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Flexibility and changes in forms of workplace subjectivity: a case study of the South African automobile assembly industry

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(...) Come l' occhio corporale che vede tutti gli obietti fuori di se' ed ha dello specchio bisogno per vedere se' stesso.
(.... like the human eye, which can see everything outside of it, but it needs a mirror to see itself)
(Giovanbattista Vico, "Scienza nuova")

Why ain't I rich? (...) Well, Case, all I can say to that (...) Is that what you think of as [the Company] is only a part of another, a, shall we say, potential entity. I, let us say, am merely one aspect of that entity's brain. It's rather like dealing, from your point of view, with a man whose lobes have been severed.
(William Gibson, "Neuromancer")

Every suture creates new wounds.
(Antonio Negri, "Marx beyond Marx")

ABBREVIATIONS

ABE - Adult Basic Education.

CBU - "Completely Built-Up".

CKD - "Completely Knocked-Down".

COSATU - Congress of South African Trade Unions.

CPSA - Church of the Province of South Africa collection, Department of Historical Papers, University of the Witwatersrand, Johannesburg.

FOSATU - Federation of South African Trade Unions.

GHP - Gavin Hartford Papers, private collection.

JIT - "Just-in-Time".

MACWUSA - Motor Assemblers and Components Workers' Union of South Africa.

MBSA - Mercedes-Benz South Africa.

NAAWU - National Automobile and Allied Workers' Union.

NIC - Newly Industrializing Country.

NUMSA - National Union of Metalworkers of South Africa.

SAMCOR - South African Motor Corporation.

TAP - Taffy Adler Papers, Department of Historical Papers, University of the Witwatersrand, Johannesburg.

TKP - Tony Krobe Papers, National Union of Metalworkers of South Africa.

TQM - Total Quality Management

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This thesis is part of a broader research project on worker subjectivity. While workplace dimensions and dynamics are investigated here, further research for a PhD dissertation will analyse extra-workplace determinants. Thus, since this research is a "work in progress", and given that I will not be able to acknowledge the innumerable contributions to this study in the next future, it does not seem untimely to recognize them now.

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work and production organisation: namely that it considers subjectivity as a resource and a limitation at the same time.

Workers tend to respond to the contradictory nature of flexible production by articulating discourses and practices that re-elaborate and appropriate the promise of flexibility and elements of managerial ideology (such as workers' contribution to quality) to define new spaces of autonomy and control. These responses develop mainly as localised and informal practices, also given the union's weakness in the plant and the general inability of the South African labour movement in this sector to articulate an agenda for progressive workplace change.

As a conclusion, I suggest that there are two possible alternatives facing the changing nature of worker subjectivity in the age of flexibility. Workers could utilize their responses to managerial strategies as a major element to redefine union strategies. In the permanence of the present union's weakness, it is not excluded that this solution may materialize with alternative forms of worker organisation. Otherwise, worker responses developing at a mainly localised and informal level will be likely marginalised and isolated, ultimately proving self-defeating.

KEYWORDS: South Africa, Work, Automobile Industry, Labour, Industrial Relations, Flexibility, Subjectivity.

ABSTRACT

This thesis is an investigation into worker responses to restructuring of work and production organisation in a South African automobile manufacturing company. The reorganisation of work and production is analysed as part of managerial strategies aimed at promoting flexibility. Worker responses will be conceptualized in a general model of worker subjectivity. Subjectivity here means the process through which workers make sense of changes in factory life according to regulative ideas and general moral and cultural constructions of the meanings of industrial work.

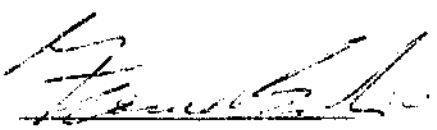
I adopted a method based on observational research and semi-structured interviews with a group of workers, integrated by archival research and interviews with managers and union organisers.

The results of my enquiry confirm hypotheses and theoretical frameworks critical towards the notion of flexibility as representing a clear divide with traditional "mass production" methods. In fact, managerial promotion of flexibility coexists here with relevant continuities in hierarchical and authoritarian structures, paternalism, lack of skills' recognition, use of technology as a mainly cost-cutting device, routinisation and lack of worker responsibility and independence. However, flexibility defines in this case a meaningful change in the attempt by management to valorise worker cooperation by formalizing it in a series of workplace structures. This creates relevant contradictions. In fact, the attempt at promoting worker cooperation contrasts with managerial authoritarianism on organisation and innovation. Therefore, little scope is left for processes of negotiated organisational change.

From the workers' point of view, the contradiction is expressed in the fact that the system of production from one side promises greater worker control and autonomy by trying to formalise worker initiative inside structures of "teamworking" and "continuous improvement". From the other side, those promises are betrayed by the interaction of technology and authoritarianism in the workplace. This contradiction provides broader insights in a general dilemma for flexible

To my mother, Cesira,
my father, Ugo,
and my sister, Beatrice.

I declare that this thesis is my own unaided work. It is submitted for the degree of Master of Arts in Sociology in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any other degree or examination in any other university



11th day of April, 1996.

(Franco Barchiesi)

FLEXIBILITY AND CHANGES IN FORMS OF WORKPLACE SUBJECTIVITY

A Case Study of the South African Automobile Assembly Industry

Franco Barchiesi

Degree awarded with distinction on 11 December 1997

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division of labour. It is rather a social construction of meanings and identity based on the workers' formation and adaptation of regulatory ideas in relation to changing workplace circumstances. "Regulatory ideas" can here be assumed as, for example, visions of fair employment relationships, wage levels compatible with the subsistence of the household, notions of human dignity and justice, or limits to the exercise of power. According to these ideas, the defense of the social status associated with their particular occupation may be for workers a determinant of radicalism more powerful than an overt class imagery (Crisp 1984). Regulatory ideas can change in relation to diverse factors, which may include modifications in factory social relations and organization, interactions with other actors, the level of unionization, the nature of institutional regulations. However, their change cannot be simply assumed as part of processes of adaptation, since determinants outside the workplace constitute repertoires of experiences and organised representations of reality on which regulatory ideas are embodied and which provide the source to measure and validate changes.

Among the determinants of regulatory ideas external to the workplace, it is worthwhile to notice the differential appeal of traditions of resistance, community and family values, ethnicity, language, religion, and the persistence of non-capitalist forms of accumulation. These imply a close attention to processes of proletarianization and class differentiation, the interaction of capitalism with pre-capitalist modes of production, the persistence of ethnic and rural-urban cleavages, the relations between labour organizations, social movements, and community struggles, the relative weight of export promotion (Bergquist 1985) compared to import substitution (Roxborough 1984) in industrialization strategies, and their consequences on worker militancy and organization (Cohen, Brazier and Gutkind 1979; Waterman 1982; Nolan 1985; Montgomery 1987; Boyd, Cohen and Gutkind 1987; Freund 1988; Munck 1988; Southall 1988; Brandell 1993). This also encompasses an enlargement of the concept of worker resistance beyond intra-workplace confrontation. Resistance to proletarianization and wage labour itself should be taken into account as structured by culture and "hidden forms of consciousness," with

evaluation of the conditions for workers' contestation of meanings, values, authority and moral regulations to define a convergence of action along class lines. It is useful here to remember the warning by E.P. Thompson (1966) not to dissociate the analysis of class from the analysis of the social practices, cultural codes, discourses, languages, and shared values which constitute class.

"Discourse" and "language" are here important not as a separate and self-explaining plane of reality (Joyce 1987). They rather contribute to articulate "interest, identification, grievance and aspiration" (Stedman-Jones 1983: 24) inside changing forms of production. In fact, managerial attempts at eliciting workers' initiative and cooperation cannot be separated from the search of a basic consent around images of common commitment and participation, for example in the promotion of quality as a unifying goal. But the importance of consent around discourses also means for the subordinate in the factory power relations the possibility of new identifications offered by those discourses. Consequently, this also admits that those subjects can possibly appropriate the managerial discourse itself and modify it to address their plights. Rules and imperatives of an organisation are never fixed and self-evident. They are opened to differing interpretations linked to the moral codes of the subject operating within those rules (Genovese 1979; James 1980; Garfinkel 1986; Clegg 1989). Similarly to Bourdieu's (1995: 144) notion of "symbolic capital," selected aspects of the objective reality can be perceived and incorporated by workers according to their relevance in confirming or challenging shared meanings and norms. These latter, and not the recognition of an objective and universalized proletarian condition, become the basis of social action.

As an agent of signification, not only of production, the worker is able to attach meanings to the company's norms which do not necessarily coincide with the management's intentions, even if open resistance may not erupt. I will, for example, show how the ideology of quality enables workers to legitimize claims opposed to corporate identities, giving expression to antagonist subaltern subjectivities.

Worker subjectivity does not automatically stem from the objective position of workers in the

discourse without idealizing class itself. Albeit this may prove an author's commitment to the critique of capitalism, it does not by any means imply that a class-based discourse indicates an objectively superior form of such critique. It is then still useful to regard class as produced by social action and as constituted through social practices of resistance, self-valorization and solidarity, more than on the basis of pre-conceived images of emancipation and citizenship of the subject.

Problems related to the nature of consciousness and the definition of class are at the heart of the empirical preoccupations of this research. These issues have also encouraged recent developments in the sociology of work to recognise the workers' subjective side as an independent topic of enquiry, requiring specific conceptual and methodological tools. A basic problem in current debates is to what extent events of worker cooperation, conflict and resistance are primarily responsive to "macro" social and economic determinants of industrial organization. Conversely, this requires an investigation of workers as relating with those determinants, with their opportunities and constraints, to shape with various degrees of autonomy the established workings and meanings of the structures of production. A growing emphasis was placed on questioning how workers respond to restructuring not only in the articulation of their individual attitudes but as collectives of people facing common workplace-related problems, questions and anxieties. The next section will be focused on processes and determinants integral to the understanding of worker subjectivity.

1.2 Worker Subjectivity as Process and Practice

A response to these questions needs an investigation of the internal social and discursive practices through which workers articulate their strategies to cope with the forces of industrial change. A crucial problem is how and to what extent these same practices can organize a common worker interest as a source of response in the workplace. This is inseparable from an

is questioned and relativized, the validity of the concept of class itself is directly affected. In particular, this leads to questioning the coincidence of the subjectivity of the "worker" with the subjectivity of the "working class."

As Chakrabarty (1989) recognizes, worker consciousness must be analyzed as produced by the relationship between exploitation as concretely experienced by different societies and cultures, and the associated images of emancipation. In this view, however, this does not forcefully imply falling in the cultural relativism of assuming each working class formation as absolutely peculiar, which would emasculate the explanatory power of the concept of "working class" in an unproblematic theory of contingency. In fact, the validity of class as a vehicle of worker subjectivity can be related to the extent workers identify the root of their deprivation of control over production processes, times, spaces and sociality, in short their "working life," in power inequalities associated with the dynamics of the capitalist mode of production.

However, in cases when the relation between subjective conditions and the objective nature of capitalism becomes apparent to workers, this mostly takes place in a plurality of practices of solidarity and struggle as influenced by locale, history and culture (Fantasia 1988; Yarrow 1992). More important, the appearance of this relation is not necessarily the only possible outcome from the point of view of worker subjectivity. Consequently, the emergence of "class" is one among many possible vehicles of worker ideas, expectations and responses. Then, if it is still possible to think about class as a form of subjectivity, this is not the product of an objective position in the material world, but a result of a contest over signification and discourse which identify in the unilateral power of capitalist management its main target of criticism.

Conceptualizing "class" as a process through which workers come to explain their subjective deprivation and lack of power on the basis of the functioning of capitalism, then, allows me to maintain the epistemological rigour and consistency of the concept of class while at the same time leaving it open to contingent levels of explanation. This finally allows to question to what extent worker subjectivity is a "class" subjectivity, or how proximate it is to an explicit class

to a large extent also the basis for "orthodox" Marxist arguments. However, while they shared the idea of the workplace as an area of denial and suppression of individual worker identities, many Marxist critics regarded at the same time the factory as the primary area of development of an antagonist class consciousness in response to the same denial and suppression.

In particular, the ambivalent nature of the workplace in Marxist views was reflected in the notion of an evolution from "false" to "true" forms of consciousness as the emancipation of the subject from its economistic aspirations towards the international subversion of the capitalist social order (Lukacs 1971). Other authors articulated this process in a teleological dynamics ranging from the recognition of class position to the definition of class opposition (Mann 1973). However, the polar opposition between denial/manipulation of worker identity from one side, and its re-appropriation as a conscious challenge to the whole capitalist order from the other simplified, or even neglected the importance of worker practices developed at the shopfloor level. In fact, revolutionary class consciousness does not exhaust the whole range of resistant and unreconciled workplace practices, while at the same time it confines the "real" worker consciousness in specific forms of representation, such as those conveyed by the party organisation.

More important, both the management-oriented and the "orthodox" Marxist perspectives lead to a separation of the subject from its consciousness, reifying this latter in an a-historical series of prescriptions. They do not consider that production under capitalism cannot be merely assumed as an undifferentiated area where individual lives and meanings are simply disarticulated by the factory organisation of time and space. Consequently, they neglect to analyze the multiplicity of sources for imagery and ideas, and how everyday experiences and social action relate with collective consciousness modifying it and being modified by it, and fixing various levels of consciousness at various situations and subjective conditions (Marshall 1983). Recognizing the importance of these questions, however, creates further problems to be addressed as a preliminary step for this research. In fact, once the notion of class consciousness

CHAPTER ONE

Out of Control. The Challenge of Subjectivity to the Study of Labour

> For when is a feeling really natural and simple?... if you escape from this drab of repetitiveness into the darkest recesses of your being, where the uncontrolled impulses live, those sticky animal depths that save you from evaporating under the glare of reason, what do you find? Stimuli and strings of reflexes, entrenched habits and skills, reiteration, fixation, imprints, series, monotony!.
> (Robert Musil, "The Man without Qualities")

1.1 The Eye and the Mirror: Subjectivity, Consciousness, and Class

Sociology of work has assisted in the last three decades to the redefinition of topics and frameworks of analysis which interrogated fundamental assumptions in industrial policy making and theory. In particular, industrial sociology was challenged in most advanced capitalist countries for having throughout this century confined workers in the role of passive bearers of responses to be accommodated and satisfied inside top-down approaches to organisational restructuring. The idea that production under capitalism is a space of mere alienation and obliteration of workers' lives, which are separated from their broader social relations and totally subordinated to the imperatives of managerial control, was shared by different and competing perspectives. This was certainly the case of management theories of job satisfaction, job enrichment and the "humanization" of the workplace. These views, following the preoccupations of the "human relations" school of the 1950s, were aimed at defining the workplace as a reconciled public space where the most de-humanizing aspects of the assembly line production could be amended (Littler 1990, Hodson 1991). But a similar image of the workplace provided

worker expectations and responses to changing configurations of production at SAMCOR. The adoption of a "technological road" by the company will be analyzed from the point of view of its consequences for workers and unions. Notable consequences concern the continuities between flexibility and "Fordist" patterns of industrial organisation, their differences on issues of ideology and worker involvement, the inability of flexible organisation to minimize workplace conflicts, the capacity of flexibility to generate indeed new patterns of conflict, and the profound implications all this carries for forms of worker collective organisation.

The relations between these aspects define unintended effects for the viability itself of the "technological road" at SAMCOR. Issues of organisation and militancy derived from this study will be summarized in conclusion, both to account for what I learned on worker subjectivity in this company, and as a guide to further research.

Employees can attribute words and meanings to an experience whose meaning is otherwise obscured by the routine of the factory. The goal of this research is not to restore a transcendental autonomous proletarian subject to a pristine integrity distorted by capitalist alienation. It is rather aimed at showing how the experience of workplace social relations, which may become explicit in episodes of industrial action or negotiation, is articulated in everyday factory life in its multiplicity and contradictoriness of meanings.

The role of meaning and discourse in social practices which produce worker subjectivity is currently influencing many aspects of the sociological study of work. A summary of these trends will provide a general framework for the findings of my case study. In the first chapter I will in fact critically evaluate sociological debates on worker subjectivity in the context of changing forms of work organisation. The notion of "flexibility" will be unpacked, emphasizing the substantial continuities with traditional forms of mass production and the discontinuities emerged in managerial strategies in relation to worker participation. The second chapter will outline the methodology of my enquiry. The adoption of observational research and semi-structured interviews will be discussed in the context of the broader epistemological implications this carries for the study of subjectivity.

Chapter Three will examine the basic patterns of development of South African automobile manufacturing and the new challenges of international competition. In particular, the ways in which the challenge of flexibility is internalised by manufacturers define two basic alternative paths to restructuring of work and production organisation, which I will analyze as the "ideological" and the "technological" road. These aspects, and the peculiar constraints they provide, have a direct impact on the evolution of my case company, SAMCOR, and on the definition of managerial strategies of work and production organisation strongly reliant on technological innovation, which will constitute the subject of Chapter Four. Patterns of technological innovation and their relations with the structuring of social relations are at the core of this problem. The last chapter addresses the empirical findings of my research in terms of

to sets of norms and assumptions in given situations, their experiences in order to articulate responses to an external environment. This is a broader and more differentiated concept than notions based on behaviours derived from the objective nature of social relations (class consciousness), or on the definition of reactive processes of adaptation (attitudes). It encompasses, instead, visions of how employment relations are and how they should be, perceptions of individual identity and collective solidarity, rationalizations of conflict and of acceptable compromises. These elements do not necessarily constitute a sort of intellectualized image of the workplace social relations to be analyzed as a precondition of collective practice. Instead, they arise precisely from workplace-based social practices.

I substantially start from a concern with "bringing subjectivity back in" trying, however, to specify how subjectivity is, first, not only a source of response to change, but a force actually shaping change. This can develop in intentional and unintentional ways, and through practices that can express acceptance, compliance, or resistance. Second, the factors which enable workers to determine industrial change are not only developed in relation with the conditions of production. The impact, in defining worker responses to restructuring, of patterns of interconnected social and institutional determinants, what Stanley Aronowitz (1973) called labour's "unfolding subjectivity," means that workers bring on the shopfloor a multiplicity of needs, expectations, identities, experiences, forms of sociality, affiliations and moral regulations. As Charles Sabel (1982: 80-81) wrote:

> (...) The workers' world must be understood as an independent and integral whole in which ideas of ambition and dignity, early experiences at school and on the labour market, outbursts of rage at management, and even acceptance of certain hardships combine according to stylistic canons that the worker recognizes as his own. These canons shape his responses to the unforeseen.

changing forms of work and production and organization, and I think it is a good starting point for conclusions that may be tested in other sectors.

This research will provide a framework to explain the impact of worker subjectivity on processes of industrial restructuring in a South African automobile manufacturing company. This will be accomplished by relating my discussion of restructuring, on one side, to sociological debates on flexibility in work and production organisation and their relevance to South Africa. From another side, a concept of workplace subjectivity will be developed as related to debates in various fields of the study of work and working class cultures, consciousness and practices.

"Flexibility" as a concept emphasizes worker capacity to adapt to rapidly diversifying production requirements responding to short-time market fluctuations, operating on multiple tasks and activating self-inspection and communication with upstream phases of the process (Sethi and Sethi 1990). The relevance of worker shopfloor cooperation and communication in this scenario makes the management of worker subjectivity relevant for production flexibility, a theme scarcely emphasized by previous paradigms. Planning for flexibility seems also to require a closer interaction between management and the employees in the appropriation by the former of capacities and knowledge of the latter, while at the same time maintaining the higher possible degree of control in the range of workers' behaviours. However, this also implies, in contradiction with the concept of planning, a greater susceptibility of the organization to unpredictability in subjective responses at the shopfloor level.

Workers' self-perception in relation to the firm, their identity and expectations, and the evaluation of their individual and collective power become directly relevant for the organisation of work and production. In some analyses of the labour process this implied a shift in understanding subjectivity, from obstacle to resource in control mechanisms. In other views, workers' social knowledge and practices could redeploy the borders between control and autonomy in the socio-technical environment of the factory.

By subjectivity I mean a process through which collective social actors elaborate, according

which articulate these responses. The "working class consciousness" is indeed defined by these practices as one of their possible outcome, far from being inherent to the condition of the waged worker. I then chose to turn to a broader understanding of dynamics of resistance and militancy, which came to be part of my notion of "subjectivity."

Third, I maintain nonetheless the importance of the notion of class as comprising a plurality of practices defining common meanings and identifications. Therefore the struggle of the subaltern inside relations of wage labour, as that of many other social actors expropriated by market forces of the chance to control their life and the satisfaction of their needs, can still be conceptualized to a large extent as resistance against the capitalist mode of production. This, of course, is mostly a political preference: as such, it can help explaining why I chose this particular subject, but not the concepts and the epistemological framework I adopted. In fact the questions at the hearth of this study can be addressed only through a radical re-elaboration of Marxian categories. This implies taking Marxism as a theory of social antagonism and as a tool to analyze subaltern subjectivities and their material and discursive practices, instead of assuming Marxism as the objective, scientific study of capitalism, of which struggle and resistance would be mere and "necessary" derivations. This, conversely, allows me to maintain "class" as a crucial vehicle of meanings, images and identification.

From one side I accept "class consciousness" not as a necessary outcome of exploitation, but as a delimited form of collective subjective identification developed in concrete forms of solidarity and struggle. From another side, accepting such a contingent concept of processes of class formation does not mean drowning it in an undifferentiated relativism of forms of consciousness, given the peculiar capacity of this concept to define the role of capitalism as a system of social relations reproducing patterns of authority and inequality. In this way, the empirical and epistemological consistency of the concept of "class" vis-a-vis capital domination preserves it as a worthwhile topic of analysis. I apply these orientations to the automobile industry, since this is the field which has by far most influenced the sociological debate on

INTRODUCTION

A recent reorientation in the focus of sociology of work and labour movement analysis raised new scholarly attention to the role of workers' perceptions, expectations and responses in explaining processes of organisational change and industrial restructuring. Worker subjectivity is being recognised as an active and constitutive force of change in workplace social relations. This is to a large extent coincidental with debates, bordering between sociology, economics, and politics, on the conditions for the success and diffusion of alternative production paradigms inspired by the idea of flexibility. My interest in these issues mainly derives from the conviction that only an analysis attentive to continuities and discontinuities in paradigms of work and production organisation can provide an adequate background to the study of changes in the nature of work under capitalism.

Three ancillary preoccupations underlie these considerations. First, as I will show, debates focusing on the renewed role of subjectivity in production have generally emphasized ruptures with pre-existing organisational models allegedly marked by authoritarianism, routine and lack of worker initiative and commitment. This view obscures the ways in which the activation of worker subjectivity can be embedded and compatible with the persistence of traditional patterns of organisation, or how organisational change may enter contradictions with the same subjective side it tries to activate.

Second, and related to this, my principal concern is with the study of worker resistance. I started studying South African labour with a focus on the organisation of the independent trade unions. However, I realized that organisational changes in South African workplaces, where management shows a remarkable degree of initiative in adapting to domestic and international pressures, can sidestep, and potentially undermine, the role of national unions in channelling worker militancy and representing worker interests. This conversely emphasizes the plurality and diversity of worker responses in particular situations, and requires a focus on material practices

resources by balancing co-operation and competition among productive units (Hirst and Zeitlin 1991: 3).

The advantages of such a productive configuration would consist in lessening the reliance on centralized regulation, allowing for a higher capacity to accommodate unstable consumer tastes (Piore and Sabel 1984; Lorenz 1993). This further implies the possibility to regulate wage relations at a "micro" level in such a way as to avoid rigidities and breakdowns in solidarity at the same time.

A capacity to adapt rapidly to shifting product markets questions in many views "mass production" as the most effective forms of organisation in alternative to the "flexible firm." Basic components of mass production have therefore come under increasing critical scrutiny (Sabel 1982: 35). This is the case of "Taylorism" (Taylor 1967; Noble 1977), defined as a structure of labour control based on a separation between conception and execution of tasks, the fragmentation of complex jobs into sequences of operations which can be performed at comparatively lower levels of skill, and the concentration of the holistic knowledge of the production process at the level of management, which translates this knowledge into detailed instructions based on time and motion study (Lazonick 1988: 13). "Fordism," on the other hand (Wood 1993: 539; Meyer 1981) describes, in its advanced stage, a system of mechanized production based on dedicated machinery (Womack, Jones and Roos 1991: 41) and automated transfer mechanisms (the "assembly line") connecting individual operators and allowing them to perform synchronized, linear sequential tasks. Parts are designed to ease assembly and minimize fitting.

"Fordism" and "Taylorism" came to be widely identified as two sides of the same productive paradigm by critics attributing to the system an incapacity to adapt to market fluctuations. Various rigidities were identified in this regard. First, given the standardized nature of production and the search for economies of scale, mechanization is prone to bottlenecks such as long setup

> Labor is both subjection and subjectivation (...) in such a way that all notions of either the free will or the determinism of the subject must be discarded. Subjectivity is defined simultaneously and equally by its productivity and its producibility, its aptitudes to produce and to be produced (Hardt and Negri 1994: 11).

This involves a high degree of unpredictability for the production planner of whether subjectivity ultimately inhibits or enhances the introduction of flexible production methods. In the next section, some of the controversies over the concept of flexibility will be summarized to clarify its ambiguities and shortcomings in the following discussion.

1.4 What's in a Model: The Flexibility Debate between Subordination and Consent

Various influences affect the discussion on the necessity of flexible methods and structures of production. Issues of organizational effectiveness and efficiency stress the combination of flexible skills and competencies in the workplace with an increased worker responsibility and initiative. Moreover, "lean production" arrangements are aimed at reducing costs, stocks and times for machine setup and material transfer. Japan has been widely identified with this model as a break with established production methods. The extent and nature of this break are under scholarly attention; this makes the debate on flexibility overlap with the conceptually distinct issue of "japanization" of manufacturing on a global scale.

Rapid shifts in product markets have been recognized as a major component of the "flexibility challenge." This particularly in the literature emphasizing the notion of "flexible specialization." Common to this body of theory is the

> crucial regulatory problem (...) of sustaining the innovative recombination of

relationships between workers' experiences and sociality. Everyday life as the point of view of the ordinary people (Benjamin 1968) can bridge this gap as far as the subjective as a site of communication, or of material and symbolic exchange, "can be the passage to understanding the intersubjective" (Maffesoli 1989: 16). The position of workers in networks of daily communication on the shopfloor is at the same time a source for everyone's subjectivity and the mode of its exercise in collective intersubjective relations in response to managerial initiatives (Sewell 1992).

The nature of the factory floor is here ambivalent. It is a space of sociality, but this is also conditional upon the experience of common problems such as line speed, wage hierarchies, struggles over distribution of control and rewards. This defines it as a delimited domain for the development of a collective subjectivity. And it ultimately clarifies the notion of "workplace" subjectivity as complementary to "worker" subjectivity.

At this point, the initial question of the relationships between flexibility and subjectivity can be clarified. Flexibility cannot merely be regarded as a productive and organisational strategy to harness worker subjectivity for the attainment of increased production. While flexibility stimulates a redefinition of subjectivity along the promise of an increased worker control over production, it can also make the persistence of hierarchies and inequalities more apparent. In this way, a strategy designed to promote workers' involvement can have effects ultimately opposed to its stated aims. The resulting conflict can profoundly redefine flexibility itself. The relation between flexibility and subjectivity is ultimately recursive, more than based on a unilinear cause-effect dynamic. Each element of this couple dynamically influences, and it is influenced by, the other:

> Subjectivity must be grasped in terms of the social processes that animate the production of subjectivity. The subject (...) is at the same time a product and productive, constituted in and constitutive of the vast networks of social labor.

equal opportunities and mutual recognition. Motifs of workplace and community resistance are historically interlinked in South Africa. Here as elsewhere the idea of a moral economy of work lays in a context of racial oppression the moral bases of protest (Kelley 1994).

My notion of subjectivity emphasizes the problem of explaining the transition from individual and localized forms of subjectivity to group and collective dimensions. This can be addressed at various levels. First, the importance of cooperation and communication in the flexible workplace underlines group dynamics. Sabel (1982: 192) points out how the division of tasks and authority in the capitalist labour process constrains the range of possible worker responses creating common experiences at the level of the work group. Group identities may be based on occupation and status, or on the informal nature of the work group as experience of common problems and shared difficulties and responsibilities (Weir 1988). Informal group cultures as a way to cope with the powerlessness implied in technological rationalization and the redefinition of worker identities may enter a tension with managerial attempts at institutionalizing group dynamics as part of its strategy of control (Grzyb 1981). The workplace appears then as a functional integration of work collectives ambiguously defined by their position in the organization of production and by internal patterns of identity and communication.

