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All contributions, comment and correspondence
should be addressed to :

The South African Labour Bulletin
4 Central Court P.O. Box 18109
125 Gale Street Dalbridge
Durban 4001 Durban 4000

(The views expressed in the articles are not
necessarily those of the editorial board.)

CONTENTS

COMMENT

:

A Managerial Choice

Page 1

ARTICLES

:

Belinda Bozzoli : Managerialism and the Mode of Production in South Africa Page 6

Michel Bosquet : The 'Prison Factory' Page 50

Andrew Prior : Managerial Ideology : Page 67
A Case Study : An
Incident in a South
African Gold Mine.
13th August 1975.

REPORTS

: A Summary of the
Bullock Report

Page 72

A MANAGERIAL CHOICE

The copy in this issue focusses on a central issue in industrial relations. This is the control that management exerts over its workforce. Managements task is, stated simply, to ensure the profitability of the enterprise. This requires the minimisation of costs whilst still producing the output level that will be marketable. In achieving the end of profitability management are, therefore, concerned with efficient techniques of production. However, they are also concerned to ensure that the activities of workers are directed toward the same end rather than any other. It is in this sense that management exerts control over the workforce in its enterprises.

This control is, therefore, a problem of attaining certain ends in a situation where those ends are not automatically realised. However, a given end can be achieved in different ways and consequently the exact way in which the control is exerted can differ widely. In this situation theories of management designed to best achieve these ends have proliferated. These theories have become more precise and "scientific". Broadly speaking the one focus has been on breaking down the components of every job so as to make them more subject to measurement and control that will eliminate the element of human caprice. The other focus has been to mould and manipulate the behaviour of the human agents in production so that they will meet managerial requirements of their own accord. The two approaches are of course not contradictory.

The fascinating studies by Bozzoli and Bosquet in this issue show the complexity of the factors that can influence the particular "style of management" adopted. Changing economic structures, changing technology and the growing power of labour all interact to influence management policies. The particular style of control adopted by management is, therefore, not entirely of their free choice since some of the factors that influence the choice are not consciously seen by management to be doing so. However, this does *not* mean that management have no choice. As Bozzoli and Bosquet illustrate graphically certain events - the 1946 African mineworkers strike in South Africa and the events of May 1968 in France - often confront management with the clear realisation

that they do have a choice.

In South Africa at present the general political situation, worker discontent, the inadequacies of existing industrial legislation and foreign criticism are all serving to renew the pressures that call for management to make their choice.

Exactly how management will respond to these pressures depends on their perception of the issues at stake. In general this perception is based on the assumption of an identity of interests between management and workers in the workplace. Only bad communications or outside agitators are seen to be capable of preventing the realisation of this identity by workers. Management are often misled by so-called experts on "Bantu customs" to define the problem as one of a difference in culture between black and white. Large sums of money are wasted on films and courses to educate the white supervisor and manager into "the culture of the African". (See SALB Vol 3 No 1 - Dave Webster, "Some Popular Anthropological approaches to the understanding of the Black Worker".)

We've argued consistently in editorials that this is a naive perception on managements part that does more harm than good in the long-run. The problems that arise in the work-place arise from the work process itself - not from alleged African customs or mythical agitators. Management are often unable to perceive this because they are not immune from the racial prejudice that permeates white attitudes, and as Prior's brief case study illustrates this can lead to substantial misunderstanding of workers actual position.

Furthermore, this perception generally leads management to respond harshly to any independent worker initiative. The case studies of industrial disputes contained in the last issue dealt with this in considerable detail.

In general management have not hesitated to call in the Labour Department, police and Security Police to help "solve" the problems that they mistakenly see as being the result of outside agitators. As a result workers are understandably sceptical of any

notion of an identity of interests when they see the power of the State harnessed by management to deny what seem perfectly reasonable demands made by them.

A particularly pernicious tendency is for management to make concessions that are basically designed to retain effective control in their hands. So Liaison Committees or Works Councils are seen as a means of preempting the emergence of independent worker organisations. But factory based committees cannot meet the requirements of independent worker representation and as a result they also fail, through a loss of credibility, in their limited function of channels of communications. As a result the misconceived concession does not create the institutions that can resolve conflicts of interests but only increases worker bitterness and frustration.

However, management elsewhere has come to realise this. To realise that they cannot have it all their own way and that there are conflicts of interests involved. That conditions of employment have to be negotiated with autonomously powerful trade unions. In effect an absolute power to control has to be sacrificed for the long-run stability of collective bargaining. Furthermore, management will have to acknowledge that workers are human beings with aspirations that will frequently clash with the profit motive.

The recommendations of the British Bullock Report, some of which are summarised in this issue, embody a clear realisation of these factors. These recommendations are far ranging and regrettably not as yet part of our industrial relations debate.

That debate, however, has reached an interesting point with the appointment of the Wiehahn Commission of Enquiry. The problem of the managerial choice is posed fairly clearly. It is up to them to make their views known to the Commission. In doing this they can use this as yet another occasion to make concessions that they hope will divert the pressure of the outside world and may appease their workforce but which will not in anyway threaten their control over that workforce. However, far more positively

they could use this as an occasion to move South Africa toward stable industrial relations based on independent, democratic trade unions and collective bargaining.

We urge the latter course. In the meantime, we advocate that the following steps in the right direction be taken.

1. Give a written undertaking to the workforce that no worker will be victimised in *any* way for being a union member or for being active in union affairs.
2. Be prepared to discuss worker complaints with union officials.
3. Give the Union reasonable access to the factory. The purpose of this is to allow workers to have the functioning and policies of the union explained to them. They are, therefore, in a better position to be involved with union decisions. This involvement means that the Union can be truly representative of the workforce and obtain its support in negotiating. Management attempts to prevent this in any way only defeat the purpose of talking to a Union. You can't negotiate with a body that can neither represent or influence its members.
4. Where a works or liaison committee exists allow the union access to that committee. Remember, however, that this does *not* constitute full recognition of a union. This requires that the union have the legal standing to enforce any contract made between itself and management.
5. Wherever it is at all possible the Labour Department should not be a party to disputes and negotiations. These should be matters between elected worker representatives, including the union of their choice, and management.
6. Prevent all police and Security Branch involvement in labour relations.
7. Treat grievances seriously and timeously. The best way of doing this is to work out a simple grievance and dismissal procedure that involves the

union. The unions independent expertise and presence reinforce workers trust and confidence in such a procedure.

None of these steps are illegal. All they require is that management exercise the choice they have in a positive way. Here is an opportunity for management to take the initiative in moving towards a resolution of the conflicts between management and labour, rather than leaving it to a cumbersome and inefficient state bureaucracy.

COMMENT

SMITH AND NEPHEW

The recent EEC Code of Conduct on Investment in South Africa is more comprehensive than the British guidelines. However, as with all such Charters it is the resolve with which they are implemented that gives them credibility.

A very crucial test of this exists at Smith and Nephew in Pinetown. To their credit the company was the first and only company to sign a comprehensive agreement with the unregistered National Union of Textile Workers. Then on the 18th July 1977 the company refused to renew the three year old agreement. They denied NUTW access to the factory whereas under the Agreement officials could enter the factory for 3 hours every Wednesday. Management then proceeded to propose a Works Council that excluded the Union in any legal sense. This has been maintained in spite of worker rejection.

NUTW claims at least 70% membership of all Indian and African workers and by all accounts these workers were very happy with the old Agreement. Management themselves have acknowledged that it was a successful Agreement.

All this is not only a sad blow for the recognition of unregistered unions but it also seriously conflicts with the steps advocated in the EEC Charter.

If the Charter is not going to help workers at Smith and Nephew then it can't expect to earn a great deal of credibility.

MANAGERIALISM AND THE MODE
OF PRODUCTION IN SOUTH AFRICA

by Belinda Bozzoli

INTRODUCTION

This paper is concerned with outlining a general theory of managerialism in South Africa which relates it to the developing and changing mode of production dominant in this region. It is concerned to define the complex ways in which we can explain the changes over both time and place in the management of black workers in industries and mines. It strives to advance our understanding of 'management' beyond the categories in which it is usually presented to us by its agents; and also, hopefully, beyond some of the more conspiratorial or 'real-politiek' explanations of it which tend to arise spontaneously amongst trade unionists and other opponents of capital. Management, no less than any other aspect of capital, needs to be understood in dynamic historical and conceptual terms, and to be related to the overall constraints operating in any one social system at any particular stage in its development.

The first task in this undertaking is to define management in rigorous terms. Here the definition is based upon the assumption that capital and labour have interests which contradict one another, based on capital's interest in extracting surplus from workers. Where capital finds it necessary or desirable to mediate this contradiction, it appoints managers to assist it. Managers are thus initially defined as *the mediators of the contradictions between capital and labour*, to the ultimate benefit of capital.

This simple formulation covers as many complexities as there are contradictions. For it to be in a position to actually undertake the extraction of surplus, for example, capital needs to create and subordinate a working class. It then needs to get it to produce, and because of the tendency of the rate of profit to fall, to increase continually the rate of production - the productivity of workers. And precisely because these processes require the subordination of labour to capital it needs to pre-

vent its work-force from perceiving and rejecting its inferior position.

It is the performance of these several, interrelated and changing functions - which could be summarised as proletarianisation, subordination, productivity and suppression - on behalf of capital, that is the task of what are usually known as managers.

A wide variety of methods can be adopted in the performance of the functions of management, depending on the particular circumstances of both capital and labour at any one time. Circumstances do not vary in a random and arbitrary fashion, but in a discernible pattern, determined by the nature, structure and operation of the mode of production (1) on the one hand, and by the nature of the social formation (2) in which the mode of production is situated, on the other. Capital, labour, capitalism and the South African social formation are the variables whose mutual articulation provide the foundations for the interpretation of management put forward here.

Before this interpretation can be pursued it is necessary to make two important points. First, any study of the rather unsatisfactory category 'management' raises the general question: at what stage does 'management' end, and the control of labour through other means, such as trade unions, political parties and the state, begin? And in fact it is as inadequate to confine one's understanding of the control of workers to management as it is to consider worker resistance and consciousness only in terms of their expression in trade unions. In South Africa this problem is accentuated by the fact that the working class is divided into white and black partly in terms of the access of the respective groups to political power and the state. The confrontation between white workers and capital tends to be mediated through the whole range of conciliatory institutions, from state to management; while that between black workers and capital occurs without any significant political or trade union conciliatory machinery whatsoever. The manager confronts the black worker with the unmediated power of the capitalist state behind him. The dual character of the

contradiction between capital and labour in South Africa should be understood *in toto*. Thus to the problem of the impossibility of isolating managerial practices from other forms of control is added that of the South African divided working class.

All that it is possible in a brief analysis such as this is to keep alive an awareness of these issues, for to cover the entire range of relationships between capital and both groups of workers is clearly impossible. (3) This article focusses only on black workers, and only on 'management'. The reader should however bear in mind the wider context in which both of these groups are situated.

Second, it should be remembered that management is not a monolithic entity. In every enterprise there exist two levels of managerial activity - the upper level where managerial ideologies are evolved and broad strategies conceived; and the lower, 'supervisory' level, where the actual control of workers within the resulting structure is carried out. Workers experience management at this latter level, nearly always in crude, more or less authoritarian forms. This is particularly so with black workers in South Africa. There must inevitably be, therefore, a considerable amount of scepticism amongst workers about the pronouncements of 'upper level' managers, because supervisory managers appear to stay the same whatever the prevailing upper level ideology. This is, however, not the point. The pronouncements of upper level managers are not as important as their ability to translate, with the power of capital itself behind them, those prescriptions into structural institutionalised realities. The supervisor works within structures dictated for him by upper level management, which is itself the arm of capital.

MANAGERS AND PRIMITIVE ACCUMULATION

The role of managers during primitive accumulation has barely been touched upon in the literature on the subject. Thus, although this paper is primarily concerned with managers within an existing and established mode of production, it seems essential to

outline, briefly, how they assisted in the very process of its entrenchment. (4)

In South Africa it is quite clear that managers were of crucial importance to capital in assisting in the processes of the proletarianisation and subordination of black labour, between 1886 and 1910. Managers of the late 19th century mining industry barely resembled the modern manager, being as concerned with the creation of methods whereby workers could be *obtained* under conditions favourable to capital, as with matters of productivity and work relationships. The obtaining of black workers implied the removal of black farmers from the land, the establishment of bureaux of labour recruitment, the establishment of a labour monopoly, the development of labour control systems, and the evolution of crude methods of surplus extraction.

The concerns of managers with these processes lent them power and independence such as would be rare in managers of established capitalist firms. The mine manager was a wealthy man, with high status (higher than that of small local manufacturers for example). His 'big house' on the mine provoked white workers to complain of extravagance, and he was given freedom to run 'his' mine more like an independent plantation than a factory - and in fact many early mine managers were drawn from plantation systems, within and outside of South Africa. He was also permitted to make agreements and alliances with other managers as he saw fit, even on crucial matters such as wages. Managers took on the appearance of being competing entrepreneurs rather than subordinate agents, and their independence was enhanced by factors arising from the isolation and large size of many mines. Because he lived on his mine, the manager was in fact often placed in a better position to perceive the requirements of his and his colleagues' mines than the more remote mineowners themselves.

