

VII Global Labour University Conference
University of the Witwatersrand, Johannesburg
South Africa
28-30 September 2011

Paul Stewart
Paul.Stewart@wits.ac.za

Labour time, worker's control and exploitation: A moment in the practical production politics of a group of rock drill operators on a South African platinum mine.

Abstract:

When labour time becomes the prism through which social analysis is conducted, its role in production reveals its formative character, both in and of production itself and more broadly in social life. The focus here is how a long-standing struggle of the informal and organic committees of a group of rock drill operators on a platinum mine finally came to turn around labour time expenditure. A mine shaft faced a political impasse after the rock drill operators embarked on a series of strikes, were dismissed en masse and the attempt to resolve issues after their reinstatement, failed. The machine operators' struggles are shown to have impacted powerfully on the mine where they worked: on production, on intra-working class relations and on their own trade union leadership. This paper tells the story of how they managed to collectively deploy their objective power in the mining labour process, actively participated in an unusual 'productivity deal', failed to succumb to the industrial relations system they had fiercely resisted, survived foregoing their own informal mteto (law) around which they had cohered - all in order to restore their old wage rates which management had punitively cut and which they, successfully managed to restore. This they did without seemingly having sacrificed an organic form of organisation, the character of which remains as yet occluded from the social scientific gaze.

This account documents the struggle both before and after a group of over 450 rock drill machine operators on a platinum mine went out on three illegal strikes in 2004. The final strike, preceded by a strictly disciplined eight-hour work-to rule regime underground, was triggered by annual leave not having been granted, in a few cases, for up to two years. The machine operators were dismissed, but brought back to work by union intervention in a deal which sorely rankled. Their mass dismissal aside, the machine operators received a final written warning, had their wage rates cut to the level of novices and were required to win back the time lost due to the strike.

Accounting for what subsequently happened graphically illustrates the centrality of labour time expenditure under mining production conditions. In order to win back their old wage rates, by

increasing their own exploitation, workers would encroach on what were previously purely managerial and supervisory prerogatives: supervisors would have to work harder and managerial systems would have to step up organisational efficiencies¹. Underground, due to the central role of the machine operators in the stopes², whose responsibility it is to break the rock which needs to be moved, *everyone* on the mine shaft would work harder.

The intention here is to examine the organisational process aimed at winning back the labour time lost as a result of the final machine operators strike. This required a qualitative shift in the intensity of the expenditure of an identifiable mass of labour time on the part of the workers themselves. In short, workers were compelled to work with above-average skill of the average worker, in order to win back their lost wage rates. In other words, workers were compelled to increase the value of their collective, social labour, thereby contributing, in the overall scheme of things, to the restoration of socially necessary labour-time, the socially accepted rate of work defined by practical experience under specific conditions. Contradictorily, however, in order to work harder and increase the productiveness of their labour power, workers has to exercise greater control over the labour process, if only to push harder for their own, generally ignored, *production demands*, to be met.

The lost labour time would be made up by changing the relation between necessary and surplus labour time or in other words, socially necessary labour time would have to be decreased. Workers would have to create a greater surplus to be distributed as profits for the company, bonuses for the supervisors and wages for themselves. This implicates social relations in production, particularly between workers and supervisors, in other words between ‘manual’ and ‘mental’ labour strictly speaking. Workers would, firstly, have to desist from their struggle to reduce working hours to eight hours day ‘bank-to bank’, which they were doing by closing-off their drills ‘early’ - in other words precisely eight hours after they entered the shaft - and go back to working the ‘regular’ nine hours and twenty minutes from ‘bank-to-bank’. Workers were, tactically, not refusing to work, but were rather refusing to work the generally accepted pattern

¹ These events, while a mirror image of those recorded in a previous chapter, occurred on a different shaft, albeit in the same mining house.

² Frost (1987) cites a ‘crude working definition’ of stoping used by Spandau (1979) as ‘the breaking and handling of rock’. I use the word ‘moving’ following Richard de Villiers (a mine personnel manager and sociologist), due to the fact that much rock is moved - washed (by high pressure water jets), scraped (by mechanical scrapers), lifted (by rock loaders) and transported (by rail) - by mechanised means.

of 96 hours averaged over two weeks as per the eleven shift fortnight (ESF). By reverting to the stipulated hours of the ESF, surplus value would thereby increase absolutely, resulting from the 'restored' length of the working day. The first task was to restore, in other words, the historical social relations of production - which were disrupted by their actions - and which had 'sprung up' through tradition and class struggle (Marx 1977:477).

In addition, on the basis of absolute surplus value extraction, 'the groundwork of the capitalist system', the machine operators would have to intensify the power of their labour, or, in other words, increase surplus value via non-mechanised means (Marx 1977:477). This they would have to do under conditions of their already cut wage-rates and a post-strike disciplinary measure effectively decreasing the value of their labour power. In this instance, as will be seen, relations in production would be forced to change, not through the introduction of new machine technologies, but rather by having to ensure a range of conditions to enhance the intensity of workers' collective labour power. The effect would ripple out, impinging on racialised attitudes to class relations (only noted in this paper) beyond the electronically controlled turnstiles and gates of the mine.

Examining labour time expenditure in this concrete context, in other words, is found to inextricably implicate matters relating to the technicalities of the mining labour process and social relations in and beyond production. The lost shifts to be made up were around 125 000 (official) man-hours, or by a different measure, to around 70 man-years, an amount of abstract labour time the company was neither prepared, nor could afford to lose, despite the rising price of platinum on the commodity resources market. The question is how this lost labour time was to be made up.

Dunbar Moodie has argued that, given the production cycle of supporting the overhanging rock followed by drilling and blasting which dominates the round of the daily shifts underground, *'it is often impossible to make up time safely when conditions are bad'* (1994:72). Moodie is referring here to poor geological, *physical* conditions underground. Making up time, by Moodie's (1993) own general account of racialised, class-based social relations in production, when *social* conditions are bad - for Moodie, presumably particularly when the integrity of the moral economy is disrupted - this spells intractability. This was clearly the case on a platinum mine shaft in 2004 after three machine operators' strikes that year.

Social relations and post-strike organisation

In brief, immediately after the third strike in late November, the mass-based trade unions managed to ensure the re-employment of the machine operators. On the mine shaft, the machine operators felt trebly punished. They had been dismissed, re-employed as novices and issued with a final written warning. They were equally dismayed at both management and the trade unions which had negotiated the deal on their behalf. These workers had, moreover, become subject to further aspects of the agreement: a study of the working environment, particularly with regard to face utilisation (how, when and which rock faces were to be mined) time spent at the face (direct labour time in other words) and an examination of production ‘bottlenecks’ in the labour process (unperformed surplus labour time).

Task team intervention

In order to implement the formal post-strike collective agreement, a task team began to evaluate a wide range of issues and once the lost production was made up, it had been agreed, management would address the issue of the machine operators’ cut wage rates.

After intense negotiations, agreement was struck with the machine operators to make up the time by way of ‘working-in’ the lost shifts. An action plan to recover the lost production began to take shape. There was, however, continued concern that the machine operators would not honour agreements to work in the days lost, signaling the degree of hesitancy regarding the machine operators within labour’s leadership ranks on the shaft as the task team had not been ‘recognised’ by the machine operators. An action plan was nevertheless devised to ‘work-in’ additional shifts. The matter of attendance (at higher rates of pay) on days ‘worked-in’, the management representatives on the task team noted, was generally 6% lower on Saturdays and 8% lower on public holidays and this required calculation as the seven shifts to be ‘worked-in’ resulted in working-in either 11 or even 14 shifts by one estimate. Increased levels of absenteeism, on such days, further impacted on productivity underground. Calculating the labour time to make up for the lost shifts, a somewhat unprecedented and peculiar form of historically unavailable labour time (the difference between working time and leisure time - Wright 1981:67) was consequently not a straight forward matter.

While the management representatives on the task team consulted extensively regarding the calculations as to exactly how many shifts were to be worked-in, a deadlock threatened. Full co-operation by the whole shaft was required, in terms of the agreement, to any arrangement to work in the lost shifts. The task team had succeeded in ensuring the required '100%' of machine operator commitment to 'working-in' lost shifts, but neither the general workforce of virtually exclusively black general workers, nor the very largely white supervisory personnel, were, however, on being approached, prepared to co-operate. Mass meetings organised by union and staff association representatives and communications down 'the line' of supervision, by management, failed to secure the required commitment of the whole workforce to work-in any 'off' Saturdays or public holidays. Workers and supervisors jealously guarded their days off and were miffed at the machine operators.

Briefly, the machine operators had physically assaulted workers they construed to have 'scabbed' by breaking their 'strike law' or 'mteto'³ imposed during the strike action. Moodie would most likely understand this as an extension of the moral economy he identifies in South African mines (Moodie 1994). 'Working-in' the additional working time was consequently and understandably refused by the general workers, as this was perceived to be merely to 'assist' the machine operators to win back their old, pre-strike wage-rates, which for the operators reflected hard-won increments, long-service and other increases which had accrued over their working careers. With a good number of the machine operators being in their forties and older, this loss amounted to a considerable portion of the value of their labour power which had accrued over time.

