In recent years opportunities for black people to move into positions of greater authority and responsibility at work have increased. Yet, even where actively promoted, occupational black advancement has been slower and less effective than might have been expected. Black people promoted to positions of authority have found themselves daunted by new challenges and stress, and subjected to hostile social relations in the workplace. White employers have been unprepared to fully trust the judgement of newly appointed black staff. These problems are not superficial, but are rooted in an historical legacy of differential access to education and resources, and those continuing aspects of the social process in South Africa, which restrict the eligibility, motivation and self-esteem of blacks in industry and commerce.

Part of a broader programme of research into the problems of black advancement in South African commerce and industry, this study provides data obtained from interviews with a sample of African industrial workers in Durban. Using original projective techniques, the author identifies the relationship between black commitment to advancement in industrial work and certain attitudinal and biographical characteristics, such as faith in the likelihood of social change, achievement orientation, and socio-economic background.

Considering the forces which impede black worker commitment, he suggests remedies involving attitude changes, improvement of work abilities, and multiracial organisation development, to counteract the disabling, demoralising and alienating effect on black people of differential racial access to modernising institutions.
BLACK COMMITMENT TO WORK & ADVANCEMENT IN SOUTH AFRICAN INDUSTRY

Some Social & Attitudinal Antecedents

Roger Allen
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1984

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The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the author or the Centre for Applied Social Sciences concerning the legal status of any country or territory or of its authorities or concerning the delimitation of its frontiers.
within economics, there has been much controversy on the primacy of industrialization for economic growth, as well as strong differences of opinion on what type of industrialization should be given preference. Outside the field of economics, a key point of debate has been a kind of classical chicken-and-egg question: Which comes first - economic growth, or its social, cultural, or even psychological correlates? There have been a number of theories ... holding that a particular personality type is a necessary precondition for both modernization and economic growth. There has been extensive discussion of what cultural values and traits are conducive to economic growth. This question has been of particular interest to sociologists, who have followed up Max Weber's well-known thesis that the so-called 'Protestant ethic', with its peculiar values of hard work and discipline, has been a crucial factor in the genesis of capitalism in Europe. A big search has been activated for 'functional equivalents' of this ethic in different parts of the world. There has been wide-ranging discussion of the social institutions (including, very importantly, political institutions) that are or are not to be seen as either necessary preconditions or likely consequences of economic growth. American social scientists have been especially interested in whether there is any degree of correlation between economic growth and political institutions along the lines of Western-style democracy. The concept of 'political development' has been one of the ... products of the last-named interest.

Berger, 1974
PREFACE

The investigation described in this report forms part of a broader programme of research into the problems of black advancement in South African commerce and industry currently being conducted by the Centre for Applied Social Sciences. As a result of economic pressures, foreign influence upon multinational companies and changes in the political culture in South Africa, opportunities have increased in recent years for blacks to move into positions of greater authority and responsibility in occupational organisations. To some degree all parties to this process of change have been caught unprepared by the pace of events. Even where black advancement has been accepted in principle, white employers have tended not to fully trust the judgement of newly-advanced black staff. Black employees have found themselves projected into unaccustomed challenge and stress, doubts over conflicting value commitments, and unsupportive or hostile social relations in the workplace. And in organization terms the development of structures and procedures to accommodate contrasting types of individual ability, outlook and manner has not been anticipated. Under these conditions occupational black advancement, even where actively promoted, has been neither as forthcoming nor as effective as might have been expected.

These problems are not superficial. They are rooted in a history of differential racial access to the education, skills, values, motivational orientations, resources, power, efficacy and emancipation typical of a modern industrial society. Early indications of our work suggest three major areas of remedial activity:

- Attitude change — in particular, attempts to move away from uninformed, prejudiced and conflict orientations, towards more informed, rational and pragmatic orientations. This would benefit all parties. But whites especially, who hold determining roles in most situations, need to be made more aware of the long-term human, economic, and security imperatives for social reform involving black advancement.
- Improvement of work abilities — such as literacy, technical skills, industrial aptitude, linguistic ability, and independent decision-making ability — and corresponding development of the institutions of education and training which confer the bulk of these abilities. Problems in this regard affect blacks principally.

- Multiracial organization development — including communication therapies and the improvement, at all levels, of social and organizational skills relevant to effective and satisfying work. This task awaits both blacks and whites.

For these types of initiative to proceed effectively, however, an accurate picture of present circumstances needs to be built up. This is one function of our present programme of research. If intervention strategies are to be properly conceived, designed, executed and evaluated, they will have to depend on reliable data.

While other aspects of our research are currently examining the situation of blacks who are advancing at junior executive and administrative level, the study reported here concentrates on the scope for black advancement in semi-skilled and technical work. Problems differ at the two levels. In many cases black advancement is more of a fait accompli than a hurdle at white-collar level. It is its authenticity that is uncertain. The problems here tend not to be those of formal eligibility for a situation of advancement, but problems of relatively informal process within that established situation. Individual abilities of advancing blacks do not appear to be in doubt; rather, the manner and context in which they are being deployed. These issues are examined in a forthcoming companion report. By contrast, questions of ability and aptitude tend to be more dominant problem areas at blue-collar level, limiting access to a relatively unattained state of advancement.

A major indication of this study, focussed on blue-collar workers, is that aspects of social process in society at large are deeply affecting the eligibility of individual blacks for advancement in
the world of industrial work, and their disposition to master or sustain advancement. Participation in different socialising institutions of society confers upon individuals contrasting characteristics which may equip them or handicap them for performance in modern work. Two key factors in the socialising processes relevant here are the tremendous influences of education and of participation in an urban way of life and economy. Equally significantly, both of these are particularly contentious areas of inequality in South African society today. To some degree, then, black advancement in work is being constrained not only directly by present conditions in the employment market, but also, and arguably more profoundly, by longstanding characteristics of the whole fabric of society. The importance of these formative influences and the urgency of the issues they raise in broader socio-political terms, while not the immediate domain of this investigation, cannot be underestimated.

Roger Allen
Centre for Applied Social Sciences
1983
The support or services of many individuals and institutions contributed toward the progress of my research and the writing and presentation of this thesis. I am, in particular, grateful to:

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at home.

Roger Allen.
A sample of African industrial workers in Durban, including migrant workers, were studied in depth to determine their views of work in white-controlled industrial-technological settings.

Using original projective techniques, sensitive to varying cultural definitions of the situation, the investigation gained a detailed picture of their reactions to simulations of archetypal forms of industrial work. In particular, the respondents' typical conceptions of the specific work, of the worker, and of the outcomes or prospects associated with increasingly demanding types of industrial work were revealed. In general, it was established that the enthusiasm with which various forms of industrial work are regarded varies considerably among the men studied. Two holistic measures of work commitment were accordingly scored from the multiple reactions of the respondents.

Certain attitudinal and biographical characteristics of the workers, among a variety hypothesized as probable determinants of outlook, were found to be related to the degree of enthusiasm or commitment with which the respondents approach industrial work. In particular, it was found that an upbringing in backgrounds of higher socio-economic status, autonomous personality traits, an achievement orientation, and faith in the likelihood of social change of a de-restricting nature, related to positive views of industrial work and of self-potential for advancement in such work. Variations in these characteristics of the individual worker were shown to influence work commitment, or the perceived appeal of industrial work, as much as variations in the character of industrial work itself.

The critical influence of certain social institutions upon the observed individually-located determinants of work commitment, and hence upon individual advancement in industry, is argued -- as is the disabling and alienating effect upon blacks of official differential racial accessibility to such institutions. Further research is suggested to investigate the effects, particularly in migrant or transitional populations, of work commitment as here measured -- and in particular its component of self-esteem -- upon the actual performance and progress of workers in challenging industrial work settings.
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CHAPTER 1.

INTRODUCTION TO THE STUDY.

Before the direct subject of this study, the commitment to work of black industrial employees, can be described the relevant background circumstances need to be explained. What follows immediately, therefore, is not a description of the matters directly investigated in this study, but a necessary account of the broader historical and social circumstances within which they occur and from which they draw some of their significance. Later, in Section 1.1.4, the direct subject of the study is introduced.

1.1 SITUATIONAL BACKGROUND.

In the late 1970's concern started to be directed toward the advancement of blacks in South African commerce and industry. Traditionally, blacks had been under-represented in positions of authority, responsibility and skill in an industrial system predominantly controlled by whites. Now, in response to a combination of economic pressures, foreign influence upon multinational companies, and changes in the ambient political culture, a type of germinal affirmative action began in the arena of urban occupational work.

The writer has worked in a programme of research investigating problems of occupational black advancement which commenced in 1979. Since that time, apart from conducting systematic formal research, the writer has also consulted industrial employers and black employees in employment situations where policies of black advancement have been officially adopted and in which the many issues attendant upon black advancement were frequently discussed. While these interactions did not constitute formal survey research they have nevertheless supplied many convincing observations. These observations support a series of general hypotheses which describe some of the complex barriers to black advancement in
2.

South Africa, and which also go some way toward explaining why formal attempts to affirmatively pursue black advancement, necessary though they are, often do not directly succeed. An outline of some of the major factors relevant to these issues is possible on the basis of earlier research and the observations just mentioned.

The factors accounting for the traditional under-representation of blacks in advanced industrial work can very broadly be divided into:

1. formal and informal social discrimination against blacks, within and beyond the world of work (i.e. institutional factors); and

2. inappropriate dispositions and abilities of blacks, from the viewpoint of white-controlled commerce and industry, leading to limited performance in that context* (i.e. individually-located factors); with

3. a simultaneous tendency for the two types of factor to influence and reinforce each other to some degree.

On the one hand the industrial work system, like the socio-political system at large, has not been predisposed to involve blacks above certain low levels, excepting where blacks have proven skills which are in short supply. At the same time blacks have neither been particularly disposed, nor, it is alleged, competent, to become fully involved in the industrial work system. Ultimately the two tendencies act to entrench each other: as in the wider society, discrimination between blacks and whites brings about the differential acquisition of relevant experience and personal characteristics such as ability and outlook, which in turn appear to justify continued discrimination. The handicapping factors here discussed are not necessarily unique to blacks, nor do they apply to all blacks, but they do tend to disadvantage blacks on average much more than whites.

* Orpen (1976) pp.4-14, 22, 23, 51-60.
1.1.1 Institutional Factors.

In society at large, among the institutional factors limiting black advancement, there can be distinguished:
- formal discrimination, in the form of, for example, poorer education and training, limiting the outlook, ability and skills of blacks; and
- relatively informal discrimination, in the form of widespread race prejudice in the dominant white population, limiting or eroding correspondingly informal but vital personal characteristics such as the estimation black people have of themselves and their faith in their own capabilities.

Whether formal or informal, these processes tend to have retarding, blocking and discouraging effects upon blacks.

Similarly, among the institutional factors within industry limiting black advancement there can be distinguished:
- formal discrimination, such as, until recently, legislated Job Reservation, which has denied blacks access to jobs above certain levels; and
- informal discrimination, based on negative racial prejudices and stereotyping, fear, low trust, and bad communication, predisposing whites to withhold from blacks responsibility and authority in work, and to distribute assets such as training, better jobs and rewards in favour of whites.

While a good deal is known about the largely self-evident institutional factors limiting black advancement, relatively little is known about the less evident, more subtle and more controversial individually-located factors. The latter issue of personal abilities and dispositions is a delicate one, involving both objective and subjective assessments, and it requires particularly careful investigation. Notwithstanding these difficulties, individually-based characteristics are the principal focus of this study.
1.1.2 Individually-located Factors.

It is commonly alleged by management and supervisors in industry, who are usually not black, that blacks tend to perform less well than whites can or could in similar work, particularly in skilled or administrative work. This limitation is usually explained in terms of personal characteristics of the available black workers.

A major and immediate objection to evaluations of this kind is the fact of their relativity. Since industry in South Africa is for the most part initiated, owned, planned and controlled by whites, are not claims of this kind very likely to be based, to some considerable degree, on highly ethnocentric and hence biased value judgements? How, then, are evidence and assessments from this sort of source to serve as a basis for the objective study of black worker abilities?

Two observations can be made here regarding the problem of biased judgment. The first is that the issue of value judgment can be very largely escaped if it is plainly acknowledged at the outset that judgments of this type from management do have a strong ethnocentric component -- but, on reflection, an ethnocentric component that is to some degree unavoidable. The world of industrial work, and much of the industrial consumer society it generates, are in certain very fundamental senses an outgrowth of secularized "western" philosophies, outlooks, and ways of life*. Until such time as alternative and quite differently-conceived sources or bases of innovative technology, high energy supply and high productive capacity emerge**, they are likely to remain so. In the meantime, persons socialised, acculturated and educated in terms of western ways of thought and urban technologies and social formations seem, rightly or wrongly, very likely to enjoy a more competitive advantage and

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* This in fact includes South-East Asian achievements.
** This is perhaps a task for Development Studies research.
5.

eligibility for industrial work over persons brought up in other cultures. Under the circumstances, whether or not we ultimately value the predominance of industrial culture, it is relevant at present to ask why blacks, most of whom in South Africa receive a decidedly different socialisation and acculturation from that of whites, do not appear to function as effectively in industry as managers expect.

The second observation is that although there is undoubtedly an element of prejudice or stereotyping in particular white judgements that black workers perform less effectively or less appropriately than whites, there is also likely to be some element of truth, albeit generalised and distorted, underlying such judgements. To some extent, then, and with suitable reservations and scepticism, it is reasonable to take heed of the evaluations of white management and supervisors.

Why do blacks tend to perform less well in industrial work than might otherwise be the case? A sceptical appraisal of research and popular wisdom suggests the following distinguishable underlying factors, specific to the work situation. These disadvantages are needless to say, not intrinsic to blacks, but can be traced to social discrimination or institutional contrasts particularly affecting the formative experiences of blacks. The disadvantages listed here are certainly not unique to blacks but may tend to be more common among blacks than among whites. The first pair of factors are essentially cognitive in nature. The second pair are more attitudinal or dispositional.

1. Less ability. Blacks may tend to have less ability than whites, in regard to the requirements of industrial work. This factor divides into formal abilities, such as literacy, skills and technical know-how, where blacks tend to have an absolute disadvantage; and informal abilities, such as linguistic ability and social skills, where blacks have a disadvantage that is relative because it is ethnocentrically* assessed, but under the

* By this is meant that if management and leadership in industry were mainly black, a different organization culture would prevail, and many of these problems would fall away.
circumstances real enough.

2. **Less understanding.** Blacks may tend to have a less deep-seated technical understanding of the world of industrial work than whites do. This factor is divided between essentially two kinds of technology: understanding of a material technology of industrial production; and understanding of a socio-psychological technology of complex organisations.

3. **Less commitment.** For a number of important reasons, blacks may tend to have less commitment to the world of industrial work than whites. This factor is examined more closely below. One major effect of limited commitment is that blacks tend to be qualitatively less motivated in industrial work. Such motivation as there is tends to be markedly exogamous*, and based not upon intrinsic meanings and involvement with the work, nor, correspondingly, upon the awakening and satisfaction of higher-order needs (i.e. it is not a permanent motivation). By any standards this is a tenuous and unreliable motivational base.

4. **Negative or inappropriate attitudes.** Compared with their white counterparts, blacks perhaps tend to adopt different and dysfunctional dispositions toward industrial work. Two types of dispositions can be distinguished.

   One major category of such dispositions is that of conscious attitudes and opinions with specific referents, such as hostility, fear or distrust. Attitudes of this type tend to be a product of immediate circumstances. The emergence of such attitudes is hardly surprising. It is not difficult to imagine how the pervasive discrimination described in 1.1.1 above may induce, for example, resentment, hostility or apathy in black workers. Whether justified or not, such negative attitudes are likely to be counterproductive. These types of attitudinal disadvantage are relative, however, in the sense that they arise out of essentially

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*i.e. not endogenous.*
arbitrary biases in the working environment which are not intrinsic to industrial work, and a change of such circumstances would be very likely to change the attitudes.

The other major category of problematic black dispositions toward industrial work is the more general one of deep-seated and unconscious attitudes and orientations with universal referents, such as fatalism or dependency. Attitudes of this type tend more to be long-term products of background. Rooted in far-reaching characteristics of inequality in society itself, these dispositions are much less amenable to change, and being comparable to limitations at an unconscious level of abilities useful in work, they constitute a more absolute disadvantage for blacks. These types of dispositions are best termed inappropriate, rather than negative.

"Attitudes" are conceptually distinct from "commitment" by virtue of their specificity. While the attitudes just referred to tend to describe particular orientations to work situations, conditions, supervision, and so on, the idea of industrial commitment describes a more enduring, global orientation to the world of industry in general. The referent of "commitment" as here conceived is also more complex than the referent of an attitude. Nevertheless, attitudes and commitment are clearly related.

This listing of generalised factors which may be limiting black performance in industry is partial and confined to the characteristics of individual workers. It does not take account of structural constraints in and beyond the workplace, conditions of work, rewards, and styles of management and supervision which undoubtedly also play their part. These and other factors may be equally or more significant in limiting the performance of blacks but are not the immediate domain of this investigation. Nevertheless, the presence in South African workforces, particularly among blue-collar workers, of significant proportions of black migrant workers who come from rural and traditionally-oriented backgrounds strongly suggests the partial role of the individually-located factors just listed -- particularly the factor of commitment -- in constraining black advancement in responsible work.
1.1.3 Industrial Commitment and Work Commitment

A fairly acute shortage of manpower, especially in skilled and certain specialized semi-skilled blue-collar work, exists in South Africa at present. It is commonly assumed and declared that the rising generation of blacks should be trained and available for such work. But even assuming that the serious deficiencies in the necessary education and training facilities had somehow been corrected, the availability of blacks, both geographically and attitudinally, for urban/industrial employment is not something that can be taken for granted in South Africa. The social, cultural and legal conditions of South African life severely constrain not only many black people's physical access to urban/industrial work but also, and with just as far-reaching effects, their capacity to identify with urban/industrial work. For all but a prosperous very small minority of professional blacks in South Africa, central macro-characteristics of South African society, together with lower-level situational factors, limit the quality of industrial commitment among blacks -- particularly among blue-collar industrial employees, and most of all among migrants. Circumstances do not encourage an authentic industrial commitment among blacks nearly as much as among whites. A consideration of the forces contributing toward industrial commitment confirms the weight of this observation.

By industrial commitment is meant a valuation of, and involvement in, the industrial work system, and indeed the whole urban/industrial society it generates, of a degree and permanence suggesting a career. The term carries connotations of predictability, stability, and a high quality of work motivation in the worker. It also implies an interest, where circumstances permit, in progress, responsibility and advancement. In addition, it is assumed that the term refers ideally to a reasonably sincere, authentic, endogenous and voluntary commitment.

Distinguishable from industrial commitment is the idea of work commitment, an involvement with a particular work situation, and the work actually done in it by the individual.
 Accordingly, in accounting for varying degrees of commitment to industrial work we may first draw a distinction between longstanding social and historical determinants of industrial commitment and more immediate situational determinants of work commitment. The former tend to determine the basic orientation of the individual to industrial work/society in general, regardless of differences between particular work settings; while the latter act to qualify basic industrial commitment as it is actually manifested in specific industrial work settings. Knowledge of these contrasting aspects of commitment would be of interest to policy-makers and to administrators on the spot, respectively.

This study is primarily about work commitment, but has to take account of the factor of general industrial commitment which intrudes to some extent upon the orientations investigated. Both aspects of commitment to industrial work, and the forces which influence them, are now discussed.

In broad social terms, industrial commitment in South Africa can be seen as being based upon four types of component.

Industrial Commitment: 1. Raw Economic component.
   2. Cultural/Ideological component.
   3. Socio-Economic component.
   4. Political component.

These contributing components can act in isolation or combine cumulatively, bringing about a correspondingly weaker or stronger overall commitment.

1. The raw economic component is a commitment to industrial work based on income only -- a relatively "mercenary orientation" (Allen, 1978) on the part of the worker.

2. The cultural/ideological component is an additional commitment to industrial work based on congruity of meanings, values and goals -- a "calculus of meaning" (Berger, 1974) on the part of the worker.

3. The socio-economic component is a further commitment to industrial work based on perceived equality of access to the products, benefits, careers, and entire way of life generated by industrial work.

4. The political component is a further commitment to industrial work
based on perceived equality of influence upon the decision-making processes which direct the political conditions of industrial society.

Clearly, material commitment (1) to industrial work/society is not necessarily accompanied by attitudinal commitment (2,3 & 4). Under suitable conditions, however, these levels of industrial commitment may accumulate over time, in the order given, as both the individual and his career develop. In addition, the degree of commitment in terms of each component can vary. For example, on the economic component an employed person who depends almost entirely upon wage employment in industry for making a living, has, in effect, a more complete economic commitment to industrial work than the person who still retains a stake in a rural subsistence economy, who could be said to have a partial commitment. Similarly, commitment in terms of the other components can also be recognised as a variable.