Second, the collective dimension of worker subjectivity can be defined as an underlying component of factory life which may or may not become apparent in cases of overt industrial action. The success of strikes may be explained in terms of the prior emergence of new meanings and identifications, a different worker morality and culture of struggle out of workplace daily interactions. During conflict, collective social practices make the nature of relations of production visible as the product of labour's daily activity. This is allowed by a suspension of established rules and the emergence of a separate public sphere, a discursive "space" of visibility (Arendt 1958). Here labour is restored to a dimension of activity generating solidarity through shared rituals and symbols inverting and appropriating relations of authority (Bachtin 1970).

Third, a focus on the collective dimension of workplace subjectivity can explain the

workplace.

This notion, derived from Thompson (1971), is a major component in proletarian "world views." It summarizes a set of relations between dominant and dominated groups as a continuous and unstable reassertion of usages and traditions. In the workplace, these relations, as often only implicitly part of employment contracts, require from the subordinate the acceptance of its co- lition to preserve spaces of job control and from the dominant the recognition of some of these spaces to discipline the workforce and minimize the costs of labour turnover (Rodgers 1978; Gersuny and Kaufman 1985). This does not imply consent or legitimation. Quite on the contrary, it likely stabilizes an implicit, customary barrier to managerial practices beyond which conflict erupts (McClelland 1987). In the South African context, "moral economy" is enriched by a further dimension. Given the absence in the country of a strong tradition of negotiated settlements in the workplace, this expression may define "acceptable" practices not as aimed at recreating conditions for stable social relations, but as a function of expectations about the future character of a transformed workplace, or of what is worth struggling for.

Ideas of fairness and equity in the workplace which sustain the "moral economy" are strictly linked with extra-workplace determinants of workplace subjectivity. In the South African case this is an integral component of workplace social relations. In fact, shared perceptions of injustice and deprivation under apartheid decisively shaped the moral economy of South African workplaces, the nature and contents of demands by organised labour, the boundaries of tacit, daily negotiations between workers and employers, and workers' ideas of democracy (Webster and Von Holdt 1992; Mamdani 1996). Moreover, the communitarian ethos of worker residential locations can "laterally" reinforce the autonomous constitution of subjectivity in the workplace by defining an opposition between collective values based on dignity and human rights, and a capitalist labour process dominated by greed and profit (Adesina 1989). The interaction between factory social order and racial ordering of society may be seen as violating the promises of industrial work and modernization, invalidating norms of workplace power relations based on

called "world views" as "sets of hopes and fears" and "maps of the social world" providing workers with visions of success and failure which articulate ambitions and expectations. This also implies that subjectivity is an ambivalent concept: those "visions" legitimate workplace inequality, but they are nonetheless liable to be transformed by awareness of common problems, workplace socialization and action, to articulate a new sense of solidarity as a strategy to achieve determined goals. Even if these strategies can be conveyed and organized in ideologies, for example through the action of intellectuals or trade unions, these latter are not entirely accountable for their emergence. The analysis of subjectivity is thus not to be confused with the formal and organisational vehicles of its generalization and consolidation. It may well be the case indeed that a continued experience of subjective violation can make conflict a vehicle for collective world views which only at a later stage provide legitimation for organisations.

An arbitrary managerial decision (for example to increase the line speed) may violate a set of normative assumptions, breaking a very uncertain border between worker acceptance and conflict. The experience of violation can become all the more devastating if associated with forces which disarticulate, under the cover of economic necessity, patterns of values sanctioned by time and tradition (Kerkvliet 1977). Violation can even be more manifest when contrasted with the promise of equal opportunities enshrined in the industrial and urban context (Sabel 1982: 188).

However, violation cannot be simply seen as equivalent to alienation or obliteration of subjectivity. Its wound, once absorbed in the experiential field of the labouring subject, becomes part of subjectivity itself. As James Scott (1990: 106-107) noticed, individual compliance with dominant values is generally conditional: in fact, it implies a particularly insidious uncertainty: the subordinate accepts sacrifices for the sake of expectations derived from promises which are usually betrayed. Violation and managerial arbitrariness, such as in the case of unilateral changes of the line speed, reallocation of jobs and tasks, or supervisory interference, therefore illuminate a further aspect of subjectivity constitution. This can be assumed as the "moral economy" of the

cultures of resistance to make sense of the experience of modernity, with its promises and violations, in an urban industrial world marked by racism, discrimination, and unacceptable living conditions (Bozzoli 1987). However, the unions could successfully cope with this cultural challenge because they were at the same time able to replace existing forms of "traditional" authority and to overcome subordinate worker identities such as those generated by hostel life (Webster and Khuzwayo 1975; Stewart 1981a,b; Sitas 1983; 1985; 1987).

The interaction of factory life as an agent of modernity and the neo-traditionalism fostered by the institutions of apartheid converged in this way to develop a working class identity resistant to waged labour while at the same time vindicating the fulfilment of its promises in terms of individual and collective promotion and emancipation. From workers' oral accounts (Makhoba 1984; Qabula 1989) militancy and action are determined not only by the subjective position in the social organization of the workplace. They rather require a further mark of immorality proper to capitalist exploitation and to the township residential conditions. The choice to join the union often evolves out of a combination of low wages, harsh and dangerous working conditions, and the sense of continuous offence and abuse implied in managerial arbitrariness, as an insult to a whole moral and political understanding of work.

South African studies on class and militancy confirm the importance of cultural and discursive practices through which the subaltern give meanings to their relation with the institutions of modernity. If a working class imagery and language emerged as the most powerful source of resistance to apartheid, this was mainly possible due to the capacity of the organisations to utilize those imagery and language to structure, validate and transmit the experiences of wage labour and factory life in a way which was consistent with traditions and patterns of resistance expressing moral and ideological worker formations internal and external to the workplace (Alverson 1971; Bonnin 1987; 1994; Atkins 1993; Moodie 1994; Hemson 1995).

The attention for processes of construction of subjectivity and of its violation in the South African case requires a recognition of the specific importance of what Charles Sabel (1982: 11)

industrialization in contexts of authoritarianism and repression may define a high level of militancy in economic demands over wages and working conditions, even if this is not consciously articulated. The lack of political radicalism is not sufficient in this case to talk about "false consciousness" without resorting to arbitrary and tautological assumptions. An understanding of "economistic" actions and behaviours should start instead from meanings constructed by workers themselves. In fact, meanings of actions cannot be simply evaluated from their immediate results. Experiences, thought and action inside the factory respond to broader needs of social change, and not only to the nature of the wage relation (Holmstrom 1984; Humphrey 1982: 80).

The impact of social change and modernity on changing patterns of labour organisation and militancy has shaped, in particular, the arena of South African labour studies in the last three decades. The South African case is important in comparative perspectives on labour in peripheral societies, given the peculiar presence in this country of a sizeable urban industrial proletariat organized in strong and democratic grassroots unions (Friedman 1987; Baskin 1991). The emergence of the unions was assumed as a powerful organizational vehicle of worker subjectivities arising from a new class composition and changing labour market structures (Kraak 1994).

Processes of industrialization, urbanization and proletarianization were captured by the unions' articulation of identity and resistance along radical languages of class. Organised labour succeeded in providing a class-based discourse to worker subjectivity in South Africa because it initially re-elaborated and adapted cultural motifs of identity and resistance, mainly originated from the dislocation of a rural social and symbolic background due to long-term processes of migration to mining and industrial areas (Fischer 1978; Bozzoli 1984; Bradford 1987; Delius 1989; Guy 1990).

Thus, organisations of the black workers could expand their membership and spread their grassroots practices of accountability on the basis of their ability to reconstruct pre-existing

workplace life which were unintended for managerial strategy, it nonetheless continued to neglect the social and discursive processes constituting class as a process of subjectivity formation.

Conversely, more recent industrial policy debates on flexibility and work reorganisation were coterminous with an explicit epistemological systematisation of subjectivity as a crucial concept in labour studies (Thompson 1989: 249). This is particularly notable in some recent influential Foucault-inspired contributions to labour process analysis (Knights and Morgan 1991; Sakolsky 1992). The emphasis here is shifted from the unilateral nature of managerial control to workplace power relations as networks of relationships constituting, and constituted by, the subjects, notably workers and employers (Knights 1990; Willmott 1990; Sewell and Wilkinson 1992; Sosteric 1996). In these perspectives, the nature of power as acting through processes of construction of subjectivity is combined to the workers' search for security, recognition and stable identities to cope with industrial restructuring and the associated anxiety (Knights and Willmott 1989: 541; Knights 1990: 319; Sturdy 1992). As a result, worker consent to factory imperatives and hierarchy, and to intra-workplace fragmentation and competition, are by-products not so much of manipulation of worker consciousness, but of daily interactions which reproduce power relations as a largely unintended consequence.

Other contributions distance themselves from the implications of this framework in terms of an all-encompassing nature of power and the invariably self-defeating nature of subjectivity (Clegg 1994; Jermier, Knights and Nord 1994; Thompson and Ackroyd 1995). These latter stress, instead, the vulnerability of power, since its capacity to reproduce subordinate worker identities is conditional upon its conformity to shared values and norms which make those identities acceptable. It is, therefore, linked to promises which, once broken or violated, expose the underlying nature of relations of subordination, opening spaces for resistance.

Studies of peripheral working class formation (Shivji 1976; Sandbrook 1977; Humphrey 1982; Adesina 1992: 14) indicate that the violation of the promises of modernity and

is constituted and enabled to challenge and modify the external social environment. These practices are indications both of how domination works on its subjects - and with which promises it can win their allegiance - and of what are its violations and limitations.

The notion of worker subjectivity as a process developing through specific social practices impacts on sociological analyses of the "labour process" in the workplace. These are generally much more concerned with issues of workplace "control" than with dynamics of worker identity and opposition (Littler 1982). Their emphasis is on questions such as fragmentation and destruction of workers' skills, knowledge and control (Braverman 1974; Shaiken 1986), the impact of technology and corporate bureaucracy in minimizing resistance (Edwards 1979; Gordon, Edwards and Reich 1982), the concomitant effect of ideology and politics at the state and factory level in manipulating worker consciousness and initiative (Burawoy 1979, 1985). However, this framework of analysis gradually came to recognize how capital's domination increasingly relies on its capacity of organising the experience of its subjects inside common interests and patterns of signification. These channel workers' self-determination into the identification of their freedom with the economic necessity of the firm. This recognition has led, in particular during the last ten years, to a major shift in labour process analysis. A new sensitivity emerged for issues of subjectivity formation in dynamics of acceptance, consent and resistance.

Management's control was initially seen as dependent on the delegation of limited autonomy to the workplace (Friedman 1977; Coriat 1980; Edwards 1990). The labour process was consequently reconfigured as inherently ambiguous and "dual," marked by a reciprocal dependence between workers and management which determines mutual limitations and, as a consequence, a development of worker subjectivity which autonomously impacts on the factory's everyday life, even in the absence of active resistance (Cressey and MacInnes 1980). Moreover, the workplace, and not the class, rose to prominence as the initial repository of worker collective identity (Beynon 1973). But if this provided a wider scope for the study of aspects and of

family values (Willis 1977; Hareven 1982), or on the construction of the female worker as a subject exposed to gendered discourses shaping career strategies (Pollert 1981; Fernandez-Kelly 1983), allocation of skills and tasks (Von Werlhof 1988; Massey and McDowell 1994), segregated identities on the job (Cockburn 1985; Baron 1992), and peculiar dynamics of female self-organization and resistance (Kergoat 1982, 1992; Collinson 1992).

However, an analysis of all these aspects largely falls beyond the scope of this thesis. My case study is concerned with the determinants and the dynamics of worker subjectivity internal to the workplace, leaving an in-depth investigation of external determinants to future research. But, while this distinction is viable at an analytical level, it is nonetheless impossible to entirely discount the relevance of extra-workplace determinants of subjectivity in shaping actual workers' images of the factory. For this reason I consider worthwhile to stress the existence of broader implications of subjectivity to explain the contradiction between relations of domination and workers' regulatory ideas. For example, workplace dynamics may be profoundly shaped by the inherent contradiction between the individual worker's search for stability in his broad spheres of social relations and the instability in his life generated by industrial change (Post 1978: 148; Agier 1987). After this parenthesis, I will now introduce issues of worker subjectivity which will be relevant for the following discussion on organisation of work and production.

1.3 Promises not Kept. Worker Subjectivity and the Restructuring of Work

In my discussion on subjectivity and consciousness, I emphasized that the study of workers' representations and ideas of the workplace life requires an understanding of the concrete social practices shaping those constructs under particular circumstances. As Clifford Geertz (1983: 4) wrote, forms of consciousness cannot be separated from their local manifestations, their "instruments and encasements." This implies a departure from the idealization of the "subject-agent" (O'Hanlon 1988: 221) and a new understanding of practices through which subjectivity

potentially highly radicalizing effects on the unions themselves (Cohen 1980; Zerzan 1974; Roth 1974; Ramirez 1978; Groh 1978; 387; Stearns 1980; Cooper 1987; Seidman 1988; Turner 1995).

The impact on labour radicalism of broader issues of social and political democratization, housing and educational patterns of inequality, persistence of racist ideologies and practices are a major preoccupation of some of the most recent contributions to labour studies in South Africa. Many of these authors (Lambert and Webster 1988; Adler 1994; Adler and [illegible] 995; Von Holdt 1995b; Buhlungu 1996) specifically address the impact of these broader patterns and implications on workplace-based worker discourses. This directly follows and relates with an increased interest for workplace conditions of a black working class stabilized in the urban context and drawing from the workplace a primary source of identity.

In this way, the impact of racial segregation on mass production and deskilling (Lewis 1983) or the contradictory position of the African semiskilled worker, between the promise of social promotion in industrial work and the reality of despotic racial control and domination (Webster 1985) can be seen in a complex light. In particular, the multiplicity of sources for an oppositional consciousness and the way they enrich and problematize an entrenched class imagery and language can be appreciated from these contributions.

However, resistant practices are determined not only by factory-related motifs, but also by multiple identities defined at the border between production and reproduction (Gorz 1993) and between working-time and leisure-time (Clarke, Hall, Chambers and Roberts 1976; 45, 50; Calagione, Francis and Nugent 1992). Finally the impact of determinants external to the workplace touches the role of reproduction and social needs in articulating struggles inside the factory and over the territory (Negri 1988; Cleaver 1992; Linebaugh and Ramirez 1992; Bonefeld 1992).

As a consequence, an enlarged understanding of the sources of working class resistance demands a renewed interest in the impact of external institutions and socializing agencies in shaping workplace identities. Studies on this topic focused on worker responses to school and

Department of Historical Papers at the University of the Witwatersrand, documents from the impressive collection in possession of Gavin Hartford in Port Elizabeth and those available in the office of Tony Kgobe, national coordinator for the automobile sector of the National Union of Metalworkers of South Africa.

I could visit the plant in different times during the period of my research, having access to all its main sections and with the possibility of talking to the employees on the lines. The cooperation of NUMSA shop-stewards was crucial: they organized visits to the departments of the plant for me and put me in contact with the workers I interviewed. Contacts with the shop stewards were provided by NUMSA national organisers, which greatly contributed to establish a climate of trust that is essential in these matters. Interviews focused on workers' perceptions of their job in three related aspects: organization of production (technology, layout of operations, tasks, skills), organization of work (teamworking, just-in-time arrangements, participation schemes) and understanding of restructuring (variations in supervisory authority, line-speed, self-responsibilization, changing workloads, outsourcing). Each interview took between one and two hours. Eight interviews took place as group discussions.

The definition of the group of workers I interviewed depended on factors largely outside of my will, such as the availability of employees and the ability of shop stewards to find time to help me to strategize, in a factory whose tight production schedules constitute an objective obstacle for this kind of research. In fact, SAMCOR is not particularly noticeable for its openness to researchers, and my dependence on shop stewards in organising interviews was mainly due to a generally uncooperative attitude on the part of the company's management. After weeks of negotiations, at the end of 1995 management allowed me access to the plant to interview workers on a "voluntary, after hour basis," and it refused to be interviewed claiming the "confidential" nature of the information I requested. Managers finally agreed to be approached only after I informed them that I had completed my interviews with workers. I utilized the availability of the company, albeit very vaguely defined, to introduce myself to shop-stewards and organize with

CHAPTER TWO

Research Methodology: Towards a "Working Class Sociology"

Autobiography is the wound where the blood of history never dries.

(Gayatri Chakravorty Spivak)

2.1 Researching SAMCOR Workers

The methodology I adopted, far from being a mere technical question, is an integral part of my understanding of the basic concepts of this research. As Fantasia (1988) realized, analyzing worker subjectivity as an interconnected pattern of experiences, responses, expectations and social practices is fundamentally at odds with survey techniques based on structured questionnaires. These provide a de-contextualized, static and fragmented understanding of individuality, isolating worker attitudes as reactive capacities from a broader understanding of the dynamic nature of the production process, everyday interactions, and overt and covert determinants of consciousness. For these reasons I preferred intensive semi-structured interviews to detailed questionnaires.

This research was conducted at the SAMCOR plant in Silverton, Pretoria, from March to September 1996. It includes intensive semi-structured interviews with 30 employees in the production of passenger vehicles. Workers in light and medium commercial vehicles are not included. Seven of the interviewees are shop-stewards, three of them full-time. I also interviewed managerial staff and officials and organisers for the automobile sector of the National Union of Metalworkers of South Africa. Finally, these data are integrated by archival research on sources both available for consultation and from private collections. These include the papers of the Federation of South African Trade Unions and those of the Taffy Adler collection at the

empirically addressed in the next chapters. In particular I provided a definition of subjectivity based on collective social processes and practices through which workers' world views and regulatory ideas as defined inside and outside the workplace can legitimise or justify cooperation, acceptance or resistance. As a corollary I redefined the question of class consciousness in terms of those processes and practices, criticising its idealization as an objective and necessary superior stage of opposition.

I nonetheless maintained the usefulness of the concept of "working class" as a vehicle for collective solidarity and opposition confronted to inequalities and subordination produced by capitalist organization of the workplace. Finally, I discussed the relevance of worker subjectivity for developments and debates in the organization of work and production, evidencing potential contradictions and problems in flexibility-inspired restructuring.

I will develop in chapters Three and Four my analysis of the South African automobile industry, introducing the responses that in chapter Five I will provide on the basis of my understanding of subjectivity. Automobile manufacturing has been in South Africa a decisive terrain for the emergence of a new black working class. Restructuring and flexibility provide arenas of struggle for workplace control based on the dynamics of promise and violation that I have here enunciated. These define contradictions between managerial requirements for worker participation and commitment and the permanence of traditional patterns of authority. These contradictions impacted decisively on forms of workers identity, solidarity and organisation.

Before dealing with these aspects, however, I will summarize the methodology I followed for my research.

from decisions by supervisors, or informal work-group practices, or the outcome of a struggle between workers and management (Child 1985: 109).

The straightforward application of "models" of organization becomes then problematic. In general, flexibility in adapting to market fluctuations does not necessarily imply, as corollaries, delegation of authority and control to workers and the overcoming of the Taylorist "distinction between conception and execution" (Jurgens, Malsch and Dohse: 1993); it can however, weaken pre-existing forms of worker identity and solidarity (Tolliday and Zeitlin 1986).

Worker participation as allowance to exercise power discretionally in a way that is not formally sanctioned by the hierarchy may contribute to corporate success. However, power is here caught in the dilemma to extend delegation of authority to lower levels to be more effective, but preventing at the same time these new authorities and their interests from becoming independent powers (Dohse, Jurgens, Malsch 1985; Clegg 1989: 190-91, 200-01). Without the persistent capacity of management to set boundaries to workers' discretion, participation schemes can easily become sources of conflict. This ultimately points to an inherent contradiction of flexibility-inspired models of restructuring. To be successful they need to formalize worker participation with its associated rewards. If this may provide advantages to the employers, particularly in relations with union organizations, they nonetheless create a new source of vulnerability. In fact, the persistence of power inequalities on the workplace can become more apparent thanks to worker expectations raised by cooperation schemes, exposing the company to increased conflict. This theme will be empirically explored in my case analysis of SAMCOR.

1.5 Conclusion

This chapter outlined the basic conceptual framework on which my analysis of worker subjectivity at SAMCOR will be grounded. That involved some questions which will be

which management is everyday compelled to address. Requirements for flexibility will arguably exacerbate the problem. These questions are not overlooked in analyses on South Africa, where they are indeed deepened by the presence of other, deeply entrenched reasons for conflict. Jean Leger (1992) analyzes for example the importance of black miners' "pit sense" as a crucial tacit skill to prevent rockfall accidents. This contribution to production provides black miners with a considerable leverage in relation to their white teamleaders, thus enabling them to claim basic fairness and equality of treatment. However, the Fordist nature of the labour process, the lack of recognition of skills and the racial manipulation of hierarchies and rewards prevented black miners' abilities from providing bases for consent. The result, which Leger calls "antagonistic cooperation," confirms the problematic nature of workplace relationships and the instability of balances in situations where worker participation is required.

These examples show that a more careful focus on social relations can provide arguments to critics of the "lean production." These point in particular to the persistence of traditional managerial practices and forms of labour market segmentation that can make cheap and docile labour relevant even inside the "flexible firm" (Pollert 1988). Some go as far as to question, from the point of view of labour control, the identification Fordism-mass production as opposed to flexibility-lean production (Hyman 1988; Clarke 1990). In fact, there was considerable flexibility under Fordism and, as analyses broadening the focus beyond the automobile industry show, craft-type and small-batch production continued to play a role even in times of fragmentation of tasks and standardization of products (Wood 1989b: 30; Smith 1989). Moreover, the transformation of management's intentions into practice does not usually take place in a linear way, but mainly through inconsistencies and gaps due to negotiations with relevant actors. Child alerts against overemphasizing managerial strategy in industrial restructuring:

> (...) one cannot infer a strategic intention from a particular form of work organisation or job design: such conditions at the point of production may result

authors identify in the update of old practices of union avoidance and repression, such as subcontracting and the establishment of plants in "greenfield," union-free areas, aspects of participation in Japanese companies in the Western world (Holloway 1987).

Trends towards "teamworking" can indeed reinforce these dynamics. Teamwork is questioned (Sayer 1986; Wood 1993: 547) as a method generalizable to the whole workforce or to the totality of a worker's capacities. Workers participating in teams are usually trained inside methods and values compatible with the company's definition of performance and improvement. This quite often requires only attitudinal and behavioural skills (Cappelli and Rogovsky 1994) and the maintenance of specialization, low levels of discretion and detailed prescriptions even inside teams (Wickens 1993). On the other hand, historical analyses (Price 1994) have shown how worker participation in problem-solving in Japanese companies cannot be assumed as resulting from a social pact incorporating worker aspirations. It rather derived from a balance of power produced by the repression of the unions' shopfloor regulation to adapt mass production to flexibility in tasks and assignments required by low volume runs of production.

A further source of contradictions for flexible production can be drawn from authors concerned with the "social construction of skills." This concept profoundly problematizes the issue of control on the workplace. In fact, flexible technologies may valorize the importance of workers' tacit knowledge and cooperative skills to operate the machines, especially in unpredictable situations. But these skills are uneasily formalizable, to say the least: then "tacit skills" constitute a new terrain of workers-management confrontation (Kusterer 1978; Sabel 1982: 80, 92; Manwaring and Wood 1985; Wood 1987; 1989a). In fact, "tacit skills" can provide semiskilled workers with a leverage in conflict, but they are nonetheless specific to a company or industry. Compared to artisan skills, they are not portable, and therefore they are a relatively weak source of bargaining power (Manwaring and Wood 1985: 190). Then, they also contradictorily foster consent and identification with the competitive success of the firm.

As a consequence, worker skills define a new uneasy balance between consent and conflict,

quality-improving device, which can modify Taylorist task assignments with regard to reduction of grades and demarcations, while maintaining structures of authority and division of labour unaltered (Wood 1989b: 26-27; Scherrer 1991). A JIT system could moreover provide for some sort of subaltern worker involvement. But this system, albeit antithetical to Fordism since it is premised on an increase in capacity utilization through a reduction of batch sizes of output, addresses nonetheless the basic concern of a Fordist system: optimizing the productivity-quality tradeoff (Wood 1993). However, this can require little significant variation in the degree of worker control of production, or autonomous decision making. A contradiction can nonetheless arise in this case between the growing importance of knowledge creation on the shopfloor and its embodiment in authoritarian managerial practices to enhance quality and productivity. Worker capacity to perform multiple operations, or multitasking, without a comparative enhancement of skills (or without a parallel multiskilling) can be an example.

In optimistic views (Martin 1985; Zuboff 1988; [illegible]ller 1991) "lean production" would replace the supervisors (the old "foremen") with new strata of shopfloor operatives communicating via computer and responding to central design/planning departments. Critics point out that these devices, while allowing a greater intensification of work and higher safety risks, eliminate indeed independence and responsibility from the shopfloor, defining at the same time a new aristocracy of highly skilled programmers (Shaiken 1986). It was noticed, for example, how the export of Japanese technology and manufacturing culture in "transplants" to other industrialized countries is generally accompanied with traditional forms of personnel management based on wage containment, union rollback, limitation of employee involvement and abrogation of delegated decision-making (Fucini and Fucini 1990; Berggren 1993; Dassbach 1994; Graham 1995; Williams, Haslam, Williams, Cutler, Adcroft, Johal 1992). From this point of view, for example, JIT can lead to despotic forms of labour control, "management by stress," high routinization, fragmentation and the denial of any effective worker participation (Kamata 1984; Marsden, Morris, Willman and Wood 1985; Dawson and Webb 1989; Garrahan and Stewart 1992). Other

economies of scale, and acting therefore as an obstacle to product differentiation (Krafcik 1988). In other words, a flexible organization of the human resources becomes more relevant than simple flexible automation.

Precisely considerations relative to workplace social relations make many authors criticize this understanding of "lean production." Hirst and Zeitlin (1991) accept that mass production is being replaced by flexible specialization as the prevailing paradigm, but mainly from a technological point of view. They recognize indeed that one single coherent alternative on work organisation is not emerging, given existing organisational and institutional plurality and hybridity. Marco Revelli's notion of Toyotism as an "integrated factory" system describes the materialization of the Fordist "dream" of the total synchronization of production, but in a context of high product differentiation. Taylorism is in his view perfected by Toyotism as scientifically defined productivity which shifts its focus from the individual operator to the system as a whole (Revelli 1993: XXI-XXVI; see also Berggren 1980). Higher costs for frequent tool- and die-changes are offset by employees' multi-machine operating capacity, allowing the plant's fixed costs to be spread over a larger output variation (Shingo 1989: 85). Workers' informal knowledge of the production process is turned from a source of defense and output control to an organisational advantage through suggestion schemes and problem-solving teams. This updates the Taylorist strategy of breaking up "soldiering" (Thomas 1985: 174). Then, the formalization of worker knowledge and cooperation is by no means in contradiction with traditional Taylorist management. My case study will show how increasing levels of technological innovation reinforce Taylorist work organization. In particular, flexible machinery does not necessarily imply a parallel flexibility in the ways workers are expected to use their initiative and creativity, or the chance for them and their unions to negotiate better rewards for flexibility.

In this perspective, while "Toyotism" does not break with mass production methods, it nonetheless creates a discontinuity with the kind of workplace social control historically associated with them. This can include a use of technology as a mainly labour-saving and

The extent of continuity and change between mass production and the new paradigms is widely debated. This is substantially beyond the aim of the present report. However it is important to notice how an increasing number of authors do not analyze mass production and lean production in terms of clear-cut alternatives. Some authors emphasize the nature of "trust" and "social contract" between management and labour under "lean production" (Kenney and Florida 1993). The shift in managerial functions from vertical command and direct supervision to horizontal coordination (Womack, Jones and Roos 1991: 198-199; Lowe 1993), would at the same time lead to the firm's imperative to harness workers' knowledge of production by providing employees with motivation and initiative (Hirschhorn 1984: 74):

> (...) Workers respond only when there exists some sense of reciprocal obligation, a sense that management actually values skilled workers, will make sacrifices to retain them, and is willing to delegate responsibility (...) (Womack, Jones and Roos 1991: 99).

However, Wolfgang Streeck (1987) separates in this regard "numerical" flexibility, as the firm's capacity to adjust employment levels to fluctuations in demand through retrenchments or temporary utilization of "external" labour market pools, and "functional" flexibility, as adaptation of the number and kinds of tasks performed by employees in a high-skill, high-wage contexts. In his view the search for flexibility and the new corporate identities it promotes tendentially undermines the stability of industrial relations systems, and the contractual role of trade unions in particular (Katz 1985; Katz and Sabel 1985; Locke 1990; Kern and Sabel 1991), unless they become partners in enhancing efficiency and competitiveness. The primacy recognized in this perspective to workplace social relations ultimately mediates between market diversity and flexibility. This openly contrasts with a purely technological road to restructuring, marked by heavy robotization and automation as factors raising costs, reinforcing the dependence on

aside for the moment the question of a real shift in delegation of power and control to the shopfloor, a conclusion can be tentatively reached. Namely, the use-value of work, its value-creating capacity, shifts in the new productive paradigm from the execution of prescribed tasks towards the formalization by management of worker cooperation and communication. Formalization here means that the new paradigm modifies managerial strategies in relation with workers' social activities on the shopfloor. Under Taylorism, the inevitability of worker communication and cooperation was at best grudgingly tolerated by the employers, and at worst considered an informal, unpredictable side of production to be minimised. Proponents of the end of mass production recognise instead the decisive importance of workers' information on quality, their precise requests for materials at any stage of production, the activation of employees' initiative in total quality programmes and suggestion schemes, but also the increasing relevance of reliability of reports from suppliers and of feedback from distribution. This recognition runs parallel with managerial policies aimed at formalizing worker cooperation and communication, activating specific workplace participative structures, disseminating a new discourse of worker responsibility and independence, and prefiguring schemes of differential rewards for the more active and cooperative employees.