The exclusively white supervisory echelon similarly refused to 'work-in' the lost shifts, having had to forego their crucially important production bonuses for the Christmas month of December the previous year. These men were adamant about not 'assisting' the machine operators win back their original wage rates. This disinclination assumed explicitly, though only privately articulated, racial overtones by the second-in command on the shaft, the section manager. Incidentally, a young leading machine operator representative, who turned out to be a strong, legitimate voice of the machine operators and whose underground overall had emblazoned on it in neat capital letters in 'koki' pen, '*Communism is the Future*', was absolutely convinced this

³ The informal 'law' of the mine (See Moodie 1994).

leading underground supervisor manager was sabotaging attempts to find a way to win back the lost wages of the machine operators every turn, believing they should not have been reinstated.

The efforts of the combined leadership task team on the shaft then, despite intensive negotiation and consultation with their respective constituencies and agreement with the machine operators, failed to secure the agreement of the rest of the personnel on the shafts.

Assessing a lost labour time issue

With tensions running high, the situation on the shaft at the time was not conducive to safe and profitable mining with Company, union, staff association and machine operator representatives concurring, but from often diametrically opposed, perceptions and points of view.

Regarding inter-personal relations generally, levels of trust were low, a culture of blame was endemic, charges of harassment, discrimination, victimisation, and ill-treatment had been made and threats of and actual manifestations of physical violence had occurred. An intensely adversarial situation had coalesced into a deeply seated antagonism between different worker groups amounting to a sustained inter-necine and racialised intra-working class war.

No single social group involved in the conflict - management, unions, staff associations or machine operators - was immune to a broad ranging series of accusations leveled at one another across the shaft. The general workforce had become disenchanted and refused consensual-seeking and representatively formulated proposals for combined positive actions in the interests of resolution. The failure of the worker leadership at all levels to secure agreement to work-in the lost shifts was symptomatic of the depth of general antagonism and signaled the extent of the challenge in restoring 'normality'.

Management, for instance, had been accused of discriminatory racially-based favouritism, not responding to and ignoring issues raised for their attention by formally recognised trade union representatives and the independent and informal machine operator group. The mass-based worker unions, across the board, had been accused of being ineffective and inattentive to members' and machine operator demands. Staff association members had been accused of racism, victimisation and ill-treatment of black workers underground. Machine operators had been accused of disregarding fellow workers, usurping unproductive forms of control over

production and found guilty of illegal industrial strike action following threats of and incidents of physical violence. The sullen ‘silent majority’ of general workers carried on without getting involved, except to refuse to help the operators.

It should be noted that these accusations and charges occurred within the social context of massive unplanned urbanisation and intense competition for jobs, resulting in intense physical conflict and ‘no-go’ areas in the un-serviced, self-built, tin shack-housing settlements in the vicinity of and more broadly than the Shaft . A study, conducted in the region around the Shaft at the time, concluded that the matter of housing was *‘generally ... ignored in companies public sustainability reports’* with corporate social responsibility initiatives *‘having had little impact on the root causes of social problems surrounding the mines’*, a senior manager confirming that *‘business activities... may be exacerbating social problems’* (Hamann and Kapelus 2004:87/8). Less than a year after the last strike, improvements were taking place at the single sex hostels and a leading platinum mining house had subsequently undertaken to build 10 000 housing units to begin improving this situation.

The broader ‘social’ initiatives of major mining corporate enterprises aside, despite rapprochement within the combined stakeholder leadership task team, workforce constituencies continued to refuse to accede to negotiated requests from their leadership and ‘vendetta-type’ attitudes against other workers had become common, with local communities implicated in these troubles.

A dispirited task team had not provided a sufficient critical mass of personal commitment and collaborative continuity to expedite matters arising, let alone the timely resolution of the situation. Union representatives had proved unable to break the culture of social antagonism by securing the necessary goodwill of their constituencies. Representative structures were clearly out of touch with their members. A general inability or unwillingness to appreciate the longer-term consequences was, however, recognised by leadership of all constituencies as requiring urgent attention.

New discussions were started with a general airing of grievances. Briefly, the mass-based trade unions, the staff association and the independent machine operators’ worker representatives outlined their combined perceptions and understanding of the situation. A general state of

‘unhappiness’ predominated. This had been communicated to management, but no active response had been forthcoming. The key issue, expressed generally by black workers and by machine operators in particular, was that, despite high levels of unionisation, they had no voice. Changes to rules and procedures, it was broadly alleged, were made without consultation and implemented without prior warning, resulting in disquiet, undue inconvenience and unsafe working conditions. Changes to the shaft schedule, for instance, resulted in inordinately long waiting times underground at the shaft stations. Applications for leave were not expedited, resulting in unnecessary domestic and social disruption. Material supply was considered poor, resulting in supervisor/operator conflict. Supply chain dysfunctions were reported to be acute: safety-threatening practices of improvisation (*planisa*) had apparently exceeded ‘normal’ mining practice (See Phakathi 2001). Day shift preparation for night shift was inadequate, resulting in instances of unperformed surplus labour - serious delays in drilling starting times with consequent extension of the working day - late exit to surface and twelve hour shifts and more. Overtime for late shifts was not always paid, thereby devaluing labour time. Workers were being disciplined for short shifts, even if the job had been completed and permission granted from the miner responsible to leave working places. Wage incentive payments could not be readily calculated. Based on workers’ experience, the number of shifts worked and the number of metres advanced at the face, did not translate into anticipated remuneration received in pay packets. It was strongly felt that calculations did not make sense: drilling bonuses were either paid late or not at all and were unpredictable.

These issues have long been little understood by team leaders, let alone workers (Leger 1985:54-62). In addition, there were grumbles that the machine operators’ wages were too low and this matter constituted an ongoing issue. Whether the company was insured against industrial strike action was queried and promptly denied by management. Promotions and appointments, a generalised complaint (Bezuidenhout and Buhlungu 2006:252) were considered one-sided, insofar as they were perceived to be discriminatory towards people with long service those who had been in ‘acting’ positions. Race was asserted as the primary criterion for promotion and advancement, both on surface and underground, thereby confirming recent research in mining (Bezuidenhout and Buhlungu 2006:252). The harassment and victimisation of black union leaders by white supervisors was strongly expressed, the relationship between supervisors and workers, also having long-been a fraught one (Leger and van Niekerk 1986), born of the ‘steel divide of race’ of over a century before (Harries 1994:126). Leave, for instance, was said to be

refused to particularly black shaft-steward union leaders. The ill-treatment of workers underground by way of being subject to shouting and swearing was asserted⁴. The issue of leave not being granted was said to have been a strong contributory factor to the strikes in 2004, this not being compliant with the BCEA which states that leave must be taken after 12 months continual service. 'Family responsibility' leave was periodically not granted, resulting in distress and unhappiness. 'Knocking-off' late, representing further un-paid labour time, emerged as an issue contributing to general worker dissatisfaction. Needless to say, virtually all of these issues 'waste' wages and hence decrease the value of labour power thereby signaling managerial practices corresponding to a despotic absolute surplus value regime.

Meanwhile, the continuing impasse aside, being out of pocket, the machine operators wanted to be paid after each made-up shift and the general manager wanted action from the task team. Despite all this, the bitter irony was that the mine continued to boast one of the best production records at the Company. This was clearly a very largely competent and hard-working mining community. This is well known to be particularly true of the machine operators who play the most direct productive role in underground mining.

A peculiar status has long been attached to this occupation, generally deemed unskilled, yet recognised in the academic literature, as by their peers, as embodying significant measures of tacit and practical skill (Leger 1985; Harries 1994). In 1958 a machine driller was considered to be the most attractive job on a mine (Glass 1958, cited in Parsons 1977). By 1976 it had dropped to being the third most attractive job (MacAllister 1976 cited in Parsons 1977). But by 1976 a non-strenuous mining job had replaced wages as the most important reason workers cited for liking 'good' jobs (Parsons 1977:40) Whatever the current situation, these men are generally awarded often a grudging and often open degree of respect within mining communities and it is to one of their struggles, introduced above, which we now must turn.

The background to the machine operators' struggle.

Regarding the group of machine operators on the shaft, their demands need to be put into the context of a longer struggle, which can be, according to internal company documents made

⁴ See the debate between Moodie and Breckenridge (1998) on violence in and on South African mines.

available, traced back to around 1985. It relates to the key matter of the machine operator's job description, their job grading and pay rates.

Two decades ago machine operators (the 'jack') and their assistants (the 'hammer'), when two-handed drilling was the norm, were on level 5 of the standard South African mining industry Patterson grading system instituted in the 1960's when the 'maximum average' system came to an end (Moodie 2005:547). They were upgraded to level 6 or 7 in the same year depending on whether the most recent version of the 'lightweight drill' was being used. In retrospect, there has been a remarkable degree of stability overall in the job of machine operator since the introduction of the hand-held machine rock drill in 1907. David Frost dates the introduction of the 'light weight reciprocating rock drill', to somewhere between 1905 and 1915 (1987:6).

An apparently newer, modified lightweight rock drill⁵ introduced seven decades later, saw negotiations between employee trade unions and the Company elevate machine operators to level 8 three years later in 1988. This change in wage scale was accompanied by 80% of the assistants' production bonus (later negotiated to 100%) in addition to regular machine operators' bonuses, in exchange for drilling without an assistant, in other words one-handed. In other words, in exchange for doing *two* jobs, the machine operator took over the bonus, but not the wage, of his erstwhile assistant. There is no mention in the records available that production targets were reduced. The majority of gold mines, it might be noted, currently continue with two-handed drilling, one-handed drilling never witnessed in a series of underground in gold mines visited over the last decade.

