stress the importance of production and product design as socially organised economic activity. As Willman puts it (somewhat inelegantly) 'innovation occurs within the context of industrial organisations, as does the achievement of efficiency, and some organisations are clearly better than others in both innovation and efficiency respects' (p. 81). Equally, and here the argument gets slightly strained, they all see the importance of assessing 'objectively' the question of industrial efficiency and its determinants. Nichols, for example, while operating in a neo-Marxist framework sees the need for criticism of the over-emphasis upon the labour process, focusing upon what goes on inside the black box of production while ignoring what comes out of it. Edwards (with his avowedly non-Marxist materialism) reflects on the difficulty of any dialogue with even the most sympathetic and sophisticated manager which doesn't take seriously the problem of corporate survival, efficiency and competition. The scale of the changes in the world's manufactur-

ing system is enormous. In the UK we are at the Rubicon; and social science is there too. How do these books help us relate to this crisis?

Let's begin with the automobile industry. This after all is the industry of the twentieth century. Fifteen years ago Emma Rothschild was predicting for it a decline to parallel the railways. Instead what has occurred has been a dramatic restructuring of the industry — economically and spatially. In 1980, on the industry's centenary, 402 million vehicles were operating around the world, an increase of 472% in thirty years. In 1979 (a peak year) an estimated 9% of the US labour force was employed in the 'vehicle related' occupations that extend from component and steel supply through to assembly and on into the repair and transportation sector. It is this industry which was the subject of the international study coordinated by the Centres For Transportation and International Studies at M.I.T. The project was conducted over four years and it involved researchers from France, Italy, Japan, Sweden, US and West Germany. These researchers were involved in data collection and on-going discussions with key personnel in the auto industry around the world, and they have aimed for 'the most comprehensive account ever conducted of a major world industry and its product'. Given this billing I suppose the result had to be something of a let down, and although they say that this book presents only 'a tiny fraction' of their research findings it is disappointingly descriptive and over generalised. The historical account they sketch of the industry's development through a series of transformations is helpful however. This begins with the ascendancy of standardised mass production systems in the US at the beginning of the century. In the post war period, market preferences in Europe are seen to lead to a high degree of product differentiation, followed in the third transformation by the rise of Japanese production systems allied to small car reliability and the soaring cost of fuel. This account develops keenly the important interrelationship between production system, product design and market form. With this (and the emphasis that it gives to *markets*) the study also demonstrates how 'each transformation has a political dimension ... Each was at least partially a consequence of government policy' (p. 13).

Today, in phase three the Japanese have an enormous productivity advantage. For their competitors, in Europe and the USA, collaboration is one solution — and there are many examples of this from Honda-BL to Toyota-GM. Another is copying, the third, the MIT team call 'substitution', and this involves giving way to the Japanese companies as they move plant out of Japan and into the West. More of this in a moment. The intriguing feature of the MIT's study is that it suggests the possibility of a *fourth* transformation and of some degree of political choice being involved. One possibility they indicate is a shift of assembly into third world locations as a means of increasing competitive edge. Clearly this phase is well under way, and has been in Europe since Ford opened its export plant in Valencia. Today the Mediterranean region is a centre of automobile assembly and Spain's industry is bigger than the UK's. The other possibility involves a *dramatic* transformation in the established pro-

duction system of vehicles, with sale rooms equipped with VDU's linked to the plant, allowing for immediate customisation. This is the option for Austin-Rover which Neil Kinnock argued for in his *New Statesman* article. It is an option for the decentralised, flexible manufacture of vehicles, with markets closely linked to plants, and a technology that permits shorter runs. It is a vision of a different kind of auto industry, and one which Jonathan Zeitlin and others have implied to be more appropriate to the deeper structures of British production history.

An assessment of the viability of such a project can be gained from Whipp and Clark's account of Austin-Rover and the pattern of innovatory change within the company. This study came out of the ESRC Work Research Unit at Aston University. Its focus is upon innovation and dematurity. Here the relevance of Abernathy is clear, as is their use of the 'production unit' as a combination of plant and product. In common with other books in this collection, the emphasis is not upon organisational structure and the regulation of the labour process, rather it is upon issues of change and governance through a perspective which emphasises choice within constraint. As such it signals an interesting departure in the sociological literature, and one which resonates with an earlier period and the writings of Burns and Stalker and Crozier. For twenty years organisational theory has been in a backwater. There are signs that it is moving into mid-stream once again.