In these terms, most whites in South Africa, particularly the urban majority, are likely to have fairly well developed economic, cultural, socio-economic and political commitments to industrial work. Alternatively, if they are not actually employed in industry, their latent industrial commitment in economic, cultural and political terms is high. Their material prosperity is closely linked with the urban-industrial economy; especially if well educated, they tend to share the complex of values and goals implicit in the activities of industrial work; there is no official limit upon the availability to them of the goods, services and lifestyle generated by the industrial order; and more so than blacks they are likely to perceive their interests as adequately represented in the socio-political dispensation of which the industrial order is an integral part. By contrast, the overall industrial commitment of blacks, whether actual or latent, tends to be lower. In the case of blacks, such commitment as exists is likely to be based very largely on the raw economic component, with a growing cultural commitment in the case of better-off urban blacks, but with limited socio-economic commitment and very little political commitment outside of a small category of co-opted persons.
To some extent this macro-model describes and explains industrial commitment in broad social terms, accounting for variation in general commitment between whole groups or classes of persons. However, commitment to work in a particular employment setting will also be influenced by more immediate factors. Such situational factors would also help to explain differences in commitment between individual members of whole groups or classes, a variation which must interest persons practically concerned with manpower development and black advancement. This situationally-determined aspect of commitment is that which we have earlier termed "work commitment". Many types of influence could be proposed to explain differences in work commitment. Our particular interest is in the determinants of work commitment most applicable to the compound predicament of institutional inequality in which blacks find themselves. For many blacks there are particular difficulties involved in winning urban residence, gaining urban-industrial employment and accomplishing satisfying work under almost universally disadvantaged conditions. Palpable black work commitment in the workplace in spite of such odds must, we propose, be an effect of at least the following factors, acting to influence the perceived appeal of the work.

1. Remuneration / organization / formal sanctions. Employment situations with better remuneration and conditions* of work, in which activities are co-ordinated effectively and with legitimate authority, and in which rewards and penalties are administered fairly and predictably, are likely to increase the perceived appeal of the work. This factor is influenced by formal discrimination.

2. Objective prospects for progress. Conditions of employment which offer increasing opportunities for training, responsibility, growth, recognition, promotion and long-term employment, with equality of opportunity for all, are likely to increase the perceived appeal of the work. This factor is also influenced by formal discrimination.

* Includes technology and benefits.
3. Informal social climate / organization culture / supervisory styles. Social conditions of work which are experienced as supportive and as satisfying the informal psychological needs of the individual, which involve good communication and consultation, and where authority is exercised judiciously and democratically, are likely to increase the perceived appeal of the work.

4. Estimation of own capabilities (technical). Circumstances of employment in which the individual feels he has adequate training skills and experience appropriate to the job are likely to increase the perceived appeal of the work.

5. Self-esteem (social and psychological). The individual's estimation of himself, as influenced by both the respect of others and by his own innate faith in his capabilities (particularly cognitive, social and motivational capabilities), is, if higher, likely to increase the perceived appeal of the work -- particularly if the work is challenging, as is the case in advancement. This factor is influenced by informal discrimination.

6. "Ideological allegiance " to industrial work. A closer identification with work on the part of the individual, enhanced by:
   - a stronger socially-determined and value-based general industrial commitment*
   - the valuing of more specific content and meanings of the actual work being done,
   - a proper understanding of the total work process and its significance in the wider world, and
   - a sense of participation in and control over the total work process,
   is likely to increase the perceived appeal of the work.

* As defined and discussed above.
The locus of these proposed factors varies along a rough continuum. Those appearing towards the top of the list are characteristics of relatively institutional phenomena surrounding the worker, while those lower in the list are characteristics of the worker himself. The latter are more in the nature of deep-seated attitudes. Correspondingly, factors at the centre of the list are products of the interaction or match between the social or technical working environment and the worker. Additional factors might well affect commitment in the workplace but these are the ones which we would expect to distinguish particularly between blacks and whites, under existing conditions.

1.1.4. Focus of the Study.

At this point it is possible to describe accurately the domain of this study.

The principal subject of the study is the work commitment of black workers, particularly insofar as it is influenced by meanings associated with industrial work. The study assumes that the meanings typically attached, by the black workers studied, to industrial work may not be the same as those typically attached by comparable white workers, or management, and are therefore worthy of detailed examination at first. The meanings taken into account by the study method are primarily those associated by the workers with the immediate work situation; but further implicit meanings associated with relevant circumstances prior to, or outside, the work situation also play their part. Sensitive to these influences, and mindful of the difficulties characteristic of cross-cultural research, the study proceeds to measure work commitment, as evident in expressed meanings of work, in a sample of black workers employed in South African industry. Holistic measures of work commitment are generated which, in the event, particularly reflect the confidence or self-esteem of the men studied. The study then identifies some of the attitudes associated with varying work commitment, together with some antecedent circumstances which appear to influence it.
14.

In more formal terms the study is based on the hypothesis that a meaningful construct of "work commitment" can be conceptualized (as in 1.1.3 above), that it can be measured with suitable instruments, and that it has appropriate attitudinal and social correlates which confirm its significance and utility. Details of some proposed correlates of work commitment and confidence appear in Chapter 4, Section 4.2.

The study takes the opportunity, offered by the research method adopted, of surveying in detail black workers' perceptions of particular forms of industrial work. This aspect of the investigation throws light upon specific subjective meanings of work which may be promoting or inhibiting the involvement and advancement of blacks in industry. Arising out of this exercise, a further interest of the study is the way in which symbolic associations of specific industrial work settings influence the overall confidence of the worker and hence the quality of the individual's overall relationship to work in industry.* However, the principal interests of this study are mental characteristics of individual workers, such as abilities, outlook, and dispositions -- but particularly, unconscious attitudes -- insofar as they affect involvement and behaviour in work, and insofar as they are initially shaped by prior experiences.

1.2 THEORETICAL BACKGROUND.

As indicated above, the central interest of this study is the role of individually-located characteristics and attributes in the performance and advancement of blacks in industrial work. In this view, certain socio-cultural characteristics of the individual's background are seen generally, and certain resulting mental characteristics of the individual seen more particularly, as being in some degree determinants of individual reactions, behaviours and capabilities in given working situations.

* see also Abstract
1.2.1 The Nature and Origins of Attitudes.

In theoretical terms the study is centred on attitudes and similar individually-based qualities, and is to some degree designed in the psychometric tradition of social psychological attitude research.

The role of attitudes in the design rests on conceptions such as Allport's of attitudes as the mental bases of behavioural dispositions and tendencies. This conceptualisation assumes a diachronic life-process, for individual persons, in which formative experiences mould certain mental attributes -- in particular, ways of perceiving the world, interpreting it and responding mentally to it -- which in turn lead to fairly regular and recognisable forms of behaviour and responses to situations. It is these reasonably stable mental attributes or dispositions which are termed "attitudes". (The concept of attitude contains the notion of habit.) The relevant formative experiences are referred to by some writers as the "psychohistory" of the individual. Allport's definition proposes that:

An attitude is a mental and neural state of readiness, organised through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related.*

For present purposes this definition has the advantage of an applicability which is not confined to specifically social behaviour. As properly used in psychology an attitude is an unconscious disposition which the subject is unaware of. As such it should be clearly distinguished from the colloquial usage of "attitudes" which actually refers to conscious opinions. Attitudes are more deep-seated and stable attributes than opinions, and exert a more pervasive influence. Only calculated acts can be influenced by conscious opinions, whereas even spontaneous acts (or unconscious behaviour such as "body language") are influenced by attitudes.