Subsequent increases to the machine operators' production bonus, one being in March of 1992, were implemented, particularly in situations with narrow stope-widths and uncomfortable and difficult rock breaking conditions underground where the geology is stratified and the rock is friable and which manifests itself very differently from that of gold bearing substrates. This appears to have occurred without trade union intervention when wages were increased at a time when the Company prided itself in being the best paying mine in the area, currently not seemingly a matter of concern. It is of interest to note that this particular 10% increase in the bonus applied to mining in stope-widths of less than 115cm, whereas a decade later stope widths

⁵ There appears to be no history of the evolution of this standard and central piece of mining equipment.

are often a challenging 80cm in platinum mines, 90cm often being the targeted norm in a range of platinum and other gold mines.⁶ This bonus increased a further 8% a year later.

On the shaft in question the stope width on which budgets were calculated was 94cm and the face advance was 8m per month per stope face, while actual figures averaged around 102cm and 10 meters respectively. Where miners boast about their tonnage or centares mined - the number of cubic metres (the length of the stope face multiplied by the face advance) of rock blasted - critical peers always inquire about their stope-width and if wider than accepted norms, ridicule such boasts by charging them with mining rock instead of platinum or gold, for an important productivity measure is grams per ton which, with a given head grade (actual grams per ton in the ore-body), is heavily dependent on stope-width. Mining low stope-widths requires both skill and a significant degree of personal commitment as the space within which the miner works is more cramped and uncomfortable the narrower the stope width - which must be understood as the 'height' of the of the stope from 'footwall' to 'hanging wall'. Much net surplus value producing labour time (the number of hours actually worked – Wright 1981:67) hinges on the measure of grams mined per ton crucially related to this measure.

Such daily fraternal altercations and rivalry among the miners aside, sometime later, the Company signaled that, while it continued to be the best paying mine in the area, it was nevertheless willing to meet a delegation of machine operators, with the proviso that no meetings would be granted under the threat of industrial action. The matter of installing additional compressors to increase air pressure to the rock drills - as occurred again in 2004 - and hence permitting a decrease in the time taken to drill, thereby improving productivity - and of course socially necessary labour time, by way of mechanised relative surplus value extraction - was also noted. In the same year, 1995, the drilling bonus was increased by a further 8% and an additional 3% adjustment in line with that year's wage negotiations. But this was not enough to prevent matters eventually culminated in the entire occupational group of 3616 machine operators across the Company going out on a strike in 1999, illegal in terms of the legislation at the time. The demand of the machine operators - to be raised to level 12 of the wage scale - was

⁶ The capacity of a skilled hand driller to 'follow the gold seam more closely than a miner with a compression drill' and work in a 'confined stope', hence keeping 'waste rock to a minimum' was a key argument against the introduction of the mechanised hand-held rock drill (See Harries 1994:15 and Moodie 1994:50-53).

not met. An agreement signed between the Company and the National Union of Mineworkers (NUM) brought these matters temporarily to a close.

Recent events

In 1999 it was noted that team-work and ‘meters drilled per operator per shift’, a measure not currently in general use, impacted on the bonuses awarded. Less than a decade ago, an increase above a specified target, amounted to an average of an additional R40 per month in each operator’s wage packet. The measure of ‘meters drilled per operator per shift’ was, however, to become the basis for the new negotiated targets to improve overall face advance per mining section in order to resolve the impasse the machine operator group faced after the annual leave strikes in 2004.

It was in the strike year of 1999 that the scenario regarding the machine operator issues points towards the present. Continued general machine operator dissatisfaction with their work situation - directed at both management and the unions - and the establishment of the Company-wide informal ‘machine operator committees’, who often held their meetings under the scrubby thorn trees of the bush *veld* around the mines, had led to the more direct involvement of a then fairly recently established union prepared to take up their cause. Dissatisfaction with the NUM was rife at the time when a group emerged calling itself the ‘Five Madoda’ - the five ‘Men’ - the term ‘madoda’ replete with macho masculine connotations of what it is to be a ‘real man’ (See Campbell 2001: 277), a phenomenon deeply embedded in cultural understandings of moral integrity (Moodie 2001:302ff). It appears that from this group the Mouthpiece Workers Union (MPWU) was initiated and began to articulate the machine operators concerns. This would square with Moodie’s argument that born out of a crisis of integrity in migrant cultures, ‘*some of the old men of integrity were eventually moved to defy the union*’ (i.e the NUM) (Moodie 1994:306). Within the federation of COSATU, of which the NUM and these machine operators were initially part, certainly since the early 1990’s, acknowledgements were made that political issues had overshadowed traditional trade union issues: ‘*We were not focussing on improving production, the quality of production... We were not making demands around production*’ (Buhlungu 2000: 81). This continues into the present.

The production demands of the shaft machine operators regarded not only the drilling bonuses and their calculation, but proposals to increase their wage scale to level 14, be remunerated the

salaries (not just the bonuses) of their erstwhile assistant ‘hammers’ and a re-evaluation of the job description of machine operators on the wage band scales. Present in these meetings in 1999 of machine operators was the shaft delegate who became central in the strikes on the shaft in 2004 and who had been the president of the ‘central committee’ of the machine operators’ committee structure, a clearly charismatic militant known as ‘Ma-help’ - the one who helps. For the mine manager of the shaft, whose authority was brought squarely into question, he was a ‘Hitler’.

The bold claims put by the machine operators - and the MPWU most visibly representing them at the time - were not met by management. Trade union rivalry across the mining industry as a whole was intense and spilled over into violence, epitomised by the tragic death of an NUM organiser, Selby Mayise (Bezuidenhout and Buhlungu 2006).

On the platinum mines, a Company-led intervention attempted to address this situation. It was shortly thereafter that steps were taken to establish a fully negotiated Employee Relations (ER) policy. The machine operator committees established across the company were formally, if not entirely in spirit, integrated into the ER policy which was signed off by all stakeholders after much negotiation three years later in 2002.

It appears that it was only at the shaft in question that dissatisfaction among the machine operators resurfaced openly, the informal machine operator committee being re-established, due to the involvement of the militant ex-President of the Central Committee, ‘Ma-help’, of the then defunct machine operators’ committees. After having apparently dissolved after the ER policy signing in 2002, the machine operators’ committees re-emerged at the beginning of 2004. They became ‘more visible’ in March of that year. In fact they became ‘very visible’ according to the human resources manager, congregating outside the gates of the Shaft. Once underground the machine operators started a work-to-rule, closing of their machines at 1pm, exactly eight hours after they had hoisted down, instead of the 9hour, 20 minute shift as per ‘normal.’ They would, however, be forced to wait for the hoist at the shaft station, only to be catch the scheduled ‘cage’ as per normal.

The continuation of these informal machine operators’ committees constituted, from management’s as well as other workers’ point of view, a disruptive role in production as they

articulated their specific demands and which ultimately manifested itself in the three strikes in 2004 and their subsequent dismissal. Given the contemporary restoration of managerial authoritarianism through subcontracting within the industry, the erosion of internal trade union democracy and emerging divisions within the NUM due to a variety of factors (Bezuidenhout and Buhlungu 2006) and the resulting lack of focus on the shop floor, the machine operators clearly sought other avenues to advance their production and workplace-based demands.

Trade union affiliation as at November 2004

The focus on the changing job descriptions of the machine operators to one-handed drilling, as a result of the introduction of the new lightweight drill, applies specifically to the stoping machine operators. The composition of this occupational group of machine operators within the broader bargaining unit and their union affiliation points towards where their sentiments lay.

The occupational category of the machine operator was comprised of the following job roles and their numerical strengths at the time of the November 2004 industrial action at the shaft:

Lightweight Stope Machine Operator	246
Developing Machine Operator	137
Drill Rig Operator	12
Miscellaneous related occupations	15
Total Number of machine operators	410

These figures indicate the numerical significance of the lightweight stope machine operators who comprise 60% of the machine operator bargaining unit. It was this particular group on which attention was primarily focused in both the work of the task team in their attempts to overcome the impasse and who had been central in alienating both their fellow workers as well as the supervisors in their over two decade-long struggle at the Company.

The following table indicates the relative union strengths in the machine operator bargaining unit.

The Shaft: Union Affiliation as at November 2004		
<i>Employee</i>	<i>Membership</i>	<i>%</i>

<i>Organisation</i>		
MPWU	204	50
NUM	125	30
CUSA	11	2,6
UASA	2	0,4
Unaffiliated	68	17
Total	410	100

Union representation among the machine operators, as a whole, was significantly over 80%. Among the lightweight stoping machine operators, the MPWU topped the 50% mark and had 129 or 52,4% membership, the NUM held 30% of their allegiance while 17% remained unaffiliated.

There is a significant consequence of these figures. Firstly, prior to the signing of the ER policy in 2002, the documentation available reveals that the machine operators had been able to elect a delegation of ten of their number and negotiate directly with company management accompanied by their MPWU representatives. Machine operators on the shaft wanted this practice reinstated. The ER policy and the CA signed by all the unions after the strike expressly precluded a return to this form of representation. It was clear from the outset of the facilitation process in June 2005 that the machine operators were not in favour of electing two of their number with observer status on the task team, i.e. one NUM delegate and one ‘Alliance’ (MPWU and CUSA on the shaft) delegate. Machine operators felt this would ‘divide’ their strength in what had become a matter of political power-play on the shaft. With little option left to them, the machine operators eventually decided to elect two of their number to sit beneath the flags of the two main rival unions, but not without mutterings which masked a substantive threat.