Marx (1973: 706) anticipated how the incorporation of social knowledge as a direct force of production defined a "general intellect" at the basis of social practices at work. He then translated it into the objectification of worker knowledge and cooperation as the culmination of "real subordination." In this perspective the "general intellect" is not a worker-empowering characteristic of specific forms of work organization. That means that the valorization of worker knowledge and cooperation can take place even in contexts combining flexibility and a limited worker initiative with authoritarian and hierarchical forms of control. But while Taylorism considered subjectivity as a source of disturbance, or as an independent intellectual contribution by the worker which violated the rationale of managerial planning, in this scenario it becomes a resource (Revelli 1993: XXXIV-XXXV).

production. At the same time, downtime, delays and work in progress between phases are slashed. Strategically, the Taylorist concern with an efficient use of time and motion is then complemented by the efficiency of the whole system in cutting waste (Coriat 1991: 62-64). Taiichi Ohno, considered the father of the Toyota system, defined this concept as "autonomation": a recursive relationship between man and machine allowing for the employee not to be entirely controlled by the machine's pace and to intervene punctually in the correction of defects (Ohno 1993).

At the level of production improvement, quality circles, suggestion schemes and "total quality control" schemes are part of the paradigm. In particular, "Total Quality Management" (TQM) represents an evolution of the selective, ex-post and piecemeal activation of worker initiative in "quality circles." TQM is aimed at building quality inside the organization through delegation to the employees of responsibility, coupled with specific training in problem-solving techniques and identification of defects (Hill 1995). As a consequence of this paradigm, while in the Fordist model of mass production materials were "pushed" down the line, in the system inaugurated by Toyota parts and components are "pulled" by the requirements of the line at any given moment (Cusumano 1985: 266). Concepts like "kanban" (the "card system" to order parts at any stage of the process), teamworking and "just-in-time" (or JIT: the supply of the quantities needed at any stage of the process at any precise time they are needed) decisively contribute to this shift (Estall 1985). They also make of the shopfloor a crucial area of strategic decision-making (Coriat 1991: 56). This also implies the substitution of "horizontal integration" (cooperation and joint-ventures) to "vertical integration" (competition among supplier companies) in relations with suppliers (Altshuler and Roos 1984: 136-38; Womack, Jones and Roos 1991: 138-168). Finally, the promotion of company unionism as an alternative to centralized collective bargaining provides a crucial advantage for managers in circumventing vulnerability to collective industrial action and to tight contractual regulations on the shopfloor (Cusumano 1985: 158).

These changes are probably not only a matter of managerial discourse and ideology. Leaving

times and costly shifts to different lines of production (Womack, Jones and Roos 1991). Second, the overarching priority of a continuous flow of production, with the necessity to coordinate a high number of suppliers, led to high costs of stock-keeping and buffers between production operations (Cusumano 1985: 265-266). Third, the whole system is considered as particularly vulnerable to disruption due to industrial action and high turnover rate (Meyer 1981; Peterson 1981; Lazonick 1988: 16). Fourth, technologically-driven imperatives of control weakened management during the transition to Fordism. In fact, the system facilitated the concentration and the socialization of a sizeable factory proletariat at the point of production, providing for potentially devastating consequences in case of interruptions in particular points on the line (Gartman 1979).

Responses to these shortcomings assumed quite strong programmatic and ideological overtones in proponents of more flexible forms of organization, often attaching to the distinction between "Fordism" and "flexibility" the flavour of a clear-cut divide. Sabel (1982: 25-30) argues that "Fordism" as a paradigm can no longer contain a growing complexity in the nature of work. One of the most widely quoted alternatives in this regard is the "Toyota production system." Its underlying strategic objective is to cut costs associated with waste as everything which does not add value to the product. While this latter is an alleged characteristic of mass production (Karlsson and Ahlstrom 1996: 27-28; Gosh and Gaimon 1992), the optimization of the process requires reduction of costs due to inspection, transport and delay, and the reduction of times for die-changes, lubrication, machine uploading and downloading (Shingo 1989: 76-81). Other authors emphasize the worker capacity to perform single operations on multiple machines, with a greater combination of different operations in producing highly complex workpieces (Monden 1983: 102; De Groote 1994; Benjaafar and Ramakrishnan 1996: 1198).

A quality output for a mass consumer market can thus arguably be achieved without mass production methods, given the capacity of a flexibly organised production process to satisfy a diversified demand in limited production runs, eliminating waste and rigidities of large lots

1980s drove many manufacturers out of the market, forcing others to merge and rationalize their operations. Moreover, local content defined as percentage of the mass of the car facilitated the domestic production of heavier and relatively low-value components, creating a further barrier to technological innovation (Southall 1985: 310).

A change in government orientation, already evident from the half of the 1970s, culminated in policy measures (from the "Phase VI" of the local content programme in 1989) aimed at promoting rationalization to reduce production fragmentation. Orientation to export was seen as integral to this solution, and the definition of local content was enlarged to include not only the share of the value of a vehicle produced locally, but also assemblers' export quotas. At the same time, protection from imported components was reduced. But in 1993 seven manufacturers still produced less then 200.000 units in 11 makes and 34 models (Duncan 1991: 28-32; Black 1994: 52-65). In 1991 the average production per model was 6,000. In 1990 this figure was 30,000 for Brazil, 40,000 for Australia, 120,000 for Japan, and nearly 200,000 for Europe and United States (Black 1994: 71). This exceptional fragmentation made the attainment of minimum efficient scale of production highly problematic. At the same time, trade union estimates indicate that models produced in South Africa in 1995 could be imported at a reduced cost of 20-30%, if it were not for the remaining market protection[1].

Obstacles to policy change in the sector can be seen as the outcome of a complex interplay between state and multinational companies. From one side, the encouragement of a national industry remained a priority well into the 1990s. From another side, the rise of the Japanese in the 1970s was linked to their capacity to penetrate diverse markets with basic "modular" cars sold in variants easy to build. This meant for European and American multinationals that the advantage of being positioned in a particular market, especially a peripheral one like South Africa, became relatively less important compared to building cars with parts from various

[1] Chris Lloyd, NUMSA, interviews with the Author, 15.8.1995

Africa's internal political and economic crisis to make the logic of inward-looking industrialization disfunctional (Southall 1985: 308). Moreover, given the prohibitive costs of high-technology development and the unavailability of local design, a logic of "national production" was objectively subordinated to strategies of integration and internationalization of major transnational groups, which could globally articulate assembly, manufacturing and component supply.

Therefore, the internationalization of the sector ambiguously impacted on South Africa's automobile industry. From one side, it favoured the proliferation of producers and makes; from the other side it decisively constrained their competitiveness. The South African auto industry, as developed in the last thirty years, is characterized by small volume production of a high number of models in multiple platform (i.e. the combination body-engine-gearbox) configurations. This provides for different lines and processes inside most plants. In 1973 16 passenger vehicles manufacturers operated in the country's 13 assembly plants, sharing a market of 229,400 units among 53 model lines. During the 1980s the number of manufacturers rose to 22 including commercial vehicles, for a total vehicle market of 342,300 units (Swart 1974: 163-164, 176; Black 1994: 52, Dix 1995).

Local content facilitated a major locational shift from the industry's historical core, the Eastern Cape, towards the Pretoria-Witwatersrand-Vereeniging (PWV) region, where most local component firms were concentrated (Adler 1985: 30). Chrysler moved to the Pretoria area, in the future SAMCOR plant, in 1968. In 1970, PWV accounted for 52.6% of the market share (Oberhauser 1993: 108). Import substitution in a phase of prolonged economic growth following the repression of the anti-apartheid popular opposition at the beginning of the 1960s facilitated a buoyant expansion of the sector during the 1960s and the first half of the 1970s. The adverse consequences of the 1970s recession were deepened by increasing international isolation, disinvestment by major multinationals, and rising workplace labour militancy (Duncan 1992a: 63-64). The basis was then laid for a slowdown in production and for the crisis that during the

has been recently expressed on the transferability of flexible systems of organisation to NICs (Womack, Jones and Roos 1990: 263; Carrillo 1995). Flexibility is assumed, moreover, as providing a new economic viability and comparative advantage to economic structures based on small scale industrialization in peripheral countries (Schmitz 1989; Sabel 1990; James and Bhalla 1993). In other views, an orientation to export as a result of shifting balances of power between transnational corporations and local institutions weakens the role of the state as an actor in industrial policy, while not eliminating local causes of inefficiency and diseconomy in production which can be attributed precisely to the unregulated overcrowding of restricted internal markets by a high number of competitors (Bennett and Sharpe 1985: 146-47, 155). This, implicitly, reinforces the case for the continuing importance of economies of scale in national industries subject to intense technological innovation.

In the case of South African automobile manufacturing the transition away from import substitution is coupled to a legacy of international isolation of the apartheid regime, which makes the adoption of competitive work and production "best practice" status all the more problematic. Originally developed around CKD (Completely Knocked-Down) assembly, local automobile manufacturing approached local content policies after World War II to curb the import of parts and to ease balance of payments' constraints. Opportunities offered by an enlarging demand stimulated a number of car manufacturers to start production of locally built-up vehicles.

The proliferation of manufacturers was facilitated by a local content programme aimed at building a national manufacturing industry while at the same time maintaining a free market approach to internal competition (Griffiths 1968; Ferreira 1969: 42-43). As a consequence of the government's incentives for local content, the number of auto-makers increased as more companies moved to South Africa to counter the expansion of competitors. As a response to the state's attempt at domesticating automobile production, transnational auto-monopolies dominated the domestic, highly competitive market. Dynamics of internationalization of production and convergence of standards around the Japanese "best practices" in the 1970s added to South

Heightened competition, due to the convergence of demand around homogeneous, relatively cheap models, and to the "maturation" of the markets in major industrial countries (Dankbaar 1984; Silver 1991), favoured during the 1970s and 1980s the emergence of sizeable automobile full manufacturing operations in various middle-income, Newly Industrialising Countries (NIC's). This trend was anticipated by various experiments of developmentalist state-fostered internal industrialization between 1955 and 1965 (Jenkins 1987: 41). In the following decades, important differences took place in various development trajectories. Some of these countries, particularly Korea (Green 1992; Lee 1993; Woo 1993), defined innovative paths where strong state support for high "local content"[1] production was aimed at stimulating export (Altshuler and Roos 1984: 41).

Other NIC's (Brazil, Mexico) maintained their "local content" policies functional to "import substitution" to attract foreign capital through fiscal and market incentives (Altshuler and Roos 1984: 38-39). However, a limited internal demand, low volume production, market fluctuations and a growing integration in technology and production methods in operations of multinational corporations across countries proved contradictory with local content. This imposed processes of restructuring, which pushed this group of countries to develop cost-competitive products for export, and to adapt their low-wage economies to requirements for quality and flexibility incompatible with import substitution industrialization (Jenkins 1987: 189-205; Truett and Truett 1994).

At the level of work organisation, versions of the "Japanese model" are supported in various NIC's. The existence in many of these countries of already high levels of management discretion, the limited scope of negotiation with unions, and a minimal recognition of skills and flexibility implicit in production are seen as facilitating factors (Humphrey 1993). An increasing optimism

[1] "Local content" defines the percentage of a vehicle that is domestically produced. It can be calculated by mass or by value of the finished car. Of course, the two consequences for the value added in production, since the most valuable parts are usually those with the lowest mass.

debates question flexibility as providing a clear alternative to forms of distribution of authority, knowledge and rewards proper to "Fordism" or "Taylorism." Where something new and different seems to emerge is in the formalization of worker participation and in the positive evaluation of subjectivity at the level of managerial rhetoric. But this is also often coupled to increasing task assignments, higher line-speed, uncertainty of working times, which only reinforce the contradiction previously noticed between subjectivity and social relations of production.

This chapter will deal with the structure of the automobile industry in South Africa. The nature of policies of development and adjustment in this sector defined opportunities and constraints for restructuring by companies operating on the internal market. Therefore, this chapter will also introduce the discussion, developed in chapter Four, of the meanings of flexibility at SAMCOR and of which peculiar contradictions they created in the relationships between workplace subjectivity and social relationships.

The automobile industry has historically been a crucial recipe for paradigms of innovation in work and production organisation. "Fordism" and "Taylorism" defined in this sector processes to address issues of control of a nascent mass workforce proletarianized outside craft traditions. Consequently, the sector was paradigmatic also from the point of view of forms of worker identity, organisation and militancy.

The emergence of mass production in the United States was challenged in the 1945-1960 period by market shifts which favoured the success of Western European producers. They proved able to adapt to limited internal demand and high product differentiation, especially in small models (Altshuler and Roos 1984: 21). The rise of Japanese companies in the 1960s, and their rapid achievement of "best practice" status was premised both on an update and an innovation of Fordist-Taylorist processes, initially to provide an increased productivity and flexibility to small scale production in a restricted domestic market. Called by Hoffmann and Kaplinsky (1988: 39) a transition from "machinofacture" to "systemofacture," this development particularly emphasized the management of workplace social relations and cultures.

CHAPTER THREE

Turning Points or Dead Ends? The South African Automobile Industry in an Age of Restructuring

3.1 Modern Times? South African Automobile Manufacturing and the Global Challenge of Flexibility

The first chapter cautioned the reader on the adoption of an idealized concept of flexible organization of work and production. The problematic nature of flexibility can be summarized as due to two main factors. First, experiments of flexible work organisation claim to elicit the active participation of the workforce, treating subjectivity as a major resource. However, this goal enters an uneasy relationship with the multiplicity of aspects which determine the patterns of world views, regulatory ideas and moral economy that concur in constructing the subjectivity of the worker. Even if I am here focusing only on the dimensions more relevant to the workplace, I also stressed that a distinction between workplace and extra-workplace determinants of subjectivity should not go as far as to assume that the observer can totally discount the influence of the latter on the former. The subjectivity of the worker synthesizes in an unstable way these influences, and it provides the basis for an understanding of the labour process which does not necessarily coincide with the managerial view.

When faced with the permanence of patterns of authority and inequality, the complexity of subjectivity can be responsible for unpredictable and unintended consequences. Depending on subjectivity while having to confine it to what is compatible with the factory imperatives is then a dilemma of flexible work organisation.

Second, the concept of flexibility itself is highly problematic. There may be various aspects of flexibility, whose simultaneous implementation could be contradictory. Moreover, flexibility does not necessarily involve every aspect of an organisation. Instead, I showed how current

In chapter Three the development of the South African automobile industry will be examined precisely in terms of specific and contingent patterns of adaptation to global forces. These patterns are neither straightforward nor without ambiguities. Indeed, as I will show in chapter Four, contradictory characteristics of industrial adaptation will be quite important to explain the development and structure of SAMCOR.

literary canons, the narrative and stylistic coding of the story, the use of different styles (colloquial, prover' politically correct, technical) in what they can tell us about the degree of emotional participation, disenchantment, cynicism, enthusiasm, estrangement of the peaker. For this reason, I maintained completely unaltered all the materials quoted from transcribed interviews.

The Marxian concept of "worker enquiry" (Wright 1988) implies that the research on the organisation of work and production is aimed, firstly, at the condition of the industrial proletariat in a holistic understanding of the factory. Second, it gives the workers the possibility to define a subjectivity denied as such by the routinized and fragmented nature of the experience of work imposed by capitalism (Marx 1995). Consequently, some authors who adopted this framework stressed consciousness and subjectivity as autonomous forces shaping workplace social relations, instead of being simply presupposed by them (Panzieri 1965). In this sense, "industrial sociology," the analysis of labour processes and organisations, rather than a field of exclusive knowledge and expert techniques to grasp worker attitudes, is defined at best as a "first approximation" (Alquati 1975a,b) to workplace class composition and worker subjectivity. The prospective aim is to allow workers themselves to develop their own sociology and their own "self-research" (Panzieri 1989; Fronti 1963; Cacciari 1975; Tomassini 1978).

I assume that a case study approach provides an adequate and general level of explanation. This derives from my understanding of the factory as an institution producing not only specific goods, but also social interactions determined by the relations of power and inequality in a capitalist mode of production. In this sense, the significance of the "singularity" of the workplace does not lie in its capacity for a strict statistical representation, but in the content itself of localized social relations whose explanation can capture their global character (Hamel 1992: 117). However, as Michael Burawoy (1985: 18) suggested, this is not a problem of abstraction from the particular to the general. In fact, every singularity contains a generality, in that the social order of a workplace is also produced by forces acting at a general and global level.

to individual storytelling, introducing a dimension of contestation and communication. In fact, individual interviews tend invariably to contain a degree of artificially constructed coherence and selection of memory. Group discussions had the purpose to modify these processes confronting them with a plurality of significations, and this was in my case quite useful, also because dialogue and contestation stimulated the participants to provide an amount of information larger than in individual interviews. This approach rejects the "neutrality" of a personally detached researcher as entitled by an objective technical knowledge (Dubet 1994 33; Fortier 1996).

Memory and attribution of meanings to everyday experience are nonetheless selective processes. Intentional and unintentional distortions may be motivated, for example, by the subject's need to rationalize controversial behaviours, or to substantiate positions and opinions, or to hide contradictory perceptions, or to find a stronger sense of consistency. In fact, healing the "wounds" created by the nature of power as discursive expropriation or imposition of meanings and identities requires continuous changes in forms of subjective identifications (Spivak 1992). However, this does not imply that subjectivity and narratives of subjectivity are the same. In fact, selected narratives of factory life and struggle may respond to the need to adjust a sense of inadequacy and uncertainty in workers' private lives as shaped by economic and social conditions (Pinelli, Sonetti and Tuccola 1986; Passerini 1983: 1202). This is most notable when identifications and behaviours spurred by social change are ultimately exceeding and unmanageable for the social and economic forces mastering change (Montaldi 1961).

Storytelling, then, cannot be assumed primarily as an objective account of "what happens" and of the position of actors in the social order: this will imply being exposed to a high level of contradictoriness (Passerini 1980). In fact, it reflects ways in which the social order is constructed in the subject's perceptions and projections to motivate social activity (Tonkin 1986: 211). Oral sources do not refer to events, but to meanings (Portelli 1981; White 1982): broad patterns of social change can be captured in a single event, or in a phrase (Schrager 1983; Hofmeyr 1988; Portelli 1990). Ways to ascertain those meanings must be attentive to their

sample. This representativeness does not depend on the possibility to generalize the responses I had with methods of statistical inference, which is made moreover impossible by the open-endedness itself of my interview schedule. It is rather given by the patterns of recurrence and the consistency of themes emerging from the answers in th. interviews. To summarize, it is the internal coherence of my findings, and not their statistical definition as the mirror of an external reality, to define their representativeness and reliability.

2.2 Methodological Rationale of the Worker Enquiry

I tried to orient my research to the more qualitative aspects of worker experience also on the basis of more general methodological considerations. The study of the dynamic nature of worker subjectivity (Sabel 1982; Marshall 1983) requires an open approach to capture the totality of worker experience and practices in a way at the same time synthetical and attentive to differences, stratifications and contradictions. In some views, this is explicitly aimed at achieving a compenetration of the worlds of the observer and of t .e observed to fill the power gap between the two and to create the conditions for the subject to make sense of the often invisible power mechanisms shaping his/her life (Burawoy 1991).

Ethnographic studies of work and participant observation have since long shown, for example, a relevance of oral history and life history approach which was not missed in the way I constructed my interviews and group discussions. In particular, I paid attention for the narrative and autobiographical strategies used to report worker experience and sociality. I then tried to maintain my presence as limited as possible, confining it to the introduction of topics according to a "grid" of basic issues to be discussed in an open-ended way. These included workers' evaluations of company quality programmes and of participative management, their perception of being involved in problem solving, the main problematic aspects of restructuring, perception of skills, the role of the union, the attitudes of the supervisors. Group discussions were related

recruits 75% of its employees[1]. The remaining interviewees mainly come from Atteridgeville. Most of the workers live with their families, and a significant minority with their parents. Linguistic homogeneity is also notable: nearly all of the interviewees speak either Tswana or North Sotho as a first language. However, I could notice that communication with white personnel and sometimes even with shop-stewards is in Afrikaans. Families of the interviewees show a high degree of residential stability in the urban environment. Nearly all of them have been living in the Pretoria area either for at least two generations or for a time that cannot be precisely quantified. Only a small minority reported strong links (frequent visits, income distribution) with relatives in rural areas, mainly from the former Bophuthatswana, Mpumalanga and the Pietersburg region.

The description of the group of workers I interviewed leads at this point to questioning why the reader should accept that the responses I got can be assumed as part of a general pattern of subjectivity, and not as the simple opinions of thirty workers. By choosing to conduct in-depth semi-structured interviews as an alternative to detailed interviews and questionnaires, my aim was not to summarize workers' attitudes towards restructuring at SAMCOR. This would accept restructuring as a neutral concept pertaining to the field of managerial initiative, confining workers only to the quantifiable aspects of their responses. Instead I aimed at showing how the quality and nature of restructuring were represented in worker experiences and how these provided meanings and sense to restructuring itself. In this way, rejecting a purely quantitative approach to sociological data, the observer should be from one side prepared to an extreme variability of responses, and from the other side he should be able to define internal patterns of consistency. In other words, since I rejected a quantitative survey approach based on responses on a given set of alternatives in strictly defined topics, the number of workers I interviewed, or the possibility of a statistical induction are not relevant to define the representativeness of my

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[1] NUMSA estimates.

them the interviews, trying to sidestep the restrictions.

Unfortunately, given that the management did not assist me in selecting workers, and given the nature of the production process, I could interview workers only when they were made available by shop stewards. This was, of course, a major problem for group discussions, which limited the number of such sessions. Moreover, the availability of shop-stewards themselves was constrained by their participation at a host of company forums and meetings, and by their general duties. Many meetings had to be cancelled once scheduled, and I had to spend hours at the company's reception or in the shop-stewards committee's office waiting for workers to interview. However, having these limitations in mind, I organised my interviews trying to represent workers from the three main areas of the plant (bodyshop, paintshop, final assembly) on a range of occupations as wide as possible. As a result, seven workers are from the paintshop, ten from the bodyshop and thirteen from the final assembly. The range of occupations is significantly diversified. There are sprayers, seal-appliers, repairmen and body-handler from the paintshop, spot-welders, metal-finishers and quality controllers from the bodyshop, and repairmen, component assemblers and quality controllers from the final assembly lines.

While this heterogeneity allowed me to appreciate continuities in perceptions and responses to changes across various occupational dimensions, in other respects the group is quite homogeneous. The age of half of the workers is between 35 and 42, six workers are between 25 and 30 and nine between 30 and 35. All except two are married. The overwhelming majority are in Grade 3 (semiskilled), four are considered as unskilled, and two are on Grade 4 or 5 (artisans). Five of the interviewed have a Standard 10 qualification, all the rest are not lower than Standard 8. Eleven workers have been at SAMCOR for between 10 and 15 years, 13 for between 5 and 10 years and six for less than five years. The overwhelming majority of the workers (26 out of 30) were born in the Pretoria area (Atteridgeville, Mamelodi, Lady Selborne). Twenty-one of them live in the Mamelodi township, about 10 km. from the plant, where the company currently

the industry, as in the Eastern Cape. It was, however, limited in the Transvaal. This was mainly due to the relatively recent transfer of automobile companies in the area, encouraged from the 1960s by government policies of industrial decentralisation. These led many companies to establish their premises, as the one where SAMCOR was then built, in areas with weak or non-existent unionization background in a period when the black union movement had been almost completely suppressed.

This contrast between the emergence of a strong union movement in the auto sector in the Eastern Cape and the difficulties and the delays it encountered in the Transvaal played a meaningful role in defining patterns of worker militancy at SAMCOR. This will be the topic of chapter Five, where SAMCOR workers' subjectivity will be analyzed in relation to the characteristics assumed by restructuring in the plant and to the role played by union organisation in shaping worker responses. However, before that it is necessary to apply to the "micro" level the analysis of the strategies for flexibility that I have developed in this chapter at a "macro" level. The next chapter, then, will investigate the ways in which the company addressed the challenge of flexibility. The contradictions defined by company policies will shed further light on issues of subjectivity examined in my final chapter.

were adapted to material conditions of racial and gender inequality. In particular, the all-white all-male, predominantly middle-class family background of South African management defines it as a very cohesive group. This helped to reproduce racial prejudices and acceptance of the status quo, even if the sector has never been overtly supporting Nationalist politicians (Duncan 1992b).

The advent of the union movement defined a new equilibrium between continuity and adaptation in management attitudes. Here, a traditionally strong anti-union stance was combined with the reproduction of racial stereotypes in a new discourse of paternalism, which found resonance in the Japanese discourse of participation. This determined on the shopfloor a gap between workers' involvement in suggestions and top-down communication, with the denial of real delegation of responsibility which reinforced unions' suspicion. "Cultural" motifs supposedly at the base of flexible organisations' success were translated into prevailing managerial imagery, as in the case of a Toyota manager who credited the success of JIT in his Durban plant to the fact that the work ethic and respect for authority of its Zulu workers were similar to the Japanese ones (Duncan 1992b: 14-15; Nattrass 1991b: 3,4).

The conjunction of these institutional, organizational and ideological patterns in the sector contributed to dynamics of union organisation and militancy which showed important peculiarities. The dependence of local automobile manufacturing on foreign multinationals, the tradition of unionisation of its coloured labour force, and the relatively better-off position of its African employees in skill and wages stratification strengthened black workers' bargaining power. Conversely, lack of recognition of skills, strict wage hierarchies, and a limited vulnerability of the industry to damages due to industrial action thanks to an unrestrained supervisory authority in hiring and firing historically provided powerful weapons for managerial control (Roux 1988-a,b). Levels of conflict and organisation in the automobile industry provided nonetheless a decisive contribution to the expansion and consolidation of militant metalworkers' unionism. The contribution of automobile workers was most relevant in the historical bases of

rewards, employment security and reinforcement of collective bargaining"[1]. It is notable that the recognition of portable skills was aimed at coping with the social consequences of restructuring trying to facilitate the re-employment of workers retrenched due to economic failures. In this way NUMSA accepted competitiveness as a strategic priority, reducing its emphasis on employment security. This was considered as an acceptable tradeoff to valorize on the labour market the inherent flexibility and skills of the workforce as a source of bargaining power, instead of accepting its reduction as an appendage of managerial strategies. In this way, the 1994 agreement made of the definition of the flexible productive subject, or of what I called the formalization of subjectivity, inside and outside the factory, a new terrain of union-management confrontation.

The agreement emphasized the linkage in NUMSA's bargaining strategy of traditional distributive issues with questions of productivity and organisation of production. Conversely, managerial organisational thinking was developed in South Africa in a much less holistic and original way. Automation is generally implemented on a selective and unintegrated basis (Maller and Dwolatsky 1993; Ewert 1992). Empirical studies showed how managerial culture largely considers piecemeal innovation and continuity of vertical power relations as ingredients to achieve a homogeneous level of quality for highly fragmented outputs (Bethlehem 1991), and this can be substantially applied to the auto industry as well. Moreover, the persistence of authoritarian management styles and the selective introduction of labour-saving machines define a gap between innovation in technology and conservation in organisation of work and workplace social relations (Kraak 1996).

In particular, managerial ideologies in the South African auto sector were shaped by a complex interplay of reception and reproduction of successive waves of business "philosophies" (American, European, Japanese) in coincidence with turns in international developments. These

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[1] Agreement on a New Industrial Relations Dispensation for the Auto Manufacturing Industry, for the Period 1 July 1998 to 30 June 1998, signed by the Automobile Manufacturers Employers' Organisation (AMEO) and the National Union of Metalworkers of South Africa (NUMSA) and SA Vleri, Staal & Verwante Nywerhede-Unie.

that worker responses to management-initiated participation schemes will be heavily influenced, and constrained, by what is their experience of democratic practices in the unions as vehicles to translate their vision of a democratic social order. Therefore, in the absence of a perceived change in power relations, flexibility does not seem endowed with any consent-generating property, especially when confronted by implicit workplace resistant practices:

> Their reaction is positive if they have their skills recognized. They don't have a problem in being flexible because they've always been flexible, frankly. They were more flexible than what we realized. We still thought they are locked in task-based levels, but they are probably the most flexible car workers in the world[8].