While by no means the only factors affecting the behaviour of workers, attitudes are focussed on in this study:
1. theoretically, as entities or concepts which concisely and heuristically mediate the influence of antecedent sociocultural experiences on later individual behaviour -- at a level of abstraction which is revealing of patterns of interaction among influences, and is amenable to analysis;
2. realistically, as factors accounting more for behavioural differences between individuals in standardised, routine and repetitive situations such as are likely in industrial work; and
3. pragmatically, as features or constructs which are appropriate for detection, measurement, statistical manipulation, correlation analysis, etc., in terms of the research technology available. 
Attitudes, then, and similar attributes, are seen as intermediate between formative processes and elements of behaviour in a process which, simply represented, is as follows:

```
FORMATIVE
EXPERIENCES/
PSYCHOHISTORY

INDIVIDUALLY-BASED
ATTRIBUTES/DISPOSITIONS

BEHAVIOUR

EXTERIOR
SITUATIONAL FACTORS
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Attitudinal characteristics are seen as tending to determine individual perceptions and behaviour, while at the same time being in varying degrees derived from aspects of earlier life-experiences such as baby-training and child-rearing practices, acquisition of language and culture, socialisation, and education. In many cases these types of formative experiences can be associated with identifiable social institutions or processes. A considerable body of social-psychological attitude research and literature*, dating from

the 1940's has examined particular relationships between specific types of formative experience (typically arising out of given social or family institutions) and specific attitudes. A wide range of the individual's mental characteristics and outlook, from the unconscious to the conscious, is influenced by formative experiences. In more specific terms, then, the role of attitudes and comparable attributes can be modelled thus:

Variability in the nature of early experiences accounts to some degree for attitudinal and behavioural differences between persons. There is in this sense a partially determined quality about the behaviour of individuals.

1.2.2 Early and Late Socialisation.

The interaction of such partially determined behaviour with further new environments and situations (such as work in adult life) may by seen as constituting new, though probably less formative, experiences,

* NOTE: As opinions are undoubtedly influenced by underlying attitudes there is an argument for regarding them as in fact a type of "behaviour".
which proceed in a type of dialectic process to further modify individual dispositions to some extent. However, the influence of later experiences may well be weaker than that of earlier ones, particularly in respect of more fundamental psychological attributes. A stratification of individually-based qualities may be proposed, which would reflect the relationship which we tend to assume between the time in the individual's psychohistory when attributes are laid down, the "depth" or intrinsic degree of the attributes, and in turn their susceptibility to change. It is generally supposed that the earlier in life experiences are, the more lastingly formative they are, and the "deeper" in the individual's psychology are the dispositions and characteristics that they lay down. Attitudes are regarded as occupying a relatively "deep" position in the stratification and as such not easily susceptible to change.

Other criteria such as the nature of the relevant social institutions responsible for the formative experiences, and the emotional atmosphere attending those experiences, have been suggested* to predict the mutability or "malleability" of attitude-type characteristics. These criteria apply to attitudes with more socially-specific referents, presumably with the effect of segmenting the mental "package" of dispositions in a way analogous to the institutional composition of society, rather than stratifying it in the more developmental perspective suggested above. Although early socialisation experiences seem to have the most impact in influencing attitudes, some types of later experience are also acknowledged as having effects which may induce some change in attitudes.

A simple example of the operation of the model, using small numbers of specific causes and effects, might be as follows:

1. Background experience ➔ Attitude ➔ Behaviour

1. **Background experience variable:** During the individual's upbringing he is exposed to an ambient worldview which imputes a very high degree of control over personal fortune, good and bad luck, and the course of life in general, to supernatural forces, deities and the forces of nature. The individual grows up in family and community socio-economic circumstances of poverty, powerlessness and low status which in practice severely limit the ability of the individual, and those with whom he associates, to act upon the world and accomplish material achievements. The individual accomplishes very little of significance or novelty or that is unique to himself.

2. **Attitude variable:** The individual has a fatalistic attitude -- a limited belief in his own capacity to significantly influence the course of his life-events, particularly large-scale ones, and has low personal aspirations.

3. **Behaviour variable:** The individual does not act in ways to change his situation or so as to take full responsibility for himself. He tends to defer to external imperatives. He does not persist in the pursuit of long-term goals, particularly if deflected.

As noted, this simple illustration of the model is confined to very few variables at each stage, and only one attitude. A subsequent consideration of further additional examples of each of the three major species of variables in the model serves to demonstrate its potential complexity. However, this development does not really increase the specificity or the overall explanatory power of the model. A problem of multiple influences is introduced. Types of background experience could be differentiated in terms of such diverse variables as language, culture, family size, rural/urban residence, traditional/modern home life, style of toilet training, approaches to disciplining of children, prosperity/class of home life, length or quality of education, work experience, literacy, and exposure to mass media; while types of attitudes, orientations or dispositions could be differentiated in terms of a host of variables, such as anomie,
alienation, autonomy, dogmatism, ego development, field dependence, individuation, intelligence, locus of control, need for achievement, optimism, self-image and self-esteem; but what specific dispositions derive from what type of socialising antecedents? And which specific dispositions are critical in work performance?

1.2.3 Theories of Individual Modernity.

A unifying perspective on the multiple influences of many possible types of antecedent experience upon many possible types of attitudinal characteristic is afforded by theories of individual modernization or "individual modernity". Essentially such theories propose that the emergence of whole "modern" types of personal outlook and psychology accompanies the emergence of whole "modern" forms of society**. In historical terms, these theories propose that the social changes known as "modernisation"*, traditionally regarded in the behavioural sciences as social-structural in character, have to be recognized as also involving characteristics of individual people. This type of view proposes, and research has indeed begun to confirm, that as changes take place in important social and economic institutions, so must more or less complementary changes occur in the social perceptions and behavioural dispositions of the persons involved. Complete "modernization", it is therefore proposed, consists not only of changes in the attributes of society but also of changes in the attributes of individuals. Sets of certain individually-based attributes, when identified as concomitants of adequately functioning modern macro-structural institutions, are referred to in a growing body of research and writings as "individual modernity". In attitudinal terms, theories of individual modernity


* Typically associated with the industrial revolution and the spread of mass communications.
propose in essence that a "modern" sociocultural environment
ultimately produces (via certain critical "schooling" institutions) a
"modern man". Underlying theories of modernity is the assumption
that the modal personality and attitudinal profile found in a given
society/culture are functionally adapted to the prevailing
sociocultural conditions.

Whether or not we accept the whole concept of "individual modernity"
it provides a framework for conceptually organizing sets of
attitudes, and for relating certain sets of attitudes to certain
types of social practices and institutions. Our use of the
perspective is at this stage provisional, and we do not imagine that
it implies hard and fast absolute relationships. Nor do we intend to
suggest that that which is "modern" is necessarily "better", merely
that it is, in theory, functionally adapted to a prevailing set of
circumstances. Nor, again, do we mean to suggest that questions of
the "modernization" of outlook, attitudes and personality are
applicable only to blacks. "Modernity" is a convenient concept
applicable to anybody in a consideration of industrial aptitudes.
Blacks happen to be the subjects of this study because they tend in
South Africa to constitute a disadvantaged group in the arena of
competition for skilled industrial work.

Theories of individual modernity, and its emergence, provide an
appropriate framework within which to consider and evaluate the
effects of sociocultural experiences upon attitudinal characteristics
relevant to industrial work. In particular, the models of individual
modernity arising out of research based on these theories point
toward the specific types of changing attitudes that might be
relevant to the adjustment of traditionally-raised migrant workers to
the world of industrial work.

A prominent and widely tested theory of individual modernity is that
of Inkeles and Smith, developed in comparative research conducted in
six Third World countries*. Growing out of earlier conceptualisations

of individual modernity by Lerner and Kahl, the work of Inkeles and Smith:
- defines the essential characteristics of social modernity;
- on the basis of observation, proposes the set of individual characteristics which best match it (i.e. formulates/hypothesizes a profile of "individual modernity");
- empirically establishes the social distribution of "individual modernity" characteristics in populations of modernising Third World countries; and
- empirically identifies the influences which most encourage the emergence of individual modernity characteristics.

The conceptualisation of modernity of Inkeles and Smith is derived specifically from a consideration of industrial needs — the factory being regarded as the ideologically-neutral microcosm par excellence of the institutions and working principles of modern society. Inkeles states that in constructing an analytic model of individual modernity he and Smith proceeded:

"to develop a list of modern qualities that met the demands or requirements of running of a factory."

They likewise proposed:

to classify as modern those qualities that are likely to be inculcated by participation in large-scale, modern, productive enterprises such as the factory and, perhaps more critical, that may be required in the staff if the factory is to operate efficiently and effectively.*

The same writers also report that they:

further narrowed the range of (modernity) themes by focussing particularly on those features of factory organisation that we assumed would be notable to and would most influence a naive worker from the countryside.*

On this basis, Inkeles and Smith propose the following complex of values, attitudes and dispositions as their thematic components of individual modernity. The components are presented by them in an order which, in apparent acknowledgement of the pioneering work of Lerner, is suggestive of a sequence of acquisition.

Thematic Components of "OM" Model of Individual Modernity*:

a. Readiness for new experience.

b. Openness to innovation and change.

Both a. and b. are defined as aspects of a "pervasive general characteristic that makes itself felt across a wide variety of human situations".

c. Growth of opinion.

An orientation characterised by:

- "a disposition to form or hold opinions over a large number of the problems and issues that arise not only in the immediate environment but also outside it";
- "awareness of the diversity of attitudes and opinion around" the individual -- an ability to acknowledge, rather than "rigidly to deny", differences which challenge one's own worldview; and
- the ability to actually "put a positive value on variations in opinion", rather than "automatically accept the ideas of those above (one) in the power hierarchy or reject the opinion of those whose status is markedly lower".

d. Information orientation.

A disposition to be "more energetic in acquiring facts and

* Summarized from Inkeles, A. (1973), ibid. Underlined theme names adopted verbatim from original. All quotes from Inkeles, ibid.
information on which to base .... opinions". In implying the espousal of informed opinion this disposition represents a shift towards empiricism.

e. Time consciousness.
A disposition consisting of:
- orientation to the present or future, rather than to the past; and
- the acceptance of fixed working hours, punctuality, regularity and orderliness as desirable approaches to work.

f. Efficacy.
An attitude of instrumentalism, as opposed to passivity or fatalism, in the individual's most general perception of self in relation to the environment -- both natural and social.

g. Planning orientation.
A positive valuation of the habit of planning activities in advance, both in public affairs and in private life.

h. Calculability (or Trust) orientation.
An apparent derivative of efficacy, consisting of:
- belief "in a reasonably lawful world under human control", as opposed to one in which "everything is determined by fate or by the whims ... of men"; and hence,
- "confidence that (the) world is calculable, that other people and institutions ... can be relied upon to fulfil or meet their obligations and responsibilities", are predictable; and hence,
- a greater readiness to trust a stranger.

i. Optimism.
Partly a derivative of personal efficacy, and of calculability.

j. Distributive justice values.
Commitment to an impersonal and achievement-centred principle of rationality in the conduct and evaluation of work -- a principle manifesting itself as:
- "beliefs that rewards should be according to rule rather than whim and that the structure of rewards should ... be in accord with skill and relative contribution; and as

k. Universalism.
An orientation toward universalistic impartiality/neutrality, as opposed to particularistic roles, in the context of face-to-face relations in work.

l. Aspirations.
A disposition to have progressive and realistic aspirations, in particular:
- educational aspirations -- an orientation "placing higher value on formal education and schooling in skills", representing an approval of secular rationality, in contrast to "traditional wisdom" associated with religious power and mystery -- a conception of superior knowledge as no longer sacred, nor mysterious, nor an elite privilege, but as essentially pragmatic, and attainable,
- occupational aspirations -- a desire for specific future occupations for one's own children, of better status than one's own.

m. Dignity value.
"awareness of, and respect for, the dignity of others" -- a disposition to "be more protective of the dignity of weaker and subordinate persons in the work setting", and "to extend the principle to other relationships and thus ... manifest such behaviour in ... treatment of all those inferior in status and power, such as woman and children".

The "OM" variable in a composite measure of individual modernity derived from scores on these attitudinal components together with scores on a few additional antecedent experience variables and behaviour variables. All attitudinal elements of this "analytical model" of modernity are proposed, state the authors, "primarily from a theoretical consideration of the requirements of factory life."*

* Inkeles, ibid.
From a reading of the detailed descriptions of the components there are, we propose, clear signs of a smaller number of common underlying factors which influence each of the situationally-specific orientations/dispositions comprising the model.

Some of the principal attitudinal variables employed in this study are chosen to approximate to what we consider to be some of the underlying factors in question. The model of "OM" modernity will be referred back to when these attitudinal variables are introduced shortly. The authors of the "OM" model appear to tacitly recognize the value of such a conceptual factor analysis when they observe, of the individual scale items comprising their "OM" instrument, that:

"No question, however, is entirely unambiguous or unidimensional, and some of the most interesting problems in analysis come from disentangling the diverse motivational forces that may come to bear on an individual's answer to any one question"*

Somewhat in contradiction to this they also allege that all the elements of their model of modernity "cohere as a psychological syndrome"*. The strict correctness of this claim is questionable, given the diverse nature of the specific components, even though a certain amount of empirical covariance of the components has been demonstrated in the Harvard "Six Nation Study". It may, we here propose, be possible to resolve this contradiction by recognizing that, empirical findings notwithstanding, the "syndrome" is apparent and that the defined "OM" modernity traits are socially-specific manifestations of underlying factors which are by nature independent of each other, but which appear to vary together because of their derivation from empirically concurrent antecedent sociocultural factors.

Our own estimations of some of the factors underlying "OM" modernity are measured independently and discussed shortly.

* Inkeles, ibid.
As noted earlier, the research of Inkeles and Smith also gives attention to the identification of the principal mechanisms encouraging the emergence of the complex of modern attitudes. In the case of individuals from traditional backgrounds, the Six Nation Study found that the types of subsequent "re-socialising" experience most strongly associated with the adoption of the modernity outlook or "syndrome" were, in order of influence:
- Education;
- Occupational experience* (especially influential among persons of lower education); and
- Mass media exposure.

Multiple regression analyses showed that these factors exerted strong and independent influences. The influence of occupational experience was a novel discovery. The researchers note that:

Occupational experience, in particular work in modern large-scale bureaucratic enterprises such as the factory, clearly played a role at least equal to that of the mass media and in some groups (of the sample) almost as great as that of education in the shaping of individual modernity.**

Other proposed modernising influences which, contrary to expectations, were found to have a far weaker association with measured "OM" modernity were, in order of influence:
- Modernity of home/school setting; and
- Urban experience.

The Six Nation Study also tested the relative influences of early and late socialisation factors upon the formation of individual attitudes. In the case of individual modernity attributes Inkeles and Smith found that their late-socialisation variables: occupational type, mass-media contact, living standard, life-cycle stage, years of

* Consisting mainly of factory work, but also of co-operative farm work.

** Inkeles & Smith (1974), p.268
factory experience, and factory quality/size, together had just as much impact on measured "OM" modernity as their early-socialisation variables: urban/rural origin, own ethnicity-religion, father's education, and own education. They read this as confirming one of their initial hypotheses, namely:

that significant change in rather basic aspects of the personality — such as the sense of efficacy, the orientation to time, and others tested by the OM scale -- could be effected in adult life well after the early formative years had presumably given a man's character its basic set.*

This finding, thus interpreted, suggests that basic attitudes underlying the measured manifestations of "OM" modernity are also to some degree amenable to change later in life, under certain conditions.

More generally this finding is encouraging for local assessments of prospects for black advancement in industrial work, for it suggests that even supposing (as might be expected theoretically) that South African blacks competing for industrial employment and progress tend to be relatively handicapped by certain "non-modern" attitudinal characteristics, institutional reforms permitting full training and experience of blacks in modern industrial employment would gradually compensate by functionally changing attitudes -- even among members of the generation presently employed. In fact, we know of no comprehensive attempts to measure modernity among industrial employees of any kind in South Africa.

It has been proposed earlier that a small number of general attitudes or dispositions can be identified as major factors underlying the various specific manifestations of individual modernity as modelled by

Inkeles and Smith. Not only is it argued in Chapter 4 below that these same attitudinal variables are related to one of the principal interests of this investigation — self-esteem — but they also have in their own right direct relevance to individual functioning in an industrial work situation. The diverse significance of some of these attitudinal variables in their own right is now discussed.

1.2.4 Locus of Control.

Locus of control, a more refined conceptualisation of the intrapersonal variable fatalism-vs-instrumentalism, has been developed and empirically tested in the work of Rotter. The characteristic describes the locus of perceived behaviour reinforcement control as varying between being "external" (E) and "internal" (I) to the individual subject — representing fatalistic and instrumental orientations respectively. Locus of control is clearly an important motivational factor in approaches to work of all kinds. It is a common factor in various popularly acknowledged workplace virtues, and arguably a major underlying disposition in modernity. Desirable employee qualities such as initiative, ingenuity, resourcefulness, confidence, and even general knowledge and work commitment, are all in some sense opposites of fatalism. Among the components of "OM" modernity, the variable efficacy is virtually identical to locus of control, and the variables calculability, optimism and planning orientation are clearly more situationally-specific manifestations of the same orientation. Even the variables aspirations and growth of opinion must be influenced in part by locus of control, as must expressions of secular rationality such as time organisation. Describing (internal) locus of control as "activism", Kahl (1968) finds it to be empirically the principal component of his "modernism" scale*, having the highest loadings (.72 and .76) on the principal axis factors of the total scale, and correlating well with many of the other components such as "Low Integration with Relatives" (.43), "Individualism" (.35) "Trust" (.34) and "Preference for Urban Life" (.37). Fatalism has also been termed passivism. "Locus of control" in fact denotes a family of

* See footnote on following page
partially related variables, factor analytic studies having shown that the IE scales of Rotter and others are multidimensional. Gurin, Gurin, Lao and Beattie (1969) find essentially three distinct factors: a general Control Ideology, Personal Control (mainly items phrased in the first person), and System Modifiability. This separation affords much clarification. Personal Control taps the individual's belief about his own ability. Kahl's variable "low stratification of life chances" clearly taps his respondents' Control Ideology, while his "Activism" scale is not a pure variable by these standards. The generality of Control Ideology comes closer to tapping a work ethic, particularly when the scale is invoked in the context of the employment situation. Gurin and associates observe that "Endorsing the internal alternative on those items means rejecting the notion that success follows from luck, the right breaks or knowing the right people, and accepting a ... Protestant Ethic explanation ". **

In a review of locus of control research MacDonald (1973) distinguishes antecedent factors influencing locus of control orientation as either episodic or accumulative. Episodic factors are unique isolated events, but of significant import, such as personal disaster, or death of a loved one. Regarding accumulative antecedents, MacDonald confirms the expectations of theory and common sense by reporting that in research in the U.S.A. three important factors have been identified:
- social discrimination:

* "Modernism" is a values-based measure of individual modernisation developed in Kahl's comparative study of, inter alia, factory-employed provincials, migrants and metropolitans in Latin America. The core components of the "empirical syndrome of modernism" identified by Kahl -- attitudinal scales with more socially-specific referents than the "OM" components -- are, in empirical order of importance, as follows: Activism; Low Integration with Relatives; Preference for Urban Life; Individualism; Low Community Stratification; Mass-Media Participation; and Low Stratification of Life Chances

** Gurin, et al. (1969) p.35
31.

- parental child-rearing practices*; and
- prolonged incapacitating disability.

In the present study, locus of control is represented by the following two variables:

1.2.4.a Personal Control, a scale of forced-choice items tapping the respondents's beliefs about his own personal efficacy rather than that of people in general. The variable could be expected to relate to performance, and to be influenced by culture, general discrimination, authoritarian personality features, and perhaps age. The determinant "culture", or ethnicity, is assumed to in some degree reflect differences not only in worldview and general ontology but also in child-rearing and socialisation processes.

1.2.4.b System Modifiability, a forced-choice measure of the respondent's perception of the permanence or flexibility of racial discrimination and political power. While probably varying independently of personal control, this variable could be expected to also influence performance, but to be itself influenced much more by late-socialisation variables than by early-socialisation variables. System modifiability, which probably does however tap deeper-seated traits such as optimism/trust as well as more conscious opinions, could also be expected to relate to work commitment, and hence perceptions of aspects of industrial work, and job-satisfaction.

* "Research consistently shows that Internals and Externals were exposed to different childrearing practices. Internals come from warm, democratic homes, where nurturance is combined with principled discipline, predictable standards, and instrumental companionship. Externals describe their parents as higher in the use of physical punishment, affective punishment, deprivation of privileges, and overprotection. In short, Internals were exposed to the kinds of parenting that foster the development of autonomy, superego, and achievement striving, whereas Externals were exposed to parenting that is conducive to the development of dependency, hostility, aggression, and a view that the world is controlling and malevolant". (MacDonald, A. in Robinson, J. & Shaver, R. (1969) p.173).