For in the wake of the refusal of the rest of those on the shaft agreeing to work in additional shifts, the machine operators now began to threaten to all take their leave on the day they were re-employed. This they would legally have been entitled to do, taking advantage of their knowledge that the new computer system marked the day annual leave was to be taken to be exactly one year after the date of employment. The machine operators were effectively threatening the Company with what would have been an unprecedented form of legal ‘strike’, all having been signed up on the same day after the December 2004 strike. With the shaft at an impasse at this point, external intervention was initiated.

Facilitation

After a series of meetings with the task team, marked by intensive discussion on matters of representation, full acceptance of the ER policy, the role of the two machine operator representatives and access to more extensive documentation, the overall objectives were set to normalise working relations, secure full agreement to work in lost shifts and move towards realising senior management's concern to 'improve' conditions on the shaft 'technically, organisationally and culturally'. The key objective, defined by the facilitator, was to recover financial losses of Company, the supervisors, the general workers and the machine operators' lost wages in order to attenuate the deeply-seated antagonism on the shaft resulting from the strike. This meant saving a significant tranche of labour time. Meanwhile, the rest of the workers, artisans and supervisors on the shaft stood firm in refusing to sacrifice valuable leisure time 'saving' the machine operators.

Facilitation immediately began to focus on one matter noted in the collective agreement and one which was directly under the control of the machine operator: the optimisation of face time, the central key to the mining labour process - direct labour time in other words, the source of net surplus value. A key intention in the collective agreement was to ensure the regularisation of both production matters and social consequences of the actions the machine operators had taken. As noted, the machine operators continued to work for strictly eight hours 'bank-to-bank', closing off their drills before the official end of the (extended) shift, moving to the shaft station to await the hoist to surface. Where individual machine operators did not follow this practice, they were heavily fined by having to purchase meat for a large *braai*, or what became known as 'Ox' fines.⁷ To ensure disciplinary control within their ranks, the machine operators turned dissident actions at the point of production into a feast of a social occasion, much to the continued chagrin of the rest of the shaft.

At the heart of resolving these issues, for management this included bringing to an end the practice of 'Ox fines', lay the matter of the machine operators' previous pay rates, forfeited as a result of the strike. The overall intention of the task team was to take the matter to the higher authority of Company-wide union/management partnership forum. But this was a slow-moving,

⁷ An ox cost around R3000, roughly twice an average monthly wage, this disciplinary practice internal to the machine operators' committees becoming the 'mteto' or law among the informally organised machine operator group.

corporatist bureaucratic organisational animal at the Company. Matters referred to the central partnership forum would be time-consuming, with no guarantee of dedicated attention or resolution. Senior trade union leadership, separated from the issue were, moreover, likely to resist the envisaged productivity deal, causing undue tensions between the rank and file and themselves, this not being unusual in such instances (Buhlungu 2000: 80). The facilitation process, which amounted to an unusual form of participatory management, did, however, as will become apparent, ‘translate into material benefits for the workers’ which is generally not the case (Ibid.).

The machine operators’ issue of their annual leave took immediate precedence. The combination of collective fatigue on the part of the operators, a significant proportion of whom were due for annual leave and their continued threat of all taking leave on the same day as was their right, ensured it assumed the highest priority. Of the 450 operators, 357 were overdue for leave: 35 from between 0 and six months; 141 from between 6 months and one year; 157 from between one and two years, with 24 men overdue by over two years⁸.

The number of machine operators due for leave, the period of overdue leave, the leave cycles that applied and the identification of those most severely affected, was undertaken. Presentations were made by the human resources personnel responsible for leave arrangements and a series of demands matters relating to the Holiday Leave Allowance (HLA) commanded attention. After a process of clarification on the technical issues and calculations and negotiations over the HLA, a leave roster was drawn up, discussed at mass meetings with the machine operators and the taking of leave of those most affected was expedited. With a formal Leave Agreement signed off and a roster put in place, the machine operators began to take their overdue leave. A further series of issues were then tackled, the matter of the calculation of particularly the off-cycle simulation pay slips - called ‘spook’⁹ pay slips - issued after the strike, proved to exceedingly complicated. The ‘pay master’, officially the Employee Benefits Manager, appeared before the task team to explain the complexities involved. An error regarding a company-wide ‘benchmarking’ exercise, impacting on the machine operator’s job and inexplicably affecting only the shaft, was met with suspicion and added to the time taken to resolve outstanding matters, resulting in a threat of

⁸ Internal Company Memorandum entitled ‘Rectification of machine operators annual leave situation on PMG shaft’, dated 4 July 2005.

⁹ ‘Ghost’.

further strike action due to a perceived lack of action on the part of the task team, averted only by an authoritative intervention from the mine manager. Meanwhile the general manager was pressing for progress from the task team and the machine operators were, by July, becoming increasingly impatient about their still reduced pay rates.

Machine operators' pay rates and working-in arrangements

The burning issue of wages was to be addressed by intensifying direct labour time. The issue of the machine operators pay rates assumed increasing importance after they began taking their annual leave and a further range of subsidiary matters were resolved. Working-in additional shifts - lengthening the working week (an absolute surplus value extraction strategy) - was out of the question. What was left was to focus on the central control the machine operators exercised over the mining labour process and to find a strategy - which ended up combining both absolute and relative surplus value extraction strategies - in order to meet the requirements of the collective agreement.

Alternatives were sought and discussed at length. What emerged was a decision to focus on the measure of face advance. This is the measure of how deep into the rock face shot holes are drilled with each drill and blasting cycle, a single such cycle being the goal of every shift, a daily blast long having been the measure of the task for a day's work underground and the basis for the measure of the blast frequency rate – essentially measuring the rate of net surplus value extraction for the occupation of rock drill machine operator and their support crew. Considerable time was spent ensuring the practical feasibility of using face advances as a measure and the means whereby the lost shifts could be restored. After much discussion, calculation and formal presentations at task team meetings by the managers from the Surveying Department and the men from Rock Mechanics, focusing on face advance signalled a real way forward out of the impasse. The machine operators' regular mass meetings, kept informed blow-by-blow, concurred with the strategy. Detailed technical proposals were crafted for presentation to the general manager.

What amounted to a productivity agreement gradually took shape. Increasing face advance was under the direct control of the machine operators, who further agreed to suspend their work-to-rule over the length of the working day, in order to regain their original wage rates. This was necessary and accepted as such to practically facilitate the optimisation of face time (direct

labour time) compromised by the early closing of the drills at the rock face. Face utilisation, how and which rock faces were to be worked and co-ordinated, received attention at management level in terms of the overall mine plan and the issue of production bottlenecks and other production related issues, impacting on unperformed surplus labour (the difference between the length of the working day and the time actually spent working – Wright 1981:67), were to be addressed by the task team in a series of underground visits.

A second Memorandum was crafted and was accepted by general manager. This second Memorandum, dated 26 August 2005, had two key ‘milestones’ to be achieved. These were summarised as follows:

1/2m face advance above target per month will be achieved for two consecutive months, Sept/Oct 2005. Pay rates will be reinstated from 1 September. If this is not achieved no pay rate adjustment will occur and the shifts to be worked in still to be negotiated as per the Collective Agreement.

1m face advance per month will be achieved above target on measuring day, 20 Sept 2005 and maintained through to December 2005 and the 2004 pay rates will be reinstated from 1 Sept and the working-in arrangements falls away.

If 1m face advance per month from Sept-Dec is not achieved, working-in arrangements will be scheduled for 2006.

The final, detailed technical report-cum-business plan and concrete set of proposals prepared in support of the Memorandum was finalised after much deliberation in the task team, management consultation with principals and union discussions with the machine operators at mass meetings.

Submitted to the General Manager, the Memo was signed off and was to be implemented on 20 August at the beginning of the new measuring month. Notices regarding this agreement were posted in the hostels, in the lamp room and at the entrances to both of the shafts.

Other important elements in the Memorandum included the issuing of job descriptions to the machine operators¹⁰, the rationale for the strategy adopted and matters regarding integrating technical, organisational and cultural issues were detailed.

¹⁰ This never occurred.

Implementation initiatives

A series of technical, organisational and personnel issues needed to be confronted and monitored if the face advance initiative was to succeed. This involved the trade union task team members in face-to-face engagements with individual underground supervisors, the Mine Overseers, directly challenging them insofar as it required changes to their routines. Importantly, the Mine Overseers attended task team meetings during this period. As previously noted, the jurisdiction of these men had changed over the years as restructuring of the organisation of the underground workplace had taken place. These were the self-same men who had lost their Christmas bonus the previous December and had refused to assist the machine operators in winning back their lost wage rates. A series of underground visits allocating task team members to individual Mine Overseers, men with considerably more knowledge of production and mining, was to prove instructive for the unionists, for this was a radical intervention in changing social relations in production itself.

Underground visits

A special meeting with a somewhat sceptical group of Mine Overseers, at least one of whom was openly hostile, was held in the boardroom of the Shaft, albeit ten critical days after the official launch of the new agreement. Task team trade union representatives allocated themselves to the various Mine Overseers into teams of two for the necessary monitoring exercise. The two ranks of men facing each other perfectly mirrored their respective racial groups. The text could not have been clearer: black trade unionists were to 'monitor' white supervisory Mine Overseers.

The results of the underground visits were to be reported, typed up and collated. These underground monitoring visits were due to take place on a daily basis in the last two weeks of September. A wide-ranging number of practical, technical, organisational and personnel issues, faced daily in underground mining situations, were recorded. The issues noted were deemed to be impediments to achieving the target of the first 'milestone' - an additional half meter face advance above mine plan target.