At Aston, the combination of the Unit's research team and Abernathy's consultancy was a fruitful one. In addition the interdisciplinary nature of the unit has seen a range of historical and sociological theory being brought to bear upon a topic which is impressive and highly suggestive. They are critical of both orthodox managerial theorists whose 'blueprints reflect the historical origins of, and capitalism of the enterprise'; critical too of some writers in the Braverman tradition who give too much credence to the 'ability of the employers to organise, reorganise and indeed revolutionise the labour process'. Companies, in their view can best be seen as historical entities, locked in to particular 'design hierarchies', operating in a variety of different time frames, planned and unplanned. The task of research is to unlock these complexities, not to offer scholarly advice but rather to prise open 'the recipes for the future held by those working in the industry' and helping in the 'development of sophisticated planning and scenario writing'.

In many ways the aims here are laudable. The Rover company archive is put to good use in the 'analytically structured narrative' which they produce of the company's development. In this the redevelopment of the company under the Wilke's brothers is charted, as is the ongoing system of paternalism, the reliance upon family connections and verbal communication; the uniqueness of the design which produced the Landrover — a converted jeep, used by the police, and the rich on social occasions; a royal product. Finally the merger with Leyland. Making use of the writings of le Roy Ladurie, they see the SDI project as a 'transforming event'. The company's attempt to produce

a high volume, international luxury car was an innovation which involved a new product, new production processes and new work organisation. At that time the *Times* motor correspondent wrote of the new Solihull factory, and how it, for the first time in many years, made him feel proud to be British. The car won the European car of the year prize in 1977, but the project ended in a disaster. The Solihull plant closed and Rover became linked to Honda.

The detail of the Aston account is impressive, if the narrative is occasionally ponderous. (Did they, I wonder, think of using photographs?). It is a story of contradiction and confusion; of the failure to follow even basic planning principles; of a rudimentary and eventually demoralised design staff. It is an account of a failure to graft Ford management and their principles, through merger, on to a specialist low volume producer. It's an account which suggests many interesting contrasts and comparisons in the motor industry. The one which comes immediately to mind is Triumph and the Speke plant which made the TR7 and closed in 1979. The comparisons they do make with Volvo are telling ones, and could have been further developed. Solihull was no Kalmar; job redesign was not on the agenda, even in a watered form — 'play down enrichment' go for financial incentives via measured day work. This was the IR policy. If Austin Rover was no Volvo neither (as yet) is it a Ford or a GM. In the 1970s the British company was known to have experienced a haemorrhaging of its design staff and the problem has continued. In contrast GM have recently acquired EDS, the third largest software house in the USA and has recruited 1200 design experts, 500 of them with Ph.D.s. Somehow, the radical 4th transformation doesn't seem likely to involve Austin Rover in its present form. The likelihood gets more remote after reading the evidence compiled by Nichols on the frailties of the 'social organisation of production' in Britain.

In the absence of this, what is left, in auto and in other sectors, is the possibility (given the MIT formula) of dealing with, learning from, or giving way to the Japanese. Implicit in this, is an assessment that 'new production systems' can be developed and learned. For the MIT team, as for Abernathy, Dunning, the members of the Harvard colloquium and the business consultants Abeglen and Stark this is not an option it is a necessity. All are assertive in their dismissal of simple cultural explanations of the Japanese success (again they are in sympathy with Nichols). Instead they emphasise the detail of the organisation of economic systems, and the possibility of its replication. For Dunning the lesson is clear; the Japanese are simply better than the British in producing a near fault free product cheaply; they pay greater attention to design and work organisation both in Japan and in the UK. The system works. As such 'if this philosophy cannot or will not be translated into the UK economy, this is not because of our ignorance of what needs to be done; but rather because of outdated traditions and values, institutional rigidities or lack of motivation. It is this rather than anything else which is the British disease.' (p. 193). On the evidence of Solihull this assessment is too simple and over-

sanguine (it is also based on little or no evidence, as the study was of Japanese and not British companies). In this connection it's perhaps worth bearing in mind Tony Giddens' assessment that 'very few practices will be portable across nations unless special arrangements of an inter-societal kind are consciously attempted.'