NUMSA's bargaining strategy adopted in 1993 was aimed at addressing these issues in a holistic perspective. The union's programme linked the redressing of the "apartheid wage gap" with a proactive approach to productivity and organisational aspects of industrial policy. This attempt at defining a union perspective on flexibility considered at the same time the necessity for "ideological compromises based on the need for international competitiveness[9]." This set of priorities found an expression in the Three-year agreement for the automobile sector signed in 1994 (Von Holdt 1995a). The agreement addressed the question of wage differentials by enforcing increases significantly above the inflation rate for the lowest paid categories, while containing them below the inflation rate for the 5% highest paid. At the same time the agreement provided for portable certification of skills, expansion of training schemes, productivity-related

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[8] Gavin Hartford, interview with the Author, 30.8.1995

[9] Tony Koobe, interview with the Author, 8.9.1995.

In the end even leading union officials' assessment of the problem sound notably pessimist. In Gavin Hartford's words, NUMSA's bargaining position on worker participation schemes is weakened by the subalternity of the union to managerial organisational prerogatives:

> In that area, quite frankly, my personal opinion is that the union is weak. It talks about a move from mass production to work teams and flexible specialization. I don't know what the fuck that means. It talks about these concepts, but in the real world of manufacturing environment they're meaningless, they are figments of imagination. Because you have a vehicle coming down of the line and you've got parts that you have to fit. And that's it, unless you can get grip of how a vehicle is designed, in the first instance, which requires billions of dollars before starting manufacturing.[18]

Then, if the permanence of traditional line production methods in South Africa is inescapable, there is one main strategy unions can adopt to maintain a strong presence and being able at the same time to contain managerial power in restructuring. That is, rather than entering negotiations on work organisation on the basis of management's ideological blueprints, to consolidate the unions' negotiating position with clear views on issues such as the reduction of wage differentials and rewards for skills.

These positions recognize that worker commitment to competitiveness and productivity is subordinated to concerns inherited from the history of the South African industrial relations and political system. Issues of adequate wages, reduction of the "apartheid wage gap" among hourly employees, prospects for advancement, recognition of skills are crucial in worker responses to restructuring and flexibility. Moreover, as Buhlungu (1996: 138) indicates, it is to be expected

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[18] Gavin Hartford, NUMSA, interview with the Author, 30.8.1995

> Wessels [Toyota SA Managing Director, Author's note] says that in 1999 they will totally be implementing JIT, TQC, blah, blah, blah... Yet Toyota Durban remains very much in the culture of South African industry. There's some evidence that its relations with suppliers are changing, but not work organisation[15].

On the other hand, experiments with multiskilling, job rotation and quality circles in the same companies encountered workers' suspicion or overt hostility because they are embodied in traditional racist attitudes on the part of management and are often introduced without consultation with the union (Nattrass 1991a; Duncan and Payne 1993b: 21):

> Workers are rightfully suspicious because they will have to police themselves, put pressure on each other (...) The first determinant of teamwork is cutting the costs of control. In general there is objection towards these things because it means more work, more load, the elimination of breaks. And the grading system is not based on the recognition of skills. Workers don't see the rewards[16].

This creates problems of communication and internal democracy in the unions themselves:

> There wasn't one single general meeting where workers came and said: "Please, union, develop new ideas on flexibility and workplace restructuring for us." On the contrary, all of these ideas were initiated by the union leadership[17].

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[15] Chris Lloyd, NUMSA, interview with the Author, 15.8.1995

[16] Tony Krebe, NUMSA National Coordinator for the automobile, tyre and rubber industry, interview with the Author, 8.9.1995.

[17] Gavin Hartford, NUMSA, interview with the Author, 30.8.1995

> They started to rebuild the company: they totally replaced the management, cleaned up their guys; they turned the company around and today it's a very successful company. A learning organization, as academics say.(...) Their management team is visionary and very interventionist, both in the plant and in the whole region[14].

I would call this an ideological road to restructuring, which substantially contrasts with the experiences of other companies, and with SAMCOR among them. The peculiarity of the ideological road is that it recognizes the employees as independent subjects whose allegiance to the aims and imperatives of the company should be gained through processes of consultation, negotiation and institutionalization of conflicts. Moreover, in the ideological road the company is prepared to recognize the union as the representative of the workers in processes of organisational change. This does not necessarily exclude subsequent attempts by the employer to undermine the power and status of the union. This road may indeed be accepted by management only temporarily, given the ability of the workers to thwart more authoritarian forms of restructuring. But in this path company participation schemes are not explicitly initiated as substitutes of the union.

The "ideological road" contrasts with the explicit anti-negotiation, if not outright anti-union, attitude motivating, for example, the introduction of quality circles or "green areas" at Nissan (Surtee 1990: 21-26; Duncan and Payne 1993b: 18), or with the labour-saving and cost-cutting bias in the introduction of Just-in-Time and automated technology without any parallel enhancement of multiskilling at Toyota (Oberhauser 1993: 109; Dewar 1990; Duncan and Payne 1993a; Nattrass 1991b: 4).

[14] Gavin Hartford, interview with the Author, 30.8.1995.

supervisory methods'. At the time of the 1990 strike, the company was already embarking in a reformist approach aimed at gaining union participation in solving the issue[8]. After the strike, MBSA started a major rehearsal of managerial positions, even recruiting the shop-stewards who had survived repression in industrial relations or human resource managerial positions and activating programmes of affirmative action[9] and local development[10] . Inside the plant the introduction of teamwork was aimed at eliminating supervisory positions[11], to be substituted by "facilitators" incorporating, in relationships with "team managers," both supervisory and superintendent duties[12]. The aim was, explicitly, to make work "self-directed" and "self-motivated,' also through attempts at introducing performance-based rewards.

MBSA's experiment is now coming under increasing strains, similarly to Volkswagen, especially on the issue of unilateral managerial power in restructuring[13]. Moreover, the attempt at cooption of shop-stewards in company's responsibilities may have important side effects. When cooption takes place in a restructuring process unilaterally decided by management, this has been proven as a major reason for unions' resistance and rejection of restructuring (Buhlungu 1996). However, this digression on MBSA is worthwhile, since it seems that the redefinition of managerial culture and values was there a precondition for restructuring of work and production organisation. This made MBSA's approach to flexibility quite peculiar:

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[8] Mercedes-Benz South Africa, Report by Joint Investigation Commission, n.d. (but 1988), GHP, MBSA file.

[9] C.Kopke to L. Kettledas, 21/8/1990, GHP, MBSA File.

[10] Mercedes-Benz South Africa, Memorandum, 8/2/1994, Ref. PSW/FhF/022, GHP, MBSA File.

[11] Ian Russell, Socio-Economic Reconstruction in the Border-Kei Region, Rhetoric or Reality, Mimeo, 26/4/1992, GHP, MBSA File.

[12] Mercedes-Benz South Africa, Teamwork: Delegates' Manual, prepared by B. Stafford, HRM Development, 3/11/1994, GHP, MBSA File.

[13] Brian Knoesen, MBSA Industrial Relations manager, interviewed by Eddie Webster, 14/2/1995.

Brian Knoesen, MBSA Industrial Relations manager, interviewed by Eddie Webster, 3/10/1996.

this latter point of view, the adoption of "lean production" became a dominant theme in South African managerial ideology, especially after the publication of the Womack, Jones and Roos' (1990) study. However, a general reluctance was manifested towards some possible aspects of the model, such as flattened organizational hierarchies, employment security and skill-related remuneration (Grenfell 1993; Kraak 1996). On the other hand, the inherited diversified nature of the output induced many manufacturers to adopt Japanese production methods in an attempt to take advantage of small batch production through "lean" organisational methods and flexible automation.

In recent years the sector has become a laboratory for worker participation schemes. In the middle of the 1980s Volkswagen South Africa pioneered the introduction of joint union-management committees for consultation and joint decision making over issues of productivity, social responsibility and organisation at its Uitenhage facility (Smith 1986, 1990). But this, far from promoting a strong corporate collective identity as preached by supporters of the Japanese model clashed with the union's concerns over representativeness and autonomy (Maller 1992, 1994)[4].

Similar attitudes to worker cooperation to those of Volkswagen drove Mercedes-Benz South Africa's (MBSA) responses to worker struggles, which culminated in 1990 in one of the most prolonged and violent strikes in the history of the sector, with the employees' occupation of the plant for nine weeks (Von Holdt 1990)[5]. That concluded a period of three years of conflict[6] in a plant notable before 1987 for the relative weakness of its union organization. A major trigger in those dynamics was identified in authoritarian and unilateral management styles and

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[4] NUMSA shop-stewards at Volkswagen South Africa, Uitenhage, interviewed by Eddie Webster, 28/2/1995.

[5] Gavin Hartford, interview with the Author, 31/10/1995.

[6] NUMSA Shop Steward Committee, Mercedes-Benz South Africa, Proceedings and Developments, n.d. (but 1987), CHP, MBSA File; Supreme Court of South Africa, Eastern Cape Division, Case No. 738/88, Mercedes-Benz of South Africa Ltd. vs National Union of Metal Workers of South Africa and 21 Others, Grahamstown, 26-27/8/1988.

shown by performance indicators. I have here to rely upon data provided by the Industrial Strategy Project's 1995 sectoral survey. Unfortunately, these figures refer to 1992, a very early stage of internationalization. However, in the absence of more recent data, they are equally useful to indicate the delays the sector had to cope with. First, quality performance is problematic. Producing a car in South Africa in 1992 required 50 hours, compared to 16.8 in Japan, 36.2 in Europe and 41 in NIC's. About 200 assembly defects per 100 vehicles were being detected compared to 72.3 of other NIC's and 60 in Japan. Production flows demanded 11.6 days inventory compared to 2 days in Europe and 0.2 in Japan. Only 2.5% of South African auto workforce worked in teams, compared to 69.3% in Japan, with a rate of job rotation which was half that of Japan (but similar to the European one) and a rate of suggestions per employee of respectively 0.09 against 61.6. Workers were divided in 32 job classifications compared to 11.9 in Japan and 14.8 in Europe (Black 1994: 74). Conversely, indicators related to the number of tasks performed displayed greater variability. At the end of the 1980s there were companies in South Africa whose workers could perform between 6 and 10 tasks, not far from standards in major producers, and companies with 2 to 4 tasks. But, even if a correlation was found on these figures between multitasking and productivity (Bothma, 1989: 108-111), multitasking did not necessarily imply a multiskilled workforce. Instead, the performance of multiple tasks without a parallel enhancement and recognition of worker skills may indicate the permanence of a strong worker subordination in a traditional organisational setting.

Moreover, the sector remains highly dependent on foreign technology in assembly and components, in both product and process. All the manufacturers are either foreign-owned or producing on licence, with local design limited to minor adaptations for locally specified components (Black 1994: 67). Flexible requirements for economies of scale and diversification at the same time indicate the rigidity of a production paradigm where scale is significantly lowered by the underutilization and the lack of flexibility in technology, and by the permanence of despotic structures of control and organisation of work (Maller and Dwolatzky 1993). From

(Desai 1996), while it is questionable whether it remedies the "irrationalities" of import substitution. In fact, one of the side-effects of local content programmes, by hampering the introduction of labour-saving technology, was precisely to strengthen workers' bargaining power on the shopfloor (Southall 1985: 338). In general, it is argued that the form taken by import substitution, for example promoting local content by mass and not by value, rather than import substitution itself, adversely affected the sector's competitiveness (Bell 1989). Moreover, policies by transnational corporations reinforcing the dependence of the sector on foreign technology, which is facilitated by local content by mass, could have further favoured uneconomic forms of protection.

At this point, the impact of the internationalization of South African automobile manufacturing on social relations of production will be addressed more specifically.

3.2 Hearts, Minds, and Bodies: Strategies for Flexibility in the South African Automobile Manufacturing

South African manufacturers internalized and addressed the flexibility challenge in different ways and with different emphases. As I explained, flexibility requires an accentuated attention to the formalization of worker participation and the activation of structures of workplace consultation, or even joint decision making to some extent. This may be more or less emphasized in a production framework where no substantial discontinuity has emerged so far with assembly line production, vertical managerial authority over times and rhythms, and segmentation of tasks. Depending on different translations of worker participation inside this common organisational framework, I will identify two different "roads" to flexibility in the South African car industry, which I respectively call the "ideological road" and the "technological road." The fact that SAMCOR is located in the latter will have a profound impact on forms of workplace subjectivity.

South African efforts to internationalize the sector had to cope with significant delays, as

"national" industries, optimizing economies of scale in host countries (Gwynne 1991). For South Africa, the alternative became between adapting to the requirements for new vehicles to be able to compete on a world scale, or losing the country's attractiveness as a site for investment (Grundy 1981: 165).

More recent adjustments substantially reject local content policies and point to a rapid liberalization of the internal market. In 1994 the government-appointed Motor Industry Task Group completed a report on a Motor Industry Development Programme (MIDP). The MIDP is geared to reward export by slashing existing protective barriers and fostering competition on the internal market. The reduction of import duties on CBUs (Completely Built-Up vehicles) inaugurated in 1994 (Motor Industry Task Group 1994; Financial Mail, 23/2/1996) carried important consequences. The first effect of the new policy orientation is that, at the end of 1996, one car out of nine sold in South Africa is an imported vehicle, a trend which is expected to deepen (Sunday Times, 27/10/1996).

Bennett and Sharpe (1985) and Doner (1991) emphasize the nature of internationalization of investment in automobile manufacturing as the outcome of negotiated processes involving states, local capital and transnational monopolies. Different agendas along the divide between internationalization of production and local development emphasize the role of strategies and power relations in defining compromises based on mutually acceptable economic returns. The South African government promoted the industry with a greater attention for short-term budget consideration, than for a global industrial policy, which resulted in growing fragmentation created by a peculiar mix of unregulated market competition and protection to promote import substitution. From this point of view, the shift to liberalization of imports and the end of local content orientations seem influenced by a renegotiation of power relations between foreign-dependent manufacturers and the state, the impact of neo-liberal orientations in macroeconomic adjustment, and the search for higher rates of profitability.

This imposes at the same time on a militant working class further bargaining constraints

of control over design, dependence on foreign technology, and integration in a multinational like Anglo American further constrain the development of production along "Fordist" lines. In fact, this would require the mass output of whole series of vehicles of a same model in successive seasonal cycles. In this case, instead, economies of scale are curbed both by limited demand and by the production of a high number of models and variants. These limitations require an extremely high level of flexibility in operations to make the output viable.

However, SAMCOR workers are implicitly quite flexible, even if as a result of the weakness, rather than the strength, of dependent auto industrialization in South Africa. In fact, workers' implicit flexibility had to be developed in response to much more complex factors than the sole consumer tastes and competition, as the proponents of "lean production" advocate. As I stressed in the previous chapter, worker flexibility was a crucial element to cope with South African companies' peculiar mode of insertion in global automobile production. Technological and financial dependence, coupled to a limited strategic capability, constrained the market strategies of local manufacturers, forcing them to spread their output on a multi-platform basis. Flexibility is not here the result of a rational and strategic calculation of alternatives in response to product and labour market changes. It is rather a process of adaptation to changing relationships between the state, national and multinational capital. Moreover, the skills deployed by the labour force are often only tacit, and they are denied a recognition by the legacy of racially discriminated opportunities for education and training. The effective use of these skills is then problematic. For example high levels of worker tacit skills often contrast with the lack of basic literacy and numeracy, which can hamper the definition of common procedures to read statistical information.

If flexibility is then a matter of adaptation, this can be moreover piecemeal and selective. Management at SAMCOR contradictorily stress a strong emphasis on quality as based on human commitment while at the same time idealizing technology as the vehicle through which quality is sheltered from the "inconsistencies of men's thought." While the company's ideology on quality elicits human endeavour and initiative, technological innovation invalidates that claim.

The company's ideology in this regard is explained in various documents. A "study of the Mazda production system"[1] produced by SAMCOR's engineers explicitly claims as the firm's vision for the future "to emulate Japanese manufacturing philosophies". However, very little percolates from that document of what theorists of the "lean production" describe as "automation with a human touch" (Shingo 1989), or the definition of a less alienated and routinized working environment. An emphasis on channelling individual efforts through collective endeavour to achieve specified results is aimed at the elimination of the "three M" (Muda, waste, Mura, inconsistency and Muri, overloading) through a growing homogenisation of motions and methods. This is the basis of the notion of "programmed work," defined as showing:

> the standard time and the classification of each job element and the standard body motions or walking pattern to do the operation (Study of Mazda Production System: 21).

The whole document is pervaded with a preoccupation with standardization of procedures, line balancing, fragmentation of work-cycles in elementary components, direct electronic supervision of movements in the search for "wasteful" activities. These substantially Taylorist preoccupations with time and motion studies and direct control are not, conversely, paralleled by a similar attention for work organization.

The emphasis on technology as the primary link between flexibility and quality is partly explainable on the basis of the peculiar product characteristics dealt with by SAMCOR. This can be attributed to a diversification which is the result of the multiple ties linking the company to international automobile production.Diversification is one of the most common challenges that an automobile producer in a peripheral country needs to address. In the case of SAMCOR, lack

[1] SAMCOR, Study of the Mazda Production System: Direct Labour Value Formation, mimeo, 1993

this operation was manual it required one operator pumping the brake and another one filling its cylinder with fluid, taking three minutes for each car. Now, with high-vacuum brake fluid computerized systems, it takes less than 60 seconds. The whole system is centrally connected by fibre optics channelling the massive amount of data to a host computer where superintendents check the state of hydraulics, electrics, wheel geometry, brake effectiveness, gas emission. All data are stored in logs by job numbers. A computerized check of assembly operations is done for every single unit, rather than on a sample basis.

At this point, SAMCOR's philosophy for technological innovation became clearer. As the local "Kaizen and Training Manager" explained, it fundamentally involves the automation of any function whose performance relies on workers' judgment or, as he said, "on the inconsistencies of men's thought," such as in the case of evaluating if a brake is hard or soft. In this way, a typical Taylorist preoccupation was pursued: to remove the labour process from the vagaries of workers' discretion, incorporating it in an objective set of quantified indicators that could be easily recorded and recalled through a central Flexible Manufacturing System.

NUMSA's Chris Lloyd observed that the dominance of a traditional paradigm in such a technologically advanced environment is more easily captured by the phrase "hi-tech Taylorism rather than "flexible specialisation[5]." In this view, the emphasis on continuity in forms of work organisation, which is indeed reinforced by technological innovation, is compatible with my definition of the "technological road," and confirms warnings against an idealization of the notion of flexibility. Automation was assumed at SAMCOR in a rather traditional form as defining a clear-cut divide between predictability of the system and worker initiative, confining the latter in what can be considered the "smoother" and most repetitive functions[6].

Interview with the Author, 15.8.1995.

[6] A similar argument is raised in Cusumano (1985), comparing the different outcomes of Nissan and Toyota policies in Japan. The former relies much more heavily upon automated technologies which were initially mainly imported from overseas, while the latter balances more carefully automation and worker self-inspection

employees' initiative (Saint, July 1985), all figured prominently in company newsletters. But, compared to other producers, technological innovation was aimed at providing a crucial competitive advantage.

SAMCOR production managers reiterate a relevant link between plant technology policy and promotion of quality for export. As a production engineer told me:

> If we wanted to become competitive locally we could have done that in other ways. But to achieve improved quality levels and to be consistent with that in a global market, we decided to automate certain things.

The driving principle in this regard is identified as automating jobs and functions considered "by their very nature" inconsistent in their output. This is the case of painting, whereby quality tends to deteriorate with physical strains derived from different operatives' positions around the car, or of body-framing, where welding can create stress and distortions in sheets of metal which are difficult to detect. This is also the case of defects that may be undetected even when operations are formally correct, such as for electrical connections or brake systems, where a control of the effects, and not only of the setup, is required. Sophisticated equipment, from this point of view, is described as aimed at finding defects which are not visible to the human eye.

In the last ten years technological innovation has affected increasing areas of the plant. At present body construction on all new models is automated. Following the introduction of Ford Telstar and Mazda 626 in 1982, total automation of the bodyshop proceeded with the completion of the automation of the framing section. In the meanwhile, the paintshop underwent significant innovation, particularly in prime spraying and colour spraying, which confined manual sprayers to the interior of the car. In the final assembly lines the whole electrical check-out system was computerized, which implied the computer simulation of the functioning of electrical appliances to test their actual operation and detect latent defects. The same applies to brake-leading. When

12 sprayers now work in the two boot lines, to which 12 repairmen and 12 sprayers in "first coat" are added. This represents less than one third of the employment levels before 1992. According to the company and shop stewards, workers were not retrenched: they were either relocated or accepted severance packages. Finally, the composition of the supervisory staff is noticeable: of seven supervisors, four are African, one coloured and two whites.

The outlook of the final assembly, where engines, transmissions and parts are installed in painted bodies, is essentially sequential and task-based. Operations are labour-intensive, homogeneous and directed at single pieces. Final assembly works on two lines, or "systems." "System 1" is for the executive cars (Mazda 626 and Etude, Ford Escort and Telstar). "System 2" is for the production of small cars, like Mazdas 1.3 or 1.6. Operations are segmented in stations: supervisors stand by their position, and very little interaction was observable with workers in production. A trim line moves the units from one station to the next on overhead cradles, while a slot conveyor brings the units to the final phases once the wheels have been fitted. In the trim line three or four workers operate simultaneously at any station, a number reduced to one or two at the slot conveyor.

It is useful to compare SAMCOR's landscape of technological innovation to Nicoli Nattrass' (1991b) description of the production process at Toyota, where manual spot-welders "directed their flames" to the car in what recalled for her the "satanic mills" of the industrial revolution literature. But here it is worth reminding that Toyota did not choose a heavy technological approach for its Durban plant, and it refused robots until quite recently (Duncan and Payne 1993b: 161).

The comparison between SAMCOR and Toyota stresses the peculiarities of the "technological" road to restructuring (Benders 1996). However, SAMCOR placed a strong emphasis, at the level of enunciations, on work organisation. Teamwork, productivity education for management, performance-related incentives (SAMCOR Forum, May 1985), training, basic education and Total Quality Management through detection of defects and involvement of

the receiving areas. After another group of spotwelders has closed the few gaps where robots could not operate, the "metal finish line" checks the quality of welding, dents, damages, metal, and doors. At this point the unit is ready for the paintshop.

A paintshop processes now about 340 cars a day. A noise even louder than that of the bodyshop is here combined with an extremely high temperature. SAMCOR claims its paint facilities are among the most modern in the world. Here automation was introduced at a relatively late stage. Cars enter an automated "pre-clean area" to remove oils and grease residues from the bodyshop. The seal is applied by hand to close the gaps from water infiltrations; some operators work in underground holes. The sealer is then dried in sealer ovens and then scraped off by hand. Prime coat and colour application are largely automated since 1992 with 22 robots working in two spray boots for the whole plant; only painting of the interiors is done manually. A system of conveyors and trolleys drives the units to the boot, where they are manually introduced. The line stops automatically in case of bottlenecks in one of the phases of the process. "Sidetrack lines" keep reserve stocks for no longer than one day. Quality checks are performed in "by-off lines" outside the boots; rejected cars are sent to a manual spray-line for repairs. This seems the area most susceptible to human intervention in the whole paintshop. Differently from the spray-boots where interiors' painters use "hose guns" electrically connected to a pipeline, workers here operate a "cup-gun" that they fill with paint. Paintshop repair is the only area of the plant operating on a nightshift basis. Here the performance is quite uneven. The number of rejected cars can range from 5 to 20 a day. The final waxing of the products respondent to quality standards is done by hand. From here units are moved by a conveyor to lifts which transfer them to the stores, ready for the trim lines in the final assembly. In this last area only four workers could be seen, who were preparing instructions for trim lines.

The whole paintshop employs now 290 workers. On average 140-150 people work directly on a car from the beginning to the end of the process. But automation had important, albeit selective effects. Sealing is still the most labour intensive job, employing 80 workers. But only

Nissan UK) are indeed limited to one[3].

Fifteen kilometres of conveyors transfer the units through the plant's 8 bodyshops, 2 paintshops and 6 assembly lines. The plant employs about 2480 workers, 4000 including employees at administration offices and at the Port Elizabeth engine plant[4]. More than 3500 workers were employed at Silverton alone in 1991 (Trade Union Research Project 1991: 15). About 85% of the workforce is African. Coloureds are 6%, whites about 7%. About 400 women are employed, mainly in final assembly-related jobs such as car washing and cutting and sewing for seats. In 1991 the average hourly wage for white workers was R11.14, compared to R6.49 for Africans (Trade Union Research Project 1991: 15). The following description only considers car production, excluding light and medium commercial vehicles.

The bodyshops are the most automated departments of the plant. They employ 47 robots and 751 weld guns. The first stage of the process is manual: rear floors, middle floors and engine compartments coming out of the presses are spot-welded separately from body sides by workers using spot-guns. Something similar happens to body sides: for a body side it takes 15 minutes to go through the whole process, divided in seven stations, with an average 2.5 minutes cycle-time for each operation. Then a "carousel," or a turning conveyor, transfers the body floors in overhead "cradles" to the robots for the second stage: while in the previous one workers only mould the three sections of the floor with "spots," now robots re-emphasize the spots, welding the entire body. In this phase, where robots operate inside a cage-demarcated area, no workers could be seen except for a white maintenance operator. Soon after, the floors are moved to an area nearby where body sides coming from a perpendicular direction are dropped from above. Here floors and sides are combined ("ballooning") in a fully robotized operation. Doors are provided from plants outside SAMCOR. Components are supplied to the lines twice a day from

[3] Chris Lloyd, NUMSA, interview with the Author, 15.8.1998

[4] Written information provided by the company

a capacity of 16 body shells per hour. Here is a description of the system in bodyshop:

> The car underbody is loaded and an overhead conveyor brings body sides and front and rear headers down on to the underbody. A walking beam moves this structure to a monster jig known as a framing buck which holds the body precisely in position to allow the car's bottom edge, cowl top, front and rear headers and back panel to be multi-welded. At the same time the overhead robot welds the engine compartment and rear decking panel to the body sides. The roof is welded on to the car by a dedicated roof multi-welder and the four floor-mounted robots weld the door openings and front and back windscreen areas, completing the bodyshell (Engineering News, 20/9/1985).

This allowed for up to 388 automatic spotwelds controlled by freely programmable microprocessors. After the bodyshop and the paintshop, engines and transmissions, hanged on overhead cradles, were assembled on the painted bodies at a rate of 35 vehicles per hour. This method allowed engines to be "stuffed" from underneath by hydraulic pumps, instead of being dropped from above, as before (Salut, September 1985).

At present, SAMCOR produces cars and light and medium commercial vehicles at a capacity of 240,000 units a year, on 11 platforms, with 25 basic models and 132 scheduled derivatives[2]. In 1991 its output was of 14 models (4 Mazda, 8 Ford and 2 Mitsubishi) in 78 derivatives (Trade Union Research Project 1991). These data are probably world-unique. NUMSA experts with a high international experience in the sector indicate that no modern car plant in the world produces in more than two platforms; many of the most recent and most advanced (Fiat Melfi,

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[2] Company pamphlets and Author's interviews with management.

since then to condition SAMCOR's internal life, relationships between workers and their representatives, and among workers themselves.

Past confrontations between unions impinged upon these dynamics, as a legacy of the beginning of the 1980s, when the Motor Assemblers and Components Worker Union of South Africa (MACWUSA) stood against the allegedly moderate and "coloured-dominated" automobile affiliates of the Federation of South African Trade Unions (FOSATU) in the Eastern Cape. MACWUSA's organization had expanded to a certain extent to Transvaal and, even if this union had taken part in the merger to form NUMSA, the "24%s issue" resuscitated ancient conflicts over union organisation and identity. The permanence of these conflicts partially explains recurring waves of intra-union clashes. Opposition around the trust fund indicates NUMSA's current weaknesses at the Silverton plant. Today, at SAMCOR, "24%" is regarded, as evidenced by shop-stewards' uneasiness and embarrassment when talking about it, as a catalyst for deeper troubles, divisions, conflict among union members and between rank-and-file and shop stewards.