In Kimberley, for example, it was a mine manager, Gardner Williams, who developed and perfected the institution of the compound - which has been described as the basic labour-repressive institution of South African capitalism. Subsequently the com-

pound system was transferred, through the actions of mine managers, to the Rand mining industry. On the Rand itself it was the powerful Mine Managers' Association (MMA) that pressurised the Chamber into developing a refined and effective system of proletarianisation in 1893, as soon as it had become clear that gold mining's future would be a great one. The MMA's committee on Native Labour was set up at that time to inform and pressurise the Chamber on such basic matters as hut tax, labour recruitment and the pass laws, suggesting in its report that

hut tax be raised to such an amount that more natives will be induced to seek work, and especially by making this tax payable in coin only; each native who can clearly show that he has worked for six months in the year shall be allowed rebate on the Hut Tax. (5)

To the extent that the Transvaal political and economic system inhibited the mines from obtaining sufficient labour, it was the MMA that pressurised the Chamber into petitioning and lobbying the Kruger government. (6) The early chamber was still a relatively weak organisation which seems even to have relied on the stronger MMA for direction and suggestions, such as that 'the Government be petitioned to enforce, and if necessary amend, the Pass and Vagrancy Law so as to prevent an accumulation of idle Kafirs in the neighbourhood of the towns,' (7) or that it be 'approached' with a view to assisting in the refinement of the systems of labour movement and recruitment. (8)

The fact that a violent and brutal conflict was taking place between capital and labour during the period of primitive accumulation was the fundamental truth about relations on the mines themselves. The management of mineworkers was an entrepreneurial matter, undertaken by managers and their subordinate compound managers with the systematisation of surplus extraction as the major motivation. According to one report:

Some managers, having secured a competent

compound manager, experienced in the treatment of natives, incontinently gave him carte blanche to follow his own methods. Almost every man of long residence in South Africa who has been in contact with the natives has his own peculiar system which he believes to be the best. Sometimes he may be animated by the single purpose of 'running' the compound as an estate farmed out to him to yield him the maximum amount of private profit. He proceeds to 'sweat' the boys by every kind of petty imposition. (9)

The management of production tended to be an ad hoc affair, with managers fulfilling productivity requirements in a violent and comparatively arbitrary fashion; the possibility of increased profitability through the further proletarianisation of workers still lay open to capital, thus rendering highly refined and systematised productivity methods unnecessary.

Against this background it was not difficult to understand why ideology in the era of primitive accumulation did not attempt to mask violence, hierarchy and exploitation. Indeed any reader of original sources of the period is struck by the explicit way in which these matters are discussed, used as we are to the mystifications of a more developed system. Mines are depicted in militaristic, hierarchical terms, with a few masters whose rule needed no justification, masses of undifferentiated servants, violence, danger, and the assumption of progressively decreasing intelligence down the hierarchy. Mines were armies, blacks were troops, who were 'recruited' and had a tendency to 'desert', and their housing was in the form of barracks. White workers were officers, their housing accordingly better and their social centre the officers' mess. Orders were given, punishment meted out and training undertaken, in a military, hierarchical mode.

Within this framework the division of the working class into black and white, to some extent pre-given, was encouraged and exploited. Through the development of the gang system, white and black workers were placed in an inherently antagonistic relationship

to one another, resulting in further violence in the form of assaults, beatings and murders. White workers were not encouraged to identify with capital (as in later times) but in accordance with the hierarchical design of the system were placed between blacks and capital, so that the hierarchy came to embody a peculiar, unique combination of racist and class-based divisions which was to persist beyond the period of primitive accumulation into that of accumulation itself.

MONOPOLY CAPITAL, ACCUMULATION AND SCIENTIFIC MANAGEMENT

The era of primitive accumulation could be said to have ended with the 1913 Land Act. From the first world war onwards, the mining industry ceased to be concerned with the creation of a capitalist mode of production in Southern Africa, and turned to the matters of its operation and profitability. The managerial function changed accordingly.

Once primitive accumulation had ceased, profitability requirements tended to be directed towards the labour force in the workplace itself. The labour process came to assume a centrally important function in the industry. There are two aspects to the resulting managerial strategy. On the one hand it is clear that gold mining in South Africa displayed the characteristics of any large, monopolistic, capital intensive (though this should not be taken to exclude labour-intensiveness) industry seeking to sustain and increase its rate of profit. For this reason it is not surprising that the general direction and character of managerialism in the developing mining industry would be familiar to all students of management. On the other hand, the uniqueness of this industry in South Africa at this time should not be forgotten. It was the combination of the general and the unique that began to lend to South African management a character all of its own.

Firstly, an industry with the characteristics and strength of the most advanced monopolies in the world had come into existence in a region with a conquered,

powerless and unorganised working class. Capital had not evolved simultaneously with labour, but had entered South Africa armed with weapons developed elsewhere, over many years and through many struggles. The weakness and inexperience of black labour rendered its resistance ineffectual and slave-like - desertions, sabotage and what was known as 'loafing' prevailed. More organised forms of resistance were easily crushed. Capital was therefore in a position to impose its profitability requirements upon black workers in an unbridled fashion, possessing a freedom of action which even the most active practitioners of 'Fordism' and 'Scientific Management' in European or American countries were unable to achieve. Second, managers in the mining industry were confronted with a contradiction within the strategy of capital whose resolution required the strengthening of their managerial capacity. This contradiction lay between the decision made by capital to keep its labour force both 'migrant' and 'ultra-cheap' on the one hand, and the ongoing and relentless pursuit of profitability on the other. Technological refinements and improvements in mining rapidly reached limits beyond which it was difficult and costly to go within existing mines; while the creation of a stable and therefore trained labour force could not be resorted to in the case of black migrant workers. The burden of increasing profitability thus fell more heavily on the organisation and perfection of the actual process of production by workers than is usually the case. Third, the strict division of the working class, while it assisted in neutralising worker resistance, also presented problems to those concerned with productivity problems of control and conflict, of dissatisfaction and resentment.

Managerial strategies as they developed through the decades following World War I reflected and attempted to mediate these peculiarly South African contradictions as much as they revealed the universality of capital's demands upon labour.

Thus there seems to be an ideological purpose to the mining industry's conceptualisation of its overall strategy as it developed, and is indeed still developing, as 'Scientific Management' -for many of the ideas

embodied in South African mine management seem to go far beyond even the more dehumanising methods used by scientific managers elsewhere. With this in mind, I would now like to outline some of the major features of this form of management as it developed in South Africa, in the light of the many contradictions within the mode of production and the social formation.

In the 1910's and 20's a gradual interest in the ideas of Henry Ford and Frederick Taylor, the two main protagonists of what came to be known as 'Scientific Management' in the United States, began to develop in South Africa. By the early thirties the problem of profitability had reached grave proportions in the mining industry during the gold standard crisis; and when that was resolved, the ultra-cheap labour policy was threatened both by competition from growing secondary industries, and by worker organisation. For reasons already outlined these crises were difficult to solve through proletarianisation, mechanisation or the training and stabilisation of the workforce. All existing forces pushed the industry towards the increase of profitability through pressure on workers in the workplace itself.

Whereas in 1892 the Association of Mine Managers had been concerned with the compound system, hut tax, and labour supply monopoly, by 1937, when its first published papers became available, and entirely new ideological structure had been developed. J.S. Ford the pioneer of Scientific Management (S.M.) in South Africa pointed out the feasibility of implementing its main tenets in a region with so weak a working class:

By reason of the particular type of native labour available, the gold mines should lend themselves more to Scientific Management than do the industries of Europe and America where the greatest retarding powerhas been the human element which is subject to neither calculation nor measurement. The workers are prone to a strong prejudice against working or living in a mechanical manner. (10)

The first task of the protagonists of SM was to destroy the existing managerial ideology, a hangover from the era of primitive accumulation. Old managers were, it was said, 'distrustful' of the idea that management could be a 'science', for they, as we have seen, existed in a structural context which lent itself to an interpretation of management as an 'art'. As one manager said:

the expression 'scientific management' has become almost a catch-phase on the mines of the Rand and under its banner many practices of doubtful value have at times been publicised and advocated. It cannot be too often reiterated that mining is an art and not a science, and that the application of factory methods to mining is only advantageous within a very restricted field. A mine is a living entity with a normal life cycle of birth and growth to maturity followed in due course by old age and ultimate dissolution.... ample scope must be allowed for the exercise of individual judgment, initiative and swift decision. These invaluable human factors cannot grow to their natural limits in an organisation the greater part of which is stifled under a blanket of inflexible standard instructions. (11)

Such views were widely held, and so programmes to 'educate' managers, and strategies to replace them, were devised, as the new ideologists sought to establish ascendancy over the old. (12) We have already seen the new structural demands upon capital to which pioneering managerial ideologists such as Ford were responding. What was the corresponding ideological structure?

The assumption on which the structured ideology of Scientific Management is based, and which is common to SM ideologies everywhere, is that the fundamentally alienated relationship between capital and labour may be bridged by the imposition by managers of sets of rules, laid down in universal code-books and learnt by all. Humans themselves are reducible to such rules, and their place and role in industry may be governed by them. (13) On the basis of this

an elaborate ideological and prescriptive structure is developed, whose aim is to increase the productivity of labour by improving its performance in the workplace. How it does so in any particular social formation, and how ideology and practice are blended, is of course determined by the nature of the workforce and the configuration of forces operating there. The 'scientific' instruments developed by managers from the 1920's onwards should be seen as practical attempts to reduce the disadvantages of migrant labour, to increase productivity and to control the workforce; and also as ideological devices to encapsulate, legitimate and regulate these things.

As has already been suggested, to increase productivity in the mines is to reconcile the fundamental contradiction between the need for efficient production, and the migrant labour system. To elaborate upon this: the advantages of the migrant labour system accrue to capital at the level of its cost, its control, and of the costs of its reproduction. Migrant workers are employed for six to twelve months on contract, and thus costs of sustaining the family of the workers of caring for redundant workers, and of other welfare matters, are borne by surviving or reconstructed precapitalist systems on the periphery of the system. However these overall benefits to capital contradict the tasks of management, which is denied a well-trained stable labour force. Because he is merely the arm of capital, the manager tries to work within the system by adapting his profitability requirements to the peculiarities of contract labour.

First, he tries to 'stabilise' labour within the migrant system, by trying to attract workers back to the same mines again and again on successive contracts. In the era following primitive accumulation attempts to evolve a system to this end were made within a 'scientific' framework and justified by a scientific ideology. On one level this concern of management was merely an extension of the managerial concern with reducing 'turnover' common to all enterprises in all parts of the world. However there developed more refined and particular systems designed to make maximal use of the twelve month contract period. Most important of these were 'scientific' selection, (14)

acclimatisation, work standardisation and labour control.

With the assistance of industrial psychologists the industry developed a series of simple aptitude tests to assist in the placement of new recruits into the categories semi-skilled, unskilled and 'boss-boy'. According to these tests, workers can be almost instantly classified, thus saving wasted training time, and experience-gaining time. New recruits are first treated entirely uniformly, (the assumption being that until and unless scientific tests are applied to them, all men are equal). They are then taken to a testing centre where a 'battery' of tests is applied. Under the silent instruction of a film, in which the actions and movements required of them are illustrated by a black actor, they are then required to perform certain tasks one by one. The tests are crude in the extreme. Some require the fitting of square pegs into square holes; others the simple screwing of the correct sized nut onto a bolt. All are done under a time restriction. Some are performed outdoors, such as the 'leadership' test in which a gang of 'boys' is given a task, such as crossing a 12 ft. wide ditch, and a few implements. The assumption is that out of each 'gang' one leader will emerge who will devise a method of crossing the ditch. He is 'boss-boy' material.

All of these tests are performed under the most rigorous scientific conditions. The people administering them believe implicitly in their validity, which in fact depends on their ability to separate very crudely those familiar with mechanical apparatus from those unfamiliar, and to discover a few potential commanding types. The scientific validity accorded to them by those who invent and administer them is far greater. They are talked of in high-flown jargon, over-administered and bureaucratised. Their function as ritualistic and propagandistic introductions to the 'superior' technology of capitalism sometimes seems at least as important as their testing ability.

Some mention should be made of the relationship between these tests and the labour process itself, for here too the system is overlaid and interwoven with a scientific ideology. The labour process on the average mine is performed by black workers, and supervised by white workers. For a complex set of reasons too elaborate to be explored here, the white workers came to be separated from one another, and each attached to a 'gang' of black workers, which itself was controlled by two or three 'boss-boys'. Each gang, plus its white transmitter of commands, skills and managerial requirements, seems to have acquired, in the eyes of managers, an *organic* nature. White workers were not operational unless they had blacks to supervise; blacks had to be integrated into the productive process by the 'catalyst' of the white supervisor. This organism of production was suited to the mining process itself, for workforces were separated from one another throughout the working day by the very nature of the mining operation, and possessed a high degree of autonomy, while the militaristic structure of the industry lent itself to a hierarchical organisation of the work process.

This organic system was regarded by managerial ideologists of the scientific age in dehumanised terms. The members of the organic gang were simply the agents of the higher aim of productivity. This in turn was concerned with the raising of the efficiency of the organism, which was composed of 'productive units'. The older, paternalistic idea of the 'native as child' was thus replaced by the scientific one of the 'native as part of a machine'. As such his position in the organism was of crucial importance to its efficiency. To place a 'boy' of 'boss-boy' potential in an unskilled position in the gang would be as inefficient as using expensive fuel in an engine unable to utilise it efficiently. Each member of the organism had an optimal position, and it was the task of 'scientific selection' to discover this.

The ritualistic and initiatory aspects of the second major SM device - 'acclimatisation' - are

even more visible than those of selection. To 'acclimatise' a mineworker is to get him accustomed to the extremely high temperatures underground. In the pre-science days, a recruit would be given two weeks or so of light duty to acclimatise him, but this came to be considered wasted time, as the pressures of productivity increased and the period of contract work did not. A more rapid method was developed over the years, which by 1963 had been perfected in City Deep Mine. According to a description made a mine manager, African newcomers are weighed, and a tag hung around their neck to indicate which weight range they fell in (blue = 120 lb. and under; green = 120 - 140; white = over 140.) They strip in the change room and are given a loin cloth from 'synthetic drip dry material'. They are then taken to what is called the "stepping area":

concrete floored, sloping to a small drain. It is divided into 15 bays, each with 15 stepping blocks ... arranged in three rows of five. Blocks are 3 ft. apart in both directions. Between successive stepping bays, a revival bay, 3 ft. wide, is situated, equipped with 6 ft. long air and water hoses. A boss boy can thus wash down a person while still observing the rest of the gang. The whole stepping area is well illuminated. An electronic metronome with four sets of blinking red and green lights provide the timing for stepping. It is set at 24 changes of colour per minute i.e. 12 changes to red and 12 to green. Thus two stepping rates can be used, viz. 12 per minute and 24 per minute. Wet and dry bulb thermometers at the start, middle and end of the stepping area are read every hour and the airflow regulated to give a temperature gradient of 89° F wet bulb at the start to about 92° F at the finish. The stepping blocks are of concrete and are 18 in. long, 12 in. wide and 12 in. high. A board 2 in. thick is used to give three stepping heights, ... (for different weights). The stepping

rate on each of the eight days is according to a schedule. They move along two bays daily to obtain the effect of the temperature gradient ... At the start of the shift there is very little temperature difference, but as the stepping gets underway heat production from their bodies soon raises the end temperature ... Stepping is accompanied by singing in time to the metronome and clapping of their hands. The latter was found necessary as circulation tended to stop in their arms if they did not move them vigorously. Temperatures are taken at hourly intervals. Elderly persons are carefully watched.....(15)

If in the tragi-comedy which is SM aptitude tests represent the comedy, then the tragedy by all accounts is 'acclimatisation'. For three hours by day for eight days, recruits undergo these 'stepping' exercises, at a rate of 550 new recruits each month. At the end they are reclassified according to their pulse rate during stepping, into three categories - those able to perform strenuous, less strenuous, and light work respectively. And yet there are other motivations underlying the acclimatisation procedure:

Physical conditioning by means of the acclimatisation procedure is necessary to enable the worker to adapt to working in the high temperatures underground....