Giddens was quoted by Whipp and Clark as support for their general view of the need for careful sectoral studies, which avoid rapid generalisations, and appreciate the detail of social processes within organisations. In this connection the observations by Abegglen and Stark bear some thought: the Japanese system they argue works well in mass production sectors, it is less successful in process industries (like chemicals) and remarkably unsuccessful in service sector industries like railways. In their contribution to the Harvard debate Ken-ichi Imai, Ikujiro Nonaka, and Hirotaka Takeuchi outline the pattern of innovation, change and product development in five leading Japanese corporations employing mass production systems. Among other things, they draw attention to the development of 'multi learning' processes within the corporation, and how these processes extend to their suppliers. In each of the companies, outside suppliers were responsible for between 65% and 90% of the parts used in the mass production stage. There is a strong lateral control and information exchange between these companies. In the case of Toritsu-Koggo this extends to seventy seven subcontractors in down town Tokyo, all within walking distance of each other, all linked socially, historically and through the development of the industry. In their paper the authors stress the dynamic nature of the interrelationship between corporation and subcontractor. What this sketch, (however interpreted), reveals is that there is more to the Japanese system than the quality circles, Kanbans and 'just in time' inventories. This point gains force if we remember that in Japan just 6% of children leave school with the basic middle school education. Also that its proportion of graduates increased from 1% in 1950 to 40% in 1980, and its R & D investment is increasing rapidly — Cannon and NEC currently spend 10% of their revenues in this area compared with 3.5% at Thorn-EMI. This latter comparison is reinforced by the view of the British management writer cited by Nichols. After the passing of the 1982 Employment and Training Act this man opined that: 'We'll run out of skilled labour about the same time as we run out of oil'.

Nevertheless the Japanese corporations *are* moving out of Japan. Their financial institutions are already firmly established in London and New York and they have manufacturing plants throughout the USA. In 1983 there were only 23 such plants in the UK; 9 concentrated in the electrical and electronics industries, the rest across a wide range of activities. These are the basis of Dunning's study which began as a survey commissioned by the Department of Industry. The published version doesn't stray too far from its original form and this is a pity. In spite of the inclusion of the Nissan union contract there is no consideration of the plant's general significance, and the discussion of trade unionism and industrial relations generally is insubstantial. Nevertheless

it is a document to be welcomed, providing useful data on the perceptions of Japanese management and their methods of operation.

Dunning shares with Abegglen and Stark the view that Japanese overseas investment can be expected to increase over the next decade. In his judgement the UK will be the main recipient of EEC plant, and employment could increase from 5,555 (in 1983) to 22,000 in 1990 and ten times that number in 2000. The *reasons* for Japanese preference for the UK lies in the weakness of the British market and the advanced penetration by Japanese imports. Dunning reports how the companies were initially worried by the threat of trade union organisation, and an inadequate component supply, a concern allied to a less than favourable impression of British management's 'Amateur' approach. Their experience it seems has removed any worries on the first score, and they are working hard on their relationship with their component suppliers. Generally their reported productivity levels are less than 25% below the Japan level, and hence — given transportation costs equally profitable. We've all now seen Nissan's advert about 'added Sun'. To an important extent this might confirm the view that the system is adaptable and that new management techniques can be applied with enormous effect. Some points of caution need to be made however, To begin with, there is a possibility that what is good for Nissan and Sony need not necessarily be good for Britain. In his discussion of 'possible conflicts of interest' presented by Japanese inward investment, Dunning raises, but doesn't answer, the point that the R & D end of the production chain will be the least likely to move out of Japan. The worry here is that, the British industry's freedom of manoeuvre in the future could be deeply constrained by the absence of adequate research and design skills. His own evidence — that only 0.9% of the workforce in the 23 plants were involved in R & D activities — suggests that this worry might be a real one.

A more general concern relates to the particularities of the Japanese plants. Most of them have been based in green field sites, often in development areas, and always with a labour force recruited through very careful selection procedures. The electronics producers, for example, prefer to employ young female school leavers. In the North East, Dunning notes the disparity between the numbers of job applicants and jobs at Nissan, and adds 'workers now being recruited . . . are in no doubt as to what is expected of them'. Leaving aside the implied threat in this summary, it should be clear that most companies operating in the UK don't have the option of new sites with specially recruited labour forces. Short of a generalised 'Wapping solution' companies will develop with the human resources now available and this does involve innovative strategies which are different in kind. For many managements, one suspects, 'knocking heads' has been more in the fore in this recession than genuinely innovative schemes for dematurity.