The promising results of recent attempts to develop IE change techniques (involving realistic supportive changes in the individual's social environment) reported by MacDonald, and the evidence from the Harvard Six Nation Study that the factory itself may act "as a school in modernity" support the notion that locus of control orientations can also be changed in an Internal direction by later-socialisation influences. However, until such developments, as MacDonald observes, "all the research points to the same conclusion: people are handicapped by external locus of control orientations." **

1.2.5 Achievement Orientation

Identified by Maslow, and elaborated in the work of McLelland, need for achievement (n Ach) is recognised as an important factor in the dynamic of work motivation -- a precondition, among others, for effective autonomous work performance. It is conceived here, in the manner of McLelland, as a pervasive psychodynamic drive which when present may manifest itself in unconscious or conscious cognitive processes, and in behaviour.

To some extent, achievement orientation must be tapped by the aspirational, planning, and time dimensions of "OM" modernity, albeit indirectly.

The direct relevance to work of need for achievement seems self-evident. Herzberg has pointed out that as higher-order needs, achievement needs are, when prepotent, an endogenous and sustained source of motivation. An entire training programme at the UNISA School of Business Leadership has concentrated on apparently the sole task of bringing about increases in the n Ach scores of skilled black industrial employees* -- success in a pilot project involving motor assembly workers and trainee mine surveyors having been


described in a business newspaper as "An exciting breakthrough in the development and motivation of black workers." The significant measured increases brought about in achievement motivation are reported to have correlated with marked improvement in self-sufficiency, punctuality, problem-solving, resourcefulness, respect for tools and equipment, work-rate, and accuracy. Although it is not reported, it seems likely that the business games on which the change technique is based did in fact inculcate more than an achievement orientation -- probably also inducing characteristics that might be termed "understanding technology and production", "understanding economics", and "understanding careers and promotion". The improved performance-components listed above also suggest a shift in locus of control. Nevertheless, the contribution of the shift in achievement orientation to improved work-performance cannot be doubted. Deserving of further investigation is the variance in work-performance specifically accounted for by need for achievement, and the additional influence upon the achievement characteristic of antecedents other than training processes. Indeed, the concept itself deserves further examination, as the dramatic mutability apparently demonstrated by the UNISA programme hardly seems consistent with the conventional Maslovian notion of need for achievement as an innate need or drive. The instruments could be measuring something that is as much a product of conscious values as of some deeper-seated drive. Correspondingly, a certain set of fairly specific values* could be imagined which might be more or less functionally equivalent, in specified situations, to a more diffuse and unconscious need for achievement. Independent of considerations as to whether or not the individual is ever deeply disposed to seek

* There is so much open discussion among personnel administrators and in commerce and industry generally about "achievement orientation" that a "learned achievement orientation" seems likely in many people. However, the depth, applicability to other areas of activity, and endurance of such a learned orientation is worth questioning.
achievement is Maslow's observation that certain conditions must be satisfied, in particular the reasonable satisfaction of the individual's lower-order needs, for even a latent achievement orientation to become manifest.

In this study achievement orientation is measured by scoring achievement imagery, along the lines suggested by McLelland and associates, as evident in written material produced by the respondents in response to projective stimuli. This written material is essentially of two kinds: narratives based on a number of ambiguous pictures selected from a TAT developed for use with African subjects*; and responses to open-ended questions asking respondents to describe any changes in their circumstances of employment which would enable them to work better. These sources of information, suitably analysed along the lines evolved by McLelland, provide reasonable measures of unconscious achievement motivation.

According to a newspaper report on the UNISA/SBL project noted above, "the limited research done on South African blacks so far indicates that less than one percent of them are high in the need for achievement".** Although "high" is not clarified, this is a contentious claim with perhaps far-reaching implications, and a need for comparative data is indicated. In addition to affecting work-performance, achievement orientation could be expected to be influenced by early-socialisation variables culture, parental socio-economic status, and education (both duration and quality). The findings referred to above support the additional expectation that achievement orientation is influenced by factory experience and opportunity for advancement. Internalisation of locus of control could emerge as a prerequisite for significant need for achievement. With opportunity


** McNulty, ibid.
for advancement intervening, achievement orientation could be expected to affect job-satisfaction.

1.2.6 Autonomy Orientation.

This is a much debated and evolved major personality construct. As a variable it would be more accurately named autonomy-vs-authoritarian orientation. In a sense the emergence of an "autonomy orientation" represents the psychological/attitudinal changes corresponding to the disengagement with close family ties, the social and geographic mobility, and the general emancipation of the individual qua individual, associated with modernisation at the level of social change. This de-parochialising process has been discussed at national and social scale by Lerner and Reisman. However the direct determinants of this type of orientation are actually much more complex than this, and have been demonstrated by research to be better understood as specific individual psychohistorical factors rather than common sociohistorical factors. The opposite of autonomy has been called "need for rules". While the autonomous or "inner-directed" personality is more able to function in independence, motivated by its own convictions, the authoritarian or "other-directed" personality is relatively dependent on fixed frameworks of authority and defined relationships for identity and motivation. These socially-expressed core orientations go on to affect perceptions of and relations with other aspects of the environment, manifested in characteristics such as prejudice/openmindedness, tolerance/intolerance, dogmatism, and intolerance of ambiguity.

The types of formative factors influencing the emergence of authoritarian/autonomous personality traits have been studied and discussed by Sanford and Frenkel-Brunswik. They are essentially aspects of parental child-rearing practices and family life. In a review of research, Sanford observes:

It may be helpful at this point to sketch very briefly the contrasting accounts of childhood by high- and low-authoritarian subjects. High-
authoritarian men more often described their fathers as distant and stern, while the 'lows' tended to describe him as relaxed and mild. High-authoritarian women characteristically saw the father of their childhoods as hard-working and serious, while low-scoring women more often perceived him as intellectual and easy-going. The mother of high-scoring subjects, both male and female, was more often said to be kind, self-sacrificing and submissive, while the mother of low-scoring subjects was more often described as warm, sociable and understanding. High-scoring men tended to accent the mother's moral restrictiveness, low-scoring men her intellectual and aesthetic interests. High-scoring women more often described their mothers as models of morality, restricting and fearsome, while low-scoring women were more often able to offer realistic criticism of their mothers.

When it came to the matter of the relations between the parents, the tendency of the high scorers was to deny any conflict, the lows usually describing some conflict in more or less realistic terms. High-scoring men usually described their homes as being dominated by the father, low-scoring men more often described homes in which there was general orientation toward the mother.

Discipline in the families of the more authoritarian men and women was characterized in their accounts by relatively harsh application of rules, in accordance with conventional values; and this discipline was commonly experienced as threatening or traumatic or even overwhelming. In the families of subjects low on authoritarianism, on the other hand, discipline was more often for the violation of principles, and the parents more often made an effort to explain the issues to the child, thus enabling him to assimilate the discipline.

...the high-authoritarians came, for the most part, from homes in which a rather stern and distant father dominated a submissive and long-suffering but morally restrictive mother, and in which discipline was an attempt to apply conventionally approved rules rather than an effort to further general values in accordance with the perceived needs of the child.*

Describing her detailed research into the associations between patterns of child development and personality, Frenkel-Brunswik finds that:

A preliminary inspection of the data supports the assumption made in 'The Authoritarian Personality' that warmer, closer and more affectionate interpersonal relationships prevail in the homes of

the unprejudiced children; the conclusions concerning the
importance of strictness, rigidity, punitiveness, rejection vs.
acceptance of the child seem to be borne out by data from the
children themselves...

In the home with the orientation toward rigid conformity, on the
other hand, actual maintenance of discipline is often based upon
the expectation of a quick learning of external, rigid and
superficial rules which are bound to be beyond the comprehension of
the child. Family relationships are characterized by fearful
subservience to the demands of the parents and by an early
suppression of impulses not acceptable to the adults.*

The general measure of autonomy/authoritarian orientation used in
this investigation closely resembles the original conceptualisation
of Frenkel-Brunswik, based on clinical analysis of subjects in the
classic Adorno research**. Frenkel-Brunswik describes some of the
essential socially-specific characteristics of
autonomy/authoritarianism, as manifested in thematic apperception
tests, as follows:

We find that low scorers***, as compared with high scorers, identify
more closely with the heroes in their stories, and attribute to
them more creative activity, more enjoyment of sensual pleasures,
and more congenial relationships with other individuals.

Aggression is expressed in more sublimated forms, most often being
in the service of a goal of creativity, nurturance, or autonomy from
imposed coercion. The activity described is more often determined
by inner rational decision rather than by external forces. These
subjects tend to emphasize autonomous behaviour, and they often
reject domination by authoritarian figures suggested by the

* Frenkel-Brunswik, E. "Further Explorations by a Contributor". in
Method of the Authoritarian Personality p.236.


*** NOTE: - "low scorers" refers to relatively autonomous,
unprejudiced persons;
- "high scorers" refers to relatively authoritarian,
prejudiced persons.
pictures. Although the heroes in their stories often seek advice and sympathy from parents and friends, the ultimate decision is usually one of the hero's own choosing. Status relationships between man and woman, parent and child, or negro and white, are more nearly equal in their stories than in those of high scorers.

The high scorers, as compared with the low scorers, tend to describe behaviour of a less constructive nature. Expression of aggression is more often of a primitive, impulsive sort; it is condemned by the story-teller and is followed by an outcome of punishment of the hero.

High scorers tend more often to describe the motivation for the actions of their heroes in terms of external influence or innate tendencies over which the individual has no control. Their heroes more often appear as dependent upon the demands and rules and regulations of authority and are more often activated by parental demands and social custom. They are more frequently victimized by affliction or death.

Contrasting status relationships are more marked in the stories of high scorers. The male and female roles tend to be dichotomized, the man as the master, the woman as weak, dependent, and submissive. Parents are more often described as domineering and judging, and their children as submissive and compliant.**

Authoritarian personality features are widely regarded as a handicap, particularly in situations requiring social interaction, adaptability, and acceptance of and involvement in new forms of experience -- all characteristics of the industrial employment situation. Theoretically authoritarianism would also be expected to be a handicap in the context of a need for risk-taking and initiative. More particularly, certain authoritarian traits would be theoretically conducive to unusually negative perceptions of danger, stress, fatigue and illness -- also features of heavy industrial work. In a re-analysis of data on five hundred negro migrants in Boston and of data from the Inkeles Six Nation Study, R.M. Suzman***


*** Suzman, R.M. (1973)
See also footnote p.40.
finds that "OM" modernity relates significantly to authoritarianism. From a reading of his analysis, the authoritarianism he is referring to might be characterised as:

- rigidity
- dogmatism

vs

- tolerance
- empathy
- adaptability

The writer's study of migrant workers in a Transvaal border industry* suggests that the more enterprising and effective individuals are distinguished from their colleagues in terms of a factor which is tentatively described as:

- rigidity
- conservatism
- ethnocentrism

vs

- adaptability
- flexibility
- change orientation

This factor bears a strong resemblance to established characteristics of the autonomous/authoritarian dimension. Suzman reports, of the Six Nation Study: "Another interesting finding from the Pakistan sample** was that those individuals who were relatively highly educated but traditional, turned out to be rigid and authoritarian individuals with low levels of ego development." In fact, the general relevance of deep personality variables to social development, and therefore industrial development, is reinforced by Suzman's final conclusions that:


** Fourteen traditional-modern pairs, matched on education and factory experience.
experiences. Among these central attributes of personality are authoritarianism, field independence and ego development."*

A re-examination of the individual components of "OM" modernity outlined above (1.2.3) strongly suggests that some of them fairly directly reflect aspects of autonomy/authoritarianism. The component openness to innovation and change, as defined (q.v.) is a recognisable autonomous/authoritarian trait. The component growth of opinion, as defined (q.v.), similarly taps a rigidity or intolerance of ambiguity orientation. The component trust and optimism (q.v.) would be expected to be of significantly lower salience in authoritarian persons. The component dignity, as defined (q.v.), affords a recognisable manifestation of authoritarian preoccupation with superordination-subordination in social relations. Finally, it seems more than likely that the components readiness for new experience, openness to innovation and change, growth of opinion, and aspirations are all partly affected by an important underlying factor: empathy. Low empathic capacity is a cognitive trait which has been related to authoritarianism.

Autonomy/authoritarian orientation is measured projectively in this study using the TAT developed for African subjects mentioned earlier**. Respondents write stories in response to six TAT pictures. From our own consideration of Frenkel-Brunswik's account of contrasts between relatively authoritarian and relatively autonomous persons, the following analytic themes or components have been discerned and incorporated into an interpretive schema for scoring the whole variable from the respondent's stories.

* Suzman, in Inkeles & Holsinger (Eds.)(1974) p.117.
a. Empathy and Projective Ability.
   low vs. high

b. Receptivity and Involvement in Situations.
   closed vs. open
   rigid vs. flexible, adaptive
   intolerant, judgemental vs. tolerant
   alienated, self-distancing vs. involved, trusting

c. Behaviour and Activities.
   emotionally-dominated vs. rationally-directed
   un-constructive vs. creative.

d. Expression of Aggression and Basic Drives.
   impulsive vs. sublimated

e. Quality of Motivation.
   external vs. inner decision
   uncontrollable vs. controllable

f. Autonomy.
   dependent/needing rules vs. independent

g. Status Relationships.
   power/contrast vs. equality

Taking into account all these dimensions, a holistic evaluation or
assessment of the overall autonomy/authoritarian disposition of each
respondent is made. In accordance with the interpretive schema the
choice of pictures used has favoured scenes depicting more than one
person, so as to evoke the content of interpersonal relationships.
Without focussing on any particular component trait, or necessarily
being very unidimensional, this measure nevertheless gives a
satisfactory indication of general autonomy/authoritarian
orientation.

A major hypothesis concerning autonomy/authoritarianism is that it
is seen as significantly influencing the adequacy of adjustment to
the world of industrial work. The influence of authoritarian
dispositions could be expected to be traceable at different levels,
relating for example to:
- disadvantageous perceptions of aspects of actual work;
- problematic behaviours in the workplace, especially where social interactions are required (e.g. teamwork, leadership, or learning); or
- limiting perceptions of self in the context of a world of new roles, motivations and responsibilities.

In addition, the more fundamental the value-changes required in adjusting to industrial work, the more so that authoritarian dispositions could be expected to compromise such adjustment. Measures of authoritarianism could be expected to relate to work commitment. They could also be expected to be influenced by education, parental socio-economic status, and ethnicity (representing cultural values and child-rearing patterns).

1.2.7. The Measurement of Attitudes.

The measurement of attitudes, which presents customary methodological problems at the best of times, is made more difficult and uncertain in cross-cultural research. As a pioneering attitude-researcher once observed, "All research on attitudes and values is haunted by the possibility that verbal expressions by respondents may bear no relation to the subsequent behaviour of these people."* This is an initial comment on the nature of attitudes. In fact, the measurement of attitudes involves skilled and theoretically-informed analysis and interpretation of "verbal expressions of respondents". In addition, and again because attitudes are often inferred from verbal expressions of one kind or another, attitudinal measures rely on a close understanding of meanings, which must moreover be shared by both investigator and subject. This may not always be the case. In cross-cultural research this problem is compounded by further problems of communication and understanding arising out of differing languages, worldviews, and definitions of situations. Finally, as is often the case in applied research, the investigation of a problem area which is not yet sharply discerned or defined calls for a more open-ended and less structured line of inquiry. While wishing to direct the respondent's attention clearly to an area of concern, one equally does not wish to focus unduly on any particular part of it, nor impose one's own definition of the situation -- which may,

* See footnote p.43.
especially in cross-cultural research, be quite inappropriate. The research here described, which is indeed attitudinal, cross-cultural, and open-ended in character, attempts to overcome these inter-related problems partly by maximising the Zulu content of the questionnaire used, but principally by employing, wherever possible, projective measures and pictorial stimuli. Further details of the central aspects of the methods employed are discussed in Section 2.3 below. The findings of the research strongly suggest that the considerable extra efforts involved in setting up projectively/pictorially-based measures have been justified.

CHAPTER 2.

THE CROSS-CULTURAL INVESTIGATION OF SUBJECTIVE MEANINGS OF WORK.

2.1 MEANINGS OF INDUSTRIAL WORK.

How do African migrant and "transitional" workers in industry — many of whom may be encountering industrial employment for the first time — view industrial work? With what emotions and associated ideas do they encounter various forms of industrial work? What are the images and stereotypes of industrial work held by such workers, which may be colouring their views of work, determining their approach to such work, and constraining their involvement with it?

Are there aspects of industrial work and the world associated with it which, for migrants and transitional African workers, constitute significant emotional or conceptual barriers to a free involvement with, and commitment to, the work?

In particular, in a period of increasing attempts to facilitate "Black Advancement" in industry, how do black industrial workers honestly feel about their own ability to adequately perform new forms of work, in situations which may be novel, alien, and challenging?

More particularly still, what sorts of individual motives or personality characteristics subjectively encourage confidence in engaging with industrial work under these circumstances, and what sorts of doubts or anxieties undermine confidence or compromise the expression of technical skills — and industrial commitment in general?

These are some of the areas of concern which the investigation here described seeks to address.* As part of a wider study of the role of social and attitudinal factors in the advancement

* See also Figure 25, p. 113.
of black workers in industry, the study reported here investigates
the views of industrial work of a group of African factory
workers in Durban, together with some of the factors influencing
those views.

The primary interests of the investigation have been to establish
not only the workers' typical perceptions of, and opinions of,
various specific types of industrial work, but also an understand­ing
of what they would consider to be the prospects for
their own progress in these forms of work.

The method of assessment of their own estimated prospects for
progress takes into account both the workers' perception of ob­
jective opportunity in the world of work, and their subjective
confidence and related feelings in approaching the challenge.

With this interest in the "psychology of advancement" the study
has inevitably also become concerned with aspects of the workers'
outlook which bear upon the factor of "optimism." Given the
contemporary predicament of many industrially-employed blacks
in South Africa, a very large component of "advancement
aptitude" — apart from technical skills and diligence — must
be that combination of confidence (self-esteem), conviction
(locus of control) and determination or motivation (achievement
orientation) necessary to undertake novel and challenging tasks
and roles for which there is no real precedent or prior ex­
perience — roles which have to be undertaken, moreover, in a
situation where there is not likely to be a supportive or
familiar atmosphere.

Assuming that relatively meaningful patterns or stereotypes could
be discerned in the respondents' views of work, a secondary
interest of the investigation has been to establish which sorts
of attitudinal or personality factors might be influencing the
character of those patterns or stereotypes, or influencing
perceptions of the prospects for advancement. In other words, the
study also aims to reveal whether certain individual or social
attributes of a more general nature might to some extent account for the individual's enthusiasm or confidence in appraising a certain type of work, and in assessing his possible future in the work.

2.2 PROFILE OF THE SAMPLE STUDIED, AND FIELDWORK PROCEDURE.

The sample of persons examined in the study is drawn essentially from manufacturing industries in the Maydon Wharf/Maydon Road area of Durban. To qualify for inclusion in the sample, respondents had to be African males employed in "blue-collar" skilled and semi-skilled jobs, or in lower-level administrative or "white-collar" jobs, in large firms.* Respondents also had to be married, to have worked with their employer for at least one year, to be proficient in the use of English, and to be sufficiently literate to understand and complete a fairly complex questionnaire. In practice, almost nobody with an education below Standard VI level was sampled. Working in the great majority of cases within these criteria, our interviewer chose 91 respondents randomly by requesting interviews on the street from black employees emerging from factories at "knocking-off" time and during lunch-hours.

Once agreement was secured in principle, a time was agreed with prospective respondents for an interview in a more formal setting. For this purpose a church hall was used, where a number of respondents could, under the careful supervision of the interviewer, simultaneously complete our questionnaire. Every effort was made to put the members of respondent-groups at their ease, to make them acquainted with each other, and to assure them of the confidentiality of the study. Under these circumstances, the church hall proved to be a convenient and reasonably "neutral" setting. To help ease some of the practical problems imposed by a lengthy interview, respondents were offered refreshments, lifts from their places of work and to their

* In many cases Multinationals.
commuter trains or buses, and a token "train or bus fare" of two Rands.

In spite of our careful training of our interviewer, we are well aware that the "randomness" of our sampling method is by no means perfect. Under the circumstances, however, we consider the method a satisfactory and adequate compromise in view of:

a. the great practical difficulty of formally sampling within the premises of a firm and hence under the auspices of its management;
b. the fact that this investigation is, inter alia, a pilot study for a further and more elaborate investigation, and any findings it yields will, if assessed with the proper reservations, prove valuable;
c. the fact that any bias introduced by this method would probably favour the selection of more confident persons — in whom the study has a particular interest —, or the selection of better educated persons, who irrespective of current job-rank would be more likely to become candidates for advancement.

In the event, moreover, we are also very encouraged by one particular indication of the degree to which the sample is representative — namely, the distribution of job-ranks in the sample. This distribution is depicted in Figure 1 (q.v.), and clearly resembles very much the expected distribution of jobs in manufacturing industry at large. As would be expected, the frequency of each job-rank tends to be inversely proportional to its seniority, with the largest category being that of the semi-skilled manual workers, and the smallest categories being those of the executive and professional jobs. This gives us reason to believe that we have been fortunate in avoiding any great imbalance in our sample.

Other characteristics of the men in the sample, and their backgrounds, are as follows.