Subsequent merger movements decisively shaped also the company's productive framework. The incorporation of different makes, models and brand names in various phases created the problem to manage a highly differentiated production (even 7 or 8 models simultaneously) in a cost-effective way, on an already highly fragmented market. The company chose to address the challenge through increasing investment in capital intensive equipment. In this way it continued practices that had already proven problematic on the market for Chrysler and Sigma, but which nonetheless made SAMCOR a firm at the forefront of technological innovation, not only in the auto sector. Already in 1982 Sigma, having to cope with inputs from Mazda, Chrysler, Peugeot and Citroen announced its intention to treble production capacity by introducing new capital intensive processes and laying off 500 employees (Southall 1985: 339-40). In September 1985, SAMCOR introduced the first robots in South Africa in its body-framing line for the new Mazda 323, which allowed for an output of one vehicle every 3.75 minutes, not far from international standards. Four floor-mounted robots imported from Sweden were used in spot-welding, with

South Africa, operating at Silverton. The company was renamed Sigma, and soon after it incorporated Peugeot and Citroen. In 1980, Sigma was the major producer in South Africa with a 22.5% market share. Crisis in the sector severely hit the company, whose high-technology investments proved to be over-optimistic about the business cycle. Sigma's car sales plummeted to 11.9% in 1983. In 1984, the company was operating at a 40-5[illegible] capacity with a market share of 8%. As a consequence, Chrysler sold its remaining 25% to Anglo which, after having re-capitalized, changed again the company's name in Amcar (Southall 1985: 312; Bradley and Sarakinsky 1985: 34, 55).

In 1987, the same year NUMSA was founded as a COSATU affiliate from the merger of seven unions with members in the metal sector, Ford announced its withdrawal from South Africa. A quota of 24% of SAMCOR's shares was transferred to an employee shareholding scheme, while what remained of Ford's capital was left to Anglo-American. In terms of an agreement reached in November 1987 between Ford and NUMSA, the workers' shares were transferred to an employee-controlled trust, with the provision to use dividends only for community development purposes. In this way NUMSA complied with COSATU policies for a socially responsible and people-driven disinvestment process, while at the same time upholding its opposition to individual share-ownership (Adler 1989b: 307-08).

The agreement rapidly ran into crisis when substantial sections of the workforce, starting from the Port Elizabeth engine plant, rejected the community destination of dividends, claiming instead payment in cash for individual union members. The protest expanded to Pretoria, culminating in a wildcat strike on April 1988, just before the enactment of the agreement. NUMSA's shop-stewards who were negotiating with Ford were replaced by the insurgents with a new committee. The employee trust was, in any case, regularly appointed, but the first dividends were offered in 1988 to individual employees, given the inability of the workers to overcome divisions and appoint representatives to the trust's board (Adler 1989b: 309-10). Divisions and rivalries over participation in and purposes of the "24% trustee fund" remained

uncontrollable. Leaving this latter aspect to my last chapter, I now direct my attention to the strategies SAMCOR chose. It will become apparent that the adoption of the "technological road" was not entirely contingent, or to some extent not even intentional, on the part of management. It resided instead in the constitutive patterns of development of the company - ownership structure, production layout, labour process and organization of work - and in the position it came to occupy in the South African dependent automobile industry.

SAMCOR appeared on the scene of local car manufacturing in 1985, as a direct consequence of Ford's decision to withdraw from its Neave (Port Elizabeth) facilities. That decision was influenced by the growing pressure of international and American anti-apartheid movement for corporate disinvestment, and by the enforcement of mandatory sanctions in the USA. However, the steady decline of internal demand after a brief and illusory peak at the beginning of the 1980s substantially facilitated Ford's move (Adler 1989a). In January 1985, as a result of concerted rationalization plans, Ford South Africa announced its merger with the Anglo American-owned Amcar, a producer of Mazdas on licence in its Pretoria-Silverton plant, to form SAMCOR. The new company was set to produce vehicles under the brand names of Ford, Mazda and Mitsubishi.

Ford had substantial interests and design overlap with Mazda in Japan. This would facilitate the introduction of common components in South Africa, reaping the benefits of economies of scale favoured by the integration of the Ford and Amcar dealers' networks. The American company would retain 42% of the new company's shares, coupled to a substantial provision of finance, design and technology, while Anglo controlled 58%. Moreover, through disinvestment and the capital injection coming from the merger, Ford could discard its obsolete Neave plant and move to the Silverton facilities just modernized by Amcar with the introduction of two assembly lines and automated technology. This took place just when massive retooling costs were required for Ford to introduce new models (Bradley and Sarakinsky 1985: 57).

Amcar, new Ford's partner, originated from a complex merging process. In 1976 Illings (an Anglo American subsidiary) became the majority shareholder in heavily loss-affected Chrysler

CHAPTER FOUR

The Elephant and the Dancer. The Rationality of Flexible Production at SAMCOR

> No longer a self-sufficient being, at war with all its kind, it has become a responsible part of a species. It has become an experiment in feeling, knowing, making and response.
> (H.G. Wells, "The Shape of Things to Come")

4.1 Hitting the Technological Road: SAMCOR in the Restructuring of the South African Automobile Industry

As my previous discussion explained, the challenge of flexibility to policies of industrial restructuring is not separable from the ways "flexible production" is internalised and represented in managerial thought and strategies. Thought and strategies can define flexibility as a mutable balance of factors. The activation of worker subjectivity may be envisaged in different forms, allowing for different levels of worker authority and independence in relation to other elements of the social and technical organisation of the firm. I summarized some basic characteristics of these differences inside the alternative between what I called the "ideological" and the "technological" roads to restructuring, whereby ideology and technology are two different ways to assert managerial control in the fundamental continuity of the line production paradigm.

However, I also explained how worker subjectivity is largely constituted by moral, regulative, militant, social components that workers independently bring inside the factory, quite often originating indeed from outside the factory. Managing these elements has always constituted a problem for company executives and supervisors. But when worker subjectivity is explicitly recognized as a crucial component of a corporate strategy, the effects this appeal may produce and worker identities and meanings it can ignite can really become unpredictable and

as a car manufacturer in peculiar conditions dictated by product market considerations and the structure of production. But at the same time the system is also expensive, both directly, due to the high levels of automation in robots, flexible manufacturing machinery, computerized quality control systems, and indirectly, because of the strains it creates to a supplier pipeline that is already structurally dependent on imports. For management the main way out of this contradiction involves massive cuts in labour costs through a significant reduction in employment levels, which can enable a higher productivity to cover the costs of new innovation.

These ambiguities are embedded in what I have called the "technological road" to restructuring. To summarize, this can be defined as a process aimed at valorizing the implicit flexibility contained in multi-model production for a restricted and competitive internal market, through the introduction of a high level of flexible automation able to recover production costs in a diversified, small volume output[15]. At SAMCOR this implies an exclusive managerial prerogative in the use of technology as simultaneously a mechanism of control and of quality enhancement, independent from changes in organisation and social relations.

At the same time, social relations are the object of strategies aimed at raising a worker collective commitment to quality and competitiveness. But, because quality comes to depend on a distanced technological framework as the exclusive precinct of managerial strategic thought, and because this technological veil obscures workers as carriers of an expert knowledge on quality, a legitimation gap between required performance and actual worker commitment has to be filled. Paternalism is a tool to this purpose. But paternalism as an adequate tool to manage adaptations in SAMCOR's "high-tech Taylorism" can be questioned. It is particularly uncertain whether paternalism and top-down communication will effectively address worker demands and expectations raised by evolving quality and productivity standards. Before investigating the nature of these changing demands and expectations, it is however appropriate to place them in

[redacted]

[15] These issues have been greatly clarified in the interview I had with Chris Lloyd, NUMSA, 18.8.1995

labour is taken into account. Productivity at SAMCOR has peaked in the 1994-1996 period from 10 to 15 cars per employee. Even if this figure is much lower than the 65 cars per employees produced by Ford at Valencia, Spain (Sunday Independent, 1-9-1996), the company's "five year plan" will significantly reduce the gap. However, it will also expose the company to urgent problems. In particular it is questionable whether the system of top-down communication, task-oriented Taylorist schedules and paternalist discourse disguised as participation at SAMCOR will be able to manage this transition. This means that, if the upper limits of worker commitment and acceptance will be touched by the new productivity targets, and if no new systems of reward will address these limits, processes of increasing worker disaffection, declining quality standards, or overt workplace conflict will become more likely. The next chapter will explore present signals of these dynamics.

Consequences in terms of retrenchments and work reorganization are still to be fully evaluated. Managers are keen to specify that restructuring will not involve retrenchments, but only a kind of "physiological" reduction of the workforce through voluntary severance packages and decreasing recruitment. But NUMSA's shop-stewards are deeply hostile to the company's plans, blaming SAMCOR for lack of consultation, and attributing the whole process to two main explanations: labour-saving innovation and outsourcing.

These attitudes fit sociological analyses which define as a "most common approach" by management to view organisational restructuring as a "crisis response" to short-term preoccupations, as in the case of downsizing and employment reduction (Macun, Joffe and Webster 1995: 18). This is fundamentally at odds with worker participation, given the insecurity such a managerial unilateralism in the short-term generates among the workers. In the case of SAMCOR, the perceived likelihood of retrenchments as a result of company plans would jeopardize the prospects for worker cooperation in this delicate transition, further complicating the scenario outlined above.

To conclude: from one side, SAMCOR's flexible process technology is necessary to survive

is able to convince the employees that the main way to achieve their goals is an increased identification with the firm and a loyal participation in company-designed structures.

However, a potentially highly contradictory pattern is reproduced here: workers are recognized as crucial in raising quality levels; their subjectivity, cooperation and initiative need to be put to work. But this cannot go as far as to recognize the need for fundamental reorganisation, foreclosed by managerial prerogative in technological restructuring. It can be hypothesized that the company's call for a higher worker commitment to quality in a flexible and cooperative environment, and the ways it is internalized, can raise expectations among workers for a higher degree of control of the process and of their individual and collective contribution. It can also provide symbolic, moral and informally organisational tools to embody those expectations in strategies of worker response.

At the same time, this configuration of expectations and responses is continuously open to clashes with managerial ideology and strategy. While talking to a shop-steward, he gave me a copy of the next SAMCOR's "five-year rationalization plan[1]," adding that it was a confidential document, not for circulation among workers, and that he had got it through underground channels. The plan provides for a massive reduction in the headcount (number of employees) in the next five years while maintaining an output of 379 cars per day. This would lead to a massive increase in production per employee and, notably, in a significant cut of hours worked per unit as a resultant of further innovation. In this perspective, the headcount is intended to drop from the December 1995 level of 2786, of which 2560 hourly paid (1585 in direct labour) to 2498 in December 1996, of which 2309 hourly paid (1420 in direct labour), and to 1838 in December 1999[2]. Over the same period, the number of hours to produce a car by an hourly employee will drop from 51.91 to 33.62, a productivity increase of 64.7% which touches 76% if only direct

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[1] SAMCOR, Manufacturing Operations: Planned Productivity Improvements Years 1995, 2000, n.d. (but 1996).

[2] Company graphs, 1995, CHP, SAMCOR File

> Teamwork is about respecting each other's dignity, it appeals to individuals to respect other people. It cannot be used to unfairly allocate work: that's not teamwork, that's not ubuntu, ...at's an insult (...). "An injury to one is an injury to all," the old revolutionary buzzword: "Amandla," power to the people: that's all teamwork stuff. But, turning it around: "an injury to one is an injury to all," so: if you take off a Monday you're injuring the man who's here, and by injuring him you are injuring the whole company. "Amandla," power to the people: yes, you are empowered to do various things, to participate in the planning and decision making on how to do the job better, on how not to waste the company's money, to make improvement in your safety. But we demand that you do it as a team.

This passage is fully consistent with the one on "safety and morale" mentioned above. In fact, their combination clarifies the mode of operation of SAMCOR's paternalism, and the ways it re-elaborates worker participation. Terminological stretches in managerial sloganeering are here indicative. From one side the company's discourse imposes meanings on workers' needs ("safety and morale") to turn them against workers' claims to independence and control based on their contribution (workers "are not interested in quality"). From another side, "participation" is restricted to worker control of specific jobs and tasks ("to do the job better" without wasting company's money) as opposed to authority over phases of production. SAMCOR seems to confirm Buhlungu's (1996: 62-68) findings on the paper industry. They indicate that management's prospects for successful participation schemes, including the possibility of avoiding the unions' constituencies, reside in the company's capacity to rhetorically address grassroots workers' needs (empowerment, responsibility, recognition) to win their allegiance to competitive strategies as an alternative to really negotiated change. The image of a management open towards worker expectations may then become a very powerful weapon for control, and constitute a real danger for worker organisations. This is all the more evident when management

SAMCOR's approach to work organization and paternalist ideology. In the words of a production manager quoted above:

> Safety and morale: that's what a worker wants: he doesn't really care about the quality of the car, that's all bullshit. No worker in the world really cares about the qua ty. That's not a first need. You need food, you need drink, you need shelter: that's what really drives the human being; you need recognition for doing a good job, his dignity needs to be upheld. Those are the real needs of the workers. They don't really need an excellent quality jol for the customer. They need recognition and self-satisfaction for having done a good job.

In any case, the quality orientation of team concepts at SAMCOR is explicitly recognized, especially in achieving "first time right" performances, that is to say a situation where rectification is not required. This would seem to indicate an emphasis on a "total quality management" approach, or the goal to "build" quality into the process through a preemptive immediate detection and correction of defects. However, a recent study shows that the centralized nature of SAMCOR's flexible manufacturing system and of computeri. ed quality checks seems to provide an obstacle to this purpose (Grossert 1991). This does not allow for quality to be "built" in the production process. The same study indicates SAMCOR's total quality management performance as the poorest in the country together with BMW.

At the same time the company aims at eliciting through teamwork a quality orientation among its workers. But, given that it cannot allow worker initiative and responsibility to infringe the limitations inscribed in the technological framework, teamworking needs to be legitimized in other ways. It seems paternalism is the peculiar mode of legitimation for teamwork at SAMCOR. This is clear in the words of an industrial relations officer:

fitters), where in 1991 there were 65 white trainees compared to 36 blacks[1]. It is then apparent that, just when the company was going to embark in a major rationalization drive, black employees were given training in SAMCOR-specific skills, whereby portable skills were still mainly reserved to whites. Therefore, the unequal structure of distribution of skills provided very little basis for a meaningful worker participation in production improvements. Put it in another way: black workers where taught how to participate, but their participation was deprived of necessary skills and responsibility. In this way the company's request for an active commitment was translated into practices promoting passive consent.

The rather traditional vertical structure in which teamwork is inserted is supported by horizontal team activities on an "ad hoc" basis. Here worker initiative and creativity seem to play a more relevant role. This is the case of the "Quality and Reliability Teams" (QRT). QRTs perform functions usually recognized to Quality Circles: they are management-instructed, task-oriented teams activated to solve specific problems. They have a core of experts and technicians permanently employed in specific functions, charged with monitoring those functions with statistical methods. Production operators from the same area of the plant can be coopted on a temporary basis to solve problems when they arise. This structure is complemented by a "Kaizen team system" on a purely voluntary basis. Kaizen is the Japanese word for "continuous improvement." "Kaizen teams," which involve functions of "suggestion schemes" include workers, teamleaders and foremen in exercises of problem solving and operational improvement. A system of rewards is attached to the "Kaizen teams."

At the heart of the team concept at SAMCOR lies an acronym that encapsulates the company's productive philosophy, and that any manager has clear in mind: QCDSM, Quality, Cost, Delivery, Safety and Morale. The first three are aimed at instilling a customer orientation in workers' cooperation. The explanation of "Safety" and "Morale" testifies again to the limits of

[1] SAMCOR, Education and Training, Hourly Employees, 1991, CHP, SAMCOR File.

say he's acting at the end of a line of instructions. Instructions come from above. If they say to him: "We want so many cars", he has to make sure that those numbers of cars are produced [my emphasis].

In these short descriptions it appears that the function of teamleader incorporates, not only in the company's formal specifications but also in the way these are internalized, the definition of substantially supervisory functions and a strong element of paternalism. Self-activation and responsibilization are limited to the teamleader's sense of pride. Under these conditions, teamwork contributes to worker participation in a very narrow sense. Following Judy Maller's (1992: 10-11) definition, drawn from Carole Pateman, it would be here appropriate to talk about "pseudo-participation." This is based on persuading employees to accept decisions already made by management, combining "task-centred" (top-down flow of information) and "power-centred" (managerial unilateral decision making) elements. The impression from images such as "I know their job better than them," or "the end of a chain of instructions" is that of a rationalization of a decentralized application of the Taylorist separation of conception and execution or, as NUMSA's Chris Lloyd said, of a "disguised form of supervision[1]."

It is here indicative that, for example, the overwhelming majority of black employees who underwent in-house training at SAMCOR at the beginning of the 1990s were assigned to "staff development" courses with a high ideological content such as trainee foreman, teamleader, motivation, "assertive behaviour techniques," participative management, "know your company" or quality circles. In this area, 3265 black employees underwent training in 1991, compared to 255 whites. On the other hand, white trainees were mainly deployed in technical skills training (mechanical, chemical, electrical) or in apprenticeship (jigmakers, motor mechanics, electricians,

[1] Interview with the Author, 18.8.1995.

performances. Top-down communication, more than active participation (Maller and Dwolatsky 1993), is the measure of the effectiveness of the team. Teams are rather a form of rationalization of the factory hierarchy and they are generally perceived as part of the company's formal structure, rather than as "horizontal" representatives of a defined production area. This answer I got from a teamleader exemplifies this attitude:

> My work is to help the foreman's main task. I mostly go between the foreman and the workers on every problem the worker encounters. I know the work they are doing more than they know the work they are doing. (...) I am representing the company to the workers. I am making their work easier. Not hard, but easy. The foreman works only in papers and he hears everything from me, he doesn't know the work practically like myself. I know the work practically and I know the work theorically (sic).
>
> Q: Is your team effective in handling workers' complaints?
>
> A: Yes, but if someone says "no", you cannot go on if someone says "no", and sometimes the compan says "no". Teams are effective in checking the workforce, how they work. They are very nice and effective for the company. But what is not good for the workers is what the company pays to them [my emphasis].

This discussion was in the presence of some team members and a shop-steward, who intervened:

> He's leading a team of ten. He arranges the whole work for a day. When a shift starts he must be sure that the guys have gloves, safety shoes, how many absenteeism, complaints, if one does not feel well, everything they need. We can

Operators, usually one or two in each station, perform a fixed range of tasks (no more than three) "for the rest of their life at SAMCOR." Teams are adaptable to a high product variety through rescheduling of times and workloads decided by management at the level of the whole group, rather than of single operations. Multitasking and limited rotation reduce the company's vulnerability to absenteeism.

It is interesting to compare some of the elements of teamwork at SAMCOR with Mercedes-Benz: there teamleaders are required to possess a Standard 10 certificate, plus a three-year diploma in management or production disciplines and five years' managerial experience in a team environment. Moreover, in that company one teamleader facilitates and coordinates activities of various teams, while team members are entitled to elect a spokesman among them to represent group's ideas to the teamleader, assisting him in solving problems and encouraging work improvements, with no additional pay[30].

At SAMCOR selection of teamleaders takes place firstly on the basis of effectiveness. That means a teamleader is required to perform any job in his section and, preferably, any job in his foreman's section. Behavioural and ideological considerations play a key role in what managers call "stringent psychometric evaluation." They involve the worker's conduct, his motivation, attitudes towards the company, and absenteeism rate. Then the candidate goes through 15 days of intensive training in management skills, problem solving and kaizen techniques and, lastly, to at least three months on-the-job training. Training is highly selective and competency-based: advancements to higher levels are based on satisfactory performances in the lower ones.

Far from arising from the appropriation of workers' informal knowledge of the process, it seems teams are here rather part of a top-down regimentation structure. In this way, teamworking does not imply the definition of relatively autonomous operative units which are oriented to a segment of the production process, or to specific projects, or to collectively defined

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[30] Mercedes-Benz South Africa, Performance Centre Project, 28.2.1994, GHP, MBSA File.

requirements. There are not CKDs in in-plant warehouses, and in-plant stocks of materials in containers are a small percentage of the containers' deposit. JIT is here defined as keeping materials in the pipeline, drawing them from the containers and putting them in production when the pipeline is empty. This allows the company to keep one or two hours side-stock for product-specific components, reaching up to two days for common materials. But management recognizes that it does not conform to mainstream JIT predicaments.

The search for technological flexibility at SAMCOR is not matched by equally radical changes in other areas. The grading structure is highly stratified. The company agreement with NUMSA provides for 27 job classifications in production grouped in five grades, with a range of hourly minima from R4.65 for the lowest grade (with no training required) to R5.20 for the highest (with 26 weeks training required)[2]. The company encourages teamwork, or "small group activity," but this is not accompanied to any flattening of hierarchy or reduction of supervisory roles, or to any far-reaching change in delegation of responsibility, authority and control. In the paintshop teamwork is absent. In bodyshop and final assembly teams involve 10-15 operatives which are "supervised" (as one manager indicatively told me) by a teamleader who, in terms of agreements with NUMSA, must be an hourly-paid trade union member. Salaried staff production foremen control between two and four teamleaders, with one superintendent or production manager responsible for 5 or 6 foremen.

Teamleaders are appointed by management and not nominated by the team members. A minimum Standard 8 qualification plus English literacy and basic numeracy are required to become a teamleader. Teams meet every day, but only on Tuesdays and Wednesdays are there discussions on quality, productivity, past achievements, possible improvements. Otherwise, as one teamleader told me, meetings are mainly to "let them know what to do, and they would know it even without meeting." On the other hand, job rotation among team members is limited.

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[2] Agreement between SAMCOR (pty) Limited and the National Union of Metalworkers of South Africa, Pretoria, July 1988.

demand, but in such a scenario mass serial production can "lock" the producer in one model to be sold in large quantities, exposing it to high risks in case of market downswings or intensified competition. Instead, SAMCOR tries to design a process which is, as a production manager proudly explained:

> like a ballet dancer, not like an elephant trashing through the bush. In normal bodyshops anywhere in the world, even the most advanced and up-to-date ones in Japan, you will have that they have a restricted capability in body styles. We've found the way of running a large number of different body styles in any sequence through our common body framing line, which lowers the "minimum batch run."

This means that at a SAMCOR's bodyshop the tooling changeover time from model to model is less than the cycle-time of one unit. In other words, if in one bodyshop 20 units per hour are processed, with a cycle-time of three minutes per unit, the tooling changeover time from model to model is 1.8 minutes. This performance is unique in the world, and absolute changeover times are lower than in a highly advanced plant as FIAT-SATA in Melfi (Italy)[28].

On the side of logistics and component supplies, it is equally essential that the system matches the flexibility embodied in technology. A programme of continuous inventory reduction is in place at SAMCOR, but the company has to cope with major structural constraints. Its inventory and materials costs, in fact, are even higher than manufacturing ones. Parts are mainly imported. Apart from exposing the company to foreign exchange fluctuations, this system is very costly because it requires local storage facilities and because the company has no control over packaging of parts. In these conditions, JIT at SAMCOR is spurious: containers with parts are stored in warehouses outside Pretoria, from where they reach the plant according to production

[28] Laura Fiocco, University of Calabria, personal communication.

and its implicit promise of an increased independence, by subjecting the worker to a higher degree and intensity of control. SAMCOR's solution to the flexibility challenge does not involve any major restructuring of work organisation or managerial culture as those envisaged by Mercedes-Benz, and it generally does not allow for a high level of worker responsibility or self-initiative. But it tries nonetheless to provide an extremely original response to the peculiar imperatives for flexibility which are proper to South African car production. This is mainly due to the company's linkage between flexible machinery and output diversification, and to the way Taylorism is updated to fit this purpose. However, this solution creates a contradiction between the need for human commitment and the rationale of technocratic control.

The next section will focus on how SAMCOR's road to restructuring addressed these contrasting imperatives in its work organisation.

4.2 What the Eye Can't See: Technological Flexibility and the Organisation of Work

The dilemmas of the organisation of work at SAMCOR question the extent to which technological innovation can by itself provide a response to the challenge of flexibility. The company's highly diversified product range creates major challenges in tooling and components supply. Amortizing tooling costs over several model lines needs non-dedicated machines and equipment capable to build different products with relatively little changes and short setup times. Models whose production does not temporarily cover costs can preferably imported from parent companies and sold through the dealer network, shifting production to more cost-effective models.

The system contains certain potential advantages, such as the possibility to spread fixed costs. But they can only be reaped with a highly flexible machinery and workforce. In this way, 90% of the new models can be built in bodyshops without changing existing tools, but only adapting them. Dedicated machines would have the capacity to recover their costs with a stable mass

worse conditions. So they are compelled to take the package. I have no problems in being removed, but not in this way. If they want me to take the package, they must tell me.

Thus, the implicit nature of a coercion disguised as free choice, excluding in this way any negotiation, seems to be a further element detrimental to cooperation. Similar considerations can be made about the alternative presented by the company to retrenchment: placing workers in Adult Basic Education (ABE) courses. SAMCOR made substantial investments in its ABE in the past, as part of a policy aimed at combining training with basic literacy and numeracy skills which are required in an environment where workers must be able to read at least elementary statistical quality information and communicate it to higher levels in the hierarchy. However, ABE has now become part of the broader restructuring strategy, and its utilization, as workers and shop-stewards perceive it, is no longer simply related to education and training. In fact, according to some of my interviewees, workers who are sent to ABE as a result of job mobility usually do not have their jobs when they return to the plant. Instead, they are placed in more degraded, less rewarding and more fatiguing jobs, to induce them, they assert, to accept the next package offer. A common reaction among shop-stewards to this political use of education facilities is that "ABE has become a monster" or that "it is used to cut headcount." In this way, a structure that could be used as a company asset to promote participation based on skill upgrading becomes a factor of growing worker estrangement and lack of identification with the company.

In fact, a palpable sense of having been betrayed by the company accompanies feelings of anxiety by shop-stewards and rank-and-file:

> They [the workers] didn't have a problem identifying themselves with SAMCOR. The problem now is this restructuring issue: people are uncertain about what's

Paternalist overtones were not lacking even this time:

> We have amicable and transparent relationships with our unions. We tell each other everything. But when you go to things that in their eyes threaten their jobs, then you start running into resistance. For example, if we outsource non core business functions, it may mean we don't need to employ some new people. We simply outsource the job, guaranteeing full-time employment and the reallocation to different jobs. Other alternatives can be to send workers to the ABE [the company's Adult Basic Education centre, Author's note], or the voluntary packages negotiated with the unions. There's no retrenchment, just resigning: the dignity of the worker is preserved, he's a free agent deciding to resign.

However, this is apparently not enough to soothe workers' anxiety. The faculty of "free choice" of the severance package, aimed at "preserving workers' dignity," often achieves the opposite results. "The package" is regarded by many workers I interviewed as a resounding humiliation. This in two ways: first, because acceptance of the package means capitulating workers' skills and ability in front of uncertainty about job security, so this is perceived as an inadequate compensation for what may be a future life of unemployment, dislocation or relocation in less rewarding, less considered jobs. Moreover, contrary to the company's claims, shop-stewards argue that packages are not negotiated with the union.

Second, the package is perceived as a company's form of blackmail, an imposition which is not accompanied to direct coercion, as in the case of retrenchment, whereby, at least, the sense of confrontation and of "having done one's best" can be maintained:

> One is proud of the job, he enjoys the job. Then SAMCOR outsources, the outsourced company brings its workers in and workers are moved to jobs in

are indeed largely not compatible and potentially antagonist with managerial strategies. Moreover, these opportunities could be subjectively seized by workers in quite uneven ways, depending on the needs to make sense of various individual or group situations. A general impression is that of a growing worker frustration, anxiety and insecurity about the impact of future restructuring trends on everyday life inside and outside the workplace. This contrasts with the company's quest for stability and predictability in industrial relations. In response to this contradiction, a controversial and potentially ambiguous attitude to the imperatives of restructuring is then defined by workers themselves.

I was calling the head of the shop steward committee at SAMCOR one evening to arrange for interviews for the day after. His voice sounded very concerned: "I think tomorrow is going to be a problem, you know; we have this very big problem with outsourcing here." In fact, NUMSA is engaged in a bitter confrontation with SAMCOR over outsourcing, or the subcontracting of certain operations of the company to third party firms. Shop-stewards argue that outsourcing will allow firms paying lower wages than SAMCOR to enter the plant to work at increased intensity, and many "guys" would lose their jobs. SAMCOR's position is that outsourcing concerns only "non core businesses" such as security and medical services, but NUMSA's reply is that even labour-intensive "core" activities in assembly, such as the fabrication of bumpers and tyres, have already been outsourced, and maybe the paintshop and other sections of the trim line are going to be. At the end of my telephone call the shop steward asked me to help him with some information on how unions in other countries are dealing with the issue. I had just got a document on this point from the UAW in the United States, so I managed to combine a meeting at Silverton for the day after.

There, the discussion on outsourcing was joined by workers coming in and out of the shop-stewards' office. The issue is apparently in everyone's mind. In some cases "outsourcing" is used as a kind of derogatory nickname, maybe for workers not critical enough on the issue. The company's point of view had previously been explained to me by a production manager,

CHAPTER FIVE

SAMCOR Blues, Restructuring, Flexibility, and Workplace Subjectivity

Always in your stomach and in your skin there was a sort of protest, a feeling that you had been cheated of something that you had a right to.
(George Orwell, "Nineteen-Eighty Four").