This raises, in an acute way, the question of trade union organisation (a deeply underresearched and misunderstood area in itself) and its future in this changing industrial context. Dunning writes briefly and with favour of the

'progressive' approach by the TGWU, GMBTU, EEP TU and AEU in relation to Japanese industry. And there is no doubt that in South Wales, Scotland, and the North East these unions have bent over backwards to accommodate new investment and the prospect of 'jobs'. In relation to this the problem set by Paul Willman — that trade unions may 'operate to the competitive disadvantage of unionised factories in the UK' may seem like an odd one. It would be if the myths weren't so intense. Willman addresses the question in a highly competent and disciplined manner. Again there is a debt to Abernathy and the product cycle. Again too there is an awareness of the need to see power and conflict as more than residual categories. In this Willman suggests that explanations which see trade unions as simple obstacles to technical change are naive. For him, the role of trade unions in this process can be positive or negative; it will relate to the industry and to the product cycle as well as to the method of bargaining and also (although this is understressed) to the times we live in. For him the critical question is 'why some sets of industrial relations systems appear to be better at accommodating change than others' and in this he is attuned to the need for analysis of 'behaviour patterns which are quite complex'. By linking Abernathy through to Woodward's early theories of technology and organisation, Willman develops Clegg's view of trade unionism in an interesting way. In industry, he argues, 'the possible combinations of product, process and effort bargain are numerous. However in all cases, the form of contract chosen closely defines the form of trade union which emerges, and this in turn defines the reaction to technical change'. In a complex argument which draws evidence from the British docks, the printing industry (pre-Wapping) and auto he poses a relationship between the rise of process and flow systems of productions with bargaining practices which move away from localised spot contracts. For Willman the form of labour contract is critical in its impact upon trade union behaviour and in this it is 'management choice in the face of product-market constraints', which is decisive.

The strength of Willman's analysis (and of all the books dealt with here) is in its detailed focus upon industrial organisation. As such, Willman sees his approach (isolating contract) to be superior to Turner's (with its emphasis upon 'employee expectations'). But this strength can also be seen as a weakness. Certainly in the face of non-unionism and the need to explain it. In the Harvard colloquium, for example, while discussing 'commitment' rather than 'control' models of compliance it was admitted that 'union management relations are by definition not an issue for many of the organisations because their workforces have never been unionised'. Across the USA just 20% of the labour force is now unionised with rapidly declining rolls inside core areas of support like auto and coal mining. It was this, in part, which saw the UAW and Ford involved in a series of discussions in which 'the parties signalled that they were entering into a new partnership based on joint initiatives and a strong sense of mutuality of interests'. So too in the UK. At Nissan, in spite of the

AEU contract, just 20% of the workers have signed up. In his rather odd last chapter Willman recognises that in Britain the big suppliers of electronic hardware like IBM, Hewlett-Packard and Digital are non-union and that 'the motivation to bargain hard over change has not been removed by institutional development within firms, but rather by allowing unemployment to rise'. As such the long term significance of such changes is ambiguous.

This, of course, serves to raise the question of the State, and in this it is helpful to mention Edwards' book. Like Willman, he registers his debt to Hugh Clegg and *Conflict at Work* is the first of a new series on the subject emanating from the ESRC Industrial Relations Unit in Warwick. It is an intriguing, and well researched volume which draws effectively upon a range of comparative and historical material. I've already referred to its 'non-Marxist materialism' and this derives from his rejection of teleological versions of history which see the 'interest' of workers lying in their inheritance of a Communist future. Shed of this he operates happily with concepts like 'mode of production' and surplus extraction and sees production as an arena of conflict and cooperation. In many respects his analysis is in sympathy with that of Michael Burawoy and Theda Skocpol; while Burawoy insists on his Marxism, Edwards rejects it unequivocally. There is more to be said on this issue, here I will concentrate on the parts of the book where he directs his attention to the question of the State and the workplace. The state is seen as having a degree of relative autonomy, performing certain tasks in relation to the process of capital accumulation, that aren't simply determined by the needs of the production system, but indeed relate to them. Here Burawoy's distinction between state activity which determines the conditions under which labour power is sold and that which regulates how labour power is used is helpfully deployed by Edwards. In this way it has been possible to contrast the UK (having a historically high level of intervention at the first level — welfare payments etc., and a low one in the second) with Japan — scoring low on both counts. It is this absence of a social democratic revolution in Japan which has often been used as an explanation for the motivation of workers in its Corporate sector. The policies of our present government might be seen to be pushing the UK and Japan closer together — into the same box so to speak, and possibly establishing a 'neat symmetry' between changes in the system of production and the state. This suggestion Edwards wisely rejects, contrasting *laissez faire* economics with a financial strategy in Japan which makes strong links between the corporations, the banks and the state. He concludes: 'to the extent that the British state's stress on short term economic viability reproduces behaviour characteristic of *laissez-faire* economics in which long term investment strategies are impossible, the gap between Britain and Japan is widening and not narrowing' (p. 180). This point, made in criticism of Burawoy's tendency to collapse complex social processes into polar types serves also to heighten our awareness of the problems involved in transferring production systems. It also adds an important material dimension to this institutional discussion. Aber-