But:

It also serves to make him fit after a prolonged period of ease at his home. (16)

Not only that but

Psychological conditioning of the newcomer to underground conditions is just as important. He usually comes from a primitive, rural environment to the bustling life of the compound. He is often told hair-raising tales of the work and dangers underground. He only loses his apprehension when he has gone underground himself and

becomes familiar with the conditions of darkness, heat, enveloping rock walls and cramped working space ... we believe that his adjustment is not only hastened but far more thorough if it takes place in the sympathetic atmosphere of underground training and acclimatisation centres, where his mentors are trained specifically to listen to him and help him solve his problems. (17)

Acclimatisation, like scientific selection, is closely linked to the system of 'gang' production, for one of the aims of the stepping tests is to divide workers into categories according to their physical abilities. Once more, the gang is considered to be a form of machine, and the slotting of workers of the correct capabilities into the correct job positions is of crucial importance to its smooth functioning.

The third SM strategy - the training of workers - is also scientific, and related to the gang system. The aim in training is outlined by Ford:

Scientific management tends to remove from all members of any personnel the confusion of mind which tends to lower productive capacity and which is engendered by their inherent fear that they are unable to perform satisfactorily the tasks set them. Scientific management requires that instructions regarding every task be conveyed to the personnel in a manner leaving no room for misunderstanding and at the same time that the management provide the utmost facilities for these instructions to be carried out with the minimum of effort, both physical and mental. (18)

With this prescription for the standardisation of all mining activity and its reduction to the lowest common denominator, managers set about eliminating 'all confusion of mind'. Detailed job instructions were developed, along the lines followed by scientific management in many other industrial systems. Ford's

description of the job of 'lashing' (shovelling) is illustrative of this: only a small extract will suffice

a) Loading the shovel:

1. the principal useless movements in shovel-loading are those due to taking too many pushes.
2. these excessive pushes may be due to a variety of causes. (19)

The description continues for two closely typed pages. Manuals for job training were developed and each job was described down to the finest detail.

This standardisation of work was related explicitly to the gang system of production, and was seen by ideologists of management as being a solution to the difficult problem of the divided and mutually hostile working class. Science sought to 'bridge the gap' between working classes. The violence and hatred engendered by the gang system were seen as a problem of 'bad communication', made worse by the high turnover of white workers:

new natives on their arrival at the mines are often sent to gangs in the temporary charge of such peripatetic and casual employees, who have no particular interest in the welfare of the mine, and so these natives learn very little, if anything, from them. (20)

The "scientific" solution to this is firmly centred on the gang system:

Therefore...a general organisation for the training of natives must be set up and if this organisation is successful the evils of an ever-changing white personnel are largely mitigated. (21)

Based on the organic conception of the gang, this solution holds that the 'organic whole' or machine, consisting of a score or more black workers, can be taught to operate mindlessly on its own, but that it requires the presence of a white miner to activate it. All

other functions of the white miner may, however, be removed by 'training the native', rendering the white simply a catalyst, a cog in the machinery of the organism, replacable at any time by any other cog.

The solutions for assaults and mutual antagonism between workers are also seen to lie in training:

The effect of standardisation is to induce close cooperation between white and native employees and generally makes underground management a less onerous task. (22)

Moreover, standardisation effects one of the primary aims of scientific management: it removes the 'human factor':

The issues are no longer fogged, the distinction between the 'good' man and the 'bad' man no longer has its previous significance, nor does experience alone mark out a man for special consideration. (23)

Linked to the idea of standardisation is that of education: the 'qualified' man will be able to act objectively and correctly:

Too many men are discharged due to a lack of knowledge of handling men by those in control. Much bitterness, resentment and many assaults at work are due to the same cause. A large percentage of labour turnover is due to the wrong attitude, unfair methods, and arrogant, blustering ways of some officials towards workmen. (24)

However, these suggestions were met with hostility by the majority of white workers. Just as in other communities, Scientific Management found it difficult to cope with a powerful and organised working class. As Ford said 'the decline (in assaults) is not as pronounced as it would be if the underground white personnel were as instruction-minded as the native labour force'. (25) This encouraged the already powerful tendency for scientifically-minded managers to direct their energies towards the weaker black section of the working class, and to emphasis the process

of 'de-skilling' implied by its treatment of the white working class in the gang system.

The science of management in this era also entered the field of labour control, which had been a vital concern of managers throughout the period of primitive accumulation. Then it had been with the fundamental architecture and structure of the workers' housing and work environment that managers had been involved. As far as black workers were concerned, the migrant labour system made it necessary for the thousands who worked on each mine to be fed, transported, housed, paid and prevented from threatening the system of production in as cheap a manner as possible. The compound system and its related control mechanisms had, as we have seen, been the solution to these problems. In the scientific era managers sought both to streamline and to bureaucratise this system, without altering its basic structure. Managers and mineowners showed their approval of the compound system by introducing it on all new mines throughout the twentieth century. After World War 2, the compound system was introduced, with refinements and a scientific and bureaucratic rationale on the new Orange Free State goldfields. On the issue of the control of labour, for example:

the change-house and Native single quarters (compound) will be connected with the man-loading bank of the shaft by means of an underground tunnel, and persons will therefore be able to travel between these three points under cover. Shifts will be raised to and lowered from this position only. A further advantage of this set-up is the *complete control of Native labour* between the shaft and Native quarters, a matter of some significance to mine personnel during that important daily task of lowering and raising shifts. The system of handling men in this way had many obvious advantages and, although used in Kimberley diamond mines for security reasons, is an innovation as far as the gold mines of the Anglo-American group are concerned. (26)

Labour control systems were refined by the development of surface checking systems 'to check natives on and off shift'. These too were conceptualised by the bureaucrats of the age of science rather than the authoritarians of the age of primitive accumulation.

For convenience the checking offices are placed as near the shaft as is practicable. The only means of entrance to or exit from the bank area is by numbered aisles through the checking office proper. This is accomplished by fencing and policing the area. The amount of fencing required depends upon the policy adopted at individual mines. It can be kept to a minimum by fencing in the immediate bank area, or, as is the case at West Springs the entire shaft area containing vital buildings. *This latter method affords protection during periods of emergency as exist at present. (27)*

This method replaces that of the 'ticket book' which prevailed on earlier mines and which was a more primitive form of bureaucracy. But the author of the new system expresses the scientific ideal of control through bureaucratic refinements when he writes

we might, with the discussion which is sure to arise, attain some measure of foolproof control of our underground labour (28)

while a participant in the discussion said:

I feel that the scheme he has initiated at West Springs takes us a long way towards *a more efficient and watertight method* of native labour control (29)

and followed with a detailed description of the bureaucracy involved in this.

An important concomitant of scientific management is 'social science'. As has already been implied, a continual problem for aspiring scientific managers lies in the fact that in spite of ideological prescriptions to the contrary, black and white workers are in

fact human beings. In order to bridge the gap between ideology and reality, ideologists made use of the human sciences, such as sociology and more frequently psychology. (30) As early as 1930 a British psychologist was invited to develop theories whereby his developing science could be applied to black workers in South Africa. Of psychology's relevance to industry he wrote:

psychology may be described as the science of behaviour. Why do human beings behave in a certain way in certain circumstances? Why do different human beings behave differently in essentially similar circumstances? Before attempting to elucidate these problems it is important to stress that psychology, as a science, is not concerned to decide whether observed behaviour is good or bad, right or wrong. It is concerned solely with the 'hows' and 'whys' of behaviour. When these have been ascertained, it is possible to apply the knowledge to the practical affairs of life. (31)

To adapt this 'value-free' theoretical perspective to the problem of black labour, Stephenson used the idea of 'civilisation' versus 'primitiveness' (an idea whose freedom from value-judgments is debatable). Human behaviour is said to be understandable in terms of its place along the continuum between these two variables:

The degree of self-control which an adult can exercise over his primitive tendencies to certain patterns of behaviour is a measure of his stage of civilisation. (32)

The 'environment' of the individual limits this behaviour according to the stage of civilisation he has reached. As far as black workers were concerned the various degrees of limitation and the various kinds of environment lead the psychologist towards the conceptualisation of different 'kinds of natives'. Psychology thus paves the theoretical way for the scientific manager's division of the black working class into sub-groups according to scientifically determined criteria. But while management is con-

cerned with physical fitness and 'intelligence' or 'aptitude' this particular psychologist raises questions of 'primitiveness' and 'tribal differences':

In their territories their behaviour has been influenced by the various conditions under which they have lived, and consequently their outlook is quite different from that of a white man who has been born and bred in a more civilised and more industrialized environment. In many respects their behaviour is child-like and the 'values' which appeal to them differ essentially from the values which appeal to the more highly civilised white man. (33)

writes Stephenson. The implications are complex:

When, therefore, compound officials have to deal with large bodies of native labour, of several different tribes, removed from native surroundings, tribal customs and discipline, family ties, etc. and precipitated in many instances into a new and strange industrial environment, it behoves them to endeavour to view the new world which the native has entered from his point of view...Natives of some tribes may appear more adaptable than others. Certain tribes are characterised by a sunny, joyous disposition, in contrast to the morose and distrustful appearance of others... Provided that the supply of native labour is ample, there is no serious reason why the cheerful and apparently willing native should not be given preferential treatment, but when a shortage threatens, it behoves the compound officials to make the best of the labour force available. (34)

The simple ideological patterns underlying the scientific management policies outlined already in this discussion are lent a more sophisticated, complex and subtle backing by this genre of racism. What is important about it is that the scientific ideology is enriched by the introduction of concep-

tual and historical referents and also that the science of the psychologist complements and reinforces that of the manager. It concerns with the fact that newly proletarianised labour is no longer available ('Make the best use of the labour force available'); with ascertaining the motives for behaviour and applying them to 'practical affairs'; with providing categories within which managers can deal with the 'human factor' without prejudicing their abilities to control humans; and with productivity as an overall aim, demonstrate the relevance of 'human' or 'social' science to specifically managerial science. The relationship established in the thirties grew and flourished in South Africa as elsewhere in the succeeding decades with the establishment of such bodies as the National Institute for Personnel Research and other less formal links between the academic and the industrial aspects of scientific management.

There is, unfortunately, too little space to elaborate on other aspects of the Scientific Management school of thought. Its use of "Fanakalo" as a lingua franca for the transmitting of low-level instructions, its relationship to the anti-communist "Training within Industry" movement and a variety of other facets need and deserve fuller treatment. In conclusion, I would like to quote from one author in whose mind there was little doubt of the relationship between scientific management, on the one hand, and the ending of primitive accumulation, the pressures of productivity, and changes in the work process on the other:

It has long been realised that there is room for much improvement in the distribution, control and efficient use of our labour. The explanation may be that in the past native labour has been plentiful and cheap, and that the general attitude has been to put on two boys if one did not manage the job. Within recent years the scientific investigation of underground work based on numerous time studies, has revealed the extravagant use of labour, particularly non-productive labour. (35)

LOCAL CAPITAL AND LIBERAL MANAGEMENT

South African capitalism is peculiar in that it experienced the development of monopoly capital before that of competitive indigenous manufacturing capital. Its managerial ideologies and practices evolved in a correspondingly unorthodox manner. While scientific management, epitome of monopoly capital's repressive capacity, was being adapted to the conditions of South African mining production, battles were being fought in the sphere of manufacturing which under the conditions of normal capitalist development should have long been won or lost. As a result, scientific management found itself having to exist along side a growing school of managerial philosophy which may be labelled 'liberal', and which was concerned with solving problems arising out of South Africa's transition from a state of underdevelopment to one of incipient capitalist development.

After 1924 the South African political and economic system began to experience a fundamental change. From being an imperial enclave dominated by mining, it was rapidly becoming a system of industrial capitalism in its own right. From small beginnings, industries had been developing steadily since the first world war, and with them, the numbers of urban-dwelling black workers. When, after 1924, the balance of power between imperial and local interests began to change with the introduction of protective tariffs, the interest of non-mining capitalist employers began to make themselves known and felt on all levels of the South African social formation. Mining, whose hegemony had been the mark of the pre-1924 era, was forced to adapt itself to the needs of a system seeking to liberate itself from underdevelopment by the growth and diversification of its productive forces. In other words, two fractions of capital - imperial and national - coexisted, each with its own primary interests and ideology, each forced to make room for the other. (36) While scientific management fulfilled the needs of the monopolistic repressive mining fraction, with its migrant labour force, different ideological and practical solutions were required to satisfy the needs of 'national' capital,

with its black working class. In the early years, before 1924, the imperial and national fractions of capital were more or less synonymous with mining and 'manufacturing'. But as the forces of local capital developed, so the mining industry, or at least certain sections of it, sought to localise itself, diversify into industry, and to take on the problems of national capital as its own. Its size and power made it a suitable base from which ideologists of management and of capital itself could work. As South Africa's indigenous capitalist system came into its own, so the distinction between mining and manufacturing ceased to hold its earlier significance in certain crucial fields. It is for this reason that the apparent paradox exists whereby the mining industry produced ideologists both of scientific management and of 'liberal' management. In the one case it was attempting to solve problems arising from its monopolistic character and its dependence on migrant labour; on the other, it was taking on the role of solving problems of capital as a whole, particularly with respect to the growth of a black proletariat in the towns.

Capital had long concerned itself with the problems of how to handle its growing and increasingly militant proletariat, both black and white. Whilst mining and manufacturing tended to develop separate solutions to these problems it would seem that as far as white workers were concerned, both fractions had come to terms with the necessity for conciliation through state and industrial machinery, by the mid-1920's. The encouragement of certain forms of trade unionism, and the passing of the Industrial Conciliation Act, were both products of this.