FIGURE 1.

FREQUENCY DISTRIBUTION OF JOB-STRATA IN FULL SAMPLE.

See Table 1., p. 49.
TABLE 1.

CATEGORIES USED IN CLASSIFICATION OF JOBS: ABBREVIATED DESCRIPTIONS.*

1. Senior Executive/Administrative
2. Professional
3. Administrative/Junior Executive
4. Senior Clerical/Salesman
5. Office Clerical
6. Foreman/Shopfloor Clerical
7. Artisan
8. Semi-skilled
9. Unskilled/Married

* Based on a more detailed classification, derived from Schlemmer and Stopforth (1979), and N.D.M.F. classification (c.1972).
In terms of ethnic origin and mother tongue, around ninety percent of the men in the sample describe themselves as Zulu, while most of the remainder are Transkeians.

About one-third of the men were educated in wholly rural areas, 20 percent in the vicinity of small towns, 28 percent in the vicinity of cities, and a further 17 percent in schools actually within central city areas. Levels of education in the sample vary from Standard VI at secondary school through to university graduate. Eighty-eight percent have an education up to at least Standard VIII or more, and of these 25 percent have at least a matriculation or higher qualification. About 15 percent have studied at a university, and 5 percent have completed a university degree. The great bulk of the sample — almost three-quarters — have education falling within the range Standard VIII to matriculation.

Further clues about the background of the respondents are offered by an estimation of what we have termed their "home prosperity" during childhood, and their residential status vis-a-vis migration. To take the first variable, the men rated the economic status of their parental homes as follows:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>14%</td>
<td>very poor</td>
</tr>
<tr>
<td>30%</td>
<td>poor</td>
</tr>
<tr>
<td>45%</td>
<td>just enough of basic needs</td>
</tr>
<tr>
<td>10%</td>
<td>always enough of everything</td>
</tr>
<tr>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Almost half of our sample, therefore, appear to come from economically deprived or disadvantaged backgrounds, and this is probably a conservative estimate. In the case of residential status, the men, using categories supplied and carefully explained by us, classified themselves as follows:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>38%</td>
<td>urban resident</td>
</tr>
<tr>
<td>50%</td>
<td>immigrant</td>
</tr>
<tr>
<td>12%</td>
<td>migrant</td>
</tr>
<tr>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>
An "urban resident" refers to a person permanently living in a city, town, or urban township, and also born and brought up in such an environment. "Immigrant" describes a person who now lives permanently in an urban environment with his family, but who was born and brought up in a rural area, and who has since moved into an urban area. A "migrant" is a person who is only temporarily residing in an urban area by virtue of being, in fact, an oscillating migrant. Such a person's family live permanently in a rural area, where he visits them or lives with them for a significant period of time each year. Thus, an urban resident has no real link with any rural area; an immigrant has a historical but now defunct link with a rural area of origin; and a migrant has a strong ongoing link with a rural home area. As each type of "residential status" corresponds roughly to a certain lifestyle, outlook and framework of identity, there appears to be in our sample a fairly good representation of a broad range of interests and values.

A very crude and tentative indication of the orientation of the men with respect to "traditional" versus "modern" socio-cultural values is perhaps given by their responses to one of a number of projective devices used in our study. In a six-picture thematic apperception test administered with a written response format, two-thirds of the respondents wrote, in the absence of any specific instructions, their stories in Zulu (the others chose to write in English); and about one-third of the respondents gave, in the absence of any specific instructions, exclusively African names to the characters in their stories (the remainder tended to use European or other non-African names). It should be stressed that only the most provisional of inferences can be made from these facts; and if anything, the use of English language and non-African names in story-telling probably tells us more about the "modernity" of respondents than the use of Zulu and African names would tell us about their "traditionalism."
FIGURE 3.
FREQUENCY DISTRIBUTION OF DURATIONS OF SERVICE IN FULL SAMPLE.
Finally, the ages of the men in the sample range from the early twenties to about fifty years in a fairly normal distribution curve, as depicted in Figure 2; while the period that they have worked with their present employer ranges from about one year to ten years or more with a fairly uniform tendency toward a slight preponderance of short-service men, as shown in Figure 3.

2.3 RESEARCH METHOD.

The study is essentially a statistical survey of the men described in the sample, based on a standardized questionnaire designed to recover information on the respondents' demographic characteristics, formative background, qualifications, work, and views and opinions of work. Using specially adapted psychological instruments the survey also attempts sensitive measurement of attitudes of a more general nature and of relatively unconscious aspects of personality deemed relevant to work performance. In use, the questionnaire takes on some of the characteristics of an interview schedule, because although respondents write on it themselves this process is administered by a trained interviewer presiding personally over small groups of respondents in what resembles an informal classroom situation.

Computer facilities are used to store, analyse, and compare a large number of detailed recovered variables describing the men.

Much as we would have liked it, participant observation of the working men in the sample was not practicably possible in the investigation here described.

A central aspect of our method in the study has been the use of pictorial stimuli to evoke the respondents' immediate perceptions of, and reactions to, the world of work and employment—in particular, their responses to what was considered to be a number of archetypal features of employment in large-scale industrial work involving the operation of heavy or precision technology.
In the initial stage of this technique a selection of photographs of industrial work scenes were shown to the respondents, who replied to a number of standardized but open-ended questions applied to each picture. The pictures clearly show a person at work in each situation, and it is assumed that the respondents unconsciously identify to some degree with the depicted workers in making their response. (The nature of the responses recovered confirm this assumption.)

This projective aspect of the method improves the likelihood of the respondents giving an authentic response, in an un-selfconscious manner. However, our primary reason for employing pictorial stimuli has here been to overcome the difficulty, particularly in cross-cultural research, of describing verbally to a respondent a detailed hypothetical situation (in this case a total work-situation) without thereby imposing a point of view, rather than to reveal deep-seated unconscious processes in the individual.

In order to make almost any sort of response possible the questions used in conjunction with the pictures are phrased in such a way as to be as non-directive as possible. However, the content of the pictures has been carefully chosen with the intention of suggesting at least some specific themes. These themes have the following in common:

— They are, as noted above, typical of industrial work.
— They would tend to stand out as novel to persons of rural and traditional background.
— They are characteristics of work which, previous research tentatively suggests, tend to provoke particular anxiety in African migrant workers.

Accordingly, some of the themes suggested, in our opinion, by the depicted work scenes are: effort, stress, danger, unusual or alien environments, contamination, isolation, concentration, uncertainty, and precision, to name a few. The pictures were deliberately prepared by us with these types of theme in mind.
Other possible themes will be mentioned shortly.

Of course, whether these themes, which are significant to us, would be apparent or significant for the respondents is not certain, but the main advantage of the pictorial technique is precisely that it permits each respondent to freely assign his own meanings to the situation, because that situation is not defined verbally.

From these details it will be appreciated that the technique and procedure resemble, with certain significant reservations, those used in a thematic apperception test.

Four photographs of work-scenes, approximately representing four types or levels of modern work, were used in the experimental procedure. These photographs are reproduced in Appendix A (q.v.).

Although the projective purpose of the pictures meant that they could not in any way be named or described to the respondents, for present purposes and for ease of reference in discussion, they are now given brief names,* which are set out below together with the numbers used to identify them in the questionnaire:

- Picture B5: "Minework"
- Picture C1: "Refinery Worker"
- Picture D4: "Machine Operator"
- Picture BCl: "Telephone Linesman"

The picture of "minework" was intended to be in some degree suggestive of a theme of uncomfortable, arduous, or dangerous work in an alien or contaminating environment. The picture of

* These names are given merely for convenience, and do not imply that their meanings were necessarily conveyed by the picture, nor that the respondents necessarily saw the pictures in these terms.
of the "Refinery Worker" was intended to in some degree convey a theme of working in close proximity to heavy or large-scale technology, also in an unusual or alien environment. The picture of the "Machine Operator" was intended in part to carry a theme of work in close proximity to complex, precision, and possibly dangerous, technology. The picture of the "Telephone Linesman", in conjunction with the introductory comments which accompany it in the questionnaire,* was intended to fairly clearly suggest a theme of advancement into work which is much more skilled and rewarding, but which would also carry very real risks and challenges. It was in this last context that fairly crucial questions were put to the respondents regarding a person's ability to progress in such a predicament.

Although the pictures do not necessarily present sufficient detail or information to clearly identify a particular job in each case, they do convey to most respondents that differing and familiar types of work are represented. Thus, pictures B5, C1, D4 and BC1 do recognizably show a manual type of work, a semi-skilled or "attendant" type of work, a skilled or machine-operator type of work, and an artisan type of work, respectively.

In fact, bearing in mind that the pictures are designed to be shown sequentially to respondents in the order: B5, C1, D4, BC1, the series of pictures as a whole, and the corresponding characteristics of work depicted or implied, can be seen to represent a continuum of jobs, suggestive to some extent of a promotional or career pathway — or alternatively, a process of advancement.

* The introductory comments accompanying the "Telephone Linesman" picture read as follows: "This picture shows a person who has recently started in a new job. This job is paid better than his last job, but it is more difficult."
Moving through the continuum represents a progressive increase in the skill, pay, and status implied by the jobs, and a progressive decrease in physical effort and in the degree to which the working environment is alien. (The only anomaly in these continua is the unusual work environment of the Telephone Linesman.) There are, in this sense, a number of dimensions to the continuum. Another important factor which varies across the continuum in the perception by most respondents of differential racial accessibility to the work. Mine work is typically seen by the respondents as a "job of blacks", i.e. an undesirable job which only blacks are prepared to do — and moreover, only blacks with the lowest education and privileges, or "stranded"* blacks. On the other hand, work as a telephone linesman is seen first and foremost by many blacks as conventionally a job reserved for whites, a factor which gives it an unmistakable fascination in spite of its other trying qualities. Although moving through the job continuum can be seen as representing a steady increase in job status and hence income, the choice of work scenes and the manner in which they are depicted also represent, we feel, a steady increase in the sense of challenge, responsibility, isolation, and even risks involved. For this reason we consider that an aspirant blue-collar worker examining the range of jobs would not automatically feel a preference for the more senior jobs**, as those that are more "advanced" appear also more daunting. A choice would not necessarily be simple.

The characteristic of "continuum" in the significance of the work pictures has been deliberately encouraged by us in the sequence in which they are presented.

* an English term commonly used by Zulus to mean persons who are unemployed, destitute, desperate, and generally without choices: persons with "Hobson's choice."

** a ranking of the work types, which was requested of the respondents, is described later in this study.
How did we use the work pictures? In the experimental procedure the respondents were told that they would be shown a series of pictures of people working, and that they would be asked questions about each picture. The respondents were encouraged to relax and use their imagination in answering the questions, freely stating whatever the pictures might suggest to them. The pictures were presented one at a time, and for each picture a matching page of the questionnaire provided a series of questions, phrased so as to be appropriate to elicit the images, stereotypes, feelings, ideas, needs, and other implications which might be evoked by that work scene, while remaining as open-ended as possible. These questions always ostensibly refer to, and apply to, the persons shown in the picture, and never to the respondent. Respondents were asked to examine the picture carefully and to then answer the questions quickly and spontaneously, completing this task before proceeding to the next picture. The relatively "light" structuring of this response format may be confirmed by an examination of the four pages bearing the questions, copies of which are reproduced in Appendix A (q.v.).

With virtually all respondents the response format has, in conjunction with the pictures, worked very much as intended. Our analysis of the responses reveals initially that in most cases the respondents have tended to empathise with the persons shown in the pictures, and correspondingly appear to have reacted to the questions in terms of a subjective, rather than objective, appreciation of the situations depicted. This encourages us in our conviction that the responses generated by our method resemble the responses that would occur if the respondents were themselves actually placed in the corresponding real work situations.

To conclude, three aspects of our technique are noteworthy at this point: the use of pictures to "describe" a situation which is to be discussed; minimal structuring of the attached questions or stimuli used to elicit cognitive and affective reactions to that situation; and an emphasis on spontaneity in
responding. There are important implications of this technique which, we believe, enhance the authenticity of the data recovered. The pictorial identification of a job and the open-ended response format mean that we (the investigators) make no pre-emptive verbal description or definition of the situation (which might differ from that of the respondents) and that correspondingly we permit the respondents to freely assign their own meanings to the situation as they respond. The presence of a person in the pictures, together with a very spontaneous appraisal of the situation, and the giving of responses in the third person, encourage a relatively unconscious projection of the respondents' perceptions and assumptions onto the depicted worker who is ostensibly being discussed. This is not necessarily the sort of projection which reveals very obscure aspects of personality, but it is a level of projection which facilitates a free and relatively unconscious expression of genuine ideas and feelings with a minimum intervention of calculated responses. Thus the responses tend to be couched honestly, in terms of the respondents' own prominent values and worldview, and with a minimum of self-censorship.
In the following two chapters of the thesis information on the respondents' views of industrial work is analysed and presented in two ways. First, a detailed analysis of response types in respect of the four types of work is given, often pictured in diagrammatic form. This analysis takes account of a great deal of multidimensionality and detail in the responses. Later, the detailed information is used to generate, for each respondent, a more general assessment of the "confidence" with which he views each form of work, and the corresponding prospects for self-advancement in it. This analysis yields two relatively crude "confidence" variables intended for use in further correlation analysis with other variables.

For each of the four types of work considered by the respondent, the response format has supplied a standardized set of approximately half-a-dozen questions (Appendix A). These questions have generated a half-dozen corresponding species of information, representing the respondent's appraisal of that work situation from various perspectives. For example, the question "As you see him now, how is this person feeling?", referring to the worker shown in the picture, tends to generate answers describing the respondent's affective state as he confronts the situation depicted. Recalling what sort of information each question was intended to recover, we have been able to categorize or place each response to that question on a corresponding variable — for example, a variable describing the type of mood or feeling evoked by the work in question. This derivation of the results about to be presented will become more clear to the reader on inspection.

On this basis the questions applied to each type of work yield essentially three sorts of information:

— variables describing the respondents' typical conception of the work depicted;
variables describing the respondents' typical conception of the worker depicted; and
— variables describing the outcomes or prospects typically expected by the respondents to result from the situation depicted.

Moving now to the first type of work situation presented to respondents, picture B5 or "Minework", the images or stereotypes typically held of this kind of work are schematically presented in Figures 4, 5, 6 and 7, on the following pages. Each figure shows the various categories and sub-categories of response arising out of a named perspective on the work, and the proportion of respondents giving responses in each category. Note that for all the results which will be presented, the proportion of respondents giving any specified response is always expressed as a percentage of the total number of persons answering the question, and that this latter value is in most cases the full sample or a figure very close to it.

3.1 IMAGES OF MINEWORK.

Virtually all respondents recognize situation B5 as minework. The results presented in Figure 4 (q.v.) reveal that the basic image of minework held by our sample of African factory workers in Durban is overwhelmingly negative. Minework is primarily seen as distressingly strenuous and as taking place in a dangerous and fearful environment. A diffuse anxiety colours most conceptions of the minework situation, an anxiety based mainly on the nature of the work itself but also on what are seen to be notably poor formal conditions of employment, such as pay and safety provisions. Another prominent negative characteristic associated with minework is the migration and separation from home which it necessitates. Anxiety in this respect is expressed in responses associating minework with concern for distant families, and with an impulsive need to escape the work situation. These findings tend to confirm indications from other research that minework is commonly perceived by Zulus as a dangerous and debilitating treadmill, and that debilitation is feared as being of a permanent nature.
Based on responses to the two questions: "As you see them now, how are these people feeling?" and "What are these people thinking?"

* NOTE: Frequencies of responses in these sub-categories are expressed as percentages of all respondents, not as percentages of the "parent category".

- Frequencies of the various sub-categories of negative and positive image may add up to more than 100 percent as many respondents mention more than one characteristic of the job.
**FIGURE 5. IMAGES OF MINEWORK: **

**PERCEIVED TYPICAL ATTRIBUTES OF THE MINEWORKER**

<table>
<thead>
<tr>
<th>Negative Attributes</th>
<th>77%</th>
</tr>
</thead>
<tbody>
<tr>
<td>uneducated</td>
<td>42%</td>
</tr>
<tr>
<td>unprivileged</td>
<td>20%</td>
</tr>
<tr>
<td>unemployed</td>
<td></td>
</tr>
<tr>
<td>people in trouble</td>
<td>7.6%</td>
</tr>
<tr>
<td>unskilled</td>
<td>6%</td>
</tr>
<tr>
<td>misinformed</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

| "Blacks"            | 33% |

<table>
<thead>
<tr>
<th>Other Attributes</th>
<th>12%</th>
</tr>
</thead>
<tbody>
<tr>
<td>rural</td>
<td>7.6%</td>
</tr>
<tr>
<td>migrant workers</td>
<td>3%</td>
</tr>
<tr>
<td>single</td>
<td>1.5%</td>
</tr>
<tr>
<td>strong and healthy</td>
<td>6%</td>
</tr>
<tr>
<td>clever</td>
<td>1.5%</td>
</tr>
<tr>
<td>trained</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

9% Positive attributes

**Responses to the question: "What kind of people usually do this work?"

*NOTE:* All frequencies are expressed as percentages of the total sample.

- Frequencies of these categories of response may add up to more than 100 percent, as many respondents mention more than one attribute.

**FIGURE 6. IMAGES OF MINEWORK: **

**PERCEIVED TYPICAL NEEDS OF THE MINEWORKER**

<table>
<thead>
<tr>
<th>Personal needs intrinsic to work ability</th>
<th>75%</th>
</tr>
</thead>
<tbody>
<tr>
<td>energy/strength</td>
<td>46%</td>
</tr>
<tr>
<td>courage</td>
<td>7.7%</td>
</tr>
<tr>
<td>good health</td>
<td>6.2%</td>
</tr>
<tr>
<td>brains</td>
<td>4.6%</td>
</tr>
<tr>
<td>perseverance</td>
<td>4.6%</td>
</tr>
<tr>
<td>relaxation</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personal needs extrinsic to work ability</th>
<th>18%</th>
</tr>
</thead>
<tbody>
<tr>
<td>food</td>
<td>15%</td>
</tr>
<tr>
<td>light</td>
<td>3.1%</td>
</tr>
</tbody>
</table>

| Education                                | 3.1%|
| Pragmatic needs                          | 50% |
| pay                                      | 20% |
| safety clothing                          | 22% |
| skills                                   | 7.1%|
| machines                                 | 3.1%|

**Responses to the question: "To do this kind of work, what do these people need most?"

*NOTE:* Frequencies of main response categories may add up to more than 100 percent, as many respondents mention more than one need.

- All frequencies are expressed as percentages of the total sample.
**Responses to the question: "Usually, what are the effects of this kind of work on people who do it?"**

*NOTE: — All frequencies are expressed as percentages of the total sample.*
So vivid do the dangers and physical conditions appear to most respondents, that wages are not found to be the prominent criterion of evaluation of minework; nevertheless, in the few instances where wages are mentioned they are regarded as poor or disappointing.

Figure 5 (q.v.) reveals an appropriate and correspondingly negative image of the typical mineworker. By far the commonest personal characteristics attributed to mineworkers are negative or problematic ones. Thus for most respondents, mineworkers are typically seen as uneducated, statutorily and socially unprivileged, poorly endowed in other ways, of rural origin, or just "black". These are all ways of saying that the type of person performing minework is a disadvantaged person, the implication in many responses seeming to be that it is only such "stranded" persons who could be induced to take up such work.

Figure 6 (q.v.) expresses what the respondents consider to be the mineworker's principal needs in the work situation. The classification of these various perceived needs is not easy. The attributes expressed in the various responses have been divided broadly into "personal needs", which are qualities or needs which would very directly or intimately affect the worker's performance and experience of the work; and "pragmatic needs", which are more formal adjuncts to the working situation. The former category of responses has in turn been divided into personal needs "intrinsic to work ability", which are qualities which the worker himself would bring to bear on the work, and personal needs "extrinsic to work ability", which are assets which the employer would more likely bring to the job.

The typical workplace needs of the "mineworker" expressed by the respondents tend to confirm the bleak image of this type of work revealed in Figure 4. The most prominent "personal needs intrinsic to work ability" mentioned are energy, strength, *

* Recall footnote, p. 58.
and courage — the qualities necessary to meet a harsh and
dangerous environment — while one of the most commonly mentioned
"pragmatic needs" is, correspondingly, safety clothing. Most
prominent of the mentioned pragmatic needs is pay, but mentioned
only half as often as the need for strength.

The underlying significance of the different types of responses
presented in Figure 6 is interesting, as it tells us something
about the attitudes of the respondents in our sample as well as
something about popular stereotypes of minework. In the sense
that the category "personal needs intrinsic to work ability"
(q.v.) represents qualities or assets which the worker himself
would bring to the job, responses in this category implicitly
express the respondent's assumption that he would personally take
responsibility for getting the work done. By contrast, responses
in the categories "pragmatic needs" or "personal needs extrinsic
to work ability" seek assets or resources from the employer,
implicitly expressing a need for external help, assistance or
protection on the part of the respondent. The former types of
response assume that the worker will "engage" with the work
essentially unaided, suggesting a relatively autonomous and con­
fident orientation, while the latter types of response suggest
an unwillingness to fully commit oneself unaided.

With this perspective, about three-quarters of the responses
given reflect a concern with the worker's development of himself
and an assumption of personal responsibility for undertaking the
work, with the qualification that about half of all responses
also contain an expression of need for assistance.

To complete the image of minework prevailing among our sample
of industrial workers, Figure 7 (q.v.) sets out the typical
effects or outcomes of minework for those engaged in it, as
imagined by the respondents. These responses appear only to
consolidate the poor image of minework already revealed. A very
large majority of responses refer to alarming or disastrous out­
comes, the most commonly mentioned being disease or illness,
death, and disablement. Except in a very few cases, minework seems to be perceived as an ordeal from which one does not emerge in a healthy, "whole", or satisfied condition. To put it slightly differently, the great majority of respondents have an extremely low confidence in their imagined ability to undertake minework in a satisfactory or fruitful way.