nathy, for all his strengths, tends to underestimate the occasional simplicity of economic power and understate the attractions of MIT's other fourth option — corporate flight. The Harvard school similarly can be criticised for paying too little attention to production as an arena of organised conflict. Equally, in each of these books, 'the worker' (male or female; Japanese, American or British; black, white, brown or yellow) has emerged as a shadowy figure. A recipient rather than an actor. While there are hints in the Aston study of the important role of workers in innovation, there is no systematic assessment of this.

It is to the question of the worker — in this case the British worker — that Theo Nichols directs his attention in what can only be described as a *tour de force*. In a powerfully sustained, and biting logical argument he unravels the variety of ways in which this historical agent has been treated, in the build up to crisis which has lasted a century. By way of personal reflection, historical evidence and detailed accounts of economic arguments he demonstrates the pervasiveness of a view, long established as myth — the idle British worker and his militant union. Dunning's evidence can already be seen as a partial corrective to this stereotype. Nichols' analysis goes deeper however in an attempt to locate this myth within the context of the crisis of accumulation that faced British capital. In this Nichols talks of researchers having 'singularly failed to produce a grounded theory of management itself' and of the need to speak in terms 'of opportunity and constraint, and in turn of the consequences of these, and, at all levels of organisational analysis and of organisational process'. While Abernathy and his Harvard colleagues are not mentioned in what is an extensive bibliography the parallels are clear and significant. Nichols' approach is different however. It is more grounded in the experience of the work place and upon the need to appreciate the detail of this experience — his writings on accidents both here and in the *Sociological Review* being both salutary evidence of what productivity can mean in practice and what social science can contribute to policy discussions. His own clinical evaluation of the policy papers is wholly convincing, as is his assertion of the need for a more thorough documentation of the views of workers on the policies and practices that affect their working lives. The shallowness of Thatcher's populism is revealed in her government's refusal to initiate any truly popular appraisal of our industrial ills.

In this way Nichols draws attention to what Tolstoy referred to as that 'unknown x' — the imponderable spirit or morale, or motivation of an army or a labour force. It was this 'x' factor which Leibenstein pushed to the fore in his explanation of comparative productivity, and Nichols cites this with some energy, decrying the failure of economists to take this issue seriously. He is undoubtedly right in this, and he has a potential ally in Willman who (in a different way) raises similar questions, pointing to the ways in which issues of power are often regarded as 'residual categories'. Throughout institutional economics categories like 'morale', 'attitudes' and 'effort' are used as explana-

tions of organisational failures. Rarely are they operationalised or supported by empirical evidence. In a real sense they are scapegoating concepts. Williamson, for example, in his book *Markets and Hierarchies* attributes workers with 'opportunistic strategies'. This term is translated by Willman to mean 'strategically dishonest', and in its specific application (to workers but not to managers) the ideological force is clear. As Nichols points out, things can be ideological and true; they can of course also be false.

The appeal in Nichols' book is for more and better research. As he castigates economists so too does he despair of sociologists who have neglected these issues 'to a remarkable degree'. He is not wrong in any of this. His book however, and the others, point clearly to the possibility of such comparative/cross sectoral research emerging in the coming period. They point, also, to the deeply critical state of modern industry in Britain and (implicitly) to the problems (and possibilities) this creates for trade unions and the labour movement. 'Choice' isn't restricted to capitalist corporations. At Brighton speaking to the TUC conference in 1986, Neil Kinnock spoke voluminously about the inadequacies of Mrs. Thatcher's policies and how 'we are going to work our way' out of the crises. The question posed by many on that day was 'how?'. It stills needs to be answered.

Department of Sociology and Social Policy
University of Durham