However, those sections of capital concerned with and by the development of an urban black proletariat, did not consider it necessary or desirable to develop similar state-regulated machinery, at least in the initial stages. Liberal personnel management can be seen as capital's compromise with black labour, during an era when it began to organise along increasingly threatening lines.

The organisation of the black working class affected both manufacturing and mining employers. In the

sphere of manufacturing, black workers joined the 'new' industrial unions of the 1930's in great numbers, both reflecting and challenging their new status as fully proletarianised workers, and thus firmly locating the contradiction within South African capitalism between urban workers and indigenous capital, of whatever fraction. But the challenges presented by black workers were not confined to the smaller, competitive industries of the manufacturing sector. Indeed it has been argued that the most important trade union of this period was not in that sector at all, but in mining. And confirmation for this view is provided by the fact that the culminating event of the years of black trade union organisation was the African mineworkers' strike of 1946 involving hundreds of thousands of workers and confronting capital on a substantial scale for the first time for twenty five years.(37) Several ideological and strategic responses on the part of industry, followed.

Almost immediately after the strike, the most progressive, diversified and 'national' mining house, Anglo American, appointed J D Reinhallt-Jones as its adviser on 'native affairs'. A leading proponent of the new liberalism of the 1930's, Reinhallt-Jones seemed well-placed to provide not only the mining industry, but all sections of capital, with conceptual and practical tools for the handling of the increasingly threatening and only recently proletarianised black working class. A second major structural basis for 'liberal' ideas emerged, with financial support from the Central Mining and Investment Corporation, when the South African Institute of Personnel Management was formed with the purpose of developing an ideology of personnel management suited to both mining and industrial conditions in South Africa. Later this was incorporated into the National Institute for Personnel Research, a government supported institution. A third structural basis for the development of liberal 'personnel' ideas came with the formation, again with the backing of Anglo-American, of the National Development Foundation, while a fourth arose when E Raymond Silberbauer, an idiosyncratic advocate of personnel management who combined it with his beliefs in Moral Rearmament and his experiences in 'rehabilita-

ting' participants in the 'Mau Mau' revolt in Kenya, founded the Bantu Wage and Productivity Association, probably in the early 1950's.

These four developments (and there were probably others) demonstrate the range of interests which the new ideology was to serve. Both mines and industries were to benefit; while the corpus of liberal thought which had flourished in the 1930's around such individuals as Hoernle, and such institutes as that of Race Relations, and which had concerned itself with the grander issues of South African capitalism, such as its overall class structure and future path, was harnessed to the specific end of catering for industry's black working class problem. Intellectuals of an academic or otherwise relatively independent kind were employed. Even scientific management was represented, in the form of individual mining ideologists and interested persons - F G Hill, for example, was a mining man able to theorise on scientific and personnel aspects of management. This range of represented interests is indicative of the extent to which the interests of national capital sought ideological 'hegemony' at this time; the range of the ideological network placed capital in a position to begin to propagate the view that its interests coincided with the 'general' interests.

The aim of personnel management ideologists was to develop a set of generalisations from which practical suggestions could arise, concerning the place and role of the black working class. While scientific management could be said to have been concerned with the production process, or the labour process, personnel management was more explicitly political in its aims: at their most innocuous these were to ensure the 'well-being' of employees; to 'improve employer-employee relations' or to 'build up an esprit de corps'. Its manipulative purpose and 'liberal' orientation lent to the ideology a particular tone, a combination of the 'science' of the age, Christianity, moral rearmament and paternalism. Its early supporters were fervent and there was a sense of urgency about their discussions - not surprisingly, considering the extent of the challenge represented by the 1946 strike.

The earliest statements concerning the need for personnel management emphasise that it is seen as a possible means of counteracting, redirecting and channelling the working class's new-found organising ability. (38) The immediate problem was that the existing 'machinery' of black working class control was now unsuitable, based as it was, on the needs of the imperial mining industry; Reinhallt-Jones spoke of:

the sanctions of the Native Labour Regulations Act of 1911 and of the Masters' and Servants' Laws in respect of individual breach of contract. They were *never intended to deal with organised strikes*, and the use of these sanctions, with the consequent use of the police to impose them, is a potent cause of bitterness amongst Native workers, and the application of the sanctions in industrial disputes cannot be continued without increasing the tension and greatly lessening race relations..the police should be kept out of Native industrial disputes..(39)

What were the solutions proposed. First, Reinhallt-Jones made clear that 'liberalism' was essentially concerned with control rather than with freedom. He wrote, soon after his appointment, of the extent to which he agreed with the Lansdown Commission into the mining industry:

The commission has very definitely been forced to the conclusion that the Native mineworkers have not yet reached the stage of development which would enable them safely and usefully to employ unionism as a means of promoting their advancement.(40)

The problem as he saw it was the workers were not yet 'ready' for unionism, and therefore their militancy was a reflection of their tendency to get 'carried away':

The strike of 1946 was due to the mineworkers having been worked up to a high feeling by the Union's organisers, but the workers anticipated the plans of the

Union which was caught unready for a strike at that time. (41)

The implication is that there is nothing wrong with trade unionism as such - it is only a problem if workers are not 'ready' for it, and are therefore unlikely to exercise the restraints which union leaders naturally will impose upon them. In making this point he was not simply referring to mineworkers - as he said: 'Experience of the workers in secondary industries shows that these Africans at any rate understand the strike weapon and have developed solidarity'. (42)

The fact that South Africa had now become a developing rather than an underdeveloped, country meant that workers were required more actively to believe in the values and structures of the society - after all they were to become consumers of, and participants in, a new system of production. Capital's interests lay not only in defusing trade unionism, but in ensuring that such structures of communication between workers and employers that did exist, were able to project the validity of capitalism as such, as well as to assist in the more usual functions of management such as the constant raising of productivity and keeping the process of production harmonious. This made personnel management more comprehensive than most managerial strategies - indeed it could explain its need for the ideological assistance of intellectuals not strictly concerned with specific industrial problems but with the overall class structure of the society as a whole. This comprehensiveness is reflected in the range of issues discussed by Reinhallt-Jones. Elaborating on the matter of trade unionism, for example, he pointed out that methods of worker control such as the Elder system, used in imperial enclaves such as pre-1924 South Africa and Zambia, were useful only as long as Trade Unions were simply channels for complaints to 'impartial' government observers. But under a 'more developed' industrial system, personnel management was necessary, because without it:

this would leave the workers without competent help at a point where they might easily be misled by agitators and go astray.

It seems to call for the help of someone whom the workers can regard as at their service to give advice, to 'open doors' for them, and to show them how they should conduct themselves in making representations. (43)

Other managers saw the ideological potential of personnel management as great enough to make it a viable basis for the prevention of trade unionism altogether. The organiser of AE and CI's workers councils claimed that they were a substitute for unions:

The non-European is shrewd and likes value for his money. Trade Unions will be interested in him only as long as he pays his membership subscriptions. Do not levy any fees for membership (of workers councils). If the non-European finds that his requirements are met through this automatic membership of the council he is not likely to remain a strong supporter of the Trade Unions. (44)

However he too recognised the potential usefulness of recognising Trade Unions, under suitably controlled conditions:

on the other hand, there is no need to denounce openly Trade Unionism as, with a grip on your employees it might be possible, and perhaps advisable, to keep in touch with their officials. (45)

If their requirements for 'control' could be met, the more progressive ideologists such as Reinhallt-Jones supported black trade unionism, or some State-regulated substitute:

It is necessary to consider possibilities other than those which now exist for carrying out the first principle of personnel management as given by Northcott .. ie 'Recognition of the rightful claims of the workers for adequate working conditions, wages and amenities and

the discharge of the employers' responsibilities on this count ... Recognition of the status of those who serve the employer in realising mutual aims'. Northcott claims that the primary aspect of personnel management is to secure the 'greatest degree of collaboration' between employees in the working out of the principles and securing the aims of sound industrial relations. (46)

he wrote. If these principles were applied to black workers in South Africa, then, he continued, two aspects needed to be considered:

One is consultation between employer and employee on general working conditions. The other is the fixation of wages. (47)

It was the second of these that lacked any structured communication mechanism:

At present there is no arrangement for collective bargaining or for independent wage regulation. We must realise that there will be increasing pressure for the establishment of conciliation and arbitration machinery to which more Natives can have access. This pressure will come not only from those who are supporting the effort now being made to organise a trade union of Mine Natives. A considerable body of opinion which does not necessarily sympathise with these efforts will feel that justice requires that there should be conciliation and arbitration machinery. (48)

Such proposals must be seen in the light of the liberal concept of 'repressive tolerance', in terms of which they were put forward, The Transvaal Steel Pressing syndicate, for example, articulated this notion well in its discussion of Native Works Councils:

The Natives know that the Management has no objection to the workers being members of a Native Trade Union, but only approximately 15% are members. When asked why they do not support Trade Unions to a greater

extent, their reply is that as they are well-treated and able to bring their grievances before the Management, they see no reason why they should be members and go to the expense of paying subscriptions. The Trade Union is permitted to collect subscriptions on pay-day as the workers leave. The secretary of the Union is also permitted to address the natives, but does not make use of the permission. (49)

The repressive tolerance is made even more explicit:

But the workers will come under the influence of the African trade union movement, and the more the attempts to organise the workers are opposed by the mining industry, the more the spirit of hostility will be bred among the workers. The development of trade unionism amongst native mineworkers must be regarded as inevitable ...and... they should be recognised. (50)

The element of propaganda in personnel management was important from all points of view. 'If the Union is to develop industrially', said one personnel ideologist, 'it can only do so by taking the African increasingly into industry, training him, and fitting him for urban industrial living.' (51) In this and most other respects, personnel management was put forward as a supplement to, and advance upon, the prevailing and growing concepts of Scientific Management. As one writer put it:

The greater his integration into the economic life of the country, the greater the need to treat the African as a human being, with all the failings, all the hopes and fears, all the aspirations and potentialities of a human being.' (52)

What this meant to the average, shop-floor manager is perhaps better expressed by another speaker:

I have long felt that the raw native should be regarded, not as ignorant, stupid nigger, devoid of any intelligence, but as a peasant, mentally undeveloped, but otherwise reasonably intelligent within his own element. He may have a thicker skull than his European counterpart, but he has ears through which access may be had to a brain of ordinary human pattern. (53)

(An appropriate reminder of the realities of South African racism to those who may possibly have been carried away by the appearance of 'liberalism' in management.)

The means whereby propaganda is undertaken in personnel management, so that the new, more 'human' black worker may be incorporated into the developing capitalist system, are usually spoken of under the general heading of 'communication'. Hence once again we find the growth of an important liaison between industrial and academic intellectuals. Hudson, in his history of personnel management, writes:

A number of factors aroused this interest in communication (when personnel management began). Indeed it is a little surprising that the discovery of communication was left so late by the personnel people...The sociologists and historians recognised the importance of communication before we did, and gave it pride of place among the civilising agencies ... (54)

Once personnel managers came to realise the importance of communication, Hudson makes quite clear its meaning:

As industry grew and spread after the (second world) war, management came to realise the need for *selling other things besides the product*, of being interested in productivity, in good human relations, in morale. *With the collapse of the master-servant relationship, with the development of*

Trade Unionism, with the introduction of mass media, it became possible and at the same time necessary and desirable to sell capitalism to the workers. (55)

The idea of communication covered other matters. For one thing, Fanakalo, the lingua franca used in mines to convey instructions, and considered to be ideal for those purposes by scientific managers, was, by contrast, viewed as totally inadequate by personnel managers:

Its scope is limited. It can handle only the simplest of operational concepts. New ideas, new attitudes, which can motivate personnel, and build morale are not easily expressed through this medium. (56)

The reason is that:

In communication we are trying to do more than transmit facts. We are concerned with with the inculcation of ideas, attitudes and ultimately a way of life...The problem is to change the social character of people who belong to a traditional community to meet new social and economic requirements. (57)

This form of communication would fulfil another need of management - the need to raise productivity; in an interesting reference to the recent change in the industrial system the writer says:

In a country in the transition stage between the primary and secondary spheres of economy, communication, or the lack of it, may make the difference between a productive and unproductive labour force. Certainly it will determine whether or not the labour force will understand the notion of productivity, of individual effort, of work for work's sake. Without adequate communication such notions cannot be readily internalised, and the traditional attitudes to work and endeavour will continue to predominate in the workforce. (58)

Neither the hierarchy of the old mining management ideology developed during primitive accumulation, nor the 'management by the book' of scientific management, is evident in this more 'liberal' ideology. Instead industry's problems are conceived of in terms of lack of communication, and of the correct structured systems to facilitate it. Personnel management propagates the concept of 'all pulling together'. Harmony, esprit-de-corps, and racial and cultural unity are the stated values of the liberal managers, and they are encapsulated within a generalised capitalist ethic. The division of the working class into black and white is deplored and its unharmonious consequences lamented: 'in the training of workers special attention must be given to the cultivation of sound racial attitudes on both sides of the colour line' according to Reinhallt-Jones, (59) while another liberal concerned with industry wrote that:

While the principle of personnel management and the results of research and experience in Britain and the United States are applicable, and available to the Union, they must be applied in an environment conditioned by the peculiar setup of a multi-racial society ...Employer-employee relations in the Union are not only class relations, but they are in the main race relations. This is a factor which personnel management cannot disregard. (60)

As was the case with Scientific Management, only the barest of outlines of this ideology has been possible in this discussion. Its relationship with the broader liberal ideology being perfected at the time has scarcely been touched upon; other facets, such as its concern with the various forms of social control (recreation, education, alcohol) and the complex internal structure of the ideological network in which it was developed must unfortunately remain unanalysed. The emphasis here has been on the contrast between this ideology and the scientific one, on the 'controlling' functions of this type of 'liberalism' and on the

relationship of the ideology to the 'problem' of the black working class.

CONCLUSIONS

Three different managerial ideological structures have been described. In each case, an explanation of the ideology was put forward in terms of particular contradictions and needs of the capitalist mode of production. In the first instance, it was the process of primitive accumulation that shaped the managerial function and the ideology of the early mining period. In the second example, the contradictory requirements of the large, monopolistic mining industry for profitability increases through the increased productivity of workers in the labour process, gave rise to the South African version of scientific management; while in the third case, it was the rise of national capital, and the concomitant rise of an organised black working class, that dictated the need for capital to develop 'liberal' personnel managerial strategies.