5.1 "Something is Changing," A Perceived Workplace Social Order in Danger

The forms of restructuring of workplace social relations adopted by SAMCOR are not necessarily consistent with the predicaments of the "technological road." Indeed, consistently with impressions gained from interviews with management, employees' testimonies indicated patterns of worker responses which do not fit the ideological claims found in the company's official statements and documents. An authoritarian use of flexible technological innovation under rigid forms of work organisation is, from one side, recognizing the importance of the human input in quality enhancement. The ways in which workers would respond to the call, however, are still problematic. The attempt by the company to define a direct, top-down, "pseudo-participatory" relation with its workers as part of SAMCOR's view of flexibility does not seem to produce a docile and cooperative labour force. This is true even if one considers the adverse consequences this strategy may have for NUMSA's representative capacity.

As I mentioned in chapter Four, the weakening of the union may prevent the formulation of a progressive worker blueprint for change, but it does not necessarily means a shift from conflict to cooperation. Instead I found that other ways may be open to articulate worker responses to industrial change, intensified innovation geared to new policies of export promotion, and the restructuring of crucial aspects of the company's productive framework. These alternative ways

shaped by and adapted to the changing landscapes of corporate flexibility and to problems encountered by the union is the topic for the next, and final, chapter of this research.

leadership accused SAMCOR of being responsible for the employer association's hard-line attitude. This was reportedly due to the fact that SAMCOR's wages could provide the "lowest common denominator" for the industry and that Anglo-American had all the power and interest in keeping remunerations down because an increase could have been transmitted to its mining activities (Eastern Province Herald, 3/8/1994). SAMCOR managers I had the chance to talk to proudly emphasized that no major disruption due to industrial action had taken place in the plant in the last six years (but workers could report a substantially different story, as I will show), and that all the unprocedural actions developed contrary to shop stewards' advice. Effectively, while in 1989 twelve production days were lost in both the Pretoria and the Port Elizabeth plants due to industrial action, in the first six months of 1992 only one day had been lost in Pretoria and none in Port Elizabeth. Low levels of overt resistance might then have made less traumatic for the company to decide, at the end of July 1992, the further retrenchment of 568 workers at Silverton[47]. Finally, in 1993 NUMSA shop-stewards capitulated to SAMCOR's demand for more overtime, after a strong opposition during negotiations, following the company's threat of a lock out and further retrenchments[48].

SAMCOR's management attitudes to worker organisation and organisational restructuring at the shopfloor level deepen the contradiction between technological innovation and strategies of control of the workers' subjectivity. By marginalising the union in processes of organisational change, the company ended up opening spaces for informal practices of worker responses. These spaces are widened by the union's poor handling of the "24%" issue, which created a crisis of representation and legitimation. Conversely, as I will show, identities and views defined on the question of the trust fund are still mobilized in inter-union dynamics that can have very little to do with the destination of the fund itself. However, the ways in which worker subjectivity was

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SAMCOR, company graphs, GHP, SAMCOR File.

Strydom to Hartford and Schlange, 7/8/1993, GHP, SAMCOR Files.

Eastern Cape regional offices, and demanding the replacement of regional leadership[44]. These events had consequences in the Pretoria plant. At the beginning of 1989 a seven-day strike against shop stewards sitting in the trust fund culminated in the replacement of the entire worker delegation. SAMCOR workers rejected the community use of the fund and claimed payment in cash. While the trustees agreed to satisfy the workers' demand, NUMSA decided to pull out of the trust's administration[45]; at present, the fund's share is reduced to 10%. The story of the "trust fund" carried a lesson for the union that impacted on its current weaknesses. In fact, by refusing the union policy on the community destination of the fund, SAMCOR workers not only advanced an understanding of their "community" as substantially different from NUMSA's. They also weakened the image of the union as an effective vehicle of worker demands along class lines[46]. But at the same time they made SAMCOR workers' inability to find a progressive solution to company restructuring apparent.

NUMSA's present official position is to withdraw entirely from the trust, rejecting even the remaining 10%. However, management still regards the fund as a potential element of stability in workplace industrial relations; shop-stewards view this as an attempt by SAMCOR to maintain a stake for workers in the company to reduce conflict and enhance corporate identity. The combined effect of technological restructuring and of cleavages between workers and the union crippled worker militancy in a factory which remained nonetheless strongly unionized by NUMSA (only about 800 employees out of 3000 are not NUMSA members; the union currently has 18 shop-stewards, of which 8 full-time).

Moreover, NUMSA reported that wages and working conditions declined at the lowest levels in the whole sector. In fact, during the 1994 auto industry national strike the union's national

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[44] Mangqabashana to Narian, 8.11.1993; Mangqabashana to Mavekiso, 9.11.1993. IKP, SAMCOR File.

[45] Nurse to Sauls, 27.1.1989, GHP, SAMCOR File.

[46] Similar conclusions are reached in Karl von Holdt's (1995b) study of NUMSA at Highveld Steel.

1984 union report[1] the main reasons for absenteeism are indicated in the growing worker overloading as a consequence of retrenchments, of overtime of the company's indiscriminate use of inter-department transfers which created further anxiety, and of the additional burden for older workers to train the newly transferred ones. Quite interestingly, a major cause resided in unilateral line-speed increases by foremen and supervisors. This triggered rejection of overtime and of line-speed increases, and resistance to abusive supervisory practices such as constraints on the use of toilet facilities. According to the above-mentioned report:

> When the line speed is increased workers work very hard to be tired not to be able to work the next day.

In this case, work avoidance could be achieved through a sick-leave. These examples of informal resistance will play a role in my description of current manifestations of worker subjectivity at SAMCOR. As an anticipation, it can be supposed here that informal resistance was not so much a kind of direct confrontation, but it was aimed at reestablishing a social and, I would argue, moral order violated in workers' eyes by the unfair alteration by management of patterns of employment and line-speed. It seems that the primary motivation of resistance here was to stop management's arbitrary actions.

However after Ford's disinvestment and the establishment of the "24%" workers' trust fund at SAMCOR, union organisation in the company was most adversely affected. Deep and often violent divisions between workers supporting or rejecting the fund undermined organisational unity and the credibility of shop-stewards. At the same time, groups of retrenched Ford workers, often with a past in MACWUSA, continued to accuse NUMSA of having failed to represent them in negotiations over the plant closure and asked for compensation, periodically occupying

[1] NAAWU, Absenteeism Report, manuscript, n.d. (but 1984), CPSA, AH2005, IAP C13.1.6.3: NAAWU Sigma Productivity Scheme Miscellaneous

locational advantage of being placed in a region with recent traditions of union organisation and with an insignificant history of auto workers' militancy. SAMCOR could then build its "technological road" on this legacy of asymmetric relations of power, whereby innovation substantially reinforced the employers' position in relation to the union. Capitalist restructuring at Sigma created conditions favourable to a heavy resort to numerical flexibility, multitasking and instability of employment relations, which created further anxiety and frustration among the workers.

The weakening of the union presence at Sigma left open, however, spaces for informal resistance where the links with restructuring were apparent. Moreover, the redefinition of the plant layout and productivity indexes following the 1985 merger, and problems associated with the introduction of robots, initially created spaces of vulnerability for the company which were filled by informal worker practices. Frequent robot and conveyor breakdowns were reported in the bodyshop until well after the beginning of 1986. In one case, the company had to call an engineer from a conveyor's mother company overseas to send repairmen to fix the installation. A manager complained that the systems just introduced "made it easy for employees to damage parts." When asked in which particular sections of the factory this was most likely to occur, the answer was "virtually everywhere." At the beginning of 1986 the mechanical line in the light commercial vehicles' shop reported a 50% absenteeism rate[17]. As a result, the company imposed overtime on Tuesdays. Paradoxically, in some areas of the plant workers were operating short-time on Mondays.

Absenteeism was a deep-seated problem for the company. Union documents have since long established a link between absenteeism as an implicit form of resistance and the particular form assumed by restructuring at Sigma, then Amcar and SAMCOR. I would add that the union's growing weakness played a decisive role in reshaping forms and languages of resistance. In a

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[17] SAMCOR, PI Steering Committee Meeting, 6.2.1986, CPSA, AH2065, TAP C.1.2.1.1; NAAWU/SAMCOR: Productivity Scheme, Minutes 1985-86

NAAWU (National Automobile and Allied Workers' Union), inside which the UAW had merged, in the plant[39].

The use of retrenchments at Sigma showed a relationship between automation technology and union-bashing which provided further arguments to the "technological road." It seems, in fact, that undercutting union power in the plant was a constant preoccupation in the introduction of labour-saving innovation. In 1984, when the company was embarking in the massive restructuring phase that was to culminate in the launch of SAMCOR, its executives complained that a high concentration of unionized workers could undermine their control on line speed and production runs, in a factory which was already affected by high rates of absenteeism and sabotage:

> The Chairman expressed concern as to whether the employees understand the reason that when the company experiences a downswing in volume and the company still keeps that number of employees in their employ [sic], the employees become accustomed to that kind of workplace and volume and all of a sudden when the volume increases, they start to complain[40].

At the same time the company (then Amcar) intensified work as a result of the introduction of new machinery and, at the end of 1984, it communicated that 153 workers out of a total workforce of 1000 had to accommodate "any schedule" between 182 and 230 cars a day[41]. This use of technological innovation and flexibility was undoubtedly facilitated by the company's

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[39] NAAWU, Minutes of Shop-Stewards Held [sic] at Sigma Motor Corporation Recruiting Centre, 11.1.1982. CPSA, AH2065 C.13.1.2.1, TAP: NAAWU Sigma Minutes: Shop Stewards.

[40] Minutes of the Productivity Index Steering Committee Meeting Held in the Manufacturing Conference Room, 28.11.1984. CPSA, AH2065, TAP C13.1.6.1: NAAWU Sigma Productivity Scheme Minutes: 1984.

[41] Amcar, Fixed Direct Manpower Due to Facility Restrictions, Memorandum File RAC sts, Coleman to Thom, 27.11.1984, CPSA AH2065, TAP C13.1.6, NAAWU Sigma Productivity Scheme.

picture, it is not an accurate statement concerning the company itself. In 1978, a year before the revival of mass industrial actions by black autoworkers in the Eastern Cape, 1500 employees at the Sigma Silverton plant downed tools in a two-day strike: a first, at that moment isolated episode of African auto worker militancy (Southall 1985; 316).

This can well represent the fact that SAMCOR's peculiarity is reinforced when looking at patterns of worker mobilization. In 1978 the United Automobile, Rubber and Allied Workers' Union (UAW), which organized African workers and was organisationally linked to a "registered" union, indicated that the state of union structures (branches and shop-steward committees), of contacts between workers and organisers, and of worker education for the black autoworkers in the Pretoria area were "non existent"[7]." However, Sigma was defined as the "first target" in the local unionization campaign. The plant already had a highly homogeneous workforce: most of its employees came from the nearby township of Mamelodi, located at a walking distance. Unionization had started in April 1978, initially through contacts with workers at the factory gates with the intention to "establish who the workers looked up to as the leaders in the plant," but still without a recruiting effort.

A steering committee was elected among the most active workers at a meeting in Mamelodi: the committee met with organisers on a weekly basis[8]. In one month, 200 workers had been recruited. The strike boosted union recruitment: in August 1978 there were 720 African workers in the UAW out of a total African workforce of 1600; membership rose to 1046 in November, and 1108 in December. The company agreed to stop-order facilities. Plant restructuring linked to successive merger processes was, anyway, accompanied by substantial reductions in employment. The retrenchment of 500 workers in 1981 adversely affected the organisation of

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[7] This and the information below come from UAW, Report on Transvaal Organising Campaign, n.d. (but 1978), CPSA, AH2065, TAP, B1: UAW Reports.

[8] UAW, A General Meeting in Mamelodi West to be Convened by Committee with the Sigma Workers, 13.6.1978, CPSA, AH2065, TAP B1.2.2.1: UAW Sigma.

the context of the history of worker militancy and organization in the plant, which will be developed in the concluding section of this chapter.

4.3 Militancy and Unionization at SAMCOR

> In the 1970s the workers were very docile. They would do whatever you told them to do, but they didn't bring their brain to it, there was no participation. It was a "baas-boy" relationship. I remember when we used to have a workers' council, before the union came, and prior to that there was nothing: production foremen had the full authority to hire and fire people. It was exactly as you hiring and firing a garden boy.

This quotation from the personal memories of a SAMCOR manager can be assumed as a good summary of workplace industrial relations in what at the time was Sigma. In union reports it is possible to read stories like this:

> F. Mashabane, Sigma 04.1012.8, 9/8/1979: was having epilepsy and asked foreman to go and see African doctor (herbalist) and foreman agreed, but on going back to work he was terminated on arrival[36].

This still occurred while the Wiehahn Commission reforms where well under way. Thus, the words of the above-mentioned manager are also a fairly accurate assessment of the state of autoworker militancy when independent shopfloor-based organisations of black workers reappeared on the South African industrial relations' scene. Yet, even if it can provide a general

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[36] UAW cases, manuscript notes, 1979, CPSA, AH2065, B.1.7.2.2.1, FAP, UAW Sigma.

But it is extremely difficult to locate in their story a time when someone cared for their complaints, or when multitasking was not a common practice. Similarly, the fact that worker struggles against high line-speed (including sabotage and go-slows) can be documented already at the beginning of the 1980s, as I did in the previous chapter, indicate the permanence of this problem beyond any mythical worker past.

However, new shopfloor structures can probably enhance these exploitative dynamics. Teamwork, with the possibility to control the reallocation of workloads it offers, can be functional to this, especially in a company that in the past was affected by extremely high absenteeism rates, refusal to work overtime, employee-provoked damages and other informal practices to slow the line-speed. Moreover, the prevention of worker control over working paces and loads is here perceived as a target of the company's strategy. The fact that SAMCOR introduced teams from above, without negotiations, reinforces this perception. Work teams are one aspect of the imposition of managerial meanings of "control" on the shopfloor. Another aspect is the devaluation of worker knowledge of the correct speed in a mixture of strict Taylorist evaluations and flexible employment of labour power. In the words of a worker, employees have no chance to negotiate the average workloads, since only management is entitled to decide the correct schedules:

> On the "systems" there are areas where they can make 600 units a day, maybe 1000, pushing the system up. What we tell them is: "look, if you want to increase the line speed we want such people" [a parallel increase in labour force per operation]. They say they think the solution is to rebalance the system, going to any individual and check he is not overloaded.

I ask them if the system allows them to plan

consequences. When these consequences materialise, worker responses to innovation are expressed in more radical terms. This indirectly confirms what I have stressed above: worker perceptions of technology depend on the social and technical practices where innovation is embedded and on the implementation of unnegotiated work organisation. Prominent among these practices is the intensification of work, and in particular the increase in line-speed. Faster work paces and heavier workloads are the most common images, linked to reduction in headcount, that workers at SAMCOR associate with the expression "lean production." Very little here recalls the idea of the workplace as populated by "independent problem solvers" that idealized accounts of "lean production" quoted in another section often convey. Quite the contrary, traditional Fordist complaints are reproduced:

> Hours per unit are reduced, people are retrenched, the speed of machines is pushed harder, jobs are shifted to people behind. These people are harder and faster, not smarter. They call it lean production. But if you are working in these conditions how can you expect to contribute to what is done in the department?

Apart from this definition, I found it interesting how a components' assembler in the trim lines characterized the concept of "lean production": workers who are terminated are not replaced, their jobs are reallocated to other workers who are required to perform a wider task range with an increased work intensity:

> We are two guys here building engine compartments of Escort, Etude and Astina, only two people. Sometimes we are taken to the floor area to go and assist there, and after few hours we are taken from that area and we must go back to the engine compartment area. So we are going through and through. Since the new models came, no one cares for our complaints.

people from the streets giving them jobs, they bring in robots.

Q: You said that the company has been producing since 1969. But the bosses have an answer to that: they would tell you that now you must be more competitive against Japanese and Koreans cheap imported cars (my emphasis).

The shop-stewards accompanying me intervened:

SS: I have an answer to that question. Why are they reducing tariffs and increasing taxes?

FB: Because they want to export...

SS: No! They don't want to export.

Worker: Since the new government comes in...

SS: Is there any company in South Africa, that you know, importing its cars to Japan?

FB: No.

SS: Why? Japan doesn't allow that. Why are we allowing it? Wanting to compete with a country like that is naivenness, it's stupidity, even with technology. We can compete only by protecting our market.

The primary concern with job security in workers' responses to technological innovation is confirmed in the rather different case of the paintshop. Here, opposition to new technology is significantly lower, and relocation to other areas of the plant is often welcomed, given the particularly hard conditions in this department, with high levels of exposure to chemical products in a noisy, high temperature environment. So far, the reduction of employment in this area has mainly been absorbed through internal mobility, particularly to the trim lines.

Technology is directly associated by workers with a number of specific, adverse

You have to sweat hard against the robot. If you don't sweat hard, the robot will take your job. That's what they told you.

The responsibility of the company is heightened by management's attempts at presenting changes as inevitable and in the common interest. This reinforces the impression that workers' experiences and opinions are disregarded, their past efforts are not recognized and that, consequently, the limits of consent have largely been reached. The use of market-related arguments by the company, instead of making its policies look more neutral, reinforces the sense of violation:

Q: Yesterday I was talking to [manager's name]. He told me a story about the fact they are introducing technology only in areas where no worker in the world can rely on his eyes only.

A (1st worker): This company has been here since 1969. Now, do you want to tell me what they have been produced since then was not right? Because robots are here only since 1992[39].

(2nd worker): At that time they were producing Colts, Valiants, Chryslers, there was no automation. That was done by hand and there was anything wrong with them.

(1st worker): The issue here is that they want to produce more with less workers. You buy a robot, you don't pay him, it does not take sick leaves, it does not stay absent from the job. That is their argument. They are not doing justice to this country. This country has a huge problem of unemployment. Instead of taking

[39] As I showed, robots were introduced in 1987, not in 1992, even if in 1992 a period of accelerated innovation started. This is another example of that process of myth-making and selective construction of memory I dealt with above. The idealization of the past as a worker discursive strategy is confirmed in the following sentence that there was "nothing wrong" with the quality of output at Chrysler at the end of 1960s.

and procedures to make sense of and to control the situation. This rationality, the pressing need to be more competitive, manifests itself inside the workplace in the form of technological innovation.

But technological innovation would not be so disempowering for workers if it is not understood in the context of "lean production." In fact, the roots of worker powerlessness are more easily found in a corporate rhetoric praising cooperation and participation while at the same time minimising negotiation. This contradiction, combined with a new trade regime which forces workers to be productive and competitive, displaces traditional images of worker solidarity and action. The fact that NUMSA has nothing to oppose to this "cooperative" paradigm at the company level, while it at least partially embraces it nationally, as shown by the relevance of productivity deals in the "Three-year Agreement," deepens the displacement and the ensuing sense of confusion among workers.

"Restructuring" and "technology" are invariably associated in workers' and shop-stewards' discourses. But the theme of uncertainty about the future, which is present in almost all the workers I interviewed, is again legitimized through a supra-individual concern, not only against technology itself, but on management's unfairness to "the people" or "the nation":

> That ideology is wrong, even if technology is good. What I'm saying is that the general people, our nation, is not yet advanced in technology. If now the company resorts to use high sophisticated technology the general people will lose their jobs. Now here robots are doing what 200 people were doing.

In this perspective, a new kind of unfair intra-workplace competition is introduced by the company, a competition in which workers' abilities, skills, their sources of pride, motivation and identity are made useless:

search for new meanings a factor reinforcing anxiety.

Technological innovation is what divides "before" and "after" in workers' elaboration of the myth. Of course, the bodyshop is the area where workers are more sensitive to change:

> [Before], the problems we had were normally everyday problems, we could cope with that. But today, since this restructuring has been introduced, people are frustrated.

However, technology plays in workers' stories the role of synthesizing changes in an icon to make sense of them, rather than of an accurate historical reconstruction. In fact, I indicated that the authoritarian use of technological innovation is a rather recent manifestation of a much deeper tradition of unilateral, top-down, unnegotiated organisational change by management. Conversely, I have shown that these practices are part of a process which can be dated back at least to the beginning of the merger movement in the first half of the 1980s. On the other hand, I noticed how managers themselves define the pre-1980 situation as a "bass-boy" set of relations.

From this point of view, it is questionable whether a past made of security and predictability, where w s "could cope" has ever existed. However, this fictional opposition of "before" and "after" plays a strategic role for workers: to locate inside an objective historical genealogy, and not only on the ground of mere perceptions, what they identify as the main reasons for their present malaise. The invention of a tradition provides then meanings to a present whose meanings are becoming obscure and confused.

In this case, the fact that "before people were happy" does not imply the absence of conflicts. But issues of racism and discrimination, unfair treatment by supervisors, disciplinary cases, struggles over benefits, all this was part of an established vision of workplace confrontation, of collective solidarity and action, and of recognized roles and procedures. But "restructuring" implies the imposition of an external rationality which destroys the capacity of established roles

unable to translate it into concerted action. Thus, worker representations of factory life hamper, rather than facilitate, the development of an effective challenge (Oloyede 1992).

Workers identify technology as the most notable vehicle for change in workplace social relations. Representations of technology in SAMCOR workers' discourse are sometimes referred to as an abstract force mimethized in the regular pace of the conveyors or in the ideology of "lean production," sometimes represented by methonymia through "the robots," some other times linked to employers' intentional choices against "the guys" and their union. They are quite often associated with the idea of unilateral managerial action and lack of consultation: words used to describe technology evoke separateness from the workers' day-to-day concerns, employers' betrayal and mistrust of the employees' sense of quality. The results of this separation are seen as unfair increases of line-speeds, heavier workloads and intensity of operations, the disarticulation of factory socialization, and cuts in employment levels. I am now turning more specifically to this set of issues.

5.2 A Cybernetic Sweatshop? The Moral Economy of Technology at SAMCOR

"Before the changes people were happy." "The changes" are here memories of the consequences of technological innovation. This statement by a worker in bodyshop, so strikingly recalling the incipit of Ken Saro-Wiwa's "Sozaboy" (1994), assumes the same narrative function, projecting the issue of restructuring at SAMCOR on a much wider horizon of significance. It builds a mythical opposition between a "before," when the factory social relations and dynamics of power and inequality were still contained inside a collectively accepted moral and symbolic code of norms and interpretation, and an "after" when traumatic and uncontrollable forces of change suddenly impacted on the workplace, disarticulating its codes and devastating its internal social life, imposing uncertainty and anxiety in place of security and predictability. The already noticed contest over the union's role, moreover, weakens a repository of identity, making the

I am a person who wants to fight rather than talking. I don't like what these guys [the company] are doing. I think that through fight we can win what we want. But they [NUMSA's regional office bearers] don't like my militancy. I'm not included in the team who's going to speak to the company (...). The illegal strike works if you are able to control the workers. It then becomes legal because no one is afraid to lose their job. They can't employ scabs teaching them how to build a car: it will take three years. It's too costly (...). Illegal strike can work as long as we are united. I worked at SAMCOR for 18 years. In my lifetime we had only one legal strike, in 1994 [management claims that there was no loss of production due to legal strikes in the last five years, Author's note], all the others were illegal. And I'm still here.

Q: What makes you think that the company will be vulnerable to an illegal strike?

A: They have invested fast. The future of this company lies in people working here. That's why they are weak. If we can be able to control the strike we can win. Although they are cutting headcount, they depend on us in the whole assembly.

Starting my examination on workplace subjectivity with outsourcing is useful to exemplify a certain pattern of worker responses to change, and how this creates problems for shopfloor union organisation. Outsourcing is mainly seen as a kind of ultimate violation of what can be regarded as acceptable relationships between workers and employees. The call for defiance towards the company comes here as a consequence of an open attack to the bases themselves of those relationships: employment security. An attack, moreover, which is seen as brought upon by an impersonal rationality of the company against which the union itself is apparently powerless. To this extent, I would say, the power inequalities of SAMCOR's road to restructuring are broadly represented. However, worker knowledge of industrial change and alteration of social relationships presents a very nuanced and stratified understanding of restructuring, but they seem

> you, you see, because we cannot sleep without food, and then crime goes up. And they are going to hire somebody by contract, where they are going to pay 7.00 Rand an hour (...). What we think, we people, because we've got minds, we think that this is maybe something that is against our government.

A part-time shop-steward nearby added:

> Bumpers have been recently outsourced to IEC. A teamleader at IEC gains 6.00 Rand per hour. Now [at SAMCOR] it's 16.00 Rand per hour: product volumes stay the same, earnings go down, profits go up. What they are practising here is capitalism. And who benefits from that? Shareholders! And who are the shareholders? Foreigners: Ford, Mazda. And the people, they stay poor, and poor, and poor. And crime is accelerating, people are committing crimes, and they don't care about crime as long as they get their shares.

It is interesting here that, to strengthen the moral superiority of workers' argument against outsourcing evoking the image of an entire social order threatened by obscure forces allied to foreigners against the national interest, no mention is made of the unions, or to the idea of general worker solidarity. The argument is entirely played at a symbolical level: the search for a transcendental source of legitimation is at the heart of the most commonly held reassuring images. Other employees, particularly shop-stewards, are more nuanced in their evaluation of the government. Some recognize that, since the present government is adopting a neo-liberal path which facilitates the import of components from overseas, outsourcing does not create any fundamental contradiction.

In some cases shop-stewards realize that, unless decisive steps are taken, this can widen the gap between them and their members, further weakening the union:

They also contribute to build the social basis for solidarity for future action. Shop stewards say that workers communicate with colleagues in other departments and then go to them, asking for action, often complaining about the union's head offices. If these dynamics of shopfloor knowledge are not peculiar to the company, at SAMCOR, in any case, shop-stewards substantially lack control of this informal organising. It seems rather to derive from the desire to find a common understanding of a change regarded as threatening employment security. This is a standard SAMCOR's theme which negatively impacts on a widely researched dilemma for shop-stewards: their need for an uneasy balance between the company's position and that of their members[9], even if this means further inactivity and isolation. Other, the majority, are more concerned about "keeping the pulse" of the rank-and-file and trying to articulate informal solidarity in a conscious agenda for action.

The articulation at the rank-and-file level of an informal knowledge about outsourcing, however, leads many shop-stewards to recognize that workers are autonomously realizing that "something is changing in the workplace." Workers can see their colleagues removed or taking packages. A sense of fear about a possible job loss pervades whole sections of the plant. I talked about the issue with workers in the bodyshop, which is the only department not directly affected, by now. And yet, they could give me in some cases truly apocalyptic visions about a possible post-outsourcing future. The issue is assumed as symbolizing a capitalist move violating not only employment relationships, but the whole promise of the democratic post-Apartheid South Africa:

> [This outsourcing thing] which is going to cripple the government, which is going to extend crime. At the end of the day crime will be too much because we are going to be given packages: thirty-thousand, thirty-thousand, thirty-thousand. Then we go to the street and that money will finish. Then we start to steal, we kill

[9] Beynon (1973) is pioneering in this regard

A: Yes, they just say they've heard that in the plant.

Q: Well, if they even know the name of the outsourced company, it must be a very reliable source.

A: I don't know what's happening. I'm not sure. I'm just waiting for the company to come and say: "men, the place is no more yours." If I say the company is outsourcing and the company asks: "Who said that?" I can find myself in troubles. And I only know that the company says it's not doing that, even if the workers say it will do it.

Q: Whom do you trust more?

A: [Embarrassed smile] I trust no one.

I could not avoid an impression of isolation, powerlessness and lack of information on the part of certain shop-stewards. On the other hand, rank-and-file members were actively developing, outside the shop-steward structures, their informational and organisational strategies. I did not ultimately manage to ascertain whether the paintshop is really going to be outsourced. The company, however, may have good strategic reasons to do that. In fact, workers from an outsourced company would be tied to different contractual arrangements, maybe they would even be members of another sector's union. Thus, the possibility for the company to strike deals on flexibility with them without the interference of NUMSA would be enhanced, reducing chances for worker control and reinforcing the trends to task-based "pseudo-participation" I previously evidenced.

The paintshop's story showed that a very solid and informal worker network to share information and analyses about company restructuring was established in the plant. This network crosses the barriers between departments and it involves sometimes the foremen for more detailed information. The promotion of black workers coming from the union to supervisory tasks somewhat facilitates this. But these networks are not only aimed at sharing information.

happening. They don't know whether they'll be working here tomorrow or not. Attitudes towards SAMCOR are changing, we see people are losing their jobs. We are losing faith, we are losing hope.

Meanwhile, voices are spread throughout the plant that whole sections of the factory have already been or are in the course of being outsourced. While these voices express a very urgent and shared concern, they are not, at the same time, always reflected in the union's communication channels. Workers on the floor could tell me precisely which sections of the plant had been subcontracted, and even the names of the subcontracting companies. On the other hand, shop stewards had to rely either on the company's reassurances or on what "people say."