To sum up these impressions, in the case of the "minework" situation, the work is seen for the most part as very arduous and debilitating, the workers as disadvantaged or weak and in need of help, and the effects of the work as personally damaging and inimical to self-advancement. This latter restraining aspect of the stereotypical mineworker's predicament is perhaps most graphically described by a small minority of respondents as a state of being "enslaved" — a term used to describe a person who feels so circumscribed by fatigue, long hours, and low income as to be unable to make plans, break out of routine, or change his situation.

In the handful of cases where the "minework" picture is incorrectly identified by respondents, it is usually seen as other forms of equally heavy manual industrial work, and with a very similar profile of characteristics to that of minework proper, namely:

- rough and strenuous conditions of work,
- feelings of tension and strain,
- concern for personal safety and health,
- concern with earning money for mere survival,
- uneducated or "stranded" workers,
- a need for strength, courage, endurance, and protection,
- prematurely debilitating consequences.

Although very probably nearly all the respondents have not had direct experience of minework, they invariably hold, if the phrase may be permitted, this "Gulag stereotype" of it.
3.2 IMAGES OF WORK AS REFINERY HAND.

Information we have recovered regarding views of the "Refinery Hand's" work situation has been analysed in essentially the same manner as that in the preceding section.

Responses elicited by picture C1 in conjunction with the associated response format C1 are presented in the following pages and Figures. The scene depicted is recognized by virtually all respondents as being some form of refinery or continuous-flow production process. Prominent characteristics noted are the heavy-industrial nature of the setting and the isolation of the depicted worker.

The information presented in Figure 8 (q.v.) tells us about the feelings evoked by this work scene as respondents confront it. The majority of these feelings, in about three-quarters of all responses, are affective or emotional in nature. Of these affective responses the positive ones, indicating mainly a feeling of happiness, confidence or satisfaction, slightly outnumber the negative ones, which tend to express feelings of anxiety or insecurity. Most of the remainder of our sample, about one-quarter, respond with feelings of a more pragmatic orientation but positive value — principally feelings of responsibility or concern for the work. A significant majority of respondents, then, have a favourable initial response to the work situation of the "Refinery Hand".

Complementing Figure 8, Figure 9 (q.v.) describes the ideas or meanings which are immediately evoked by the "Refinery Work" scene. About one-fifth of responses consist of thoughts not about the work itself but rather about the need for various forms of assistance or reward as conditions for undertaking it. In other words, concerns intrinsic to the work are not evoked in these cases. In the remainder of cases, however, the situation evokes ideas or concerns intrinsic to the undertaking of the work, the majority of these indicative of realistic and positive involvement with the work. Finally, for about one-fifth of respondents the
thoughts evoked by this scene concern problems perceived to be intrinsic to the job, such as danger or loneliness. In more than half of the respondents, then, this work scene prompts an apparently authentic interest in the work, expressed in responses of a constructive and optimistic nature.

Feelings about the isolation of the depicted Refinery Worker, which are expressed in Figure 10 (q.v.), tend to be polarized. Most of those who view the isolation negatively see in it a lack of safety, of help, and of companionship; whereas those who view the isolation positively see in it a freedom from close supervision and an opportunity for increased responsibility and attention to the work. These points of view are about equally represented.

The most prominent perceived needs of the depicted worker, set out in Figure 11 (q.v.), present an encouraging image of Refinery Work. Although about one-fifth of responses express a need for resources which would constitute external help or assistance to the worker, the remainder express practical job-oriented needs. In particular, nearly half of the respondents mention abilities intrinsic to the worker as needs in this situation, implying a personal commitment and attitude of responsibility for the work.

The expected outcomes of this particular work situation also present a relatively encouraging picture. As can be seen in Figure 12 (q.v.), a clear majority of respondents associate work in the situation depicted with the likelihood of eventual promotion or advancement. A further proportion would expect changes or outcomes very probably representing an improvement in the occupational status of the worker, although not necessarily in the same sphere of work. A proportion of less than a quarter of respondents foresee stagnation in this form of work.
**FIGURE 8. IMAGES OF REFINERY WORK: I.**

**BASIC MOOD/AFFECT/FEELING EVOKED BY REFINERY WORK**

- **Emotional:** 75%
  - Positive: 45%
    - Happy/lucky/good: 33%
    - Satisfied/O.K.: 5%
    - Confident: 2.5%
    - Free: 2.5%
    - Pride/sense of belonging: 1.25%
    - Determined/keen: 1.25%
  - Negative: 30%
    - Sadness/sad: 13.8%
    - Anger/fear: 10%
    - Insecure: 2.5%
    - Confusion: 2.5%
    - Loneliness: 2.5%
    - Alienation: 2.5%

- **Pragmatic/rational:** 26%
  - Concern for work/businesslike: 20%
  - Responsible: 3.75%
  - Skilled/trained: 2.6%

- **Physical:** 6.25%
  - Positive: 1.25%
    - Fit/strong: 1.25%
  - Negative: 5%
    - Tired: 2.5%
    - Hot: 2.5%

- **Based on responses to the question: “As you see him now, how is this person feeling?”

*NOTE: — Frequencies of these response categories may add up to more than 100 percent, as many respondents mention more than one feeling.*

**FIGURE 9. IMAGES OF REFINERY WORK: II.**

**PRIMARY IMAGE OR IDEA EVOKED BY REFINERY WORK**

- **Concerns intrinsic to the work:** 79%
  - Positive: 50%
    * Concern for work process, responsibility in work: 36%
    - Good job/earn money/not not dangerous or heavy: 7.5%
    - Promotion/responsibility/future prospects: 6.75%
  - Negative: 21%
    - Danger/unsafe: 13%
    - Lonely: 2.5%
    - Job insecurity: 2.5%
    - Unattractive work: 2.5%
    - Not competent: 1.3%

- **Concerns extrinsic to the work:** 21%
  - Apparent concern for work but for extrinsic motive (reward): 11%
    - Want help/assistants: 3.9%
    - Concern for survival/money: 2.9%
    - Want training/tools: 2.9%
  - Concern for family/desire to return home: 1.3%

*Indications of moderate work commitment.*
**Indications of stronger work commitment.*

*NOTE: ++ Frequencies of sub categories do not necessarily total 100 percent.
+ These concerns implicitly express a need for help on the part of the respondent.*
** FIGURE 10. IMAGES OF REFINERY WORK: III. **

<table>
<thead>
<tr>
<th>Positive perceptions</th>
<th>51%</th>
</tr>
</thead>
<tbody>
<tr>
<td>happy</td>
<td>28%</td>
</tr>
<tr>
<td>unsupervised/happy</td>
<td>9%</td>
</tr>
<tr>
<td>responsible</td>
<td>5%</td>
</tr>
<tr>
<td>better concentration</td>
<td>4%</td>
</tr>
<tr>
<td>O.K.</td>
<td>4%</td>
</tr>
<tr>
<td>pride</td>
<td>3%</td>
</tr>
</tbody>
</table>

| Indifference         | 1.25% |

<table>
<thead>
<tr>
<th>Negative perceptions</th>
<th>48%</th>
</tr>
</thead>
<tbody>
<tr>
<td>lonely</td>
<td>16%</td>
</tr>
<tr>
<td>no help in emergency</td>
<td>10.4%</td>
</tr>
<tr>
<td>unsafe</td>
<td>8.4%</td>
</tr>
<tr>
<td>resignation</td>
<td>5.4%</td>
</tr>
<tr>
<td>needs assistant</td>
<td>5.4%</td>
</tr>
<tr>
<td>needs courage</td>
<td>1.3%</td>
</tr>
<tr>
<td>bad</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

** Based on responses to the question: "How does this person feel about working alone?"

** FIGURE 11. IMAGES OF REFINERY WORK: IV. **

** Perceived typical needs of the refinery worker: ***

<table>
<thead>
<tr>
<th>Personal needs extrinsic to work ability ** (23%)</th>
<th>11%</th>
</tr>
</thead>
<tbody>
<tr>
<td>money</td>
<td>4.5%</td>
</tr>
<tr>
<td>help</td>
<td>3.7%</td>
</tr>
<tr>
<td>feed/light</td>
<td>1.2%</td>
</tr>
<tr>
<td>no drink/drugs</td>
<td>1.2%</td>
</tr>
<tr>
<td>encouragement</td>
<td>1.2%</td>
</tr>
<tr>
<td>good eyesight/</td>
<td>1.2%</td>
</tr>
<tr>
<td>head for heights</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

| Personal needs intrinsic to work ability 39% | experience/aptitude | 9.5% |
|                                           | concentration/determination | 8.4%|
|                                           | energy/strength | 7.3%|
|                                           | alertness | 6.1%|
|                                           | patience | 3.7%|
|                                           | intelligence | 2.4%|
|                                           | control | 1.2%|

| Pragmatic needs 40% | training | 24% |
|                     | safety equipment | 16% |
|                     | equipment | 8.8% |

| Education 5.8% | 7.8% |

** Based on responses to the question: "To do this kind of work, what does this person need most?"

** Most of these needs implicitly express a "need for help" on the part of the respondent.

* NOTE: — Frequencies of these response categories may total more than 100 percent, as many respondents mention more than one need.
** Based on responses to the question: "In five years time what will this person be doing?"

* Although the subjective value of these outcomes, relative to the refinery job, is uncertain, most of these would probably represent an "advancement" of some kind to the respondents.
To sum up these views we should mention that the mainly positive views of the refinery work situation expressed are nevertheless tempered by significant minority expressions of concern, doubts or anxieties. The sense of status, or security, or optimism attached to this form of work is by no means secure, it would appear. Indeed, we suspect that the sequential nature of our experimental method may, by introducing this work form directly after that of mining, have had the effect of somewhat exaggerating the favoured characteristics, by reason of contrast. In other words, an element or feeling of "relief" that is essentially accidental but which positively colours responses to "Refinery Work" may rather reflect a certain relaxation in contrast to the immediately prior experience of examining minework, than a true liking for the work itself.

3.3 IMAGES OF WORK AS MACHINE OPERATOR.

The picture D4 (q.v.), named "Machine Operator" for convenience, was intended by us to convey a skilled type of work, with a suggestion of complexity, precision and possibly danger in the work arising out of a direct use of technology. Virtually all respondents correctly identify the situation depicted with some accuracy.

In general, the sight of what is usually recognized as sophisticated and valuable machinery in this scene seems to spark off a new and brighter mood in the responses evoked. Through many of the answers and comments made by respondents runs an assumption that to have attained to such a job as this is to have confidence and competence, to have valued skills and insight into production processes rather than naive impressions, and to have gained acceptance into perhaps the lower rungs of a continuous career of employment within the industrial system rather than the relatively peripheral involvement of migrants or casual labour. In fact, this type of work tends to be seen as having not only a higher status than the preceding types, but also as having a more definite status.
That work of this nature has a decidedly positive image in spite of being more difficult is suggested by the responses presented in Figure 13 (q.v.), describing the initial mood evoked by the "machine operator's" work situation. A large majority of responses are purely affective, and almost all of these are positive, expressing feelings of happiness, satisfaction or confidence. Similarly, among the responses classified by us as more "pragmatic" in nature, the majority are also positive, describing feelings of ambition and concern for the work. The perennial negative concerns of loneliness, poor safety, and fatigue associated with most industrial work are in this situation expressed by hardly more than one-tenth of the respondents.

The thoughts or ideas ascribed to the machine operator, summarized in Figure 14 (q.v.), are almost all concerned with the nature and demands of the work itself, rather than with "hygiene" factors. Of these intrinsic-to-work responses the two-thirds majority which are positive in orientation express clear signs of work commitment based on concerns with work competence, achievement, and even personal advancement. Although these positive responses are not in a particularly large majority, they are expressed in sophisticated and professional terms—not diffusely. Against this must be set a proportion of about one-quarter of responses expressing worries about poor safety and risk of injury in the job. The fear of danger thus seems to be prominent in a sizeable proportion of the respondents, but the work is evidently of a type to be taken much more seriously in spite of this.

The residual anxiety about the possible danger of the work is expressed again in the respondents' evaluations of the solitary nature of the machine operator's job, summarized in Figure 15 (q.v.). For about one-fifth of the respondents the solitary nature of the job is negatively perceived, evoking a feeling of danger or a need for assistance. For the remaining majority of respondents, however, the fact that the machine operator works
alone evokes clearly positive responses — enjoyment or confidence for some, and pleasure at the idea of working autonomously and without distractions from others. As in the case of the refinery hand, the feelings about working alone are polarized, with the positive perceptions seeming to recognize and understand that the independent work is part of the nature and the value of the job. The proportion of respondents who place a positive value on the machine operator's working alone is greater than in the case of the refinery hand — 78 percent, compared with 51 percent — confirming the apparently greater relaxation and confidence which this work-type inspires.

The perceived typical needs of the "machine operator", set out in Figure 16 (q.v.), are seen in an overwhelming majority of responses to be either personal work abilities such as diligence or calmness, or as learnable work skills relevant to the job — that is, in nearly all cases as productive factors which the individual would bring to the job. These responses imply a seemingly realistic understanding of the job-requirements, and a recognition of the personal efforts and responsibility required to master work of this kind. The proportion of responses expressing a need for "help factors" of some kind is very small, at about 5 percent. Thus, although this work would require more skill than the preceding types, we find a greater readiness to invest more effort and commitment in it on the part of the respondents, who seem to assess this work-type as a better investment or having better potential. The expressed need for assets which are not strictly work-intrinsic, such as protective clothing or adequate pay, seem to us, from our examination of responses, to reveal a realistic orientation in response to this work rather than an abdication of responsibility or a desire for assistance.
** Based on responses to the question: "As you see him now, how is this person feeling?"

* NOTE: — Frequencies of these categories of response may total more than 100 percent, as some respondents mention more than one feeling.

** Based on responses to the question: "What is this person thinking? Why?"

* NOTE: — Frequencies of responses in these categories of response may total more than 100 percent, as some respondents mention more than one idea.
**FIGURE 15. IMAGES OF WORK AS MACHINE OPERATOR : III.**

PERCEPTIONS OF SOLITARY WORK AS MACHINE OPERATOR

- **positive** 78%
  - affective 54%
    - happy/great/pleased/likes it 47%
    - confident/proud 3,8%
    - safe/no danger 2,6%
  - cognitive 24%
    - undisturbed/no distractions 10%
    - free/independent/responsible/using initiative 7,7%
    - attending to work/busy/careful/competent/trained 6,4%

- **negative** 22%
  - unhappy/lonely/no company 10%
  - need help/assistant 6,4%
  - insecure/unsafe/danger 3,8%
  - bored 1,3%

- **neutral/ambivalent** 6%
  - solitude accepted pragmatically 5%
  - equivocal response 1,3%

**NOTE:** Frequencies of responses in these categories of response may total more than 100 percent, as some respondents give more than one opinion.

**FIGURE 16. IMAGES OF WORK AS MACHINE OPERATOR : IV.**

PERCEIVED TYPICAL NEEDS OF MACHINE OPERATOR

- education 15%
- pragmatic 47%
- personal needs intrinsic to work ability 32%
- personal needs extrinsic to work ability 21%

- acquired skills (training/knowledge) 26%
- protective clothing/goggles 17%
- assistant 2,5%
- tools 1,2%
- diligence/accuracy/skill 15%
- intelligence/quick thinking 6,2%
- concentration/alert 6,2%
- patience/calmness/no worries 3,7%
- courage 1,2%
- good pay/protection money 11%
- good eyesight 4,9%
- good food/health 3,7%
- encouragement 1,2%

**NOTE:** Frequencies of responses in these categories may total more than 100 percent, as some respondents mention more than one need.

**SOURCE:** Based on responses to the question: "How does this person feel about working alone?"

**NOTES:** Frequencies of responses in these categories of response may total more than 100 percent, as some respondents give more than one opinion.
Based on responses to the question: "In five years time, what work will this person be doing?"

* Although the subjective value of these outcomes, relative to that of the imagined machine operator, cannot be assumed with certainty, it is likely that virtually all would represent an "advancement" in the view of the respondents.
Realism is perhaps at its maximum when the respondents are asked to predict what the "machine operator" will be doing in five year's time, the responses to which are summarized in Figure 17 (q.v.). This realism requires a consideration of career and structural factors outside the immediate domain of the job, and this may explain why in spite of the favoured image of the machine-operator and the positive responses to his work situation, a quarter of the respondents nevertheless foresee negative outcomes for this type of worker. This divergence may be an effect of such factors as the present socio-political dispensation, or economic trends and legislation limiting the accessibility of jobs, or race-attitudes in industry, insofar as these factors influence the outlook, assumptions and self-image of black working men. Where this intervention of relatively external factors is absent, however, the perceived high status and potential of the job itself seems to determine responses, yielding an apparently high quality, as well as high proportion, of imagined positive outcomes. (Refer to Figure 17.) Thus, while the negative outcomes tend to be expressed in structural or institutional terms, such as low chances of promotion for blacks, the positive outcomes tend to be expressed in much more professional and job-specific terms, in which particular and more skilled or advanced jobs are named. What we seem to find is that if structural constraints are eased, our African respondents are prepared to optimistically foresee their own advancement in work of this kind. This view is perhaps reinforced by the significant proportion of responses which express optimism at professional level while seemingly side-stepping structural inhibitions. In these responses,* about one-fifth of respondents do foresee personal development, but not necessarily in the work situation

* For example:  "Will start his own business."  
"Will be training others."  
"Will be a worker representative."
shown in our picture. In other words professional continuity is accepted even if structural freedom is not foreseen.

To sum up the responses to picture D4, or "machine operator", this job is the first in the continuum to evoke reasonably relaxed, unforced appraisals by the respondents, characterised in most cases by a general feeling of cautious optimism. The men seem to confront the work depicted in a mood of recognition, familiarity, and hence ease, rather than tension. The job is valued by nearly all respondents, even if they are not confident about their own possible involvement with it. Achievement imagery, scored from all four response formats for another aspect of this study, reaches a maximum with this picture. For many respondents their entire perception of this work scene seems more vivid and real, as evidenced by their responses, than with prior scenes. Responses are more detailed, less hypothetical. We consider this fact to be just as much due to the nature and image of the work depicted as to, say, the increased detail and scale of the picture. Not all appraisals of this work are realistic, particularly those made by respondents who are themselves employed in less skilled work. In this minority of cases, successful outcomes for the "machine operator" seem to be regarded as somewhat automatic, rather than achieved. Likewise, to some the job is appealing though at the same time slightly overawing or inaccessible. However, the attendant mood in both cases is positive.

The general image, then, of this type of skilled work using technology is evidently appealing to our African respondents, and evokes realistic interest, motivation, aspirations, and a willingness to learn. With the exception of a very small minority who see the work as dangerous, the problems perceived in this situation relate to opportunity for advancement, whether constrained by structural factors or by individual confidence, rather than to the nature of the work itself.
The last picture shown to the respondents, BCl (q.v.), is in some senses a critical one. The basic theme intended to be suggested by this picture, together with its corresponding response format (which differs slightly from the preceding ones), is one of advancement into more skilled and challenging work, but work which at the same time involves real risks and hurdles. With this theme clearly established, the respondents are asked unequivocally how they think the depicted worker will fare in the new job. Accordingly, the responses given to this combination of stimuli represent, we believe, a telling assessment of the perceived feasibility of black advancement in these sorts of conditions.

To virtually all respondents the work represented in picture BCl is recognized as prestigious, but the actual scene depicted is nevertheless unusual and somewhat startling — the "telephone linesman" is shown working in a difficult position at the top of a ladder. This aspect of the situation was intended by us to minimize any element of complacency in the responses generated. Rather as expected, therefore, we find that the incidence of anxiety or doubts in the responses to this work-type is increased, in contrast to that evoked by picture D4, which seems to be the most "comfortably-perceived" work.

In practice, then, the work of the "telephone linesman" is seen by many respondents as somewhat difficult or problematic, although recognized as definitely high in skill, and correspondingly "white" in status. In this sense, the work is seen as challenging and exacting, rather than as a good job taken for granted. In the context of our research method, whose projective basis seeks to identify the respondent with the depicted worker, this modest but significant component of challenge or doubt suits our purposes at this point. This is because we wish to assess the respondents' perceptions of the chance or opportunity for personal performance and progress in a context which
is as realistic as possible — in particular, with the respondent feeling perhaps a little daunted, and therefore speaking authentically, rather than responding in a mood of blind optimism or enthusiasm merely because the questions posed are in a sense hypothetical.

These conditions of realism are reflected in the detailed responses to this work-type, which are presented in Figures 18 to 21 below (q.v.). In Figure 18 the initial moods or affective states evoked in the respondents by this work situation are set out. Compared with the situation of the machine-operator, the proportion of uneasy responses has, it will be seen, increased, to almost half of all responses. Among the negative responses a concern with danger and exposure is prominent, and in these cases this anxiety is evidently strong enough to taint the otherwise positive image and status associated with the job. On the other hand, among the positive feelings reported, pride and aspects of motivation for the first time significantly enter the perception of the job, indicating a recognition of the quality of this work type. Thus, as if in confirmation of the Herzberg "Two-Factor Theory" of job-satisfaction, negative sentiments tend to be associated with "hygiene" factors, and positive sentiments with "motivator" factors.

The distribution of essential or basic ideas associated with the work of the telephone linesman, which is set out in Figure 19, confirms the findings of Figure 18. The salience of an essentially negative image of the work, in this case based mainly on perceived danger, is, compared with the two previous work-types, up, to about one-half of all responses. For most of these responses the depicted situation evokes ideas of danger, anxiety and stress. At the same time, it is motivating factors and good morale which loom large among the positive images evoked — that is to say, the satisfaction of higher-order individual needs is also associated with this type of work. In this sense, two themes or forces, acting in opposition, appear to compete in forming the image of this work — on the one hand a view of the work as prestigious, competent, and self-actualising; on the other
hand, a view of the work as sufficiently dangerous to be distracting or discouraging.

From a methodological perspective, it may be mentioned in passing that we consider that the conflicting associations evoked by this work-scene make it a useful test of confidence or self-esteem. This variable is examined more closely in the next chapter.

The personal needs perceived by our respondents as most urgent for the "telephone linesman" resemble those attributed to the "machine operator", as will be seen by comparing Figure 20 with Figure 16. The total of pragmatic responses and "personal, intrinsic" responses, which together represent the resources directly relevant to work which the individual would himself bring to bear upon his job, amount to a proportion which is about the same as it was in the preceding situation, though slightly increased as would be expected in the context of very skilled work. The particular response types occurring in the category "personal needs, intrinsic to work ability" (q.v.) reflect clearly a recognition of individual responsibility for the job, in spite of the fact that responses in the category "personal needs extrinsic to work ability", which may be seen as expressing a need for "help factors", are up — with safety equipment featuring prominently. The salience of "personal, intrinsic" responses is encouraging, not only because of what it tells us about the image of this work type but also because of what it tells us about the potential work-commitment and realism of the respondents. The perceived need for education, which is actually a remoter type of pragmatic asset, remains high for this job, and it would seem that in the view of many black workers the concept of "responsibility" in a job is (albeit slightly erroneously) directly associated with that of a higher level of education.
FIGURE 18. IMAGES OF WORK AS TELEPHONE LINESMAN: I.

**BASIC MOOD/AFFECT/FEELING EVOKED BY "TELEPHONE LINESMAN"**

<table>
<thead>
<tr>
<th>Positive (affect)</th>
<th>Negative (affect)</th>
<th>Pragmatic</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>46%</strong></td>
<td><strong>46%</strong></td>
<td><strong>12%</strong></td>
<td><strong>12%</strong></td>
</tr>
<tr>
<td>- happy/content</td>
<td>- unsafe/exposed to weather</td>