These three ideological forms exist separately, but it should be pointed out that they are separated less by chronological factors than by structural ones. They do not 'evolve' from one another; the idea of the 'evolution' of managerial ideas from crude and unrefined ones to subtle, refined ones is itself ideological. What evolution does exist rests more in the evolving strategies of labour, and management's consequent responses to them, than in any inherent tendency within capital to 'progress'. In particular it should be noted that 'personnel management' was not an "advance" and an "improvement" upon 'scientific management', and nor did it follow chronologically. The two strategies evolve, and are still evolving, together. That they co-exist and are even to some extent expressed by the same ideologists in different contexts, is an indication, not of their inseparability, but of the variety of interest-structures which capital possesses in complex social formations such as the South African one.

This raises, thus, the issue of the explanatory framework used here. If it is true, as has been suggested, the managerialism is related to the mode of production, then what does the relationship consist of, in specific terms? Changes in the nature and functioning of capitalism have indeed been shown to exist, and a relationship between these changes and managerial responses has been suggested. But throughout it has been implied that neither set of changes is arbitrary, governed by semi-mystical sociological concepts such as 'evolution', or the 'importation of new ideas', both of which must themselves be explained. Instead it is suggested that the 'interests' of capital are structured and ordered, and that in particular phases of its development, or in particular areas where the interests of capital as a whole and those of its different fractions are not identical, separate interest structures come into being. It is the structures of capital's interests that give rise to the corresponding ideological structures in any one area or phase of its operation.

This phenomenon is thrown into sharp relief in South Africa because of its rapid transition from pre-capitalism to capitalism; the peculiar reversal in which the hegemony of monopoly capital came to precede that of competitive national capital; and finally, the weakness of the black working class. The first factor, the rapidity of South Africa's transition, makes possible an analysis of managerial participation in the process of primitive accumulation; and provides, within a space of fifty years, contrasts of a most illuminating nature, between this and other functions of management. The second factor, the reversed development of capital, has numerous consequences of great importance in the understanding of South Africa. From the point of view of this discussion, it places beyond doubt the relationship between scientific management and monopoly capital. Further, it was one of the determinants of the third factor, the ultra-subordination of the black working class, and thus of its subjection to scientific managerialism

in an extreme form; and the consequent need for 'personnel management' to address itself to the crucial problems of black working class organisation rather than simply to the matters of work organisation and work relationships. The relationship between interest structures and ideological structures is clearly linked to the question of domination. 'Interests' here are not subjective categories arising simply from the perceived needs of particular groups; but objective categories arising from the manner in which the laws of capitalist development manifest themselves in particular situations and at particular historical moments. The 'interests' which managerial ideologies serve are not any interests but those of the class or fraction seeking to attain and sustain its dominant position within the mode of production. In the first phase, managerial assistance is required in the actual achievement by capital (in this phase, monopoly imperial capital) of domination over the existing African modes of production; in the second phase two distinct areas of interest arise; on the one hand, existing, imperial monopoly capital requires the assistance of management in sustaining its rate of profit, without disturbing the manner in which it exercises dominance over the reconstructed African modes of production; on the other hand a massive transformation of the capitalist mode of production itself is taking place in which imperial capital comes gradually to be replaced by national capital. Managerial assistance is required in the development of methods whereby the dominance of capital may be extended, to the sphere in which a black working class needs to be controlled and if necessary appeased, without permitting it to gain power in the sphere of legitimate politics. An important indication of the dominating place of capital is the harnessing of the wider ideological resources of the social formation - academic and other intellectual contributions to managerialism play a major part in its development.

As was pointed out at the beginning of this essay, these aspects of capital's strategy towards

subordinate groups are not the whole story, but merely the part in which managerial assistance is required and used, in relation to black workers. At the same time as these strategies were being developed so were others, as capital sought to establish suitable relationships towards the state, white workers, black workers in spheres other than those mentioned, and other dominant or secondary groups, in all three 'phases'. Managerial ideologies and strategies should always be assessed in the light of these more general factors.

These then are the major conclusions of this essay and are specifically concerned with its central thesis- the relationships between management and the 'mode of production'. However this leaves the essay somewhat in mid-air as far as the historical aspect is concerned, for we are left with the picture of national capital putting forward 'liberal personnel management' solutions to the problem of the black working class after world war 2, but we know that such solutions were not implemented after the advent of the Nationalist Government in 1948. Instead, apartheid policies attempted to resurrect the pre-capitalist modes of production in the black 'reserves' and to make of the fully proletarianised black labour force, a migrant one. It also tolerated no 'liberal' solutions to black working class militancy. How is this to be interpreted?

It is certainly not to be interpreted in terms of the 'liberal' conventional wisdom, in which it is argued that (English speaking,) national capital represented a progressive force, while Afrikaner nationalism represented the forces of white working class and rural conservatism. On the other hand, the fact that Afrikaner nationalist policies were, as it turned out, extremely 'functional' to the needs of capital as a whole is in itself not adequate as an explanation either - for there was clearly a powerful and ongoing opposition to certain aspects of these policies by English capital throughout the 1950's. This is not the place to put forward a sustained

argument in which these problems are resolved. I have neither the space nor the historical material appropriate to such an argument. However what can be suggested is that the conflict between English capital and Afrikaner nationalism during the 1950's should be interpreted primarily as a conflict between *fractions of capital*. While English capital considered itself to be secure enough to appease the black working class, nascent Afrikaner capital, represented by the National Party, was not even established, let alone secure. To allow the proposed 'liberal' policies to be implemented would be to guarantee that Afrikaner capital never got off the ground.

NOTES:

I am grateful to Theo Mars and Martin Legassick for reading and commenting on a very early draft of this paper, and to Charles van Onselen and Eddie Webster for encouraging me to complete and modify it.

FOOTNOTES:

1. 'Mode of production' is used here to refer not only to the particular configuration of forces and relations of production at the economic level, which determine the nature of the mode (capitalist or otherwise), but also the ideological and political levels at which that mode is expressed, reproduced or maintained.
2. 'Social formation' is used here to refer to the social, economic, ideological and political system in which a particular mode of production is embedded. A social formation is always dominated by one mode of production, but may include other, subordinate, modes.
3. However elsewhere I have attempted a broader analysis of the strategies and ideologies of capital in South Africa until 1940. See B. Bozzoli, *The Roots of Hegemony: Ideologies, Interests and the Legitimation of South African*

Capitalism, 1890-1940, University of Sussex,
D. Phil. 1975.

4. This outline is based largely on material drawn from Bozzoli, *The Roots of Hegemony*, (op cit. note 3), Chapters 1 and 2.
5. 'Report of the Committee of the Mine Managers' Association on the Native Labour Question', *South African Mining Journal* (hereafter *SAMJ*) September 23rd, 1893.
6. 'Report of the First Annual General Meeting of the Mine Managers' Association, 8th January 1894', *SAMJ*, January 13th 1894.
7. 'Report of the committee', (op cit, note 5).
8. *ibid.*
9. 'Editorial', *SAMJ*, April 21st, 1894.
10. J.S. Ford 'Scientific Management, with particular reference to a Witwatersrand Gold Mine', *Association of Mine Managers of the Transvaal Papers and Discussions*, 1942-45, Vol. 2, Transvaal Chamber of Mines, 1948, (hereafter *Papers and Discussions*).

This is a fascinating journal, and even the titles of some of the articles are indicative of the 'scientific' ideology's tenets: 'Mechanisation applied to mining in relation to native labour', 'Compound Administration', 'Surface Checking of Underground Native Labour', 'Native Labour Control and Conservation', 'Physical grading of native labour', 'A study of the underground work of Boss Boys', 'The determination of Native wages by job evaluation', 'The economics of mechanisation in relation to the cost of Native labour', 'Control of food waste', 'Some notes on feeding with special reference to breakfast feeding', are some of the issues raised, all of whose implications cannot possibly be discussed here.

11. G.R. Heywood, 'Some aspects of mining practice', *Papers and Discussions*, 1942-45.
12. This is an interesting illustration of the structural nature of ideologies, and of the disjointedness of a process often depicted as evolutionary - that of ideological change.
13. See, for comparison, Harry Braverman, *Labour and Monopoly Capital* (1975) and Antonio Gramsci, *Selections from the Prison Notebooks*, (London 1971) both of which give penetrating analyses of Scientific Management in Europe and the United States.
14. There is a great deal of published material on selection processes in the mines. The following brief analysis is based on my own observation of such selection procedures at the National Institute for Personnel Research and on individual mines.
15. P.G.D. Pretorius: 'Underground Training and Acclimatization at City Deep L d', *Papers and Discussions*, 1966-71.
- 16-17 *ibid.*
18. J.S. Ford 'Scientific Management', (op cit, note 10)
19. J.S. Ford *Underground Management*, 2nd. Edition, Johannesburg Consolidated Investment Co. Ltd, 1950.
20. J.S. Ford, 'Scientific Management', (op cit, note. 10)
- 21-23. *ibid.*
24. Comment by U.V. Glatthaar, on Ford's paper.
25. Ford (op cit, note 10)
26. W.D. Lyle, 'Opening up the Orange Free State Mines of the Anglo American Corporation of

27. J.G.W. Couperthwaite, 'Surface Checking of Underground Native Labour at West Springs Ltd.' *Papers and Discussions*, 1942-45.
28. *ibid.*
29. Comment by G.B. Batty, on Couperthwaite's paper.
30. The harnessing of academic and other intellectual resources of the society is an on-going theme of capital's attempt to achieve ideological domination, and takes place in the spheres of economics, history and conventional sociology and psychology (as opposed to their industrial varieties) as well, in South Africa, particularly from the 1930s onwards, when national capital was gaining ascendancy.
31. A. Stephenson, 'Psychology and the South African Native Worker,' (pamphlet) London 1931, pp. 8-9.
32. *ibid.*
33. *ibid.* p. 10.
34. *ibid.*
35. A.S. Knight, Comment on paper by Couperthwaite, (op cit. note 27)
36. The following analysis is based on Bozzoli, *The Roots of Hegemony*, (op cit, note 3) Chapters 3, 4 and 5).
37. See D. O'Meara, 'The 1946 African Mineworkers' Strike and the Political Economy of South Africa'. *Journal of Commonwealth and Comparative Politics*, July 1975.
38. It is revealing how managerialism adapts itself to the degree and sophistication of consciousness and organisation of the working class. While management presents itself as being 'evolutionary', it is in fact the workers' initiatives which provide the basis and the reasons for change. Management is essentially reactive rather than innovative. It is the workers who are innovative in their attempts to challenge and transcend capital's

39. J.D. Reinhallt-Jones, 'Personnel Management in Relation to Native Labour Problems on the Gold Mines', Address Delivered to the Institute of Personnel Management, 28th September 1948, *Personnel Management*, July, Aug, Sept. 1948.
- 40-43. *ibid.*
44. Vernon Atkinson, 'On forming Workers' Councils for Natives', talk given to Rotary, cited in Reinhallt-Jones, (op cit. note 39).
45. *ibid.*
46. Reinhallt-Jones, (op cit, note 39).
- 47-48. *ibid.*
49. Transvaal Steel Pressing Syndicate, Memorandum on Native Welfare, submitted to the Native Laws Commission of Enquiry, Johannesburg 1947.
50. *ibid.*
51. Quintin White, 'Editorial', *Personnel Management*, Jan, Feb, March 1950.
52. *ibid.*
53. T.A. Stannard, vote of thanks (to A.J. Fox), *Personnel Management*, Jan, Feb, March 1950.
54. N. Hudson, 'The Notion of Communication with Bantu Workers', *Journal of the South African Institute of Personnel Management*, January 1964.
- 55-58. *ibid.*
59. Reinhallt-Jones, (op cit, note 39).
60. Whyte, (op cit, note 51).

THE 'PRISON FACTORY'

by Michel Bosquet

Try putting 13 little pins in 13 little holes 60 times an hour, eight hours a day. Spot-weld 67 steel plates an hour, then find yourself one day facing a new assembly-line needing 110 an hour. Fit 100 coils to 100 cars every hour; tighten seven bolts three times a minute. Do your work in noise 'at the safety limit', in a fine mist of oil, solvent and metal dust. Negotiate for the right to take a piss - or relieve yourself furtively behind a big press so that you don't break the rythm and lose your bonus. Speed up to gain the time to blow your nose or get a bit of grit out of your eye. Bolt your sandwich sitting in a pool of grease because the canteen is 10 minutes away and you've only got 40 for your lunch-break. As you cross the factory threshold, lose the freedom of opinicn, the freedom of speech, the right to meet and associate supposedly guaranteed under the constitution. Obey without arguing, suffer punishment without the right of appeal, get the worst jobs if the manager doesn't like your face. Try being an assembly-line worker.

Monday how you'll make it to Saturday. Reach home without the strength to do anything but watch TV, telling yourself you'll surely die an idiot. Know at 22 that you'll still be an assembly-line worker at 60 unless you're killed or crippled first. Be as old biologically at 40 or even 35 as a woodcutter of 65. Long to smash everything up at least once a day; feel sick with yourself because you've traded your life for a living; fear more than anything that the rage mounting within you will die down in the end, that in the final analysis people are right when they say: 'Aah, you can get used to anything. It's been like that for 50 years - why should it change now?'

MAY 68 WAS NO ACCIDENT

The French bosses were still asking this question 10 months ago when a particularly sharp emergency

changed their minds for them. This happened in May 1971. The major issue at that time was generally thought to be the question of retirement at 60; for many workers, however, those in their twenties and thirties, retirement seemed as remote as the day of judgement. 'If we have to go on like this for 40 years', they were saying, 'we may as well drop dead right now'. These workers had already made themselves heard at the Batignolles, Ferodo and Moulinex factories, and at the Polymécanique works at Pantin. But these were small or isolated concerns. It was only in May, when the assembly-line workers at Le Mans came out on strike, that the bosses began to get really worried. *Renault* on strike could start a forest fire. This was now an extremely serious business.

It later emerged that this five-week strike traumatized the bosses as much as May 1968. The fear of another May was such that country-wide emergency measures were taken. At one point, CGT squads came from outside to help their outnumbered comrades prevent the occupation of Renault-Billancourt. The strengthening of security services, the methodical hunting down of militants, the now-familiar sackings on the slightest protest, all originated in this long, botched strike. The Renault management will never be the same again and neither will the rest of the bosses.