In October, preferring safety in numbers, the union task team members conducted six visits as a single group. In at least one instance, a problem faced by machine operators underground who were reluctant to fully participate, was resolved. The task team had also come head-to-head with

a phalanx of resistant machine operators, but won them over in terms of their own agreement. A summary of key issues reported per mining section, constituting the detail of matters within the mining labour process, is noted in the table below.

The Shaft: Underground visits						
Issues and Description	262	263	264	265	266	274
Absenteeism	⌄	⌄	⌄	⌄	⌄	
Lack of Equipment	⌄	⌄	⌄	⌄	⌄	
Lack of Material	⌄	⌄	⌄	⌄	⌄	
Shortage of Labour	⌄	⌄	⌄	⌄	⌄	⌄
Lack of Communication	⌄	⌄	⌄	⌄	⌄	⌄
Night shift does not clean	⌄	⌄	⌄	⌄	⌄	
Safety Issues	⌄	⌄	⌄	⌄	⌄	
Shortage of Ventilation pipes	⌄					
No meetings with management					⌄	
Shortage of panels					⌄	
Refusal to sign leave forms					⌄	
Problems with the HR Assistant					⌄	
Late comers					⌄	
Ventilation problems	⌄					
Gang make ups incorrect	⌄			⌄		
Surveyors give wrong drilling information	⌄					
Mine Overseer use vulgar language		⌄				
Blast while workers are still under ground	⌄				⌄	
Problems with PPE (inadequate knee guards)				⌄		
PPE Stores close to early in the afternoon	⌄			⌄	⌄	
Clocking problems	⌄					
No underground toilets		⌄		⌄	⌄	
Complains about level control				⌄		
Underground stores too far from working place	⌄				⌄	
Problem with the lamproom	⌄					
Drinking water only available on station				⌄	⌄	
Complain about electricity		⌄				
Safety rep does not visit the working place					⌄	
M/O does not want to sign notes					⌄	
Roof bolt spanner too heavy	⌄	⌄	⌄	⌄	⌄	

The major issues noted - every single one of which impacts on maximising direct labour time and minimising unavailable surplus labour time - were absenteeism, lack of equipment, lack of materials and labour shortages. These factors essentially reduce to a lack of sufficient men and materials required to get the job done. These particular issues, as has been clearly shown, are endemic to mining and are consistently not given sufficiently serious attention throughout both the gold and platinum sectors in underground mining operations. Simply put, poor technical organisation of production wastes labour time.

Unaccustomed to and reluctant to subject themselves to the rigours and temporal discipline of reporting underground on a daily basis, the trade unionists only conducted 20 out of a potential 160 visits and which could have greatly facilitated task team and Mine Overseer co-operation. The information base of problems in working conditions would have been extensive, *whether such problems were perceived or real*. This information would have provided the basis to systematically identify technical constraints, policy and procedural inadequacies and worker

dissatisfaction. The trade unionists were not up to the task, confirming the dim view, the supervisors in general and the Mine Overseers in particular, had of them. The notable exceptions were immediately spotted by management and identified for individual ‘grooming’ and mentoring with a view to promotion up the ranks at the Company. For as the literature has shown regarding the *‘the position of the shop steward’... this layer of union leadership is a popular recruiting ground for management in the industry’* (Bezuidenhout and Buhlungu 2006:251).

Level Control monitoring

A particular concern raised by the trade unionists was the number of workers being turned back at the shaft due to arriving late. This complaint, expressed by their worker constituency, was not conducive to achieving the new face advances. Arguments were presented that often the reasons for lateness were genuinely beyond the control of men such as the bus transporting underground mine personnel not arriving on time. These matters were solidly within the range of their experience, as opposed to the tougher production details - management’s traditional prerogative - they were unable or unwilling, in the main, to tackle. An agreement was reached to monitor the extent of this occurrence, the results being reflected in the table below.

THE SHAFT: LEVEL CONTROL EXERCISE						
DATE	S262	S263	S264	S265	S266	TOTAL
14-Oct	1	3	0	0	0	4
15-Oct	3	5	1	1	2	12
17-Oct	0	3	0	5	3	11
18-Oct	1	3	0	1	2	7
19-Oct	1	2	0	0	0	3
20-Oct	2	3	0	2	0	7
21-Oct	2	4	0	1	2	9
24-Oct	1	5	0	3	0	9
25-Oct	3	0	0	2	1	6
26-Oct	1	1	0	2	0	4
27-Oct	3	3	0	1	1	8
28-Oct	2	0	0	0	3	5
29-Oct	1	3	0	2	0	6
31-Oct	10	6	1	6	0	23
1-Nov	1	9	1	2	0	13
2-Nov	4	7	1	3	2	17
3-Nov	1	6	0	4	3	14
7-Nov	0	8	0	3	0	11
8-Nov	0	2	0	1	2	5
9-Nov	0	0	0	0	0	0
						170

While the number of lost man-shifts (historically unavailable labour) ‘saved’ as a result of this exercise was hardly significant overall, the exercise pointed to the attempt by trade unionists to ensure the success of the agreement. The labour time ‘saved’ in this manner amounted to around 1360 man hours. The unionists were particularly proud of this initiative, for this impacted directly on assuaging some of the frustration of their worker constituencies. It represented a rare engagement of mass-based trade unionists to involve themselves directly in production issues, measured, of course, in labour time.

The Section Manager’s ‘War Rooms’

The general mine manager brought the underground supervisory chain of command directly under senior Company management control. This involved daily meetings in the Section Manager’s office, dedicated to ensuring closer supervision¹¹ and reporting of a variety of factors relating to production. This can be analysed in a number of ways, yet its impact was a decisive component of the success of the increased face advances that took place over the months of September through to December 2005.

During these early morning meetings Mine Overseers, one by one, gave detailed reports and HR personnel were present in order to respond especially to reported issues such as absenteeism and reasons for labour shortages.

Underground, at the waiting places, the charts designed to track face advance, lost blasts and related measures were found not to have always either been consistently applied or regularly completed. Not all personnel were sufficiently familiar with the process which permitted more careful monitoring of the underground stoping environment than previously possible. One shift overseer glumly admitted to knowing that ‘they’ - the managers - were now focusing on face advance. An older man, his entire being bespoke the strain of long-ingrained, dispirited fatigue. For this underground line supervisor, this was yet another task to perform and his lack lustre approach stood in marked and distanced contrast from the keen decisions the task team had been taking in the boardroom on surface.

¹¹ Close supervision is generally associated with policing the intensity of labour, i.e. by making workers work *harder*. Here, in the context of significant worker autonomy at the point of production, it related to ensuring the necessary materials and equipment to expedite efficient production and the overcoming of its manifold obstacles, i.e. intensifying work, but by making work *easier*.

Failure to communicate to every individual in this industrial army of over 2500 remains a function of complex organisations generally, but is of critical import, particularly in the extensive underground workings of a mine shaft.

The worker representatives on the task team did not, however, integrate themselves into these daily meetings as envisaged at a certain point and which proved to be a weakness of the overall strategy adopted to implement the terms of the key Memorandum then underway.

What follows precisely squares with an analysis of how South African trade unions are required to face the transition, from militant mobilisation to an engagement with the realities of a considerably more complex democratic society, if real material gains for workers are to be made. For as Sakhela Buhlungu had argued a few years before:

'Unions do not have the skills to engage in complex discussions about shop-floor issues, let alone broader economic and political issues. With many companies embarking on restructuring, particularly on the shop-floor, the need for union engagement is likely to become greater.... The shop stewards' committee and the members' general meeting were very effective in the era of resistance, but they were never geared to deal with production issues. This weakness was exposed when management came up with new initiatives which required workers and shop stewards to take a clear stand on issues such as productivity and the need to become globally competitive' (2000:83).

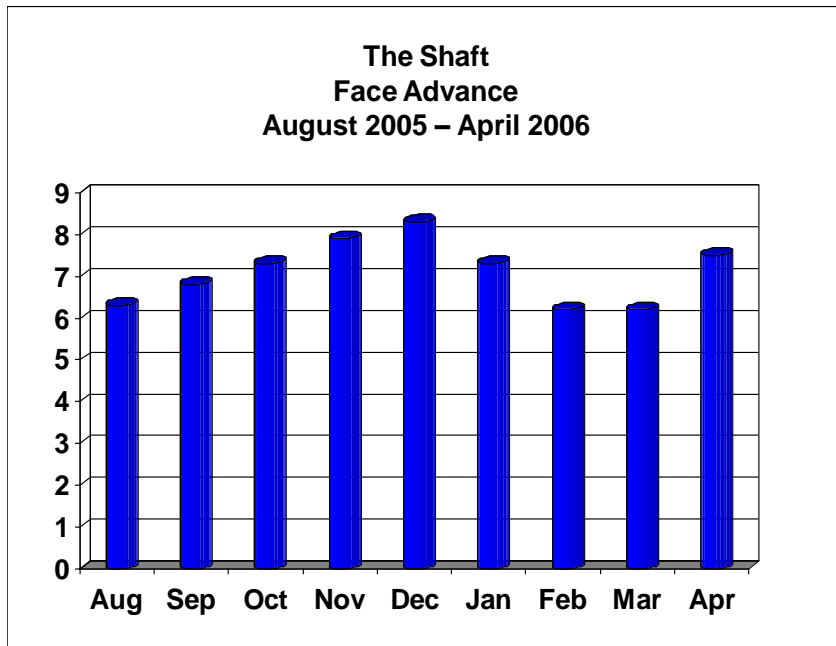
Despite the exercise being in the direct interest of a powerful though fractious constituency, the Shaft task team felt compelled to engage, and often did so somewhat reluctantly and only partially, in the process, but one which did show results, as indicated in the section which follows.