<td>- concentrating</td>
<td>- like work</td>
</tr>
<tr>
<td>- self esteem</td>
<td>- nervous/careful</td>
<td>- determined</td>
<td>- dislike work</td>
</tr>
<tr>
<td>- elated/excited/perfect</td>
<td>- frightened/scared</td>
<td>- diligent</td>
<td></td>
</tr>
<tr>
<td>- well/O.K.</td>
<td>- unhappy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- elated/excited/perfect</td>
<td>- lonely</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- well/O.K.</td>
<td>- ambivalent</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on responses to the question: "How does this person feel? (What is he thinking?)"

---

FIGURE 19. IMAGES OF WORK AS TELEPHONE LINESMAN: II.

**PRIMARY IMAGE/IDEA EVOKED BY TELEPHONE LINESMAN**

<table>
<thead>
<tr>
<th>Negative image</th>
<th>Pragmatic / Job-centred</th>
<th>Positive image</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>48%</strong></td>
<td><strong>41%</strong></td>
<td><strong>11%</strong></td>
</tr>
<tr>
<td>- dangerous job</td>
<td>- job competence</td>
<td>- well paid job</td>
</tr>
<tr>
<td>- anxiety/stress</td>
<td>- work orientated thoughts</td>
<td>- enjoyable job</td>
</tr>
<tr>
<td>- solitary work</td>
<td>- self actualisation</td>
<td>- prestigious job</td>
</tr>
<tr>
<td>- poorly paid work</td>
<td>- skilled job</td>
<td>- white job</td>
</tr>
<tr>
<td></td>
<td>- good prospects</td>
<td></td>
</tr>
</tbody>
</table>

Based on responses to the question: "How does this person feel? What is he thinking?"
**Figure 20. Images of work as telephone linesman: III.**

**Perceived typical needs of "telephone linesman"**

- Pragmatic assets 53%
  - Training 39%
  - Knowledge 8.02%
  - Experience 5.72%

- Personal needs, intrinsic to work ability 37%
  - Care 5.3%
  - Concentration/Alertness 5.3%
  - Intelligence/aptitude 7.02%
  - Courage 4.6%
  - Motivation/determination 3.4%
  - Stamina 2.3%
  - Patience 1%

- Personal needs, extrinsic to work ability 33%
  - Safety equipment 15%
  - Money/incentive 9.22%
  - Helper/Assistant 5.72%
  - Tools 2.3%
  - Time 1%

**Based on responses to the question: "To do this kind of work, what does this person need most?"**

*Note: Frequencies of responses in these categories total more than 100 percent, as many respondents mention more than one need.

+ "Help factors."

**Figure 21. Images of work as telephone linesman: IV.**

**Perceived response to, and outcome of, advancement challenge; and reasons**

- Emphatic success 5%
  - Determined lifelong achievement/more blacks equal to whites 5%

- Success/Advancement 45%
  - Trained/skilled/careful 20%
  - Assistant/safety gear 14%
  - Trusted/independent/responsible 8%
  - Committed/serious/devoted, willing to learn job 3.0%

- Survival 46%
  - Skills/knowledge 16%
  - Willing/interested/knew 13%
  - Money/security 7.6%
  - Careful/behaves well 6.3%
  - Helper 2.5%

- Failure/Stagnation 15%
  - Danger factors 7.6%
  - Help factors 5.1%
  - Confidence factors 1.3%
  - Reward factors 1.3%

**Based on responses to the question: "Will this person be able to succeed in this new job, or not? Why?"**

*Note: Frequencies of responses in these categories may total more than 100 percent, as many respondents mention more than one outcome.

**Raw labels:**

+ Anticipated outcomes -
+ Reasons -
Once again, we find that the response to a skilled industrial job divides broadly, in terms of perceived personal needs, into two major and distinct types: a relatively autonomous "engagement" with the work; and an appeal, perhaps obliquely, for assistance or help factors from some agency other than the worker. One way or the other, the basic obligation to proceed with the work appears to be assumed in all cases—probably through economic pressure.

As was mentioned earlier, the work-situation depicted in picture BC1, the "telephone linesman", is somewhat critical in our experimental procedure, which attempts to evoke the idea, the feelings, the predicament, of the challenge of personal advancement in work. In confronting the depicted situation of the "telephone linesman", the respondents are, in the interview situation finally asked directly whether or not the depicted worker will be able to succeed in a new job such as this, what he will be doing five years hence, and why. The responses to this combination of situation and question are summarised in Figure 21 (q.v.), in which are set out the perceived responses of the worker to this "advancement challenge", together with the various reasons given for each imagined type of outcome.

Assessment of the responses in this case is made difficult by the fact that some respondents have mentioned more than one outcome, and described them in a manner which is not always self-consistent. However, in spite of this it is clear that at least half of our sample imagine that the "telephone linesman" will proceed to successful outcomes constituting advancement. Of the remaining responses, the great majority envisage outcomes of mere survival— that is, outcomes in which the worker manages to retain his job, albeit without improvement— while only a relative minority anticipate outcomes of failure or stagnation. The general tone of the responses, therefore, seems largely positive. In more objective terms, however, it is true to say that only half of the respondents have a truly optimistic view of the situation—as defined by responses implying mastery of the task, job, and situation, which would lead on to what could
be correctly called advancement. These respondents appear to show a more genuine and convincing confidence in the worker's (i.e. their own) ability to cope with this form of work. The other responses exhibit either a complete lack of confidence, or an equivocal or only apparent confidence.

The various reasons given for the different sorts of outcomes summarised in Figure 21 are interesting. Significantly, among those who predict "survival" for the telephone linesman, a high proportion suggest as reasons the possession of assets such as skills, knowledge, assistance, and income; while among those who predict "success/advancement" for this worker, a high proportion attribute this outcome to qualities such as care, dexterity, responsibility, reliability, dedication and willingness. In other words, success tends to be associated with particularly intrinsic abilities within the worker, while mere survival tends to be associated with relatively extrinsic assets or qualifications. What are we to make of these observations? These associations convey to us an implicit recognition by the workers that success in work is due not only to qualifications but also to what we might term less formal factors. More particularly, certain aspects of personal identity, or personality,* related apparently to inspiration or volition, seem to be recognized by a segment of our sample as necessary personal qualifications** for advancement. Those who predict mere survival for the depicted worker appear either not to be aware of these less formal qualifications or not to place any emphasis on their role.

The "less formal" qualifications just mentioned appear to be orientations favouring or facilitating autonomous motivation.

We may sum up reactions to picture BC1 as follows.

* "individually-based attributes" or "psychological traits" might be alternative terms.

** not necessarily sufficient qualifications for advancement, but necessary qualifications.
Built into the popular image of the "telephone linesman" work, as revealed by our examination of the foregoing responses, we find a fairly clear instance of the image of a type of work, or at least an aspect of that image, acting as a barrier to work-commitment. In many cases the net evaluation of the job by a respondent is compromised by the risk factor. This appears to be the only significant situational compromising factor. And in a few cases the perception of a significant risk, and hence a negative view of the work, is still "overcome" in the final analysis by an optimistic outcome in the respondent's projection. There is an essentially realistic and businesslike approach to the answers and opinions given by the respondents. Those responses which add up to a positive view of the work are usually very enthusiastic. High skills or training, education and experience are emphasised as important characteristics of the work, while concentration, determination, and self-improvement tend to be evoked and recognized as important personal needs for this worker. Indeed, among those not discouraged by this job a palpable sense of striving is awakened in their responses. However the manner and tone of these responses also tends to convey a recognition that "intrinsic" or individually-located attributes alone are not enough. For the optimistic respondents, a will for self-improvement, plus further formal assets in the form of training and special skills are seen as the basis for success. As reflected in the views of the work itself and in the anticipated outcomes for this job, artisan skills tend to be seen as a doorway to independence and to work which is less formally organized and supervised.

A high degree of congruity is evident in the respondents' perceptions of the work, of the worker, and of the likely futures of the worker (see Figure 22). The basic image of the work is seen as favourable to about half our sample, and as unfavourable to the remainder. Correspondingly, favourable outcomes for the worker are expected by about half the respondents, with problematic outcomes predicted by the remainder. Finally, a higher-than-average proportion of respondents, approaching half, name extrinsic
or "help" needs in describing the worker himself (see Figure 23), as if to echo a trying or demanding image of the work.

3.5 PATTERNS IN THE VARIATION OF VIEWS OF WORK.

3.5.1 Variations in Image of Work.

As we have seen in the preceding detailed analyses, similar types of concerns or themes tend to arise in the responses of workers to all four depicted work situations. For example, themes such as health, safety, affiliation, and success; or disease, danger, loneliness, and failure, tend to enter the workers' appraisals of all the work situations that were shown to them. The relative salience of these themes, however, varies significantly from situation to situation, presenting a complex picture of the employee view of work — a picture that is perhaps still too complex to form a useful overview.

Nevertheless, very roughly speaking, all these response themes could be grouped and divided into two broad families, namely:

— positive reactions to a work situation,
— negative reactions to a work situation.

And such a grouping exercise, albeit heavy-handed, we have at this point undertaken so as to be able to comparatively demonstrate in a relatively simple and visible manner how the overall tenor of responses varies between the different work-situations.

Accordingly, for the purpose of presenting such an overall view all responses to the work-pictures have been re-classified as either essentially positive (or favourable) in character or essentially negative (or unfavourable) in character. Thanks to the structure of our response format in the questionnaire, this grouping of responses has been able to be performed separately for responses describing:
— the basic mood or affect,
— the primary idea or image,
— and the likely outcome

evoked by each work situation.

From this operation, the relative frequencies of all positive and all negative responses to each work-type, within these three categories, have been calculated. The resulting scores are set out in Table 2. This re-classification or grouping of responses represents a summary of the information earlier presented in Figures 4, 7, 8, 9, 12, 13, 14, 17, 18, 19 and 21.

In a few cases our subjective judgement has had to be used in the grouping of responses — where, for example, the ultimate significance of a response might change according to the frame of reference adopted.* However in these cases we have attempted always to use a frame of reference centred around the immediate meanings, and development, of work itself. Also, to qualify as "positive", responses had to be distinctly so — to convey a distinctly "valued" perception rather than an "adequate" perception. In the very few cases, therefore, where truly neutral responses occur, they have been regarded as "not positive" and therefore classified as negative.

Forcing information into a dichotomous classification can, clearly, present difficulties, but using appropriate criteria we consider the exercise to be worthwhile.

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* One example of this would be a response which states that the final outcome of a particular work situation will be that the worker concerned moves to a very different type of work. Although in the context of an individual's lifetime of personal development this could well be viewed as a favourable event, in the context of work development or work-commitment such a move would be an unfavourable event.
TABLE 2.

SUMMARY TABLE OF POSITIVE/NEGATIVE RESPONSES TO SPECIFIED WORK-SITUATIONS.

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>SITUATION</th>
<th>DERIVATION</th>
<th>% NEGATIVE RESPONSES</th>
<th>% POSITIVE RESPONSES*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic mood/affect:</td>
<td>Mineworker</td>
<td>Figure 1</td>
<td>94</td>
<td>6</td>
</tr>
<tr>
<td>Basic mood/affect:</td>
<td>Refinery Hand</td>
<td>Figure 5</td>
<td>34</td>
<td>66</td>
</tr>
<tr>
<td>Basic mood/affect:</td>
<td>Machine Operator</td>
<td>Figure 10</td>
<td>18</td>
<td>82</td>
</tr>
<tr>
<td>Basic mood/affect:</td>
<td>Telephone Linesman</td>
<td>Figure 15</td>
<td>47</td>
<td>53</td>
</tr>
<tr>
<td>Primary image/idea:</td>
<td>Mineworker</td>
<td>Figure 1</td>
<td>94</td>
<td>6</td>
</tr>
<tr>
<td>Primary image/idea:</td>
<td>Refinery Hand</td>
<td>Figure 6</td>
<td>43</td>
<td>57</td>
</tr>
<tr>
<td>Primary image/idea:</td>
<td>Machine Operator</td>
<td>Figure 11</td>
<td>33</td>
<td>67</td>
</tr>
<tr>
<td>Primary image/idea:</td>
<td>Telephone Linesman</td>
<td>Figure 16</td>
<td>48</td>
<td>52</td>
</tr>
<tr>
<td>Likely outcomes:</td>
<td>Mineworker</td>
<td>Figure 4</td>
<td>88</td>
<td>12</td>
</tr>
<tr>
<td>Likely outcomes:</td>
<td>Refinery Hand</td>
<td>Figure 9</td>
<td>26</td>
<td>73</td>
</tr>
<tr>
<td>Likely outcomes:</td>
<td>Machine Operator</td>
<td>Figure 14</td>
<td>31</td>
<td>69</td>
</tr>
<tr>
<td>Likely outcomes:</td>
<td>Telephone Linesman</td>
<td>Figure 18</td>
<td>46</td>
<td>54</td>
</tr>
</tbody>
</table>

* NOTE: Negative and positive responses total 100%.
FIGURE 22.

VARIATION IN RESPONSES TO SUCCESSIVE WORK SITUATIONS.

(Based on Table 2.)

Likely outcome
Basic mood/affect
Primary idea/image
The relative distributions of positive and negative responses in Table 2 are graphed in Figure 22, which clearly depicts the variations in three types of response — affective, cognitive, and predictive — to the four successive work situations. As the proportion of negative responses and the proportion of positive responses to any one situation necessarily total 100 percent, the scales of both positive and negative response variables are superimposed on the same vertical axis of the graph, and a single point used to indicate the frequency of both response types.

What does this multi-trend graph tell us? First, that the general image of work varies markedly between the different work-types. Among our sample negative images of work predominate overwhelmingly in the case of "minework", positive images of work predominate noticeably in the case of the "Refinery Worker", positive images of work predominate even more so in the case of the "Machine Operator", while negative and positive images of work are about equally represented in the case of the "Telephone Linesman". The graph also tells us that the general image of the different types of work varies consistently in terms of the component criteria of assessment — that is, the relative images of the work-types as inferred from affective data are closely confirmed by the relative images as inferred from cognitive or predictive data.

Two further points need to be made in comment on the significance of the summarizing exercise depicted here. Although the graphs in Figure 22 may give the impression of a relative assessment of work-types by the respondents, in fact they merely present on the same format quantified "images" of work as assessed by respondents in absolute terms. It is we, the investigators, who are in this way making the comparisons; comparative presentation is a device of data assessment used by us. The respondents merely judged each work-type independently and on its own merits — and these curves are the outcome. The variation thereby demonstrated is thus an objective phenomenon of which the respondents are not necessarily conscious.
Correspondingly, it should be noted that this comparative depiction of absolute perceptions of work-types, which is performed to demonstrate variations in responses, resembles neither the "relative popularity" rating of the jobs, which was independently carried out and is described below, nor the generation of new "confidence" variables from the same initial projective data, which is described in Chapter 3. These last two "generalising" procedures are based on quite different principles.

To sum up, then, the apparent "order of repute", in absolute terms, of the work-types as inferred from the respondents' detailed, projective (less conscious) evaluations is:

1. "Machine Operator"
2. "Refinery Worker"
3. "Telephone Linesman"
4. "Minework"

As will be seen shortly, this order contrasts with the average ranking established later when the respondents were asked to rate all four work-types comparatively in terms of their desirability.

3.5.2 Variations in Perceived Needs of the Worker.

What patterns can be seen in the needs ascribed by our respondents to different types of worker? It will be recalled that in addition to stereotyping different aspects of the work-types presented to them, our respondents also expressed what they considered to be the principal needs of the depicted workers.

These needs, however, could not be generalised in the same way, nor presented on the same format, as the "images of work" discussed in the preceding section. As subjective constructs of individuals, needs are not "positive" or "negative", but can rather be classified into different types according to their referent. Furthermore, needs in this context are perceptions by the worker,
rather than attributes of the work, and it would be misleading to attempt to express them in the same sorts of terms as work-characteristics. Perceived needs, then, could neither be simply dichotomised nor presented in Figure 22. Our summarization of the perceived needs of the four worker-types is therefore made separately, as follows.

In the great majority of cases the needs expressed by our respondents (i.e. projected by them onto the depicted workers) were work-oriented, and tended to be states, assets, resources or talents relevant to the solving of problems in the work situation. Similar broad "families" of needs, discerned and defined by us as follows, tended to be mentioned in responses to all four work-pictures:

- Personal Needs, Intrinsic to Work Ability
- Personal Needs, Extrinsic to Work Ability
- Pragmatic Assets
- Education

This particular fourfold categorization of needs which was adopted by us was considered by us to be useful and relevant in an examination of work from an industrial commitment and worker-advancement perspective. With these sorts of concerns in mind the motivational implications for the production process of the way in which needs are conceived would be of central interest.

The four need-categories were defined as follows: "Personal Needs" are needs or qualities which will very directly or intimately affect the worker's performance and experience of the work, while "Pragmatic Assets" are more formal adjuncts of the working situation such as training, tools, machines and "hygiene factors". "Intrinsic Personal Needs" are qualities or requirements which the worker himself would bring to bear upon the work, such as courage, intelligence or persistence; while "Extrinsic Personal Needs" are resources or needs of undoubtedly personal significance but which the employer would more likely bring to the work, such as assistance, encouragement, food or
wrmth. "Education" is actually a type of Pragmatic Asset, but is given its own category because of its importance as an issue in black advancement and its prominence as a common response.

Another reason for categorizing "Education" separately is that it could arguably be linked with either "pragmatic assets" or "personal qualities intrinsic to work ability". Education is not only a qualification, post hoc, and hence a type of fixed status, but also a major socializing and acculturating experience in itself, during the time it takes place. In other words, education appears to be primarily a pragmatic asset, but it can be argued that as a process it also diffusely confers highly personal characteristics which are "intrinsic to work ability" — including, for example, a sense of efficacy (as opposed to fatalism), under some circumstances a more autonomous orientation (as opposed to a need for rules or external direction), and a more enhanced self-image. Thus, "education" responses could have been in a direct sense added to "pragmatic assets", or in an indirect sense added to "personal needs intrinsic to work ability". By maintaining "education" as a separate need category we avoid taking a decision which could be misleading either way.

To return to our search for possible patterns in the way needs are ascribed to different types of worker, for the present generalising exercise we have classified and scored all responses in respect of perceived needs into the same fourfold categorization adopted earlier. This categorization caters for virtually all responses encountered, as well as reflecting an empirically recurrent need typology which persists from picture to picture. The results of this general classification are set out comparatively in Table 3 and graphed in Figure 23 (q.v.).
TABLE 3.

SUMMARY TABLE OF PERCEIVED TYPICAL NEEDS OF SPECIFIED WORKERS.

<table>
<thead>
<tr>
<th>VARIABLE.</th>
<th>WORKER.</th>
<th>DERIVATION.</th>
<th>NEEDS:</th>
<th>PRAGMATIC ASSETS</th>
<th>EDUCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>PERSONAL</td>
<td>PERSONAL EXTRINSIC.*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>INTRINSIC.*</td>
<td>EXTRINSIC.*</td>
<td></td>
</tr>
<tr>
<td>Typical needs:</td>
<td>Mineworker</td>
<td>Figure 3</td>
<td>75</td>
<td>18</td>
<td>60</td>
</tr>
<tr>
<td>Typical needs:</td>
<td>Refinery Hand</td>
<td>Figure 8</td>
<td>39</td>
<td>23</td>
<td>49</td>
</tr>
<tr>
<td>Typical needs:</td>
<td>Machine Operator</td>
<td>Figure 13</td>
<td>32</td>
<td>21</td>
<td>47</td>
</tr>
<tr>
<td>Typical needs:</td>
<td>Telephone Linesman</td>
<td>Figure 17</td>
<td>37</td>
<td>33</td>
<td>53</td>
</tr>
</tbody>
</table>

* Note:

1. These terms have been abbreviated as follows:
   - Personal needs, intrinsic to work ability : "Personal, intrinsic."
   - Personal needs, extrinsic to work ability : "personal, extrinsic."

2. Frequencies of needs mentioned for each type of worker may total more than 100%.
FIGURE 23.

VARIATION IN PERCEIVED TYPICAL NEEDS OF WORKERS.
(Based on Table 3.)
What can be inferred from these figures? First, the curves in Figure 23 show that the *relative* salience of the four need-types, as expressed by our respondents, is remarkably constant from one work situation to the next. More particularly, the *absolute* rate at which the need-types are expressed is also fairly constant from situation to situation. This constancy in rate and in relative salience is indicated by the levelness and the parallelism, respectively, of the curves. The only exception to this pattern is the expressed level of "intrinsic personal needs" in the case of the "mineworker" situation, which achieves a visibly higher-than-average score. However, this apparent anomaly is not surprising. The portion of this score which exceeds the average for the other work types is accounted for almost entirely by extra responses mentioning energy or strength as the foremost need of the "mineworker" — in accordance with the arduous and exhausting image commonly held of this work, a perception which is confined to this work-type. The need for physical endurance is hardly mentioned in the response to other work-types (see Table 4), and were it not for the preoccupying conviction of our respondents that "minework" is debilitating, the uniformity of the curves in Figure 23 would be complete.

**TABLE 4.**

Frequency of Responses Mentioning ENERGY, STRENGTH, OR STAMINA as a Worker Need, in Four Successive Work Situations.

<table>
<thead>
<tr>
<th>Work-Situation</th>
<th>&quot;Mine Worker&quot;</th>
<th>&quot;Refinery Hand&quot;</th>
<th>&quot;Machine Operator&quot;</th>
<th>&quot;Telephone Linesman&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of Sample Responding</td>
<td>46%</td>
<td>7,3%</td>
<td>0</td>
<td>2,3%</td>
</tr>
</tbody>
</table>

To a much lesser but significant degree an expressed need for courage also tended to be confined to the "mineworker", where 8% of respondents cited this as a need.

These findings present us with a marked and revealing contrast. While the image of the *job* varies greatly through the
work-continuum, the imagined needs of the corresponding workers appear not to. The fact that in Figure 22 the curves show marked variations from situation to situation, while in Figure 23 the curves are relatively constant (virtually "level") suggests that job-stereotype or job-image is a function of job, essentially, while perceived needs associated with jobs are a function of the respondent type.

This contrast confirms our suggestions made earlier, in sections 2.2, 2.3, and 2.4, that information recovered regarding the "needs of the depicted workers" tells us more about orientations of our respondents per se than about the popular image of types of work. To be more specific, it was there suggested that the citing of "personal needs, intrinsic to work ability" by a respondent implied a tacit recognition of the need to take personal responsibility for work and one's own engagement with work — an essentially autonomous approach to work — while in contrast the citing of "personal needs, extrinsic to work ability" signalled a wish for nurturance or assistance in the approach to work, or an abdication of ultimate responsibility for the work — a relatively "dependent" or less committed involvement with work. We might also suggest that an expressed need for "pragmatic assets" could reflect a more experienced approach to work and a realistic understanding of work and organization processes (a more "procedural orientation"), or alternatively an approach to work that is mediated by institutional concerns — a "contingent or conditional commitment" to work. Finally, what an expressed need for education would imply about the respondent's outlook is not easy to say; it might possibly reflect a status-based conception of competence in work, or perhaps more likely a realistic, pragmatic and objective appraisal of the work.

It must be emphasised that the relationships just proposed between personal orientations to work and felt needs in the workplace are suggested as tendencies and not hard correlates.
Also, in respect of the data it should be understood that the relative salience of the needs graphed in Figure 23 reflect not a relative weight or "ranking" attached to these need-types by the sample as a whole, not a single opinion shared by a mass of people, but rather the frequencies within the sample of different types of persons who are distinguished by the type of need they feel the most.

3.6 **Rated Popularity of Work-types.**

Another approach to assessing the image of different work-types was afforded by what was in effect a ranking exercise set up in our questionnaire. This was a short subsidiary exercise which followed the detailed projective examination of the work-types described in the earlier part of this chapter. Immediately after the respondents had completed their stepwise written responses to the work-pictures, in which the work situations had been completely assessed one at a time, they were asked to look, for the first time, at all four work-pictures together and to imagine they had to choose one of those work situations to work in themselves. They were then required to indicate on the questionnaire the job that they would like best, the job they would like second best, and the job they would like least. The format for this exercise is reproduced at the end of Appendix B.