How long *can* one run a factory by repression and intimidation, in fact? What is the value of work carried out by someone with a supervisor breathing down his neck, under threat of punishment or arbitrary harassment? What does this barrack-room atmosphere cost in terms of spoilt parts, discreet sabotage, disabling accidents, breakages, daily disturbances, growing difficulty in replacing the workers who leave? What is to become of an industrial country which has to look as far afield as southern Africa for its manpower because its own citizens, even the unemployed, reject imprisonment in its factories?

Today the CNPF (the French employers' federation) is having to face all these questions. Since the May 1971 revolt at Le Mans it has felt that its hold on the working class is slipping, that May '68 was no accident and the bosses' control mechanisms are really disintegrating. Repression only escalates the conflict without solving the problem; if you persist in that direction, it isn't long before you can only maintain 'order' in the factories by extending your 'fascism' into the rest of society - if you can do it at all. Most bosses daydream from time to time of introducing fascism (a new *kind* of fascism, naturally) as the lesser of two evils, but the thinking minority is well aware that it would solve nothing: look at the workers' risings in Spain or the workers' insurrections in Cordoba (Argentina). Anyway, fascism is bad for business; it's too crude, a last-ditch expedient to be used only when all other means of domination have failed.

This is why, last autumn, the CNPF sent fact-finding missions all over the world to study possible solutions. It is possible to reconcile workers with the nature of their work? Are despotic management methods really necessary? *Is the fragmentation and hierarchization of tasks indispensable in this day and age?* Could the jobs performed by assembly-line workers be done away with and replaced by more interesting ones, thus reconciling control by the bosses with the introduction into the workshops of the principles of 1789? The CNPF study group wrote in its report on *'The Problem of the Assembly-line Worker'*: 'This problem is both vast and difficult. We believe that it is inescapable'. Fontanet, the Minister of Labour, expressed much the same opinion.

DISQUIETING RUMBLINGS

The first to take an interest in this problem were almost certainly the American managers of the 1930's. Starting from the viewpoint that man is an infinitely adaptable animal, they concluded that those who did not get used to production-line

work were *'unadaptable'*; they must, it was felt, suffer from 'psychological problems'. Industrial psychologists were hired to help the workers gently to 'overcome their personal problems'. This opened the era of *'human relations in industry'* - a gigantic brainwashing enterprise.

After the Second World War when labour became scarce in the US, the managers started to combine 'human relations' with material incentives in various ways. It became necessary to give the workers an 'interest' in the level of productivity. They had to be rewarded when they agreed to increase production. The thirst for consumer goods which lasted through the 1950's seemed to confirm the managers' basic belief that you can get anything out of a worker provided you pay him for his trouble; that there is nothing a man will not do for money; you can buy his labour power, his health, his youth, his sanity, his sleep, his very reason.

All good things must come to an end. Towards the mid-sixties disquieting rumblings began to be heard in the big factories. A few years ahead of their European colleagues, American workers were rebelling against production-line speeds, the meagreness of rest periods, the tyranny of supervisors, the nervous exhaustion that resulted from performing monotonous tasks. In 1963 tens of thousands of Detroit workers stayed out on strike in defiance of their union, which had just signed a package agreement making no provision for rest periods or for the reduction and control of line speeds.

The American bosses reacted to these spontaneous revolts in much the same way as their European counterparts: they replaced white workers with black and brown ones on a larger and larger scale. These workers, hardly ever represented in the union machinery, isolated and despised by management and skilled white fellow-workers alike, found themselves saddled with jobs nobody else would accept. Production lines manned by Blacks travelled 20 or 30 per cent faster than those served by Whites. Black militants ('This isn't

automation, it's *negro* mation') set up DRUM, the Detroit Revolutionary Union Movement; the tension had become so unbearable that in one 'line incident' a black worker downed tools, walked up to his white foreman, killed him on the spot and left without a word to hand himself over to the police.

There was no French 'May' in the United States, none of the prolonged rebellions which from September 1968 onward turned Fiat's vaunted organization of labour upside down and are still tormenting the Turin factory in the form of arguments over production norms, job-quotas, piece-work rates, and so on. Absenteeism in the United States has never reached the 15 per cent recorded by large French and Italian Firms; it remains between 5 and 10 per cent. Labour turnover attributable to voluntary departures has not yet reached Sweden's 30 per cent per annum, let alone the 100 per cent plus of certain Fiat plants; at Ford of Detroit, annual turnover is 'only' 25 per cent of the total work-force.

It was however, an article in the July 1970 issue of the American business magazine *Fortune* that made the clearest statement to the bosses in every country on the 'inescapable' nature of the problem, and its resistance to disciplinary or punitive solutions. This article, '*Blue Collar Blues*', painted a picture of industrial stalemate: the assembly-line workers were invincibly stubborn; their resistance was costing a great deal; it was necessary to reconsider the *technical division* of labour from top to bottom.

AT THE END OF THEIR TETHER

'Some assembly-line workers are so turned off, managers report with astonishment, that they just walk away in mid-shift and don't even come back to get their pay for the time they have worked... In some plants worker discontent has reached such a degree that there has been *overt sabotage*. Screws have been left in brake drums, tool handles welded into fender compartments (to cause mysterious,

unfindable and eternal rattles), paint scratched and upholstery cut... The result of all this churning labour turmoil is, inevitably, wasted manpower, less efficiency, higher costs, a need for more inspections and repairs, more warranty claims - and grievous damage to company reputations as customers rage over flaws in their glistening, but all too often defective, new cars.'

In brief, the race for more production leads to a decline in productivity and over-exploitation leads to a decline in profits. What can be done about it? Delmer Landen, personnel director of General Motors, comments: 'One thing is sure: if they won't come in for \$32.40 a day, they won't come in for a monogrammed glass.' In the States as in Europe, plenty of young workers take a job for a few months to save money and then leave to enjoy it in freedom.

According to American statistics (there are no equivalent figures for Europe), in 1966 employees were staying in the same job for an average of 4.2 years. By 1969 this average had dropped to 3.9 years; the latest figure for young people under 24 is 0.7 years. In 10 years' time the number of young adults (i.e. those under 34) will have increased by 46 per cent, roughly equivalent to 19 million people. 12 million of them will belong to 'anti-system' age-groups and strata; nearly 80 per cent of the country's adolescents will pass through the universities. Without basic changes to the nature of industrial work, it is difficult to see where industry will find its manpower.

The CNPF is facing this question squarely. 'It is not unreasonable to predict', wrote the study group quoted above, 'that in a few years' time there will be jobs for which no labour will be available. It is significant that even immigrant labour only takes certain jobs on a very temporary basis; there are many functions for which it has always been necessary to import manpower of a less developed character... *Has it occurred to anyone that a more searching economic analysis would undoubtedly show that*

the cost of employing foreign labour which is sometimes very backward seems infinitely greater if adaptation problems, retouching of sub-standard work, and irregular production are taken into account? Besides, even for non-immigrant labour, has nobody ever weighed 'the minutes or seconds gained by a fragmented work-system against the cost of retouching, botched work and strikes...incidents, accidents, absenteeism and labour turnover, not to mention the consequences of a lack of job-satisfaction?'

The study group also reached some startling conclusions on the 'economic cost' of industrial accidents: 'Losses attributed to accidents, according to company figures, represent 4.5 per cent of labour costs on average; if, however, the *indirect* cost of accidents, resulting from disturbance of the production process, is taken into account, this figure can be roughly doubled.'

Nothing but good, in fact, can come from 'humanizing' and 'reorganizing' factory work, 'adapting the task to the man' and abolishing fragmented, repetitive tasks which exhaust the worker with their intense monotony. But is it possible? How is it that the bosses did not think of it sooner? That is the first thing to understand.

The whole history of industrial techniques has been marked by the original sin of capitalism: separation of the workers from the means of production. The reason for this separation was not, in the first place, a technical one. The first factory bosses were 17th-century merchants who monopolized the looms in order to gain possession of the *entire production* of the weavers. The weavers had to be deprived of their machines to prevent them from selling their products on their own account. Once they were obliged to go to work in the boss's own workshop and on his machines, the first proletarians could be subjected little by little to other constraints. They could be required to work to the limit of their strength, something no man will do for long if left to his own devices.

Subsequent technological innovations have always had a double purpose: to make human labour as productive as possible, and also to force the worker to work to the limit of his capabilities. The need for this constraint goes without saying in the eyes of the classic boss. The worker is suspected of idleness by definition; how could it be otherwise? Neither the product itself nor the purpose of its manufacture has anything to do with him. *The purpose of all this production is not to fulfil the workers' needs but to make the largest possible profit, so as to buy more machines which will yield still greater profit.* It is impossible for the boss pursuing this aim (the *accumulation* of capital) to rely on the workers' basic will to work; their daily or weekly production must be imposed on them and to this end must be fixed in advance as rigorously as possible.

All that remains is to see how this can be done. The obvious solution is to link payment to yield, but this is not as simple as one might think; workers doing *piecework* never go all-out for maximum pay. Beyond a certain level of energy output, they lose interest in money. The tendency is for workers to settle on a cruising rhythm and then try to get that rhythm to correspond to a reasonable wage. Work study makes no difference: the more they are constrained by shackles imposed from above, the more ingenious workers become in leading the boss up the garden path.

THE MACHINE GIVES THE ORDERS

Work study is also extremely difficult to apply to highly skilled workers (e.g. toolmakers, fitters, adjusters) whose jobs demand initiative, intelligence, application and skill - all qualities which cannot be closely controlled. As long as skilled workers are necessary, the boss will be dependent on their goodwill. Their influence was at its peak in the era of the 'universal machine'. The only way of breaking their power was to simplify the work to such an extent that anyone would be able to do it without the slightest training.

From 1920 onward *Taylorism* provided the means: the work was split up into extremely simple tasks; assembly-lines were supplemented by powered conveyor belts and became fully automatic; 'scientific work organization' completed the picture. Fifty years after the beginning of Taylorism, skilled workers have become a marginal 'aristocracy' and work-quotas are predetermined with mathematical rigidity.

The rational fragmentation of work has produced productivity increases which have often been spectacular, but it can be seen today that these increases could have been gained in other ways and that productivity was not the only objective. A hidden (and successful) aim of these developments was to make the forces constraining the worker to work more anonymous and 'objective'. The work quota is no longer laid down, negotiated and imposed by a human authority which remains open to argument, but ordered by the machine itself, imposed by the inexorable programmed advance of the assembly-line. The compulsion to work now appears as a law of nature reinforced with the wonders of science. Behind the scenes, doubtless, are engineers and technicians, but the worker never meets them face to face, any more than he sees the remote boss. All he sees are *supervisors and foremen*, and it is with these 'boss's lackeys' that he has to deal.

Thus work has been fragmented, simplified and made more and more moronic mainly to deprive the workers of any vestige of power over the production process, to shield the process from 'human hazards' such as skill and intelligent initiative. Everything, including the workers, has to become mathematically predictable to the nearest thousandth. Cost prices, profits, the production plans and investment programmes of a great capitalist enterprise cannot be left at the mercy of 'human hazards'.

But some of the more enlightened big bosses began to discover that the organizational passion of technocrats trained and hired to rationalize

production down to its last detail could provoke flashbacks which the technocrats were unable to foresee. The misadventures of Olivetti are a classic example.

'UNADAPTABLES' AND 'HARD CASES'

The workers on Olivetti's calculator assembly-lines were used to working in fixed positions. Each worker would take a partly assembled machine from the man on his left, put it on his bench, fit a part to it and send it rolling along the conveyor to his right-hand neighbour. The work-study engineers felt this method to be irrational and decided to hang the machine from a continuous overhead line. This made it unnecessary for the workers to get up and pass the machine along; thus several seconds were gained and, more important, they no longer controlled the speed of assembly, which was now determined by the speed of the line.

As soon as the new line was installed the workers came out on strike. Engineers visited the shop to explain to the workers that the whole thing had been thought up for their benefit, but in vain. The management then called in industrial psychologists, ordering them to get 'unadaptable' and 'contentious' elements out of the shop. Instead of doing what they were told, however, the psychologists sided with the workers and accused the engineers of stupidity: how could they have been so gross as to deprive the workers of their last shred of freedom, *the freedom to produce their daily quota while working fraternally and in unison, faster or slower according to the time of day?* How could they fail to see that it is contradictory to expect precision work to be carried out at a steady, sustained, monotonous rhythm?

Mishaps of this kind in the United States have given birth to a new school of psycho-sociology whose leading exponents have been *McGregor* and *Scanlon*, *Argyris* and *Herzberg*. Stripped of its academic jargon, their reasoning is good simple commonsense. Workers or employees, they maintain,

are concerned first and foremost with ensuring their subsistence. As long as their *primary needs* - health, security, food and housing - are not secure, it is quite useless to ask psychologists to solve factory problems. Furthermore, however high the wages, dissatisfaction will persist if the working 'environment' is bad and the worker is frustrated in his secondary, affective needs: if he finds a barrack-room atmosphere instead of comradeship.

Before passing to the third point (which is the most important), we might do worse than listen to the CNPF beating its breast on the first two. The bosses' report quoted above states that assembly-line wages in France are 16 per cent lower than in Germany, while engineers' salaries are 11 per cent higher. A 'confirmed' engineer earns four times as much as an assembly-line worker, against 2½ times as much in Germany, Britain or the United States. The 'environment' of factories is almost universally detestable. Newly employed workers are received by barking supervisors, confronted with their task without preparation or advice and told to fulfil the norm if they want to keep the job. 'They often "crack" after three or four days' and suffer 'lasting traumas'. Everything seems designed to convince the workers that factory work is some kind of expiatory punishment. Talking about 'participation' and 'job-interest' in these conditions is tantamount to asking the oppressed to 'participate' in their own oppression.

Here is the third point: if the pay and environment are good, but the work is idiotic, the worker will still try to escape from it in a thousand ways. Managers respond by trying to increase the pressure to work; the results are absenteeism, lowered quality and sabotage. 'Idleness, indifference and irresponsibility', notes Herzber 'are healthy responses to absurd work.' It is equally absurd, he adds, to think that work can be made more attractive by varying tasks which are individually fragmented and repetitive: 'The combining of two senseless tasks adds nothing to their sum'.

ABOLISH THE CLOCK

The only correct solution is to re-frame, broaden and enrich jobs so as to make them intrinsically interesting. Man is, according to this school of psycho-sociology, an 'active animal' who likes to work provided the work gives him the opportunity for 'self-realization': a flowering of the intellect, an enrichment of knowledge, recognition and appreciation for his ideas and inventions in the context of a collective effort and co-operation. In short, *the fragmentation of work, external pressures and hierarchical quasi-military relationships* should all be abolished.