At the trim line shop stewards seemed more convinced. They for example indicated the recent physical demarcation of the paintshop as a proof that it has already been outsourced. Effectively, the paintshop is the only area of the plant separated by physical barriers. While it was relatively easy for me to move across other departments, to enter the paint shop I had to be accompanied by a shop-steward who gained permission from a guard for me to pass through a gate. The company argues that the gate was placed to keep people out of a hazardous area. I asked a shop-steward in the paintshop if that had anything to do with outsourcing. This one is much more cautious than his comrades in assembly:

There are voices that Dulux is coming to buy the boot lines, there are also voices about the sealers. The company says it won't do it, but workers have been saying for one year it will do it.

Q: The guys at the trim lines are convinced they are much more than voices. How do workers know about that?

A: I don't know.

Q: Have you ever asked?

In this and similar cases that I could observe a clear perception exists, compared to workers performing more skilled jobs but whose skills are not recognized, of the fact that the worker is made responsible towards the quality of the product, that he must inspect it without relying on the supervisor. In this stronger attachment to the job and, implicitly, to the company, what I identified as the contradictory nature of "tacit skills" might play a role. Providing the worker with greater opportunities for control, tacit skills in formally low-skilled jobs make him, nonetheless, more dependent on his occupation, given that skills are plant-specific and non-portable. In this way, it seems likely that the nature of the job as a source of identity and of claim over control can be strengthened, and any attack on such a vulnerable and precarious identity resented. Studies of technological deskilling in South Africa (Ewert 1978: 334-336) have shown how the loss of skill and status as a consequence of new technology has the consequence to define high levels of specialization weakening the position of the worker on the labour market. On the other hand, relatively high levels of remuneration and benefits could prevent the job from being felt as "degraded," discouraging the search for alternatives, and reinforcing worker dependence on the company, a point already noticed by Roux (1984b).

Whereby in the first two workers interviewed for this section a militant self-disciplined rhetoric was still maintained for strategies of response based, respectively, on upward mobility or on the exit from the company, in the third example the idea of quality entirely substitutes any language of struggle. I would rather say: the invention of quality, given the nature of this particular job, highly fragmented and repetitive.

I can advance, as a conclusion, that worker orientation to quality as a value increases when the skill and knowledge content of the job decrease. In parallel, workers' positive attitude towards the job and its final results are less instrumental and more expressive. The reason can be that with the weakening of individual worker control over his job, its pace, load, final result, and with a decreasing security on the prospects of future employment and the withering away of alternative meanings to attach to work, a new source of sense and identity is found. Company's common

It's a problem. It's like having a wife who is irresponsible; but you love that woman and she's the mother of your kids.

Even workers substantially satisfied with their jobs and with their grade cannot be automatically assumed as compliant. Satisfaction may be produced by the perceived capacity to set the correct times and procedures for a task which can be called invented "pseudo-craftsmanship." This is an ethic and a sense of initiative even totally unrelated to the lack of autonomy and initiative, the low-skill nature, or the monotonous characteristics of the job. This recalls Charles Sabel's (1982: 14) definition of craft as defined not by the nature of tasks but by the worker's expectation to show its knowledge and preparedness in unforeseen situations. A feeling of being essential may be coupled for workers to lack of formal skills in a situation of high uncertainty. This is especially true for workers with plant-specific skills and little chances of being employed in another company.

Given the weak foundations of identity on the job, in this case workers can become even more susceptible to violations by management. I talked to a self-defined unskilled seal-applier in the paintshop. His job consists in sealing the unwelded gaps opened in units coming from the bodyshop:

I like the job, very much! I enjoy the job because I experience problems, I've got a say. I can blow, if a blowman is absent, I can flat, now, I can do underbody seals. The job of sealer is changing. There's more responsibility. I can say it's becoming working faster. They set the line speed for that job as they see you perform well and they increase a little bit; if you still perform well they increase a little bit, a little bit. After a month they feel that guy is alright for the job and you yourself can feel now you're alright. And you start enjoying the job.

disillusionment and violation when he found his qualification as an assembler to be lower than his real qualification as a repairman. This involved at the same time a more difficult and tedious job, whereby "repair is easy; there's no line, just work." What is worse is that he is required to perform both the assembler and the repairman job. This implies overtime, given that the double job does not allow him to comply with his repair schedule during normal working hours. Extra-work is mostly done on Saturdays and sometimes Sundays on unfinished cars set aside of the line. Yet, he is remunerated at an assembler's wage rate, R508,00 per week, compared to R780,00 a week for a repairman. He describes the combination of jobs of various qualifications in one single worker's schedule at the wage of the lowest qualification as a common practice at SAMCOR, where "there is no standard grade, it depends on the company," and where wage differentials are huge, even inside the same grade. At ISCOR, where he was employed before SAMCOR, it was not like that: promotions there were more transparent. He left because that job threatened his life-strategy, the prospect of being moved to another plant and to live in a hostel would have jeopardized his family life. He had to take a choice where external considerations prevailed: he accepted the job at SAMCOR knowing that conditions were worse than at ISCOR. But this led him to a quite instrumental attitude:

> When I came here I thought maybe the company will develop me, but now I only want to start my own business.

It is mainly for this reason, he continues, that it is important to work at the best of one's capacities. If undisciplined behaviours are developed, this can "grow inside," undermining the prospects of success once having left the company.

But even if a pessimist perception of the viable alternatives brings this worker to an instrumental attitude, his relationships with the company suffer, they are controversial, not conducive to consent:

here essentially means transparency of procedures. However, it is not arbitrary to deduce that procedures are more likely to be considered as transparent if they are negotiated and monitored by independent legitimate worker representatives. This confirms that the company's unilateral style of restructuring, its manipulation of issues of control, and its unavailability to bargain on work organisation mainly account for its undemocratic nature. A similar point is reflected in other opinions:

> You have a Standard 9, with five years experience; then it comes a white unable to read and write, and in one week he becomes a supervisor, and he tells you what to do.

While dissatisfaction does not define in this case a strong identification with NUMSA or any visibly militant attitude, and striking is considered as a last resort, it does not seem that dissatisfaction can be entirely contained inside the company's rules of the game. Self-affirmation in this case takes the meaning of a process of social promotion developing despite and against a company which violates the rules of a fair game:

> By struggles I'm not say I'm going on strike. I'm saying I'm going to struggle; it might be through that post of motor mechanic. It's all part of the same struggle.

Even in case of a correspondence between skill and occupation the social order of the factory, its rationality and imperatives are often seen as unfairly interfering with the workers' sense of their job, the meanings attached to their activity, and the subjective construction of the abilities required to perform it. This can have little to do with the particular content of the job or its classification. A Grade 3 semiskilled assembler at the slot conveyor developed a strong sense of

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unaccountable and despotic nature of foremen's authority

quality for purposes expressive of identity:

> According to myself, nothing is impossible for me. I can't say my job is difficult (...). If you do that job everyday, you become used to that job. Yes, the job has changed, there's more line-speed. But I'm a fast man always, if the line-speed is going up I think I can cope with it (...). I have been a clerk, I don't think this is the only job I can do. I am a fastest man. I grab fast, so if each of the department take me to the job I think I'll make it, because it t ' s me few hours to know the job.

Construction of identity defines here precise strategies of adaptation and response. This, however, does not mean compliance with the imperatives of power. An assumption in this case is that it is viable to articulate a strategy around the prospects of promotion if equal opportunity and transparency in remuneration existed to take account of the whole range of abilities and expectations developed inside and outside the workplace. In other words, a higher worker commitment raises the stake of the promise of working at SAMCOR, but it also makes violations more likely and reactions more susceptible.

The same assembler quoted above goes on blaming the company of unfairness and discrimination because

> people with lesser knowledge are on top of you. If there was enough democracy in this company we wouldn't have to struggle all over.

It is here interesting that by "people with lesser knowledge" are mainly intended white newly hired employees, promoted in superintendent or junior management positions[4]. "Democracy"

[4] Adler (1993b) stresses that worker tacit skills and discretion, as everyday responses to shopfloor problems, are prevented from becoming a basis of workplace cooperation by the lack of skill recognition and the

SAMCOR is reported, together with Delta, as paying the lowest wages and benefits in the sector. Workers, on the other hand, are able to make comparisons, or "benchmarking" as one of them said, with other plants, which heighten the sense of injustice. This takes place either through the circulation of information through the shop-stewards, or thanks to networks involving relatives or friends, sometimes originating from the same areas and working for other companies in the Transvaal. So, I could learn that a worker in Grade 8 at Nissan gets the same remuneration of a Grade 3 at SAMCOR, or that workers at BMW benefit from profit-sharing schemes which do not apply at Silverton.

Issues of a fair wage for individuals and the household are strictly linked to what workers perceive are their skills, and the need for recognition. This need is defined both on the range of tasks a worker feels prepared to perform, and on the content of specific tasks he is actually doing in terms of dexterity, physical strength, speed, concentration. The lack of skill recognition defines sets of complex, sometimes contradictory worker orientations to quality. This issue seems more relevant to workers displaying a more articulated understanding of the opportunities embodied in restructuring and a clearer strategic approach to career choice. Apart from the sense of individual pride for mental and physical abilities, the possession of previous work experiences involving communicative skills may help the worker to strategize and to define expectations for control. What follows is from a Grade 2 assembler of heater-blows, boot-locks and lights at the trim line's "System 1", with a previous experience as a retail salesman:

> I want to know the whole plant, the whole job of the plant, but my main job I want to do is a motor mechanic. That's the career I want to follow.

In this case a positive attitude towards the opportunities contained in the job as derived from broader experiences and strategies is negatively affected by the narrow content of work at SAMCOR. The sense of being "the man for the job" reinforces the meaning of contribution to

check machines during normal production, so they have reduced hours of overtime to make people check the machines during normal time, so you have to skip the lunch to check the machines. You have to work eight hours checking and producing; before it was only to produce. How can you check and produce at the same time?

In any case, the company's appreciation of workers' contribution to quality defines a new level of struggle over control. Worker identities constructed along these lines are wounded when examples of unfairness appear which, undermining workers' sense of control over their job, break the promise. In this way, quality is not a neutral playing field defined by universally accepted rules and standards of performance. It rather becomes an area of contestation between different visions of control over production, of a defensive combination of worker autonomy and initiative against the impersonal logic of the "technological road."

Workers' emphasis on issues of control is a reaction to what is perceived as disregarding their contribution to quality. Perception of unfairness at SAMCOR is linked to issues such as managerial manipulation of work times and paces, lack of recognition of skills, supervisory interference with the worker's knowledge of the job.

A general dissatisfaction about wage levels is common. This is combined to varying degrees of worker identification with the company's imperatives. After the "Three-year Agreement" was signed, a shop-steward recalled, trade union organisers and shop-stewards were attacked during report-back meetings, where NUMSA was accused of having "sold out" the opportunity for better wage increases for the sake of its aims on productivity deals and skill upgrading. The agreement is generally recognized by external observers as an advance for workers with few parallels in other sectors. Cases of rejection of the agreement show, instead, not only a short-term worker attitude to wages, but also a clear and rational calculation of the articulation of family's needs, of the necessity to support unemployed relatives.

doing production operations in the trim line:

> I don't believe we build cars at a 90% quality, but I've checked. I found they are 75-80%. Quality has deteriorated because workers are squeezed. How do they expect workers to perform like machines? We are not properly manned. All this lean production thing, it's all about save costs, squeeze the workers, do more jobs. If we had more time, we'd be doing quality because we'd be planning. We are not planning now, we don't know what we are going to build the next day; they are just brought down. Models just come down from the paintshop. An assembler should expect anything.
>
> Q: How were the results on quality before lean production?
>
> A: Before it was better. There were enough people on the systems, assisting each other, a 100% quality, we were working normally.

Again, "normally" seems more aimed at reconstructing and imposing some form of regulative ideas on the present, rather than referring the "before" to a concrete historical reality. "Normality" is here the advocation of a condition where workers have at least some voice over how work is organised.

Part of the "squeeze" on workers is also what is regarded as unfair allocation of time for machine inspection. Here, one of the celebrated components of the Japanese model is openly rejected[51]:

> They [management] are not maintaining the whole machines, only when machines stop they come, but otherwise they don't make inspections. You can't

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[51] This aspect was already raised in Kamata (1984), in a "classic" exposure of the human costs of the Japanese model.

and construction of subjectivity may find a substantial input precisely in a re-elaboration of company ideology, also through the contribution of militant shop-stewards. I explained how the promotion of quality commitment at SAMCOR defines a contradiction: on one hand, quality is encapsulated in the machine and insulated from the perturbing effects of social relations and interactions; on the other hand, managing social relations and promoting compliance and initiative is a condition for the effectiveness of the whole socio-technical system on which quality rests. This contradiction is materially translated into retrenchments, arbitrary allocation of time and tasks, instability of employment relationships.

Workloads, line-speed, deteriorating health and safety conditions or growing employment insecurity cannot be regarded as necessary and/or sufficient causes of overt conflict in so far there is a perception of other possible, and less costly, alternatives to define identity, exert moral pressure on the company, or strengthen workers' bargaining power and claim to a fair treatment.

Among these alternative responses, a kind of flexible identification with quality imperatives as defined by managerial ideologies can provide opportunities to worker self-affirmation. This can be of a purely instrumental nature, or else expressive of identity. In any case, it seems that the ideology of quality and competitiveness motivates worker acceptance or cooperation in so far it can be associated with the promise of equal opportunities for everyone to contribute to the success of the company and to equal rewards, which implies greater worker control. Adherence to quality performance becomes part of a pattern of tradeoffs and negotiations on the workplace. Since quality provides the company with the legitimation for restructuring, workers must prove capable to give a specific contribution to quality in order to carve up spaces for them inside the dynamics of change. Conversely, the persistence of hierarchical relations prevents the redistribution of the benefits of quality-enhancing schemes. As a consequence, the inherent inequality in authority relations prevents an agreement on shared quality-oriented values.

Quality-related considerations can strengthen workers' demands for a greater measure of control over loads and rhythms of production, as in the words of this part-time shop-steward,

cradles: sometimes cradles get loose and body sides fall on operators below. In an accident of this kind, a worker was beheaded last year. In 1994 a 500 kg. transformer activating spotguns fell on a worker, who is now paralysed. The problem of loosening cradles is reported in assembly lines as well. Here, moreover, mounting engines "from below" involves the danger of falling engines. Multitasking increases these risks by often placing unprepared workers to perform hazardous operations. In bodyshop a feeling that "the company don't (sic) care about employees" is associated with unfair and discriminatory treatment in safety provisions, aimed at cutting costs. For example, fitting components at SAMCOR is a high labour intensive job: operations that in many countries are mechanized are here performed manually. This is the case of windscreen fitting. Workers fit screens on the painted body with a chemical moulding. They would not be entirely protected even if they wore gloves, according to one of them. And yet, this operation is done at SAMCOR by hand and without gloves. Some workers had their hands devastated by encrustations and scars caused by the moulding, as if a second skin had replaced the natural one.

However, if from one side workers feel increasingly alienated by the logic of organisational restructuring at SAMCOR and by its social and human costs, from another side a greater advocation of control over their jobs is encouraged by fissures and loopholes in restructuring and in its discourse. As I have already argued, workers cannot be simply assumed as passively suffering processes of restructuring. They establish a recursive relation with them. Processes through which workers' meanings of industrial change, albeit problematic, contradictory and "mythical," are constructed affect and shape industrial change itself. In the next section I will analyze opportunities provided for workers to respond to restructuring by flexibility as ideology and practice.

5.3 Grabbing Fast: The Social Construction of Quality at SAMCOR

In the presence of a weak and divided trade union organisation, processes of worker responses

and it moreover generates instability and frustration through prospective reductions of employment as a further impediment to worker militancy and control, and as a permanent threat to the remaining employees. If this, conversely, is translated into an individualised concern with job security, for example by trying to avoid being critical or outspoken, it can further weaken union solidarity, reinforcing workers' loneliness in a vicious circle.

The intensification of work as the most visible manifestation of restructuring is generally linked by interviewees to higher hazards for health and safety in what is becoming a high-risk working environment. Interpretations of restructuring as profit-driven and not concerned with people's lives and dignity compare present health and safety issues with the "old days" pre-change problems which "could be coped with." Now, a causal link is established with new technological and productive paradigms. These concerns are raised in every department. When I was interviewing shop stewards, the most frequent cause for interruptions was given by workers coming to my interlocutors reporting physical injuries on the job. In some cases they were bleeding from machinery-related wounds. Most of the grievances dealt with by shop-stewards during the period of my research were connected with health and safety issues.

The bodyshop is probably the most health-hazardous environment. Lack of safety equipment and clothes is widely reported. This is a documented, longstanding problem at SAMCOR[2]; in the areas more exposed to fumes and emissions, a problem aggrieved by forktruck's exhausts which are often malfunctioning, only a minority of workers was wearing masks. Where workers wear masks, as in the paintshop, it can happen that the fans are broken and the chemical fumes are not dissipated. There is apparently no company policy on the use of masks; wearing such equipment seems entirely voluntary.

Work accidents are reported by shop-stewards as frequent, and linked to poor safety precautions in the use of machines. Body sides are brought along the overhead "carousel" by

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[2] Seiler to T. Adler 6.6.1986; Health Information Centre to T. Adler, 25.6.1986, CPSA, TAP, C13.2.2: NAAWU-SAMCOR: Spray Painters.

> No. I don't have enough time to plan, we are only instructed. We cannot do our job if we are not manned properly. I don't enjoy working for this company, it's just I don't have any alternative.

A sense of the union losing control of work paces is present in the words of another operator in the trim line:

> The shop-stewards monitor the line speed[5], but you find that behind their back the line is running fast.

This impression is nearly exactly replicated in this argument by a bodyshop worker:

> Workers are not satisfied as the way they were satisfied. No, they're squeezing the job. You have four and they take three out of the job and you have to produce the same volume at the same line speed. You see what's happening with the idea they came out with, lean production, they're losing headcount, they are retrenching people, everyday. When you lose headcount, the company doesn't reduce the line speed. People are complaining everyday, minute by minute, that the line is moving fast, that they cannot cope.

Worker perceptions of "lean production" are not conducive, then, to participation, involvement and commitment, as it is assumed by common wisdom in business literature. Flexibility is not part of a process of legitimate organisational change, for which it should be bargained with some kinds of worker representatives. It is rather "this idea they came out with,"

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[5] This seems rather prescriptive, since there is no company agreement providing for this role for shop-stewards.

5.4 Workers, the Union and Resistance

The company and the union embody two peculiar rationalities that may be interpreted on the basis of class consciousness and opposition. This, however, does not necessarily determine clear-cut identities in processes of day-to-day subjectivity construction on the shopfloor[7]. In particular, dynamics of intra-union conflict are not uncommon at SAMCOR.

Conflicts on the "24% trust," as I explained, generated identities and loyalties which largely survived the issue itself, by now relatively less important. Workers' "anti-24%" caucuses were at the forefront of attacks to elected shop-stewards on broader issues of union's line, action and militancy, as I will show. The most common reaction among shop-stewards about this kind of cleavage is a sense of frustration and ingratitude, nurtured in convictions of being misunderstood for what they honestly perceive as a service to the whole membership. The head of the SAMCOR shop-steward committee has been working for the company since 1980, when it was still Chrysler. He is part of the kind of relatively skilled and educated automobile industry workforce which provided the backbone for the first phases of union organisation. Hired as a "semiskilled" quality inspector in Grade 3, he entered the union after the experience of the 1976 school revolts. Before SAMCOR, he was retrenched twice for being a MAWU (Metal and Allied Workers' Union) member, after having followed the example of his elder brother, an organizer for CCAWUSA (Commercial, Catering and Allied Workers' Union of South Africa).

His experience at work has always faced him with a management considered as an extension of the racial social order. However, he is aware of changes in technology and work organisation, and he notices in them opportunities that are not underlined in his comrades' arguments. He stresses that now a degree of cooperation with the company acquires the new meaning of contributing to economic and social reconstruction under a democratic government, while

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[7] This point has been emphasized in Beynon (1973).

not solved."

The transformation of the role of the shop-steward in an instrumentalist sense, as a provider of services in specific episodes, can weaken his function as a vehicle of worker organisation and identity, but it can also facilitate more resistant and less consensual approaches to problem-solving:

> They [the supervisors] are not polite, then I become angry; if I'm angry I'm not to do my job properly. My mind is not concentrated. Some of them are treating us like human beings, some of them don't give a damn about us.
> Q: What do you do when you have a clash with your supervisor?
> A: Last time I asked my supervisor to go to first aid and the supervisor didn't want me to go to first aid. I ended up losing my temper and I said "Fuck it!". Then I went to the shop-steward and I managed to convince the supervisor.

It is important to remind that the importance of shop-stewards as brokers of compromises and mediation on the shopfloor does not prevent them, however, from being at the centre of contestation and criticism. In fact, if the presence of the union can reinforce worker resistance in localized episodes, the role of the shop-stewards is also linked by contractual obligations, procedures and customs which constitute the basis of the recognized role of the union inside the plant. This requires their capacity to transcend personal and group situations and to look for arrangements to accommodate the demand for worker empowerment and the reduction of inequality and injustice inside the broader aims to ensure viability to the company and solidity to the union organisation. This set of issues will be at the core of the next section.

> But if they experience you are not a union member they say: "No, man, we don't operate like that. You have to listen to what I told you to do." They are scared by NUMSA.

This line of argument indicates that workers still advocate a greater determination by the union to counter arbitrary managerial decisions and to strengthen workers' views vis-a-vis the foremen. Thus, even if workers criticise NUMSA's wage policies, or are disillusioned by its lack of a blueprint for workplace transformation, they still positively evaluate being members of the union, if not as a foundation of a strong common identity, at least as one of their weapons in everyday episodes of confrontation:

> (...) if you put an input they [the employers] got the suggestion, but only if you are a NUMSA member; with ordinary workers they refuse. If you are an ordinary worker they will just look at you and "that... that... that...: Fuck!". You see?

The role of the shop-stewards is substantially identified as negotiating, whether or not backed by a strongly antagonistic and unreconciled agendas. In this area, it can further delegitimise teamwork as the vehicle of a common corporate citizenship and identity:

> When I have a problem on the line, I am overloaded on the job, I go to the teamleader and I try to explain: "Hey, gentleman, we have so and so problems in this line," then the teamleader goes to his supervisor and explains him: "They went into that problem," and then he went to the manager who says "OK." But the problem is not yet solved and I and my colleagues keep on crying. Then we go to the shop-stewards and explain them: "We've got so and so problems; we have tried to call the teamleader, who called the supervisor. Yet the problem is

changed:

> They still think their decisions are final and binding. If he tells you to push this chair at a corner without a reason, you mustn't ask him "why?". (...) I need to fight against that, against the fact that they are making decisions.

This can define new patterns of shopfloor solidarity against perceived common threats:

> Last year there was an incident about the line-speed: we protected our [black] foreman against a superintendent. He was being hard to the foreman and we thought it was not fair and right.

However, since the scope for foremen's independence at SAMCOR is rather narrow, the promotion of more blacks to this position may not be accompanied to a substantial shift in workers' opinion. Racial solidarity has its limits, and it is interesting to compare cases of black workers' positive evaluations of black foremen with their generally negative opinion about black teamleaders. A complementary explanation for cases of shopfloor solidarity between workers and foremen can reside in what I have noticed as the identification of the common enemy on the workplace in the form of further centralization of decision making and new kinds of supervision.

In fact, racial solidarity can highlight the fact that the foreman's job is disappearing, or losing importance due to new systems of regimentation of times and tasks identified as "lean production". However, I recognize that answers on this point are not conclusive, and this would require more in-depth enquiry on the issue.

In some cases, it seems that the union identity, that is the possibility to call shop-stewards in, can still provide workers with some leverage in dealing with foremen:

However, more than half of my interviewees recognize that "something is changing" in relationships with foremen. In some cases communication is becoming easier, and supervisors seem to be more attentive and cooperative. I could clearly identify two main reasons for change: the promotion of black workers, sometimes with trade union experience, in supervisory positions, and the importance of the union's backing black workers' standing vis-a-vis the foremen.

In the passenger vehicles bodyshops there are presently three African foremen, one coloured and five white. Two of the African foremen in that position for two years, have experiences as shop-stewards. Workers are increasingly finding common ground with them, both as far as communication is concerned, and because they feel them to be more responsive and concerned about their work:

> Foremen are changing attitude towards quality control and quality. If panels or subs [subassemblies] are rejected, they now react immediately that this has to be resolved quickly. They don't live in the past saying, if you reject this: "let it go to the line, they will resolve the problem somewhere," and this because quality is being preached every day in the company.

However, this evaluation is not unanimous. Two workers I interviewed in this department expressed negative opinions about black foremen. One of them, in particular, said that their promotion is, after all, always a question of personal favour: they are often chosen among teamleaders, and the company does not appreciate independent-minded persons in these positions.

In the Medium Commercial Vehicles section at the trim line most foremen are black. While relationships with them have improved and a greater joint problem-solving attitude has developed, workers resent that white foremen are more likely to "send people to industrial relations" management to be disciplined: in this case relationships have not substantially

of the foreman. The whites' sense of superiority is equally resented:

> White supervisors are a problem. Here all top positions are white. If they want something, they just throw it to the workers (...). If you have a problem, the supervisor thinks that a black problem is not a problem. Thirty-two year old supervisors talk to fifty-two year workers as if they're just talking to a kid.

In workers' opinions, teamwork itself is often regarded as an extension of a racially-biased supervisory apparatus. This is related to the integration of teams in line authority, their pseudo-participative nature, their emphasis on top-down communication. Again, the parallel with traditional despotic practices is telling:

> Q: Does teamwork help the workers in contributing to solve problems in the factory?
> A: Yes, but very little; very few suggestions are heard and listened to. (...) You can form whatever structures but only in few areas there are changes, but not broadly. Teamleaders are appointed by the foreman among those whom he favours. It's the same as indunas, they just changed the name and put "teamleader"; he's just the mouthpiece of the foreman. It's very difficult for him to come out with his own ideas.

In some few cases, a difference between teamleaders and foremen is identified in the fact that the teamleader is more legitimized by being "at least," as a worker said, visible on the line and having a knowledge of the operations, differently from supervisors, who are distant and ignorant. It is however interesting that one of these workers argued that the foremen are the biggest obstacle to teamwork.

both the authoritarian nature of control and by the enduring legacy of a non-democratic political past. The ways in which collective identities and community practices developed in the opposition to apartheid decisively shaped worker responses to managerial control. Authoritarian methods that could prove successful in other non-democratic contexts are here less effective. As Chris Lloyd, from NUMSA, told me:

> The South African workforce is different from any recently proletarianized workforce in the world. For them concepts of democracy are important, concepts which were unknown to, say, Indonesians or Koreans. They have a stronger sense of resistance and they are used to bring community problems inside the factory. There is no clear distinction between community and company, and they have no common culture with management[9].

The racial divide, the fact that "these whites are harsh for the people" is still a predominant consideration, in workers' evaluations of middle management attitudes:

> It's not easy to change a guy from what he is. For whites their attitudes still stay the same (...). For example, this morning a guy was complaining because his white foreman refused him to go to the toilet.

Refusal to go to the toilet, or a strict supervisory measurement of time for physiological evacuations, is a common complaint. Apart from the humiliation contained in these testimonies, the toilet assumes here the relevance of one of the last liberated spaces in the factory, the only one where a measure of self-management of time is possible without the omnipresent discipline

[9] Interview with the Author, 15.8.1998. This is consistent with findings in Adler (1994), Von Holdt (1998b), Bululungu (1996)

> of the company and exert it to employees. If management was treating them like people, they would behave like normal people. But since management is pressurising them, telling that if they don't do that, than they go, they take the pressure and exert it to the guys on the floor. You have no rights as a supervisor because of lean production. (...) Supervisors and workers are on the same side, but not sharing the same concerns [my emphasis].

It should be noticed that these few lines agree with observations that "lean production" is leading to the disappearance of supervision, a point I already noticed when dealing with the self-regulated, "disguised" supervision inside work teams. Then, that is not a consequence of a decentralization of managerial authority to the workers, as Womack, Jones and Roos (1991) imply. It rather depends on further centralization, which invalidates the promises for more authority to the rank-and-file:

> If I'm working I don't want anyone to watch how I'm working. If I'm doing my job, I'm doing my job. The foreman is there not to do a watchdog, to police me (...). The production guys: always the foreman is after them, watching them. If I go to the toilet the foreman watches for time (...). And they refuse people to go out to attend problems: they treat us like slaves.