1.1 Achieving and assessing improved face advances

1.1.1 Milestone one of the key Memorandum

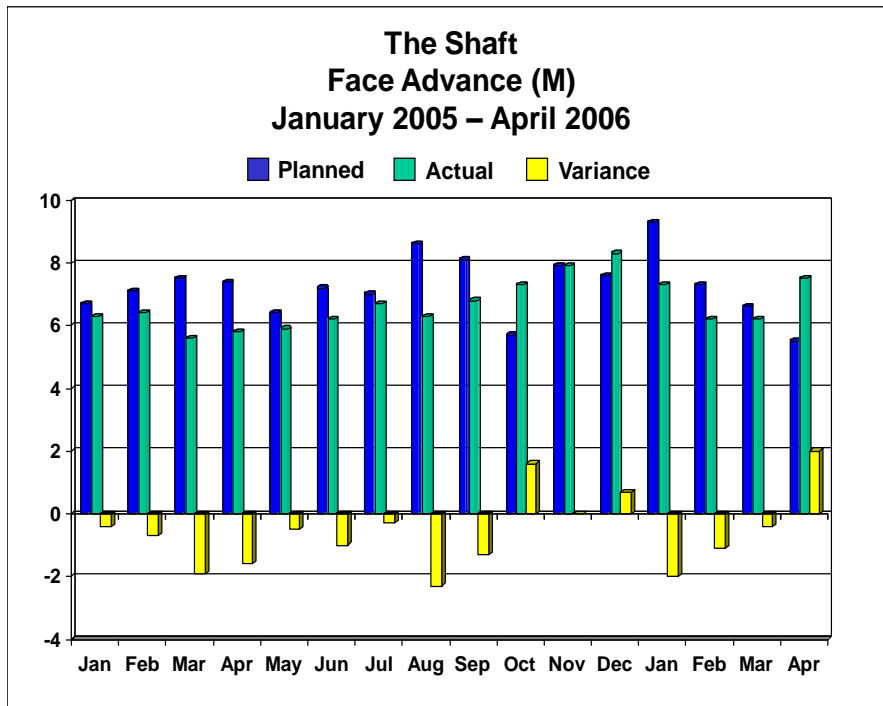
Face advances improved significantly due to the collective efforts of the key parties: the machine operators themselves, the daily 'War Room' meetings at 7am in the Section Manager's office and even the limited underground visits of the task team dedicated to investigating trouble spots at the stope faces. These crucial developments led to the reinstatement of the machine operators' old wage rates prior to the strike on 25th November the previous year.

The bar chart below very clearly indicates the extent to which face advances improved over the four consecutive months from September to December 2005 after the inception of the face advance productivity deal on 20 August.



This improvement off the base of current production, needs, however, to be examined in relation to the planned targets set. The reasons for the drop from January 2006, quite apart from the natural rhythm of a drop at the beginning of any new year, are dealt with in the next section.

An increase over and above existing mine plan targets needed to be reached in terms of the Memorandum. The bar-chart below, capturing face advances from the beginning of 2005 through to the official, though premature, end of the facilitation process, provides this picture.



The requirement of the first ‘milestone’, that the face advance increase by ½ meter above target (mine plan) for two consecutive months, was not met.

The planned target for September was 8,1 and the actual 6,8 m giving a negative variance of 1,3m, while the planned target for October was 5,7 m and 7,3m was achieved, resulting in a positive variance of 1,6m. This gave a 0,3m gain overall for the first two months instead of the required 1m.

In November, the actual face advance met the planned target of 7,9m, resulting in an overall shortfall of 1,5m for the three months.

December’s efforts were rewarded with 8,3m actual advance, 0,7 m above the planned target of 7,6m, yet still 1,3 m short over the four months despite a steady rise from 6,8 to 7,3 to 7,9 to 8,3m from September to December.¹²

¹² If a comparison can be made with face advances in gold mining, in 1987 Frost cited an advance of 6,1 meters per month as ‘the conventional mining rate’ (1987:32). Face advances vary, Frost going on to cite work from the Technical Advice Group (1986:10) of 6,4 meters at Vaal Reefs and 8,43 at Western Deep Levels (1987:36).

Despite not having met the new negotiated targets as agreed, the General Manager saw fit to reward the efforts and improvements off the base line and the wages of the machine operators were re-instated as from 1 September. This was recognition indeed. At this point the machine operators urged themselves onto even greater efforts to win back the wages lost from the time of the strike in December of the previous year to 31 August. But despite their efforts, as will be seen, management had not forgotten that the political power struggle had yet to be won to their satisfaction.

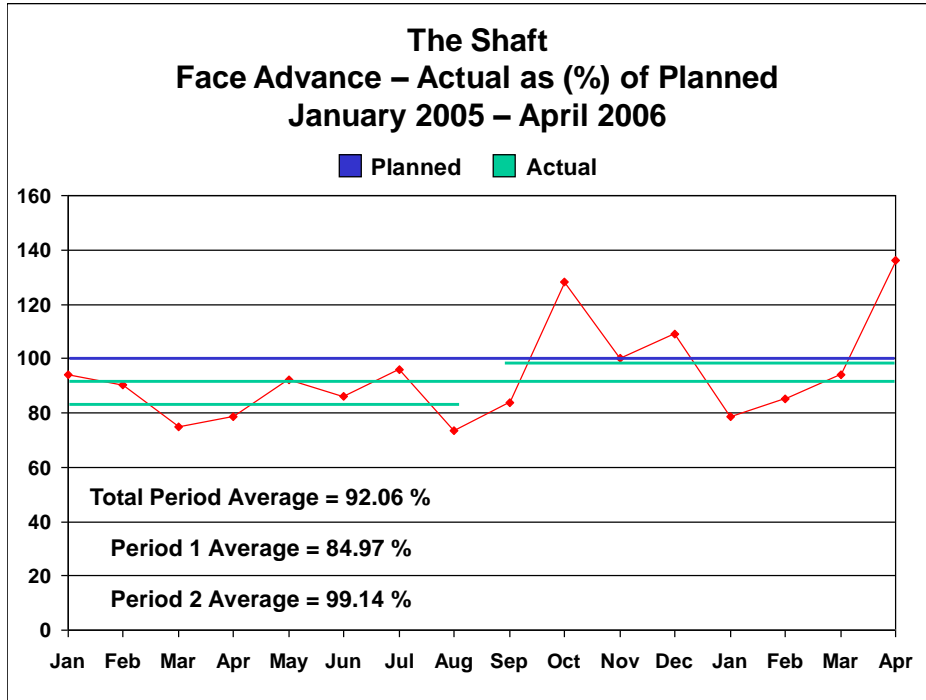
It is instructive to note that for the first time in 2005, the planned target is exceeded in October and met exactly in November. This significant achievement possibly contributed to the decision to award the re-instatement, despite an overall negative variance of the 1,3m over the four months September to December 2005. In December 2005 1,7m above target was achieved, this dipped again until 2m face advance above target was again achieved in April 2006.

A further instructive point to note in the table below is a comparison between the first eight months of the year (Jan-Aug 2005) with the eight months (Sept 2005-Apr 2006) after the new planned targets were attempted.

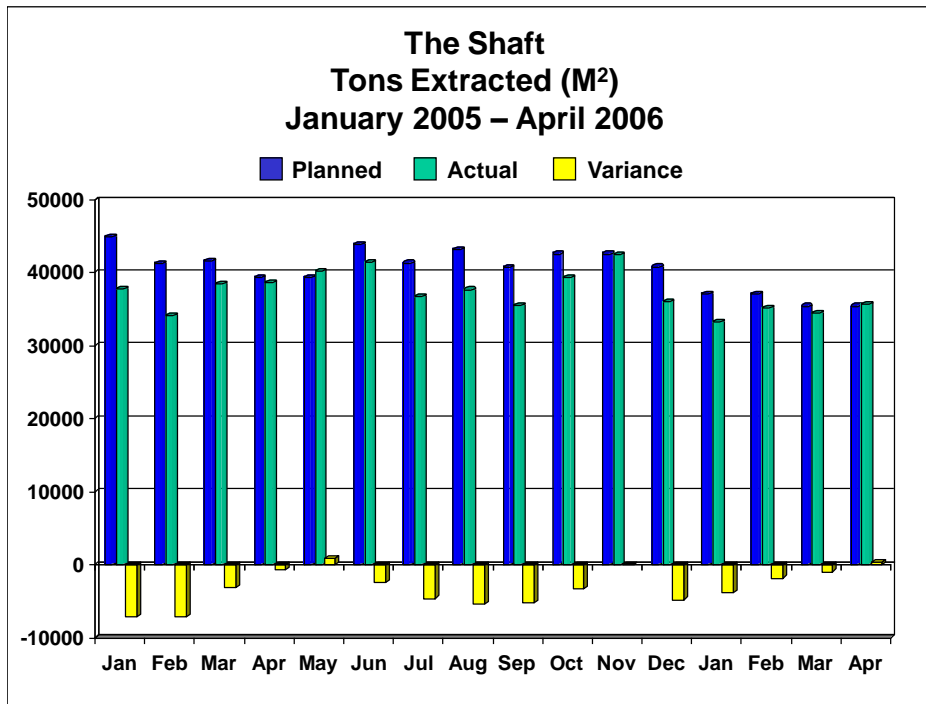
Period	Planned (m)	Actual (m)	Variance (m)	% Realised
jan	6.7	6.3	-0.4	94.03%
feb	7.1	6.4	-0.7	90.14%
mar	7.5	5.6	-1.9	74.67%
apr	7.4	5.8	-1.6	78.38%
may	6.4	5.9	-0.5	92.19%
jun	7.2	6.2	-1.0	86.11%
jul	7.0	6.7	-0.3	95.71%
aug	8.6	6.3	-2.3	73.26%
jan-aug 05	57.9	49.2	-8.7	84.97%
sep	8.1	6.8	-1.3	83.95%
oct	5.7	7.3	1.6	128.07%
nov	7.9	7.9	0.0	100.00%
dec	7.6	8.3	0.7	109.21%
jan	9.3	7.3	-2.0	78.49%
feb	7.3	6.2	-1.1	84.93%
mar	6.6	6.2	-0.4	93.94%
april	5.5	7.5	2.0	136.36%
sep-apr 06	58.0	57.5	-0.5	99.14%
jan 05-apr 06	115.9	106.7	-9.2	92.06%