That's the theory, anyway. It is currently being applied in all or part of two or three hundred large and small enterprises: Texas Instruments and IBM in France; Phillips (Holland); ICT (Britain); Lapointe, Donnelly Mirrors and AT & T (the world's biggest company by number of employees) in the US. Here are some of the results.

Environment: create a climate of trust by abolishing the time clock. Abolish obvious class discrimination: the same canteen and the same food for everyone (including the managing director) and, as far as possible, the same dress. Everyone paid on a monthly basis, and a single salary-scale. Abolish timekeepers, checkers, supervisors slave-drivers and cops. Each worker or crew should be responsible for the quantity and quality of their output, the maintenance and adjustment of their machines and their working methods. Every group or individual makes a complete thing. Managers who do nothing but give orders disappear: technicians and management are now 'friendly counsellors' who get their hands dirty.

The anticipated result is that the workers regain their taste for work and produce more *while expending less energy*; they are spared the psychological strain of working against their spontaneous inclinations. Does the experience bear out the theory? Let us look at a few examples.

Labour turnover was particularly high in the claims and invoices departments of American Telegraph and Telephone (AT & T), which has a monopoly of telecommunications in the United States. The work is finicky, involving the sorting, coding, transcribing and verifying of cheques and invoices. 'Attractive' pay and environment were not succeeding in keeping employees. The proportion of errors had stood at 13 per cent for 10 years and needed a cumbersome checking system when in 1966 AT & T called Herzberg to the rescue. He observed that the work of sorting, checking and totalling cheques and invoices was broken down into ten successive operations and run along hierarchical, semi-military lines; when a group of clerks reached the end of a stack of a thousand invoices, the supervisor would send them another thousand. What motivation did these women have to work rapidly and conscientiously? None whatsoever.

TRUST THE WORKERS

Following Herzberg's advice, AT & T decided to make each employee responsible for her own sector of town; she would always be dealing with the same clients and would be responsible to them. The work (basically card-punching) did not change, but each operator became free to vary her working speed and, within certain limits, her hours of work. The proportion of errors fell to 3 per cent and a whole superstructure of checkers could be dispensed with. Result: a 27 per cent productivity increase and a saving of \$558,000 in one year.

Could the same thing be done for manufacturing industries, for mass-production? The psychosociologists said that it could. Here is the proof. Non-Linear Computers, which makes automatic control mechanisms, had problems of absenteeism, output and reliability. Since it could not trust the workers to turn up regularly, the company could not trust the quality of its products. It could reinforce quality control,

but who would control the controllers? Argyris advised them to approach the problem from the other end: trust the workers, make them responsible for the quality of the product and in return do away with the time clock fragmentation of tasks, and various controls. Each worker would be given the (pre-tested) components of the mechanism and would then assemble them, perform final checks and pack the assembled unit. The firm followed this advice, with the result that the output of its assembly workers doubled in two years and defects declined by 90 per cent.

At Texas Instruments, which adopted the same principles, the time taken to assemble one navigational aid fell from 138 hours to 32 in one year, a productivity increase of 330 per cent.

Philips (Holland) is now beginning to apply 'task-enrichment' to the assembly and adjustment of colour TV sets. Formerly this work was broken down into a hundred operations, each lasting less than a minute, performed by a hundred workers. The work was monotonous and repetitive in the extreme. Assembly and adjustment are now being performed by experimental groups of seven workers who have a stock of parts at their disposal, co-ordinate the work themselves, pick their own speed and are free to move about. At this stage output is up by 5 per cent, absenteeism is down by 25 per cent and defects are dropping towards nil.

ICI, which has already introduced work enrichment and 'workers' control' in several factories employing a total of about 5,000 workers, has registered a 30 per cent productivity increase in its Gloucester synthetic fibre factory, where former assembly-line workers, freed from the supervision of foremen and specialists, have learned to adjust, maintain and repair machines which are supposed to be very complex.

Given all this, why is it that the great majority of bosses (75 per cent in France according to a recent poll) remain stubbornly hostile to the

abolition of fragmented, idiotic work? 'It's too expensive', say some, without even trying to work it out. To others, including Renault boss Pierre Dreyfus, 'it's by no means certain that fragmentation is such a bad thing'. Furthermore, *'it isn't established that this fragmentation can be eliminated' from the automobile industry.* This is not the opinion of the CNPG investigators: 'There is apparently no industrial sector in which job-enrichment cannot be introduced.' On mass-production assembly lines, for example, it is perfectly viable to replace the long assembly-line with a shorter one passing in front of transverse alcoves. A group of workers in each alcove would receive the part-assembled machine and keep it for 10 to 30 minutes, working as a crew and fitting a number of parts and components to it before passing it on to the next crew. Each group would keep buffer stocks of parts, absolving it of the need to keep working at the same rhythm. This system is now being tried out by the Swedish car industry, where the union is pressing to have it adopted.

HOW FAR CAN THIS BE TAKEN?

In reality, the bosses' hostility is not motivated by technical or economic factors; it is *political*. *Job-enrichment spells the end of authority and despotic power for bosses great and small.* It replaces the order and discipline of the barracks with the voluntary co-operation of workers whose autonomy and power extends to their work. It requires that these workers doing 'a man's job' be treated as men. The whole hierarchy must be recast; engineers and management, says the CNPF report, must 'modify their attitude profoundly'. Social, cultural and hierarchical barriers must be removed. 'After acquiring some idea of ergonomics, engineers and technicians should spend a year doing workers' tasks in workshops that use their specialized skills ...' Finally, the workers themselves must 'identify the problems, discuss the possible solutions and then reach collective decisions. Relations will no longer be as between superiors and subordinates...'

Once this road is taken, in fact, where does it end? Managers and technicians will lose their monopoly of science; the alleged technical or scientific necessities in whose name they give orders will lose their mystery and become open to question, along with the ideology they support. Isn't this the thin end of the self-management wedge? the CNPF report seems to admit that it is, but without undue alarm; in the democratized and 'enriched' enterprise, management authority will still prevail as long as it changes its style.

But can we be sure? Will these workers doing intelligent, creative, responsible jobs feel, as Herzberg wants them to, that work well done carries its own meaning within it? What sense is there in a job whose products are meaningless? How long can a person remain interested in assembling colour TV sets when the programmes are rubbish, in producing polluting detergents, in weaving textiles that wear out in no time? Herzberg considers research into productivity and output an end in itself, but has it any meaning when its purpose is the growth of profits? What is the purpose of profit and growth? Why produce more when we can live better by producing less, provided we live and consume *differently*?

All these questions spring logically from any extension of job enrichment. For this very reason, advanced elements of the workers' movement see the struggle to 'recompose' 'splintered work' as being far more than a mobilization issue or a modestly reformist campaign to 'humanize' work. What they call 'workers' control' - the re-appropriation by the workers of some say in the nature and organization of their work - can and should lead workers liberated from brutalization, oppression and boredom to struggle for their total emancipation.

WORK IS NO LONGER AN END IN ITSELF

This is exactly what the great majority of bosses is afraid of: 'The more you give them, the more they want. Give them a bit of power and they want

it all.' True enough. But the CNPF investigators answer this by saying that *repression is becoming more and more expensive* both politically and economically, that industry in the final analysis has no choice: if it wants to find the manpower it needs without having to face continual rebellions, it must try to make the work interesting and attractive. All these subversive questions raised by job-enrichment are, after all, being asked at this moment in every possible way by millions of young workers and unemployed in the United States and Europe. For them, work - whatever its nature and whatever the pay - has ceased to be an end in itself.

Do they reject it because they reject its products and its results? The fact of the matter is that they do not agree with Herzberg when he says: 'Leisure today is no more than a frantic effort to forget work. When work has a meaning, leisure will have one too.' The tendency of the young is to approach the problem from the other end: 'Work will have a meaning when its purpose has a meaning; not before.'

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MANAGERIAL IDEOLOGY : A CASE STUDY

AN INCIDENT IN A SOUTH AFRICAN GOLD MINE:

13th AUGUST, 1975.

by Andrew Prior

On 13th August, 1975 an incident took place on a West Rand gold mine which provides some insight into managerial ideology in the South African mining industry. The incident was not remarkable enough to merit coverage in the national press. This is because it did not result in a loss of life or damage to property or, more importantly to shareholders, a loss of production. It was examined by managerial representatives in a remarkable document, the exegesis of which forms the basis of this paper.

THE INCIDENT :

The physical lay-out of the mine is relevant to the background understanding of the events of the 13th August. At that time the black miners "hostel" was about 20 miles from the shaft where the incident occurred. The men were transported to the shaft by a train and trucks operating a shuttle service. Approximately 3 000 men are transported in this way. The men were woken at about 3.00am and for those who wanted it a meal of coffee, bread and porridge was provided. Trains and trucks transported the men to the shaft and they proceeded underground from 3.30 am.

At the end of the shift the men were hoisted to the surface in batches, but not before a long wait at the underground "station". The first miners surfaced at about 1.00 pm. and waited for 45 minutes for the first train to depart for the hostel. The second train departed at 2.45 pm. From the time the miners left to the time they returned it was possible for a time lapse of between 12 and 14 hours.

The mine concerned is a deep level one. This means that the men worked in excessively hot and humid conditions, and they were underground for as long as eleven hours at a time. The mine did not supply lunch and, generally, the miners ate nothing from

the time they left the hostel in the early morning to the time they returned in the late afternoon.

On the 13th August the hoisting of the shift was delayed for two reasons. An accident had occurred underground which resulted in a stretcher case having to be hoisted before everybody else. This delayed the inspection of the hoist which was scheduled for that day. Instead of the shift being lifted at 1.00 pm, it commenced only at 2.15 pm.

Black and white miners are segregated in the hoist. When the lift eventually started the white sections were only half-filled. "Underground police" (mine employees) who "control" the miners waiting for the hoists arrived at the station only at 2.00 pm.

When the miners began to surface the first of the trains had departed because it had a full load of ore. At 4.15 pm. miners who could not be accommodated on the trucks began to walk towards the hostel - some 20 miles distant. A few hundred miners were in this group.

Two managerial representatives attempted to persuade the workers at various points to use the transport which had arrived, but they refused and resorted to stone throwing.

At 5.00 pm the train met the walkers but they refused to get on, and again stoned it. The mine security teams were called out and the South African police were notified.

The hostel manager and a black managerial representative (an "Induna") intercepted the walkers and attempted to talk to them, but were disregarded.

The mine security policemen then shot tear gas at the miners, and moved in with dogs. The miners then dispersed, and gathered together in the hostel where they were given the opportunity of "voicing their grievances".

MANAGERIAL ANALYSIS :

In the managers analysis of this incident it is pre-

sumed that the event took place because of "weaknesses" in the system. By this is meant a degree of ineffectiveness in controlling the workers. While it was admitted that the workers had genuine grounds for grievance (the long hours spent away from the hostel; the long delay in the hoisting of the men; the absence of transport), it is indicative of managerial ideology that instead of advocating a stepping up of formal means of communication and admitting of the need for worker representation in the work structure, they called for a more rigorous worker control. This extended to a streamlining of the procedures for getting security personnel, dogs and vehicles to the place of any incident; the procuring of radio equipment and the provision of a riot car for the mine.

It was pointed out in the report that a reason for the delay in the hoisting of the black miners was the custom of segregating white and black miners in the hoist. The numerically smaller white supervisors were transported to the surface separately, and in half empty sections. The mine management saw this to be a point of irritation for the black miners but, in the face of the powerful (all white) Mine Workers Union, could not order the whites to de-segregate. All they could do was to recommend and "appeal" to be made to the white miners. Implicit in this is the recognition of a tri-sectional interest groups: management, white miners and black miners.

The managers report refers frequently to the walking miners as a "mob" in spite of noting that they were being lead by "a young Basuto...bearing a survey staff on which was attached the customary red and white flag combination." This was, in fact, a protest procession but managerial ideology did not allow it to be seen for what it was. Consistent with managerial terminology is the assumption that they have a prerogative over "reason" (mobs, after all, behave by impulse rather than by reason).

It is noteworthy that the miners were not prepared to listen to the hostel manager or to the "Induna". Nor were they willing to discuss with anybody from the side of management. The managerial report does

not see what is implied in this. The total lack of the recognition of the moral authority of mine management points to the deep underlying suspicion between management and workers. The absence of consensus in manager-worker relations results in a logic of the exertion of power as a determinant of inter-group relations. In this instance consensus was replaced by control through the use of violence. As a further consequence the workers were reluctant to delegate leaders from their group recognising the dangers of exposing individuals to possible managerial victimisation.

The tendency for management to believe that its policies are totally reasonable does not allow it to admit that any opposition could be rationally based (there is the admission that bureaucratic incompetence may prejudice its periodic application.) All opposition is reduced to two causes: the first, is the immaturity or inability of the workers to understand what is reasonable (they are, after all, still referred to as "boys" by white management); the second is the management belief that the average worker is perfectly contented with his lot and when he does indicate some dissatisfaction it is only because of the action of "instigators". At the time of the report it was common managerial belief that Shangaans from an independent Mocambique were potential "troublemakers". It is not surprising that it is noted that the miners were "encouraged to walk at the insistence of two Shangaans". Similarly, the mention made to the leader of the procession as a Basuto man is consistent with this. Ethnically based analysis do not admit of the possibility of worker solidarity.

The spread of an ideology is indicated by its ability to incorporate almost any feature, no matter how unpleasant, under its umbrella. While admitting that the workers felt "real grievances", management rationalised this by arguing that discomfort is an essential part of the mining operation. The impersonal demands of the system enable management to abrogate responsibility in the region of inter-personal relationships.

While the incident resulted in some slight gains for the workers in the form of managerial affirmation that the transport of workers must take priority over the transport of ore, and the provision of benches at the shaft head, these were totally outweighed by the stepping up of means of worker control. No serious questions were asked by management. Why was it, for example, that the system of managerially constructed communication was totally disregarded by the miners? Why was there total distrust, and latent hostility, between workers and management? Was it not possible that the incident was rooted in a totally inadequate form of labour utilisation where large number of men are seen as labour units and housed, transported and work in conditions dictated by managerial inclination and profit? But in terms of the analysis of managerial ideology at work in the analysis of this incident, it would be whimsical to consider even the possibility of such questioning.