Persistence of racial inequality, on the other hand, confers to the foremen's arbitrariness an added bias. This point is relevant given that, if the permanence of traditional patterns of "Fordist" authority in the workplace nullifies the promises of "lean production," the ways in which these are related to historical practices and institutions of racial oppression undermine "Fordist" methods themselves. Rejection of unilateral interventions is reinforced by a continuing politicization of factory life. The promises of a democratic workplace are here invalidated by

furthermore reinforced by the overlapping competencies of foremen and quality controllers. I have already mentioned analyses about the lack of a "total quality" orientation at SAMCOR. This seems to be confirmed in my interviews. A highly hierarchical, top-down approach to quality control is still present in the company. Quality checks are centralized in control areas which verify the use of correct tools and loading of the right jigs, the selection of adequate panels, the detection of damages, which are addressed by fitters, electricians or other specialized personnel called from outside the team. Even if one manager proudly described how every car is electronically checked in the trim lines, random checks of the penetrability of the spots still prevail in the bodyshop.

As a consequence of centralized systems of control, a range of mixed feelings exists towards supervisory authority. There is a strong trend to relate personal opinions to categories drawn from the apartheid past. These make a distinction between black foremen, usually more recently employed and sometimes with trade union experience, who are more friendly, communicative, attentive to employees' problems, and "these whites," as they are often referred to, without even mentioning their occupation, depicted as authoritarian, incompetent, racist, greedy, disrespectful of the way a job is done, or indifferent when real problems arise. This is summarized in a bodyshop worker's opinion that "these whites are vultures."

The foreman is generally regarded as the agent of implementation of restructuring in the workplace, even if images of a commonality of fate with the workers may emerge to some extent. What follows is the most benevolent opinion on foremen I could find. It is clear that foremen are here considered in a similar situation to that of workers: changes are threatening their position as well, their behaviour is even partially excused for that, but in the internal market for identity and power as scarce resources, they are objectively privileged by their position in the hierarchy:

> Relations with them are bad. They are instructed to implement production. They have no choice but to abide by the rule of the company. They take pressure out

In fact, workers can advocate a greater legitimacy for their opinion on the basis of a higher knowledge of the process. In the words of a quality controller in bodyshop:

> When I check the quality of the panel, sometimes I do fight because I think it must not go to the line. I can inspect what the guys are producing and reject the whole stock already built because the weld is not holding. It's a problem because if the quality is not good the production foreman is going to fight with you because I'll be hampering or disturbing the production process which is designed on what he needs, say five cars. He's going to fight with you. That is why lean production is not favourable, because you cannot interfere with the production volume. The foreman has a target and he does not care about quality. But if the quality controller rejects a car then there is conflict (...). The workers are concerned about quality; what causes the problem is that they want us to produce more. They are not giving time to check on what we are doing.
>
> Q: Do you find a contradiction in that?
>
> A: It is a contradiction. They want to keep the volume high and the control high. Instead, if the production control has to be high the volume has to be low.

The promise of a common commitment to quality is here invalidated by the permanence of traditional systems of control and supervisory authority that are, moreover, unable to guarantee that the job is done "right first time." Furthermore, this argument totally opposes what management advances to legitimise the "technological road": that workers are not concerned about quality "in itself." Instead, workers' interest in quality is not an end in itself. It derives from a calculation of opportunities and ways to achieve more favourable balances of power on which wages and recognitions depend.

The contradiction between quality promotion and persistence of archaic forms of control is

security, a diminution of anxiety, and so on.

Supervisory intervention can be considered as an immediate challenge to personal and individualized constructions of commitment to quality. An unskilled "body handler" in the paintshop, moving units from trolleys to the sprayboots, defined supervisors, or foremen, as continuously interfering with his occupation, arbitrarily modifying the pace of operations, violating in this way implicit assumptions on the "right speed" on which resides the whole moral economy of the job, the everyday tradeoff between autonomy and acceptance. Supervisory interferences are all the more unacceptable in as much as they are presented as "final and binding," because they allegedly care "more about quantity than about quality," since what foremen want is a higher production bonus for themselves. Thus, these interventions carry a mark of immorality, besides that of despotism and incompetence. But only on the basis of a personalized social construction of a good quality job can the worker claim the "moral high ground" in the everyday struggle for survival and recognition.

Far from being a sign of compliance or consent, this process is permeated by antagonism. The foreman's self-interest is regarded as a particularly hated outrage especially because it contradicts a common commitment to quality. To put it in the words of the above-mentioned seal applier:

> OK, maybe I can spend twenty minutes on each combi, doing my job properly and checking the quality and attending the next one. But if they come an' say: "Kom! Kom! Let that car pass away!" you start being confused, the quality is going to be poor and at the end of the day you won't make twenty (...). But if you think it's unfair the only way you can fight is through the quality[55].

Neither "fighting through quality" can be considered a simple matter of invention of identity.

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[55] The role of the foreman as enforcing informal increases in the line-speed is well analyzed in Beynon (1973: 138-39).

sense on quality promotion is adapted to create a new discourse of individual strength and indispensability for workers. Workers' use of quality as a weapon for material and symbolic self-empowerment, which draws at the same time on the firm's discourse and on processes of personal settlement aimed at regaining identity and security, well represents what I have called "social construction of quality."

But workers' interpretation of quality can differ from what management expects, given that the managerial evaluation of a worker's job is entirely foreclosed to workers' scrutiny. Even the most fetishized and abstract worker notion of quality, and even if it is entirely removed from any consideration about relations of power and inequality in the workplace, is not a guarantee of "hegemony" for the company's ideology. At best it can outline the highly problematic nature of a notion of the firm as united by a substantial commonality of interests. At worst, it can define a new terrain of confrontation between opposed cultural and moral understandings of the labour process. I would say that the weakest are worker identities based on the prospect of continuous employment or skilled labour, the strongest is their attachment to their social construction of quality, and the highest the levels of resistance in case of violation.

To clarify this point, it is necessary to enter a further aspect of the problem: that of external interferences in the execution of a job. In fact, and as SAMCOR's evidence has shown so far, regardless of the degree of control that a worker on the line perceives to exercise on his job, the reproduction of the material conditions of that occupation (line-speed, workloads, number of tasks performed) and the evaluation of the final performance are separated from the workforce. Being convinced of having done a good job, as one manager quoted above explained to me, is not enough: final scrutiny and validation reside in the hands of supervisory personnel or in computerized quality control. This may be perceived by workers as an interference in the meanings they subjectively attach to the job. As I explained, these meanings are not necessarily related to the content of the operations or to the worker's position in the division of labour. They can be motivated by broader social considerations concerning personal achievement, collective

stewards are identifying the problem, even with hints of self-criticism, trying to articulate a new relationship with grassroots forms of resistance. As the current head of the shop-steward committee refers:

> Their [workers'] weak point is on our side as leaders. If we take workers to the process mobilizing and informing them day-by-day, our members are taken by surprise by what happens here. Only now we are informing them on the company's five-year plan. Workers are passive because they are not informed, we are too far from them, and management is building on this back. We didn't mobilize them in the past, but we are doing it now. We didn't have common understanding as shop-stewards, we failed to mobilize new shop-stewards. Now they are supporting us because we are trying to inform them.
>
> Q: Is there any particular suggestion coming from the workers?
>
> A: That we have to bring the plant to a standstill. Others want to bring the trade union to be involved in negotiations to stop outsourcing.

Joffe and Lloyd (1996) recognise that current trends of collective bargaining in the automobile industry indicate growing fragmentation, given the fact that here a very limited number of companies are faced with highly plant-specific concerns raised by workers, such as productivity performance payments, benefit schemes, overtime, training, manning levels. This can prospectively weaken the role of centralised bargaining, a trend which is indeed encouraged by certain manufacturers, leading to forms of "company unionism" detrimental to the role of NUMSA as an actor in the regulation of minimum wages, working conditions, training and grading.

If this dynamic is going to deepen, it can exacerbate intra-workplace divisions and reinforce informal networks of information, militancy and organisation. This may be the case especially

party" to the managerial arbitrariness in the lockout and the redefinition of working times - in defining a process of opposition and conflict. This, as in the case of the 1996 Mercedes-Benz strike, put the union at the forefront of a confrontation amongst its own members.

On the other hand, the process of weakening of NUMSA as a repository and a vehicle of a common union identity, beyond a merely instrumental use of the shopfloor union organisation, may be further deepened by worker responses to the 1994 "Three-year Agreement" for the automobile industry. I found a unanimous rejection of the agreement, especially motivated by a strong dissatisfaction about its wage provisions, which are those that in workers' perception characterise the whole text. The most benevolent opinions are of this tone:

> I'm not satisfied. There's too little money. Just better than nothing; just to send my wife at school, to pay rent, and that's it.

But shop-stewards' accounts are particularly significant in this regard. They reported a generally negative worker attitude towards the agreement, recounting of having been openly contested during report-back meetings, one told me to have been confronted by a worker holding a gun, while others were "visited" at night. If NUMSA's role in the 1994 automobile sector agreement defined nationally a new position for the union in the equalization of conditions and wages for the whole sector and in the restructuring of the industry through a centrally defined policy on training and grading, this did not, however, percolate on SAMCOR at the shopfloor level. Here, the absence of a union policy on organisational change opens indeed the way to possible new divisions.

It was noticed (Buhlungu 1999c: 189-164) how workers' loyalty to the union in macro-level processes of negotiation and mobilisation can contrast with the relative powerlessness of individuals and groups confronted with everyday inequality in power and control on the shopfloor. This can have adverse consequences on the levels of union support. Some shop-

and that no disciplinary action was brought against paintshop members. When I randomly enquired about levels of militancy asking three workers about their political commitments, their response was negative. One answered: "Politics? Far away from me!".

The illegal strike culminated in the dismissal of 17 union members, plus the leader of the strike:

> This guy was involved in this 24% story [he had been active in the anti-shopsteward caucus on the issue of the trust fund. Author's note]. After he was suspended, his colleagues called on people that they should do away with shop-stewards because the shop-stewards did not represent the guy properly in the hearing. That was a lie (...) and the demand that the shop-stewards should step down was because this guy was terminated and because the shop-stewards won't help with the 24% [my emphasis].

It is notable here that the only industrial action developed inside SAMCOR in recent times was caused by an isolated non-union member who was able to capture a deep-seated resentment among employees over overtime. By attacking the union, allegedly liable for having settled with management on the issue, and for having failed to represent the initiator of the revolt in disciplinary hearings, he could mobilise worker resentment around allegiances and identities built on the by now remote "24% issue." And this process was consolidated in an open form of counter-organisation. One worker said that "this guy" was a "member of a party calling themselves "24%"." In this case, not only NUMSA was delegitimised as an actor to control the development of the events, because it had been associated with an agreement over overtime which violated a shared sense of equity. It was, moreover, affected by a division in its own constituency. In this case, a seemingly minor accident provided a catalyst for the convergence of multiple determinants of subjectivity - from the fractures historically associated with the "24%

> are we locked out? We aren't on strike," and management said that because people weren't satisfied with the bonus, they can damage things here (...). After six or seven days of negotiation, at the end we reached an agreement. Management agreed to give us the bonus and we committed ourselves to build the 330 units on overtime. In January we told the general meeting. Just before we started the overtime, this guy [a worker] (...) went to the canteen, during tea-times and lunches, calling people not to work that overtime. The company called the guy to a hearing for inciting, and we represented him. The overtime was worked and the guy was suspended.

However, he continued, the conflict escalated in a full-scale confrontation involving the shop-steward committee and, in general, between supporters and adversaries of the existing board of trustees for the workers' fund. After the instigator of the revolt, not a member of NUMSA, was suspended, his followers, mostly NUMSA members, directed their hostility more markedly towards the shop-stewards, demanding their resignation. In the memories of participants, during teatime groups of workers started chanting outside the canteen near the assembly "systems," calling their colleagues to strike. Incitement was essentially verbal and no violence or physical threat was employed. When a significant number of strikers was achieved, they entered the premises toyi-toying, encouraging in this way more people to follow. From there, the strike spread to the entire workforce.

Shop-stewards tried to stop the action, even calling union organizers from outside. It is notable, to confirm impressions already reported, that the paintshop, the department most recently hit by restructuring and automation, was the most loathe to follow the strike. Even now, when asked, workers and shop-stewards from that section assume a nearly apologizing tone, saying that the strike had been started "up there," at the trim lines, that they ended up being "inevitably" involved because incited, that they supported the strike less than other departments,

foreman and a worker on this issue while visiting the bodyshop. However, work stoppages and go-slows identify a common target: the struggle against the unilateral definition of times by management and supervisors.

I noticed above how SAMCOR is a company whose strike levels and intensity of formal industrial actions are among the lowest in the industry. I found NUMSA shop-stewards, especially the full-time ones, quite uncomfortable talking about strikes. This is influenced by the depth and the intensity of intra-union divisions. The "24%" case deeply affected the role and credibility of NUMSA structures at SAMCOR. Moreover, confrontations on this issue seem to have transcended its content, spilling over other lines of conflict. It is not by chance that the only significant case of industrial action at SAMCOR in the last three years, apart from the 1994 national strike, was directed against NUMSA and the shop-steward committee.

In December 1998 a major dispute took place over overtime. This is the story in the words of the then-head of the shop-steward committee:

> Last time we negotiated a performance bonus and the company set a target which was 6830 units per month. The bonus was R600.00 to achieve the target, but this required overtime. It was December, before the shutdown. People then become loose, either they don't come to work or they come and go for a beer and come back drunk. It's not because they're dissatisfied, but because they simply used to leave their job, moving around, visiting friends in other departments. In this way, 330 units were lost, and we didn't get the bonus, but management didn't approach us. Management was arrogant: "You won't get the bonus, you've missed 330 units." And we said: "Wait a second: why didn't you approach us and give us this information?", but it was late: there were only two days to the shutdown; we could only have a meeting to try and correct what the management did. After the shutdown, when we came back, we were locked out: "What is happening? Why

example, in the trim line it can be required to stop one "system" to allow the other one to continue operations. On the other hand, employment reductions by the company have made absenteeism more visible, and more punishable.

The most apparent manifestation of everyday resistance, however, is in illegal work stoppages or go-slows. What follows is a description of work stoppages from the bodyshop. It should be noted that these tactics are still aimed at raising the foremen's attention, and that they are more situational, short-term and localized than overt industrial action:

> Q: How do they happen?
>
> A: We just leave the work and assemble somewhere, trying to express our anger.
>
> Q: Can you be more specific?
>
> A: Let's say the guys are complaining the line is moving fast so we are being overloaded and that problem is not addressed. We lose our temper and just leave the work. Doing nothing.
>
> Q: And are you disciplined for that?
>
> A: Yeah.
>
> Q: How?
>
> A: We get a warning, and then a final warning.
>
> Q: Do you, then, try to slow the line speed in other ways?
>
> A: I simply work slow. If I need certain attention then the foreman comes and say: "You're working slow."
>
> Q: Do you take this decision by yourself, or does it happen that it is coordinated?
>
> A: I take the decision by myself.

Conversely, this tactic is more diffuse than, for example, overtime bans; go-slows are reported indeed to happen nearly every day. I was present, for example, during an exchange between a

experiences with overtime into common responses premised upon a collective elaboration on the effects of restructuring.

More common, however, is the adoption of methods of struggles which do not expose the responsible to possible retaliation. The most widespread of such practices is "work-to-rule," or the strict execution of the prescribed duties, which causes slowdowns or even stoppages of the line, especially in periods of high absenteeism. While the identification of disruptive behaviours in this case is quite difficult, they are likely to achieve the desired results given the likelihood for supervisors to call the shop-stewards for consultation.

On the other hand, absenteeism is not foreign to a discussion of forms of resistance. Worker attitudes towards absenteeism are controversial. In a teamworking environment, the workload of absentee workers is redistributed among components of the team. In this sense, a widespread worker hostility towards absenteeism as a way to avoid problems through a self-centred, comfortable avoidance strategy is reported by shop-stewards. However, and especially between shop-stewards and most skilled workers, as in the case of quality controllers or repairmen, there is also a tendency to locate absenteeism in context, as part of broader social evils, associated for example with alcoholism, determined by workers' frustration and uncertainty about restructuring and by physical overworking:

> I can't say I'm totally satisfied [with teamwork] because, you see, the company is facing problems for absenteeism if it might be the workers are absenteeing themselves. There is a reason to be absent. They may absent because they are overloaded in the job; they can become tired, they wake up in the morning and think: "Today I'm not going there."

At present, according to shop-stewards, absenteeism may reach peaks of 25%, especially on Mondays, in final assembly and bodyshop. In certain days lines can totally stop as a result. For

quality. In Glenn Adler's (1993b) view, in fact, struggles around training and grading are possible in a productive configuration which is substantially different from the conventional image of "Fordism." They reveal a sense of injustice not deriving from the technical division of labour. It is rather produced by the subtle interplay between promise and violation in the "participative" workplace, by the personalization of workplace social relations embodied in the figure of the white foreman, by the manipulation of grades and jobs as a legacy of practices of job reservation well entrenched in the industry's history. This imposes an arbitrary control over distribution of time and income, creating a misfit between jobs and qualifications.

Resistance assumes at SAMCOR a variety of forms. Consciousness of the rules of the organisation and awareness of its priorities, such as quality, can be used to "change management's minds," or to raise its sensitiveness. Informal meetings take place on the shopfloor between workers, who usually call shop-stewards in support, and supervisors. In case of a continuing lack of attention by management and foremen,

> They [the workers] start disregard their job, start coming late, when you ask what's wrong: "fuck!" and so on.

This attitude, reported by an employee in the trim line, often culminates in resistant informal practices, for which workers' knowledge and communicative links are mobilized, and directed especially against the foreman. For example, refusal of overtime requires the prior formation of what in the plant are referred to as "anti-foreman groups":

> They [the workers] agree that if he asks for everything, just shit him up.

Albeit spontaneous, these activities show a degree of coordination and solidarity only possible on the basis of channels of information and organisation which can translate individual

confrontations. But the role of the shop-steward as broker and mediator of informal dynamics of resistance would contrast with his commitment to competitiveness, in the absence of a strategic response to management-initiated participation, and this would distance shop-stewards from the rank-and-file. In a situation whereby the uncertainty generated by restructuring seems to require a reinforced sense of identity and security at the grassroots, the divisions are instead sharpened.

This situation leaves wide scope to informal practices of everyday resistance developing to a great extent outside the reach of the unions. I have already explained how informal worker knowledge is mobilized, reproduced and circulated to make sense of restructuring, and how shop-stewards are often bypassed by it. These informal communicative practices are probably facilitated by the nature of the labour process as implying a higher level of inter-worker cooperation and communication through teamwork. This contains a potential source of both strength and weakness. In fact, resistance through everyday localised informal acts is a proof of teamwork's capacity to disarticulate concerted, widespread action. Conversely, these acts could provide the foundation for dynamics of solidarity which may erupt in episodes of subversion and disarticulation of the factory order.

A subjective gap between representations and reality is crucial in explaining forms of resistance or the absence thereof. For example, Marianne Roux's (1977) study of the Eastern Cape coloured autoworkers showed how job satisfaction was largely a verbalization and rationalization for underlying feelings of frustration and deprivation, expressed in the desire to find alternative jobs. This compromise was however subordinated to the maintenance of an income, prospects for advancement and job security. However, contrary to Roux's findings, at SAMCOR not only workers in higher grades are more attached to their autonomy and more defensive against foremen's interference. These feelings are indeed generalized, and they are related not to specific occupations, but to the workers' perception of the opportunities they have to control the process (especially times and workloads) as provided for by the new discourse of

your wife of what happened, and you don't have any other topic (...), that would be 90% of the topics with your wife.

In fact, this situation, added to the time constraints of his union activity, ultimately led to the crisis of his marriage and to separation from his wife.

Intra-worker divisions at SAMCOR are not always overcome by the role played by shop-stewards in everyday power relations. New responsibilities for worker representatives can lead to contradictory situations. NUMSA's bargaining strategy and the "Three-year Agreement" defined a framework where shop-stewards should be able to enforce worker commitment to competitiveness, but this is conditional upon their capacity to stop outsourcing, guarantee transparency in promotion and recognition of skills, make management accept negotiations over line-speed and manning levels. Moreover, they have to articulate a union policy on participation and cooperation on a terrain often defined by managerial initiative. This entails strengthening the bargaining position of the union avoiding managerial attempts at undercutting it through pseudo-participative structures.

This complex set of imperatives implies the definition of a new stratification of meanings in the union's official discourse, meanings that enter a problematic relationship with processes of subjectivity construction on the shopfloor. At SAMCOR, these processes still bring to the surface an "apartheid workplace regime" (Von Holdt 1995b), manifest in the denial of fair wages, in unjust hierarchies, in authoritarian and insensitive implementation of restructuring, in paternalism, in abusive racial treatment, and in the arrogance and incompetence of white supervisors. But, even worse than this is the fact that now these practices develop in ways which encourage intra-workplace competition, uncertainty, frustration. In fact, traditional images of authority are now hidden behind the objective rationality of markets and technologies, which fragment existing discourses of solidarity and opposition.

Individual shop-stewards can be functional to a large extent in day-to-day shopfloor

position in relation to members:

> You are in the struggle, fighting the war alone, and then sometimes you realize that what you want is unachievable; then you try to tell them it's unachievable. It's difficult. I don't know how to explain it. (...) It happens in every trade union and every company, every year.(...) You won't be able to satisfy any member in your organisation. If the company rejects what you propose, they lose faith in you. Sometimes shop-stewards get out of hands, they get drunk, or when you strategize on the issue they will take that information to management under closed doors.

On the other hand, hardships caused by restructuring, uncertainties and members' anxiety take on a personal dimension. As he told me, if he cannot address the workers' concerns, he is always liable to be called a sell-out. Overtime is a major concern:

> "When the management wants overtime and you go to general meetings trying to reason with your people over overtime, people say: "Fuck you! Step down!". And when there's a strike they tell you to step down."

Moreover, the union's inability to cope with restructuring can be experienced as a personal failure. All this assumes broader social implications, leading to the eventual disarticulation of social and family life, as the same shop-steward recounts:

> You go home and you're not happy with what goes on in the plant. If you are not a shop-steward you are not involved when someone loses his job, it won't affect me. But as a shop-steward you are affected, and you go home and discuss with

apartheid destroyed workers' sense of the future. This defines new challenges for the union:

> Initially the task of the union was very simple: to crash everything coming from management. If the management said that they don't have profits then they cannot pay us increase, then you just go on strike. You were prepared to die, you were prepared to suffer (...). Coming to the company, it was just a company, it was there (...). Now the task of the union has changed, as to say: this is the cow which feeds us all, and you must make sure it feeds us properly. But we shop-stewards feel threatened by the higher knowledge of the management. You must know the law; before you are able to stand up with Seifer [SAMCOR's Managing Director, Authors' note] you must be learning for two, four years.

If these lines reflect concerns and characteristics that are probably inherent to the shop-steward role, there is also awareness that this role must be updated in a new context of organisational change to cope with rising requirements of competitiveness. And, as this shop-steward stresses, knowledge becomes a decisive weapon to address the challenge. Therefore it is important for the union to articulate alternative paths of organisational restructuring, challenging management's rationality. Moreover, this capacity will probably be decisive to maintain the union's legitimation as an actor capable to define long-term strategies based on strong collective identities, instead of simply becoming a service structure for problems and complaints on a particular basis. Then, internalizing the new discourse of the national economy and the post-apartheid reconstruction implies for the union to assume an identity linked to the capacity to play a meaningful role in bargaining dynamics and strategic elaborations.

This relates to the question which closed the previous chapter: NUMSA's capacity to define programmes of progressive workplace change. However the words of the head of the shop-steward committee reflect the absence of such a programme, and this, moreover, weakens his

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management to govern flexibility in the workplace, this will have to develop alternative forms of articulation of struggles, or else face a dispersion and fragmentation of resistant practices that may easily lead to irrelevance.

growing perception that restructuring generates anxiety, insecurity, betrayal. Worker resistance, then, can take more often the form of everyday "opposition" rather than frontal "resistance" (Mason 1981). However, it is questionable whether the outcome is necessarily "ungovernability" (Von Holdt 1995b): this study emphasised instead that a central terrain of development of SAMCOR workers' subjectivity resides precisely in their questioning management's unrestrained capacity to unilaterally restructure workplace power relations. It is then to be investigated which alternative forms of rationality and governability may arise from these dynamics.

Finally, if an analysis of forms of workplace subjectivity can illuminate changes in worker identity, meanings and conflict, this is useful to raise further questions to be investigated. These concern the role of organisation and collective action. In particular, I stressed how changing competitive landscapes are adversely affecting the unions' role as a vehicle of collective solidarity and mobilisation. Resort to strike action becomes more difficult and wage militancy is relativized inside complex issues of restructuring and economic viability of the company. On the other hand, the implementation by employers of their own participation schemes is often aimed at making the union unnecessary and redundant. The alternative for organised labour seems to be the development of progressive and comprehensive programmes for workplace reorganisation to redress power inequalities, translating into practice the advancements contained in national agreements. On these bases participation could be negotiated with management.

The materialisation of this perspective faces nonetheless a crucial dilemma: to succeed, unions must be able to relate with the new discourses and practices of worker subjectivity construction in the age of flexibility. In other words, they must draw support for claims for the elimination of gaps of power and income, for the reward of skills and for job security from the meanings and the knowledge workers autonomously develop as part of their everyday responses to flexibility. In case of failure, the gap between unions and their constituencies will widen. Then, from one side unions would not be able to respond to management-initiated change and would be marginalised. From another side, if worker subjectivity emphasizes the difficulties for

formalization of worker participation and commitment, which I indicated as the main peculiar element of the age of "flexibility."

As a result, the term "restructuring" cannot simply denote managerial strategic initiative and choice: it rather implies piecemeal adaptation and uneasy balances of social and technical components. SAMCOR attempted to define a solution to this dilemma through what I called its "technological road" to restructuring: a highly problematic mix of technological innovation, rhetoric of worker commitment and top-down definition of worker participation. However, further contradictions emerge when worker responses, expectations and demands are taken into account. Workers' contribution is elicited and activated in a selective way, and at the same time their jobs, the content of their occupations, their workloads and times are unilaterally redefined according to the requirements of technological innovation. A dynamic of promise and violation is thus ignited, encouraging worker responses which deepen the unpredictability of the restructuring process.

The analysis of social and discursive practices at the heart of processes of subjectivity construction illuminates how workplace social antagonism can be defined in this case as starting from the fissures and loopholes in managerial discourse. These limitations can facilitate the development of new images of worker opposition and control. This is especially the case when unions are weakened and when resort to industrial action is unlikely. It seems that this case modifies the metaphor of the "frontier of control" (Goodrich 1920, Beynon 1973, Webster 1984) of the workplace: instead of competing actors fighting to get increased control of a common playing-ground, we have different, non-communicating "planes" (Deleuze and Guattari 1987) where non-cooperative or antagonist subjects express their own rationality, moral appellations, construction of meanings, discourses and sources of legitimation and belief.

Workers in my case study do not merely suffer restructuring in a passive way, they tend to appropriate its ideologies and discourses to attach meanings to it which do not necessarily coincide with those of the management. And these become all the more radicalized with the

CONCLUSION

This thesis has investigated the shortcomings and the limitations of industrial restructuring in a peripheral economy from a particular point of view, that of workplace subjectivity. I have shown how the introduction of methods of flexible manufacturing in the South African automobile industry has to cope with obstacles which make the application of any supposed "model" of lean production highly problematic. This questions flexible production concepts in the sector, in particular with regard to the nature and functions of worker participation in relation to the maintenance of coercive, paternalist and bureaucratic forms of control in a low-wage growth path. Since employers are increasingly recognizing the relevance of worker adaptation to flexible production, and given that no definite solution is emerging from current debates on work organisation, these concerns are contested inside managerial circles as much as between capital and labour. Contestation revolves mainly around strategies, structures and modes of reward for harnessing worker creativity and commitment in a low-conflict environment, and around procedures for participation, consultation, joint decision making, decentralization of authority, recognition of skills and wage differentials.

However the relationships between new forms of organisation and social and institutional actors in specific cases may produce high levels of uncertainty and unpredictability. As a consequence the union movement, industrial policy makers and management planners will have to cope with a broad range of unintended consequences in the implementation of their agendas. From one side, a legacy of domination by multinational corporations and dependence of local manufacturing led to dynamics of fragmentation of market and production which makes technological and organisational innovation imperative to the survival of the industry. However, the racially segregated structure of the labour market and a managerial culture developed in a highly authoritarian milieu heavily impacted on forms of labour process, division of labour, skill structures and factory discipline. This substantially constrains restructuring in terms of

in periods and in companies where the union already encountered problems as a vehicle for collective identity and action, as in the case of the 1990 Mercedes-Benz strike, in the recent events at SAMCOR, or in even more recent episodes of conflict at Toyota and, inside the union, at Volkswagen. In these cases, it can be hypothesized that forms of worker response to capitalist restructuring in the auto sector will result in a significantly plural and diversified range, from informal and semi-organised activities of control of the lines to direct industrial action. But the danger remains that, in the presence of a significant weakening of collective organisation, these responses may turn out to be self-defeating.

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