Data culled from information provided by the Surveying Department

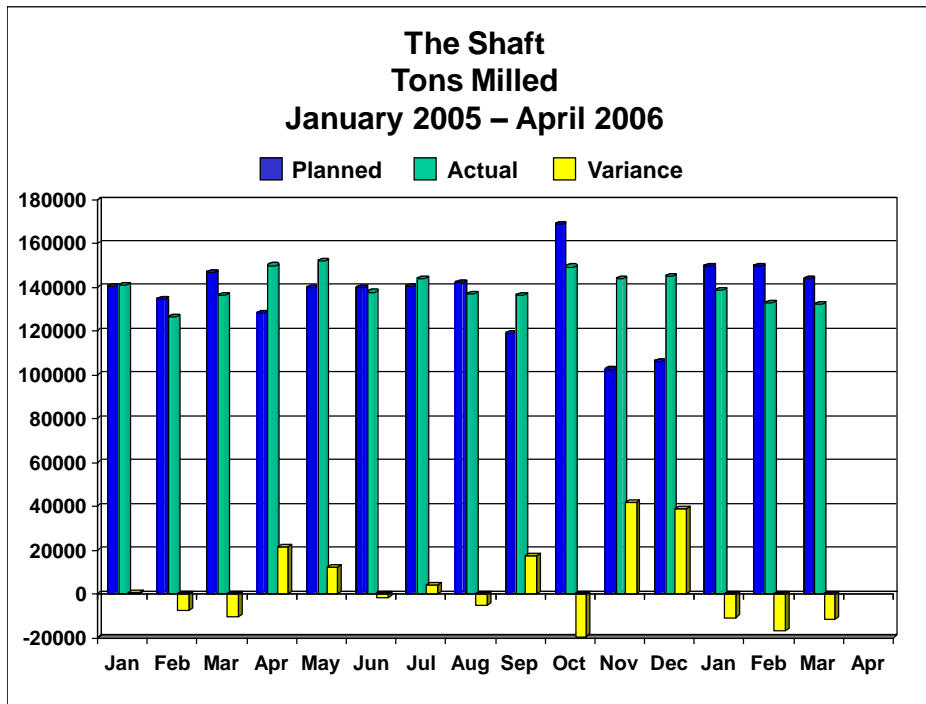
These figures are graphically displayed in the following chart and point not only to the considerable improvement sustained over the eight months since the beginning of the project, but suggested that measures ought to have been adopted to continue to sustain this improvement in order to ensure that the benefits accrued to everyone on the Shaft, the non-striking workers and supervisors in particular.



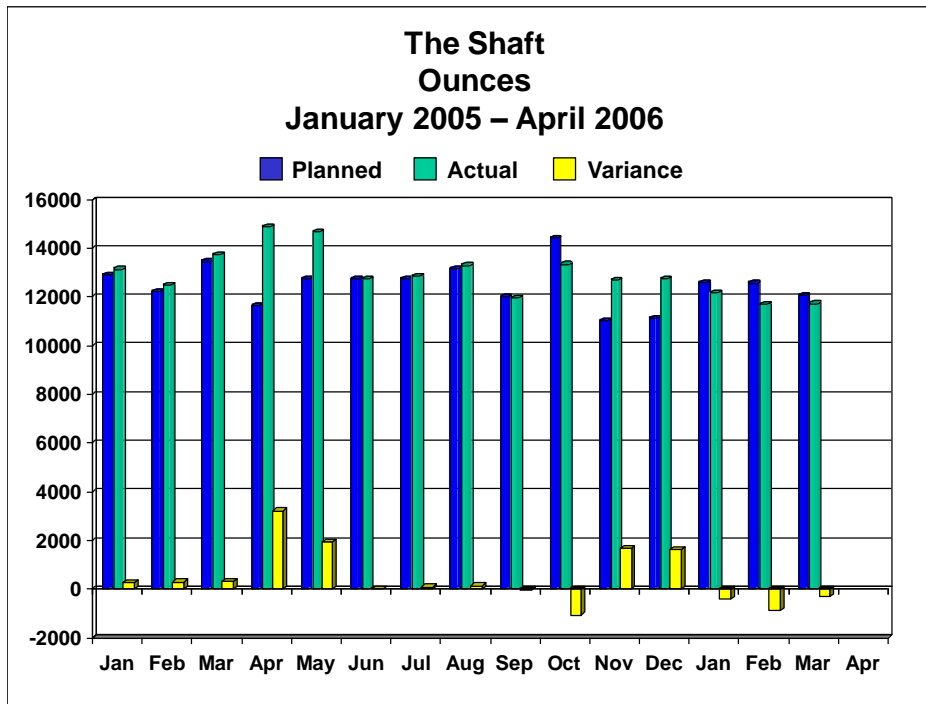
The increased performance of 14% overall marks a significant and sustained improvement over the eight months beginning with the face-advance deal, despite the negotiated target not being met.



In the chart above, the planned and actual tons (m²) mined, reflective of the performance of the shaft as a whole, reveals a slightly different picture. For calculations in mining are always amenable to different measures and perspectives. It is important insofar as it also shows an increase in performance, when the first eight months (Jan 2005-Aug 2005) are compared to the months since the new targets were set (Sept 2005-Apr 2006). While less marked than the increase in face advance, measured as an average percentage of tons extracted, the first period boasts 91,1% of target reached while the second period rises slightly to 93,7%, reflective again of a sustained increase in overall performance of the shaft.



When it comes to tons milled, further down the line in the production process in the refinery, the picture above changes again, as there is a positive and hugely significant 52293 tons milled *above target*. Calculations here are, however, not necessarily due solely to the task team’s initiative. This could be to ore (‘stof’ - unrefined ore) in gullies having been cleaned or the frowned-on practice of revealing ‘back pocket’ tons - drawing from stock piles or a combination of two or three such practices production managers employ to meet the overall targets of a shaft. Any canny miner leaves ore in his gullies to haul out when he has not met his production targets for the month, but to ensure he gets his production bonus nevertheless. This is simply part of the art and craft of mining. In this instance stock-piles were drawn on by the most seasoned of all the miners, namely the managers, the reasons for which were not established.



The crucial measure in mining of its final product is ounces of refined precious metal. In the chart above, regarding ounces of refined platinum, results are similar to that of tons milled, 6767 ounces in excess of target for the period under review. The unverified explanation for this was reported to be due to higher grades of reef mined than forecast and noted on mine plans.

The overall effect was that the Shaft mining community remained a stalwart collective producer. Within the terms of overall productivity at the Company, their ‘socially necessary labour time’ was lower than the average. In September 2005, for instance, the Shaft was the only shaft to meet all its production targets. The regional Human Resources manager thanked the task team for their efforts on behalf of the mine manager and the General Manager and noted that the second milestone now required attention. At a task team meeting later, both senior managers specially attended and expressed their appreciation of the efforts made. This was as far as the project was to go.

Milestone two of the key Memorandum

No agreement regarding the second milestone was signed off as intended by all parties in the task team. The reason for this failure was that which lay at the heart of the machine operator’s history and struggle around changing conditions of work, namely the machine operators’ job description.

The machine operators job description

A key aspect of the Memorandum submitted to the General Manager, born of the requirement to approach facilitation in an integrated manner and address certain key issues, reads as follows:

‘The machine operators are provided with copies of their job descriptions and agree: To work according to job description. This is not currently occurring. This applies especially in stoping sections and particularly with regard to:

Assisting/erecting temporary support

Lashing the footwall at stope face

Sludging out shot holes (‘piping’)

Removal of temporary support

To thereby actively re-establish team-work relations with panel and other workers.’

While these elements are officially part of the rock drill operators’ job, the men were implacably sticking to doing one thing only: drilling shot holes¹³. At the point at which the second milestone was to be formally set down, these matters relating to the job description of the machine operators’ proved a decisive impediment to effectively continuing with the terms of the second Memorandum. The union members in the task team at this point considered this to be a matter to be dealt with beyond local shaft level discussions. In addition, administrative matters of ensuring that the reinstated wages were implemented, was receiving the greater part of the attention of particularly certain members of the task team at this point.

Facilitation did not succeed in persuading the task team to actively grapple with this matter on the shaft and it was referred to the combined management/union partnership forum, but not tabled at that forum, realising precisely the fears facilitation had previously expressed, but became implicated in the broader issue across the Company regarding a new job grading system well beyond the jurisdiction of the task team.