In the meantime, however, given the absence of a coherent worker organisation adequately representing worker interests, and powerful enough to withstand the organisational power of management, incidents of this sort are likely to be an endemic feature of the mining industry. Given the fact that this incident was not judged newsworthy by the press is already an indication that incidents of this nature are commonplace in the mining industry.

It may be that managerial techniques may succeed in remaining one step ahead of worker grievance through a more systematised early warning apparatus, and more decisive riot control techniques. But even the most sophisticated techniques have structural weaknesses which are likely to be fully tested by black miners in the future.

THE BULLOCK REPORT

The Bullock Committee of Inquiry on Industrial Democracy, set up in response to the crisis in British industry, received wide publicity when it was tabled in the House of Commons earlier this year. Its recommendations are based on the belief that the revival of British industry is crucially dependent on the establishment of a new relationship of "equality" and cooperation between capital and labour, which provides for the joint determination of company strategy. The main proposals are that board representation should be through bona fide trade unions choosing to exercise this right; that workers and shareholders should have equal representation; that representation should be on the main policy making board, which would take on some of the powers previously exercised by the meeting of the shareholders; and that all board members should be required to consider the interests of workers as well as shareholders.

A wide variety of techniques have been developed by management since it became apparent that it is not productive simply to coerce workers. These include: the welfare approach, providing workers with large non-fringe benefits; Taylors 'scientific management' approach, based on the idea of 'economic man'; the human relations approach, based on the idea of the 'social man'; and more recent attempts at introducing 'participation' and job enrichment.

This Report is significant for two reasons: firstly, it has the support of the British Trade Union Congress and the trade unions will be fully incorporated at all levels of decision-making. Secondly, the Report challenges the concept of the company as solely the property of the shareholders.

We publish below, with acknowledgement to the British Trade Union Congress, a guide to what the Bullock recommendations mean for trade unions.

1 WHAT NEW RIGHTS WOULD LEGISLATION ON THE LINES RECOMMENDED BY THE BULLOCK COMMITTEE GIVE TO WORKERS?

The major new right would be the right (which the workers in each company that employs 2 000 or more people can choose to take up or not) to elect through trade union machinery a number of worker representatives, equal to the number of shareholder representatives, who would sit on the board of the company that employs them. This right applies to companies that are subsidiaries of foreign-owned multinationals as well as to British-owned companies.

2 WHAT IS THE "2X + Y" FORMULA?

In addition to the equal numbers of worker and shareholder representatives, the board would also have a third, smaller group of independent members jointly agreed by the other two groups. The report calls this the "2X + Y" formula. The law would stipulate that this third group must always consist of an uneven number of people greater than one, thereby guarding against deadlock. Beyond this, the size of the third group would be a matter for agreement between worker and shareholder representatives. As a deadlock-breaking formula the 'Y element' approach has much to recommend it when compared with the other possible options, such as giving the chairman the casting vote, or appointing one isolated 'odd man', and from a more positive point of view it has the advantage of providing for the introduction of outside technical expertise to the boardroom, which worker representatives may find particularly helpful. The fact that the independent members would be jointly agreed by both the other parties ensures that the principle of equal representation, to which the trade unions attach such importance, is maintained.

3 ON WHAT KIND OF BOARD WOULD WORKERS BE REPRESENTED?

In Europe, worker representation has typically been on a 'supervisory board', which principally oversees the work of a 'management board' and deals only with long term company policy, while leaving the management board to manage. It was clear to the Bullock Committee that it would be impractical to introduce this two-tier system into the UK. It was also clear

that worker representatives on supervisory boards have had very little power. The committee concluded that representation should therefore be on the existing company board.

The majority report stresses, as did the TUC in its supplementary evidence, that the most important consideration is that workers should be represented on a board that has real policy-making powers. The danger of a formalised two-tier board structure, the report argues, is that it can isolate worker representatives from any constructive, positive involvement in the real policy-making process, giving them only a negative right of veto over decisions already taken. These dangers are well illustrated by the proposals of the minority report, which advocates worker representation on a supervisory board separate from the management board: the supervisory board would have no right to initiate policy discussions but could only react to policy decisions already taken by the separate management board.

4 COULD JOINT DECISIONS MADE BY THE BOARD BE OVERRULED BY THE SHAREHOLDERS ?

If major decisions taken by boards could be overruled by the shareholders' meeting, or if indeed the shareholders' meeting could take the initiative still on vital questions such as winding up the company, the concept of equal worker and shareholder representation at board level would soon become a mockery. That is why in 'Industrial Democracy' the TUC called for 'stringent limits on the collective ownership rights of shareholders'. The Bullock report accepts the need for a major shift in power from the shareholders' meeting to the board on which workers are represented, vesting final responsibility for certain key decisions with the board. The report recommends that in a number of specified areas the shareholders' meeting would retain a right to approve or reject the board's proposals. However, the shareholders meeting would no longer have any right to initiate action in these areas; the exclusive right to submit a resolution for consideration at the shareholders' meeting on any of the following issues would rest with Board:

- a) winding up the company;
- b) changes in the memorandum and articles of association (these cover the capital structure of the company, the duties and responsibilities of directors so far as these are not covered by law, procedures to be followed by the board and so on);
- c) recommendations to the shareholders on the payment of dividends;
- d) changes in the capital structure of a company (e.g. by an increase or decrease in authorised share capital, or by a merger);
- e) disposal of a substantial part of the undertaking.

By reserving the right of initiative in these areas to the board, the powers of the board vis-a-vis the powers of the shareholders would be considerably increased. Very rarely would the shareholders wish to provoke a show-down by vetoing the board's proposals.

The points (a) to (e) above contrast with points (i) and (ii) under question 5 below, where the shareholders would *not* have any standing, or veto powers.

5 HOW COULD WORKERS BE SURE THAT IMPORTANT
DECISIONS ARE REFERRED BY MANAGEMENT TO
THE BOARD ?

A unitary board system together with the limitations on the powers of shareholders described above would ensure that workers representatives were involved in all big decisions. The Bullock report recommends that the law should clearly specify certain key areas where the responsibility to take final decisions would rest with the board.

The two key areas suggested by the committee are:

- i) the allocation or disposition of resources (this effectively means all planning, investment, research and development and budgeting decisions).

- ii) the appointment, removal, control and remuneration of management.

The board could not delegate *responsibility* for decisions in any areas to senior management but *authority* to act could be delegated if this was agreed by the board. Clearly the constitution committees of the board would be an early and important question for discussion by the reconstituted board.

6 IF THE BOARD WAS RESPONSIBLE FOR ALL STRATEGIC POLICY DECISIONS, MIGHT NOT THIS MEAN THAT BOARD MEMBERS WERE OVERLOADED WITH UNNECESSARY DETAIL?

A considerable amount of delegation would be essential if the boards were not to be overloaded. But the important point is that it would be up to the board on which workers are represented to set agreed guidelines or rules for delegation and to decide where the line between job of the board and the job of senior management should be drawn. As regards the general allocation and disposition of resources, clearly it would be impossible, and indeed undesirable, for the board to deal with all decisions involved here from company to workshop level. The main function of the board would be to establish the overall corporate objectives of the enterprise over the next few years, in terms of such central issues as investment, shares of product markets, export and sales strategy, product diversification and the research and development associated with this. In many instances this corporate plan might take the form of a planning agreement, with Government involvement and support. Questions of resource allocation which did not come to the attention of the board should of course still be discussed through existing joint regulation machinery at lower levels of the organisation, and any issue that caused particular concern to the trade unions could still be raised at board level.

7 WHO WOULD REPRESENT THE WORKERS?

Worker representatives would normally be employees of the company, probably drawn from shop stewards and

other workplace representatives, and would be selected through trade union machinery for a period of office of two or three years, after which time they would be free to stand for re-election. In exceptional circumstances representatives could be recalled during their period of office if a demand for recall were signed by all the recognised trade unions in the company. No other party, management or shareholders, or a particular union, could remove a properly elected worker representative from office.

Their role on the board would be as a representative, not as a delegate - in other words, they could not be mandated to vote in a specific way on a particular issue. But they would be entitled to - and indeed would be expected to - sound out the views of the members they represent before an issue was decided at board level.

Because workers would sit on the board as representatives of the work force and not as conventional directors, they would not receive a director's fee. Like any other shop steward or workplace representative, they would receive their normal earnings, and would be entitled to compensation for loss of earning incurred by taking time off to attend or prepare for board meetings. The Bullock report suggests that a code of practice should be prepared on time off for board representatives similar to the ACAS Code on "Time-off for Trade Union Duties and Activities". Financial provisions would also cover the training needs of worker representatives (including JRC representatives), to which the report attaches great importance.

8 WHAT WOULD THE LEGAL RESPONSIBILITIES OF WORKER REPRESENTATIVES BE ?

The representatives would not in a legal sense be committing the workers or the JRC to company policy. The representatives would however carry the same legal responsibilities as shareholder representatives - that is they would be required to act in what they believed to be the best interests of the company. But this would no longer be equivalent to saying, as it is at present, "in the best interests of the shareholders". The Bullock Committee argues that if worker representation on boards is to have any credibility and worker representatives themselves are not to be placed in an

intolerable position, company law must be altered to require directors to have regard to the interests of employees as well as shareholders.

The report makes it quite clear that the legal responsibilities of worker representatives would in no way impede them from arguing specifically from the workers' point of view at board meetings.

9 WHAT ABOUT CONFIDENTIALITY - WOULD THIS MEAN THAT WORKER REPRESENTATIVES WERE BOUND TO SILENCE ABOUT BOARD PROCEEDINGS?

The Bullock report emphasises strongly that a precondition for the effectiveness of board representation will be the fullest possible reporting back by worker representatives to their constituents, and takes the view that the label of confidentiality is at present used much too frequently. Even where highly sensitive information is involved, the report argues that it should be quite possible for worker representatives to report the broad implications of a particular policy to their constituents without divulging sensitive figures.

The report comes out against any attempt to define in law the boundaries of confidentiality, as this would be likely to impede rather than assist communication. It should be up to the board members themselves to agree how particular pieces of information should be treated. The practice followed by the board of a particular company in Sweden is quoted as an example of how this might work. Here the board agreed at each meeting what could be reported back and what was confidential, distinguishing 3 stages of confidentiality.

- 1) information that could not be released out of the boardroom;
- 2) information that could be discussed with one or two senior trade union colleagues;
- 3) information which could be passed on to the trade union committee and to the union members.

In practice, worker representation at board level will be likely to act as a stimulus to the much wider disclosure of information for which trade unions have been pressing.

10 HOW WOULD BOARD REPRESENTATION RELATE TO
EXISTING COLLECTIVE BARGAINING MACHINERY?

The main way of ensuring that there is no conflict between the various methods of joint regulation is, as the majority report of the Bullock Committee accepts, to base board representation firmly on trade union machinery.

Some countries such as Sweden have tried to further minimise any demarcation problem between the collective bargaining and board representation functions of trade unions by prohibiting worker representatives from taking part in those boardroom discussions and decisions which concern strikes, lockouts and collective agreements. However, committee members found that this provisions had rarely operated in Sweden; in practice it was unusual for boards to become involved in matters of this sort, and when they did it was felt to be valuable for worker representatives to contribute to the discussion. The Bullock report therefore recommends against any similar legal prohibition in UK law. It takes the view that worker representatives are unlikely to demand that the management negotiating position is the subject of detailed and practical consideration by the board, and that if they did make such a demand they would almost certainly not be supported by other board members. The only occasion where the report envisages that worker representatives might be obliged to abstain from boardroom voting is a situation of actual or potential industrial dispute. A worker representative who found that an instruction to take industrial action amounted in effect to a mandate on him to vote in a particular way on a specific issue would, on normal principles of company law, be obliged to declare this to the board and abstain from voting on the issue.

Strike action is the exception rather than the rule in industrial relations. The main concern of trade unions would be with establishing orderly procedures for deciding how different kinds of issues were to be handled in terms of the relationship between collec-

tive bargaining procedures and board representation. In practice this link between board representation and collective bargaining machinery would be provided by a joint union committee at company level which the Bullock report refers to as the Joint Representation Committee (JRC).

11 HOW WOULD THE JRC OPERATE?

The JRC would be modelled on the combine committees that exist in many firms already, but it would be at company level, consisting of representatives of all the recognised unions, manual and white-collar, in all the plants in the company. Where workers seek representation on the board of the holding company of a *group*, the JRC would consist of union representatives from all the subsidiaries in the group. The normal practice would probably be for joint works committees at plant level to elect representatives to sit on the JRC at company level. Where the company was one of a number of subsidiaries in a group, the company JRCs would elect representatives to sit on the JRC at holding company level. The task of selecting worker representatives to sit at board level would be the responsibility of the JRC. In some companies, such joint committees already exist, but this is by no means common practice. The report argues that the more systematic establishment of such committees will itself represent a major advance in trade union organisation and in inter-union and inter-plant co-operation and solidarity.

The JRC would have a number of specific functions in the process of implementing board representation. But at a more general level it would be the job of this body to discuss and reach agreement on how various types of issues should be handled - whether they should be raised at board level, or through existing joint procedures, and if so at what level. Regular reports to the JRC from board representatives would be an essential part of the system. And it would be in the JRC that unions could decide how policies discussed at board level with bargaining implications should be dealt with through existing procedures and collective bargaining machinery at the various levels of the company, in terms of reaching agreement on manpower requirements, new methods of work, pay and so on.

The establishment of JRCs where they do not already exist would not only therefore help ensure compatibility with existing procedures and agreements; it should also lead to the formulation of a more coordinated union strategy at all levels of a company, and provide a key link in a company-wide trade union information and communication network.

12 WHAT ABOUT TRAINING FOR WORKER

REPRESENTATIVES ?

The report recognises that most worker representatives will already have acquired valuable experience and skill as shop stewards. There will still be a need for a substantial expansion of existing trade union training facilities to serve the needs not only of board representatives but also of members of the Joint Representation Committee, who will also have new and wider functions, as a result of the report's recommendations.

An important element in the training courses would be the acquisition of technical skills involved in company planning, but equally important would be a full consideration of how board representation related to general trade union principles, responsibilities and objectives. The report recommends that the training for worker representatives should be provided by an expansion of existing trade union facilities. In view of the resources needed to finance such an expansion, it is argued that a large part of the cost of the initial training effort should be borne by the government.