More importantly, however, was that no-one was prepared to face off against the machine operators who clearly had, over time, won the practice of defining their own job as strictly drilling the rock face. Except for drilling, the RDO’s (machine operators) were performing not one of the other tasks associated with the work in the underground stope-face as listed above in

¹³ The issue is an old one. An argument against machine drillers nearly a century before was that unskilled hand-drillers, machine drillers did not lash or clean their own stopes.

their official job description. Assisting and or erecting temporary support was the timber-man's job; lashing the footwall, a wearisome task, part of the cleaning night shift's job - formerly done with a shovel, latterly with high-pressure water hoses; sludging out the shot holes was the miner's assistant's job - prior to 'charging up' i.e connecting the fuse wiring, detonators to the explosives in the specified pattern to the burden of holes or removing of temporary support - generally done by the timber-men. The *de facto* power of the machine operators at the point of production had enabled them to slough off aspects of their job to other underground workers - thereby impacting on the social relations between them and those who had long since taken over parts of their job¹⁴.

The work of the task team at the shaft, the facilitation process and the successful completion of the terms of the second Memorandum, effectively stalled.

Conclusion

In 2004, the machine operators went out on strike three times as they struggled to force their legal right to take badly overdue annual leave. Management had not listened to them, neither had any of the trade unions taken them seriously. Social relations had deteriorated badly. Prior to their strikes, the machine operators had first resuscitated their own organic and informal worker committees on the shaft and had embarked on symbolic protests at the gates of the mine. Then they began closing off their drills exactly eight hours after they had clocked in at the crush, only to go and wait at the shaft stations for the hoist to take them to surface at the normal time. Production at the Shaft was not only continued throughout, but was of the best at the Company. None of these strategies afforded them the relief they sought. Arguably, they held the moral high ground.

If so, they lost not only the moral high ground, but any support they may have had from their fellow workers during their third strike, once having taken to violence. Within their own ranks they enforced their strike law by holding celebratory cultural feasts, funded by fines paid by

¹⁴ As Moodie states regarding the transition from hand to machine drilling a century ago 'one of the strongest arguments for hand drilling was that hammer workers lashed their own stopes for up to two hours to clear the face prior to beginning work (1994:51). It is not clear why lashing had remained part of these rock drill operators' job description, suggesting a history of its own around this issue and which clearly has temporal implications, as well as implications for employment and social relations in production to boot.

recalcitrant members for having dissented with what were either genuine majority decisions or the dictates of a powerful demagogic leader, who clearly had refused to let go of a two-decade old struggle in which he was personally involved. Whatever the case, there is no doubt as to the display of the machine operators' remarkable collective organisational discipline. Once dismissed and rehired under the threat of final dismissal, their representatives in the task team failed them yet again. They then turned to tactical options by having found a bureaucratic loop hole, threatening to all take leave simultaneously and to which they were legally entitled.

An outside party crafted a way out of the impasse in which the whole Shaft found itself, the impasse being related directly to the objective power at the point of production exercised by the machine operator occupational group. But this required of them not only to cease using their labour time as a weapon to reduce the length of the working day, but which required the intensification of their direct labour time, the only capacity left to them. They proved themselves up to the task, only to be denied the opportunity of pushing their struggle, to win all of their lost wages, to its logical conclusion. Production was no longer the issue, but power. The restoration of managerial disciplinary power trumped the possibility of additional surplus value creation. Normality had been restored and working lives continued much as before.

In terms of a value-theoretic analysis, the machine operators' strategic position as creators of net surplus value constituted the material basis for their actions. No other single occupational group on the Shaft - or on any mine for that matter - would have been capable of waging the struggle they did. Firstly, their very position in production fostered the creation of the machine operators committees: a charismatic leader having revealed their objective power to them. They subsequently took time out to organise and re-establish their organic working class organisation, albeit only on the Shaft and not across the Company. Astute management took appropriate evasive action to prevent further mobilisation of these committees. Secondly, the machine operators embarked on symbolic protest action, but opted for a tactical retreat, on more than one occasion, once faced with the mine manager's threat to fire them. Thirdly, they then sought to increase the value of their labour power by increasing socially necessary labour time (and consequently decrease the surplus extracted from the expenditure of their labour power) by struggling over the length of the working day - that component relating to class struggle over the labor process. This resulted in more unperformed surplus labour on the Shaft. Finally they went out on strike for a third time, resulting in a tranche of historically unavailable surplus labour they

would have to make up to restore the consequences of the strike and a condition of their re-employment - lost wages, the epiphenomenal expression of labour time. Not only this, the machine operators deprived the supervisors of an important portion of redistributed surplus value - their lost Christmas bonuses.

The wages the machine operators lost eroded the historical and moral component of their wage, pushing their struggle back to one over physical subsistence, a struggle characterising much of the twelve decades of mine-working labour in South Africa, the struggle, in other words, over what constitutes the physiologically minimum necessary labour to ensure the reproduction of labour power under mining conditions in different periods of time.

During the face advance productivity project, workers were seeking to re-establish the traditional historical and moral component of their wage and they assumed a degree of institutionally sanctioned control at the point of production in order to do so. They were seeking, to continue applying Wright's schema, to restore the wage corresponding to socially average necessary labour, a very specific numerical individual wage known *practically* by each and every machine operator.

In terms of socially necessary labour time, however, the 450 rock drill operators, by intensifying their labouring efforts, as well as the additional engineering capacity of the compressors installed in the bank, this amounted to increasing relative surplus value by both mechanised and non-mechanised means. This, however, at one and the same time, impacted on this group of workers insofar as they were simultaneously contributing to *decreasing* socially necessary labour time and hence the value of their labour-power. Recall that socially necessary labour time is a shifting average only calculable at any 'given moment' under specific conditions. In fact, the neighbouring mining competitor's workers were working at lower average costs. By this group of workers decreasing socially necessary labour time they were, in effect, *ceteris paribus*, coming up to par with their more productive working class compatriots who were, as a comparable group of mineworkers, producing greater value by virtue of working at lower cost and whose socially average necessary labour - as their contribution to the overall scheme of things - was consequently lower.

The face advance project was an important moment for the machine operators. For they stood to lose the earnings of their entire careers, having been reduced to working at the wage rate of a novice. In essence they were fighting the rock to win back their lost wage rates and hurt themselves in a process into which they clearly threw themselves with unbridled gusto, for the sake of their very careers as miners, represented by the sum total of their life's labour time expenditure.

References

- Bezuidenhout A & Buhlungu S 2006 'Old victories, new struggles: the state of the National Union of Mineworkers', Buhlungu S, Daniel J, Lutchmann B & Southall R (Eds) *The State of the Nation, 2006-2007*, HSRC Press, Pretoria
- Breckenridge K 1998 The Allure of Violence: Men, Race and Masculinity on the South African Goldmines, 1900-1950 in *Journal of Southern African Studies*, Vol 24, No 4:669-693
- Buhlungu S 2000 'Trade Union Organisation and Capacity in the 1990's: Continuities, Changes and Challenges for PPWAWU', *Trade Unions and Democratization in South Africa, 1985-1997*, Adler, G and Webster, E (Eds) Witwatersrand University Press, Johannesburg
- Campbell C 2001 'Going Underground and Going After Women': Masculinity and HIV Transmission amongst Black Workers on the Gold Mines, *Changing Men in Southern Africa*, (Ed) Morrell R, University of Natal Press, Pietermaritzburg and Zed Books Ltd London & New York
- Frost, DJ 1987 *The Hesitant Revolution: Mechanisation, Labour and the Gold Mines*, BSc (Hons) thesis, University of Cape Town
- Glass Y 1958 Seasonal fluctuation of Native labour on the gold mines (Interim Report) *National Institute of Personnel Research*, Johannesburg
- Hamann R and Kapelus P 2004 'Corporate Social Responsibility in Mining in Southern Africa: Fair Accountability or just greenwash?' *Development*, Vol 47:85-92
- Harries P 1994 *Work, Culture and Identity: Migrant labourers in Mozambique and South Africa, c 1860-1910*, University of the Witwatersrand Press, Johannesburg and Heinemann, London

- Marx K 1977 Capital, Volume I, 9th Edition, Lawrence & Wishart, London (1877)
- Leger JP 1985 Towards Safer Underground Gold Mining: An Investigation commissioned by the National Union of Mineworkers, Labour Studies Research Report 1, *Sociology of Work Programme*, University of the Witwatersrand
- Leger JP and van Niekerk P 1986 Organisation on the Mines: The NUM Phenomenon, *South African Review*, Vol 3 (Ed) Southern African Research Services, Ravan, Johannesburg
- McAllister PA 1976 Migrant Labour project: report on the pilot study, *Institute for Social and Economic Research*, Grahamstown
- Moodie TD with Ndatshe V 1994 *Going for gold: Mines, Men and Migration*, University of California Press, Berkeley
- Moodie TD 2005 'Maximum Average Violence: Underground Assaults on the South African gold Mines, 1913-1965, *Journal of Southern African Studies*, Vol 31, No 3:547-567
- Parsons JA 1977 'How attractive is gold mining to black mineworkers? - A synthesis of research findings up to September 1977', Human Sciences Laboratory, Research Report 42/77, *Chamber of Mines Research Organisation (COMRO)*
- Phakathi TT 2001 *The changing relationship between teamwork and work culture in the South African gold mining industry: A case study of Tautona mine*. Unpublished MA thesis, University of the Witwatersrand
- Spandau A 1979 Mechanisation and Labour Policies on South African Mines, *Labour Research Programme*, University of the Witwatersrand, Report no 22, Johannesburg
- Technical Advice Group
Unpublished Johannesburg 1986 *Mechanisation on South African Gold Mines*,