This procedure generated a ranking of the four jobs according to immediate desirability. The rank assigned to each particular job or work-type could therefore vary between 1 and 4 from respondent to respondent.

In order to determine whether some jobs were more often assigned a higher rank than others, and if so to what degree, we have tabulated for each job all the various ranks assigned to it by the respondents, and from these figures calculated the "average rank" of each job. From this tabulation we find that there are indeed differences in the rate at which ranks are assigned to
the different work-pictures. Picture B5, for example, ("Mineworker") is consistently ranked fourth or third in desirability but never first or second. Picture C1 ("Refinery Hand") is very occasionally ranked second, extremely rarely first, more often third or fourth. Pictures D4 and BC1 ("Machine Operator" and "Telephone Linesman") are most often ranked first and second, occasionally third, hardly ever fourth. The results of the average rank calculations are depicted in Figure 24 (q.v.).

One fact is immediately evident from Figure 24. In contrast to the apparent "order of repute" of the work-types, inferred from absolute assessments in Section 2.5 above (q.v.), the relative order of popularity of the work-types — based, we feel, on a more superficial view of the work-types — is:

1. "Telephone Linesman"
2. "Machine Operator"
3. "Refinery Hand"
4. "Mineworker"

Why do the two ratings of the work-types differ? It seems that the individual choices upon which this latter desirability ranking is based were made according to extrinsic criteria such as status and income, because we have no shortage of information elsewhere (the detailed assessments, and the "CONF" variables) to suggest that the actual job depicted in BC1, "Telephone Linesman", when rated on its own merits is viewed with significantly more discomfort and apprehension than the job in picture D4, "Machine Operator". Thus on the one hand job BC1 is very definitely daunting to the respondents, yet on the other hand it is the most wanted job. It appears that in spite of serious misgivings about a form of work when it is considered in detail, people will still pursue it for reasons which are based on broader life-values and interests. It is perhaps an encouraging sign that in respect of work the aspirations of the respondents are in advance of their immediate feelings.
FIGURE 24.

AVERAGE RANK OF THE FOUR JOB-TYPES AS RANKED BY THE RESPONDENTS IN ORDER OF DESIRABILITY.

1. 1.55  BC 1  "TELEPHONE LINESMAN"

2. 1.94  D 4  "SKILLED MACHINE OPERATOR"

3. 2.67  C 1  "REFINERY HAND"

4. 3.76  B 5  "MINE WORK"
CHAPTER 4.

SUBJECTIVE DETERMINANTS OF PERCEPTIONS OF WORK.

The relations between some of the situational antecedents of work-commitment relevant to our investigation can be diagrammatically represented along the lines of Figure 24.

In terms of the admittedly provisional model represented by this diagram, factors such as "work-commitment", which are experienced as relatively behavioural (or as fairly specific and conscious opinions), are seen as influenced by orientation or attitude factors (less conscious) such as confidence or anxiety, which are themselves seen as influenced by idea or concept factors such as "image of work". Finally, the derivation of these various mental attributes from the actual objective nature of work or jobs is influenced in some degree by the background — and hence the worldview, outlook and personality — of the individual.

Although the background and personality of the individual may appear to be depicted in this figure as relatively marginal factors, this is not our intention. They are in fact recognized as major influencing factors upon the attitudinal and dispositional potential of the individual. Nor are the earlier factors in the sequence viewed as immutable. A concept factor such as "image of work" can itself be gradually modified by feedback from experience generated by behaviours such as "approach to work."

4.1 NEW CRITERION VARIABLES: MEASURES OF CONFIDENCE AND COMMITMENT

Up to this point in this account we have tended to focus on the objective characteristics of various forms of work. But specifically what sorts of subjective, individually-located, characteristics determine the way work is perceived? More particularly, what sorts of personal characteristics encourage, or compromise, confidence with respect to work, and hence perhaps industrial commitment? Having initially elicited and
FIGURE 25.

SOME SITUATIONAL FACTORS AFFECTING THE APPROACH TO WORK.

1 "concept factors"
   - Image of work
   - Associated feelings and ideas

2 "attitude factors"
   - Emotional or conceptual barriers to commitment
   - Self-concept, confidence
   - (Other mediators)

3 "behaviour factors"
   - Work-commitment
   - Approach to work
   - Optimism re advancement

1 "concept factors"  2 "attitude factors", orientation, disposition  3 "behaviour factors", highly specific or conscious attitudes, opinions

ACTUAL WORK AND CONDITIONS

BACKGROUND AND PERSONALITY OF THE WORKER
described in some detail the reactions of our respondents to various work situations, the second phase of our investigation was to identify possible antecedents or correlates of perceptions of work — in particular, subjective factors which might be influencing whether work is viewed positively or negatively.

For this purpose, a much smaller number of "summary variables" expressing succinctly the respondent's view of each type of work, and doing so in terms of a relevant and useful concept, needed to be generated — in order that they could then be compared with other variables describing aspects of the respondent's background.

This was achieved by holistically reassessing each respondent's total projective response to each work situation so as to assign to it a single score or label according to new and more general criteria. Although more general, the new criteria were carefully defined.

The result of this operation is a new pair of variables describing something akin to confidence — in two specified and particular contexts within the work situation.

The first variable, which could be described as "Perceived desirability of the work", represents a scoring of the total response to a depicted job according to the criterion question: "Would the respondent want this job?" For computing purposes this variable was named "IMAG" to suggest the idea of "Image of work."

* The writer regrets the need, initially imposed by computer facilities, to use mnemonic or abbreviated names for certain variables. "IMAGB5", for example, names the variable describing "Image held of the work depicted in picture B5". Similarly, "CONFCl" names the variable describing "Future confidence in work depicted in picture Cl".

Further details of the scoring of "IMAG" and "CONF" variables are given in Appendix B.
The second variable, which might be described as "Optimism with respect to own advancement in the work", represents a scoring of the response to a depicted job according to the criterion question: "Is the respondent confident of his own ability to progress in this job?" For computer analysis this variable was named "CONF*" to suggest the idea of "Future confidence in work."

As can be seen from these definitions, these two new measures express a factor which is closer to the self-esteem of the respondent, in a specified work context, than to an external "image" of a type of work presented. Essentially both variables, but particularly the latter, are confidence ratings, having been based largely on the affective component of the respondents' reactions ("IMAG" is confidence with regard to the current job predicament; "CONF", confidence with regard to the outcome of doing such work).**

These summary variables are, moreover, based on a realistic assessment of the attributes brought by both the worker and the job to the work situation. In real life the perceived opportunities, by a Black individual, for Black advancement in a particular work context will inevitably be some product of both the perceived characteristics of that work and the self-image (implying own assumed capabilities) of the individual. It is therefore appropriate for us to extract a context-specific measure of self-esteem or confidence (the context changing from job to job) in a projective simulation of the work situation which evokes the respondent's own assumptions and capabilities. The detailed pictorial evocation of the job, and the indirect projective character of the respondent's evaluation of it encourage an authentic "real life" response, as has been discussed earlier. We feel, then, that our instrument, interpreted with suitable criteria, does tap something close to the respondent's self-esteem as it would obtain under conditions of work.

* See footnote, preceding page.

** See also Orpen (1976) p.155 et seq.
In terms of these new perspectives, a clear variety of responses is evident among the men in our sample. Some responses are clearly confident in nature, and others pessimistic, while a third category of equivocal responses can also be fairly clearly discerned. This confirms that the new variables have a significant and usable range. The distributions of responses to the different work situations in terms of these confidence-oriented summary variables have been set out comparatively in Tables 4 and 5, and graphed in Figures 25 and 26. (q.v.).

What interpretation may be placed upon these tables and graphs? In the case of the "IMAG" variables, the frequencies of the "confident" response imply the relative appeal of the different types of work, and it may be noted that the "confident" curve in Figure 25 tends to confirm the impressions established in Figure 23 (q.v.). In both indicators the apparent appeal of work peaks in the case of the "machine-operator", closely followed by the situation of the "refinery hand". Also in emulation of the reactions depicted in Table 23, the appeal of work revealed in Figure 25 tails off in the case of the "telephone linesman". As before, the appeal of "minework" is extremely low.

With the exception of the "mineworker's" situation, the "CONF" variables show a clear majority of confident responses in all types of work. Apparently, a majority of respondents are optimistic about their ability to advance from the depicted "refinery", "machine operator", and "telephone linesman" jobs. At the same time, a sufficient proportion of responses to situations C1, D4 and BC1 are equivocal or negative for us to feel that our sample is adequately representative of both high and low self-esteem, suggesting the valid use of "CONFCL", "CONF4", and "CONFBC1" in correlation analysis.

In addition, the very negative image of minework established earlier suggests that the apparently very low level of optimism indicated by "IMAGB5" and "CONF5" is essentially contextual in origin,
### Table 5.

Relative Frequencies of Values of Variable "IMAG" Through Four Successive Work Situations.

<table>
<thead>
<tr>
<th>VALUE</th>
<th>IMAGB5</th>
<th>IMAGC1</th>
<th>IMAGD4</th>
<th>IMAGBC1</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 (CONFIDENT)</td>
<td>2%</td>
<td>49%</td>
<td>57%</td>
<td>33%</td>
</tr>
<tr>
<td>2 (EQUIVOCAL)</td>
<td>16%</td>
<td>22%</td>
<td>34%</td>
<td>23%</td>
</tr>
<tr>
<td>1 (NEGATIVE)</td>
<td>82%</td>
<td>29%</td>
<td>9%</td>
<td>44%</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
FIGURE 26.

VARIATION OF VALUES OF VARIABLE "IMAG"* THROUGH FOUR SUCCESSIVE WORK SITUATIONS.

(Based on Table 5.)

* Perceived Desirability of the Work, or, Confidence Regarding Immediate Work Situation.

TABLE 6.

RELATIVE FREQUENCIES OF VALUES OF VARIABLE "CONF" THROUGH FOUR SUCCESSIVE WORK SITUATIONS.

<table>
<thead>
<tr>
<th>VALUE</th>
<th>CONF05</th>
<th>CONF01</th>
<th>CONF04</th>
<th>CONF0B1</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 (CONFIDENT)</td>
<td>5%</td>
<td>49%</td>
<td>40%</td>
<td>52%</td>
</tr>
<tr>
<td>2 (EQUIVOCAL)</td>
<td>9%</td>
<td>25%</td>
<td>32%</td>
<td>29%</td>
</tr>
<tr>
<td>1 (NEGATIVE)</td>
<td>86%</td>
<td>26%</td>
<td>28%</td>
<td>20%</td>
</tr>
</tbody>
</table>

|       | 100  | 100   | 100   | 100     |
FIGURE 27.

VARIATION IN VALUES OF VARIABLE "CONF* THROUGH FOUR SUCCESSIVE WORK SITUATIONS.
(Based on Table 6.)

* Optimism with respect to Own Advancement in the Work, or, Perceived Prospects for Own Advancement in the Work.
rather than stemming mainly from an intrinsically low self-esteem in the respondents. In other words, we feel that most of the variation in optimism indicated by IMAGB5 and CONF85 is accounted for by the perceived characteristics of the work, while a far higher proportion, probably the majority of the variation in optimism indicated by "CONFCl", "CONFD4" and "CONFBC1" is accounted for by the self-esteem of the individuals (which we feel is actually quite high in some cases), the work in these contexts being regarded as tolerable, if not desirable, and therefore not significantly compromising the nett optimism experienced by the respondents. If this is so, then the variables derived from situations Cl, D4 and BC1 will be the more reliable indicators of self-esteem — again suggesting their use in correlation analysis.

It is therefore proposed to use the "CONF" variables principally as indices of self-esteem, concentrating on those applicable to Cl, D4, and above all, BC1.

4.2 POSSIBLE ANTECEDENTS OR PREDICTORS.

Included within the scope of the broader study of which this report describes a part is information about our respondents in respect of a wider range of further variables. This information, some of which has already been referred to in Chapter 1, consists broadly of two types: on the one hand, the social, biographical and demographic characteristics of the men in our sample, and on the other hand, attitudinal and personality data. As some of this information represents factors or variables which we would expect to influence or determine the outlook, and in particular the self-esteem, of individuals in a challenging situation, the opportunity exists for us to observe, by correlation analysis, whether in fact any relationship does exist between these antecedent variables and those which we consider are tapping the self-esteem of the respondents. These possible predictors are reviewed below.
Our selection of certain variables as supposed determinants of self-esteem is based in some cases on known findings arising out of research on populations in the United States, and in other cases on our own consideration of the interactions between socialization, acquisition of culture and identity, personal efficacy, and social transactions.

On this basis, we would expect the available variables which are listed below to act in some degree as determinants or predictors of self-esteem. We hold this expectation, however, with the following reservations:

1. not all the theoretically expected determinants of self-esteem are tested here; only those approximations which happen to be available as measured variables in our program of research.
2. the strength of the relationships, if any, which may be revealed is expected to be very modest, as "IMAG" and "CONF" are but indices, not pure measures, of self-esteem. "IMAG" in particular, is more of a measure of the appeal of specified forms of work than of subjective self-esteem.

On this understanding, then, the factors which we would expect to influence the confidence with which our respondents approach the work situation are as follows.

4.2.1 Attitudinal or Personality Variables.

a. Achievement Orientation.
A composite measure derived from scores on a conventional projective measure of "need for achievement" together with further projective measures of concern for achievement behaviours and for production in employment contexts.

b. Locus of Control: Personal Control Ideology.
A measure of Fatalism-versus-Efficacy in respect of the individual's beliefs about his own personal capacities and
abilities, scored from a multi-item forced-choice scale.

c. Locus of Control: System Modifiability.
A measure of Fatalism-versus-Activism in respect of the individual's beliefs concerning the mutability of systematic barriers and discrimination in society at large, also scored from a multi-item forced-choice scale.

Research in the United States by Coopersmith** has identified a number of fairly clear contributing determinants, and correlates, of self-esteem. Among the findings were that the parents of persons higher in self-esteem tended to expect higher performance from their children, that persons higher in self-esteem tended to set themselves higher personal goals, but also, by way of qualification, that the quality of personal goals set was also compromised by the realistic expectations of the individual. The first two determinants are undoubtedly manifestations of achievement values in the family setting, leading us to expect an association between "achievement orientation" and higher confidence. The third, qualifying, determinant represents, in effect, the intervention of the individual's realism, or efficacy beliefs, in the generation of higher self-esteem. We would therefore expect persons with more internal "locus of control" orientations — i.e. persons who realistically believe in their own ability to control their lives, and in the ability of society by its own secular process to reduce discrimination, social constraints, and other sources of powerlessness — to likewise be higher in confidence. This factor of conviction, then, we expect to play a significant role in catalysing the genesis of self-esteem.

d. Autonomy Orientation.
A diffuse measure of Autonomous-versus-Authoritarian personality traits, holistically assessed from the individual's responses

to a Thematic Apperception Test, according to a standardized set of criteria.

Further findings of Coopersmith's research were that the parents of persons with higher self-esteem were more tolerant, within fixed limits, and that these parents tended to behave more predictably within the family — in particular, they were not harsh, emotional or power-seeking. By contrast, it is also known from other research that opposite forms of parental behaviour, that is, behaviours which are intolerant and unpredictable, tend to generate authoritarian personality traits in the child. In other words, the same aspects of childrearing tradition account for both low self-esteem and authoritarian dispositions. Furthermore, lower self-esteem can itself be seen as part of the essential syndrome of authoritarian personality traits (Adorno, Frenkel-Brunswik, et al.). For these reasons we would expect persons of a more autonomous orientation — i.e. with less authoritarian personality traits — to be higher in self-esteem.

4.2.2 Social or Demographic Variables.

In general these variables are chosen because they represent socializing factors or formative experiences which are influential in shaping the individual's outlook.

e. Parental Occupation.
A variable generated by ranking the occupation of the respondent's father in terms of its socio-economic status.

f. Parental Education.
A variable expressing the quantity of education received by the respondent's father.

g. Home Prosperity.
A variable expressing the degree of poverty or affluence of
the home in which the respondent grew up. (Already referred
to at page 50.)

The three preceding variables together describe the socio-economic
status of the family background of the respondent, a factor which
we would expect to affect, via resources and abilities which
would act to reduce frustrations or blocks in the life of the
subject, the fatalism or locus of control of the respondent. We
would also expect higher socio-economic status of parents to be
associated with higher parental self-esteem and calmer, more
nurturant and more predictable parental behaviour in the home —
factors which have been demonstrated (Coopersmith) as encouraging
higher self-esteem in the individual.

Later types of socializing factors or experiences which we would
expect to affect the outlook and quite possibly the self-esteem
of the individual, and about which we have information in respect
of our respondents, are:

— the urbanism or modernity of the home area; and in the case
  of rural persons, their experiences and movements as migrant
  workers,

— experience of work in factories and manufacturing industry;
  and in particular, the promotions and seniority attained by
  the individual,

— educational experiences, routines, and achievements in schools;
  as well as knowledge and skills acquired.

These three areas of influence are represented respectively by
the following three index variables.

h. Residential Status.

A variable referred to earlier (p. 50) which by discriminating
between lifelong urban residents, urban immigrants, and
oscillating migrants, measures in effect the quantity of urban experience in the respondent's life, and hence to some extent, indirectly, the degree to which his outlook is "traditional" or "modern".

i. Job Level.
   A variable generated by ranking the respondent's present job according to skill, status and seniority.

j. Education.
   A variable simply expressing the quantity of formal education received by the respondent.

We would expect a greater exposure to education and to factory experience to enhance an individual's self-esteem — in general, and in the context of skilled work. Exactly how the urban or rural character of a person's background might affect a person's self-esteem in the context of work is not easy to predict. Superficially, we might expect people of rural backgrounds and values to be less confident in an urban-industrial environment, because of the incongruence between the worldviews upon which these two worlds are constructed. However, against this it might be said that people of traditional background receive an upbringing and socialization which is firm and consistent, within a stable environment, which is quite possibly more conducive to a well-founded self-esteem than the relatively mobile, disrupted and anomic early life of their urban contemporaries.

These, then, are the ten discrete themes about which we have accurate information concerning our respondents, and which could arguably affect, via the attitudinal construct of self-esteem or confidence, their approach to work.
4.3 CORRELATES OF CONFIDENCE.

In order to test initially for signs of covariance between our confidence variables and the various predictors hypothesized in the preceding section, Pearson correlation co-efficients were computed for the relationships between these possible predictors and the "IMAG" and "CONF" variables. This test was also applied to the individual items of the three composite attitudinal measures.

A number of significant relationships emerge, which are set out in the correlation matrices in Tables 7 and 8. In the matrices the predictor variables appear in a row along the horizontal axis, and the various confidence variables along the vertical axis. The values of $R$, the Pearson correlation co-efficient, and $p$, the probability, are indicated in the upper and lower half of each cell respectively. The strength of the significant relationships is not very great but virtually all such relationships occur in the directions which we would expect, a fact which enhances their face value.

The observed relationships in Table 7 suggest that the perceived desirability or image of work is associated significantly with:

- System Modifiability Beliefs
- Autonomy/Authoritarian Orientation
- Father's Education and Own Education

and that confidence with regard to the prospects for one's own advancement in the work is likewise associated significantly with:

- Father's Occupation
- Achievement Orientation and Own Education.
TABLE 7.
PEARSON CORRELATION COEFFICIENTS (R) FOR RELATIONSHIPS BETWEEN "IMAG" AND "CONF" VARIABLES AND HYPOTHESIZED ATTITUDBNAL AND BIOGRAPHICAL PREDICTOR VARIABLES.

<table>
<thead>
<tr>
<th>TATFOL</th>
<th>LOCUSPC</th>
<th>LOCUSSM</th>
<th>ACHOR</th>
<th>PAROCC</th>
<th>PARED</th>
<th>HOMEPRO</th>
<th>RESTAT</th>
<th>JOBLEVEL</th>
<th>EDUCAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMAGB5</td>
<td>.20</td>
<td>.07</td>
<td>.21</td>
<td>.05</td>
<td>.15</td>
<td>.09</td>
<td>.19</td>
<td>.07</td>
<td>.25</td>
</tr>
<tr>
<td>IMAGC1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMAGD4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMAGBC1</td>
<td>.22</td>
<td>.02</td>
<td>.24</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONFBC1</td>
<td>.20</td>
<td>.03</td>
<td>.35</td>
<td>.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: — See text and Tables 9 and 10 for explanation of variables and names.
— Values: Upper half of cell indicates Pearson Correlation Coefficient, R; lower half indicates Probability, p.
— Relationships with a probability of .05 or less are indicated in heavy type.
— Relationships with a probability between .10 and .05 are indicated in light type.
— Relationships with a probability of more than .10 are not indicated.

TABLE 8.
PEARSON CORRELATION COEFFICIENTS (R) FOR RELATIONSHIPS BETWEEN "IMAG" AND "CONF" VARIABLES AND INDIVIDUAL ITEMS OF ATTITUDBNAL PREDICTOR VARIABLES.

<table>
<thead>
<tr>
<th>LOCUSPCA</th>
<th>LOCUSPC</th>
<th>LOCUSPE</th>
<th>LOCUSPCG</th>
<th>LOCUSPCI</th>
<th>LOCUSSM</th>
<th>LOCUSSM</th>
<th>LOCUSSM</th>
<th>LOCUSSM</th>
<th>WORCOMA</th>
<th>WORCOMH</th>
<th>WORCOMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMAGB5</td>
<td>.20</td>
<td>.05</td>
<td>-.16</td>
<td>.08</td>
<td>.20</td>
<td>.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMAGC1</td>
<td></td>
<td></td>
<td>.19</td>
<td>.05</td>
<td>-.14</td>
<td>.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMAGD4</td>
<td></td>
<td></td>
<td>-.19</td>
<td>.10</td>
<td>-.16</td>
<td>.08</td>
<td>-.18</td>
<td>.05</td>
<td>.19</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td>IMAGBC1</td>
<td>.22</td>
<td>-.26</td>
<td>.01</td>
<td></td>
<td>-.28</td>
<td>.02</td>
<td>-.14</td>
<td>.10</td>
<td>-.15</td>
<td>-.16</td>
<td>.08</td>
</tr>
<tr>
<td>CONF5</td>
<td></td>
<td></td>
<td>-.17</td>
<td>.07</td>
<td>.14</td>
<td>.10</td>
<td>.17</td>
<td>.05</td>
<td>.23</td>
<td>.14</td>
<td>.13</td>
</tr>
<tr>
<td>CONF1</td>
<td></td>
<td></td>
<td>-.12</td>
<td>.07</td>
<td>.14</td>
<td>.10</td>
<td>.17</td>
<td>.05</td>
<td>.23</td>
<td>.14</td>
<td>.13</td>
</tr>
<tr>
<td>CONF4</td>
<td></td>
<td></td>
<td>.19</td>
<td>.10</td>
<td>.17</td>
<td>.05</td>
<td>.23</td>
<td>.14</td>
<td>.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONFBC1</td>
<td>.20</td>
<td>.03</td>
<td>.35</td>
<td>.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: — See text and Tables 9 and 10 for explanation of variables and names.
— Values: Upper half of cell indicates Pearson Correlation Coefficient, R; lower half indicates Probability, p.
— Relationships with a probability of .05 or less are indicated in heavy type.
— Relationships with a probability between .10 and .05 are indicated in light type.
— Relationships with a probability of more than .10 are not indicated.
TABLE 9.

EXPLANATION OF "IMAG" AND "CONF" VARIABLE NAMES.

<table>
<thead>
<tr>
<th>MNEMONIC</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMAGB5</td>
<td>Image or Appeal of Work B5 (&quot;Mine Worker&quot;)</td>
</tr>
<tr>
<td>IMAGC1</td>
<td>Image or Appeal of Work C1 (&quot;Refinery Hand&quot;)</td>
</tr>
<tr>
<td>IMAGD4</td>
<td>Image or Appeal of Work D4 (&quot;Machine Operator&quot;)</td>
</tr>
<tr>
<td>IMAGBC1</td>
<td>Image or Appeal of Work BC1 (&quot;Telephone Linesman&quot;)</td>
</tr>
<tr>
<td>CONF B5</td>
<td>Perceived Prospects for Own Advancement in Work B5 (&quot;Mine Worker&quot;)</td>
</tr>
<tr>
<td>CONF C1</td>
<td>Perceived Prospects for Own Advancement in Work C1 (&quot;Refinery Hand&quot;)</td>
</tr>
<tr>
<td>CONF D4</td>
<td>Perceived Prospects for Own Advancement in Work D4 (&quot;Machine Operator&quot;)</td>
</tr>
<tr>
<td>CONF BC1</td>
<td>Perceived Prospects for Own Advancement in Work BC1 (&quot;Telephone Linesman&quot;)</td>
</tr>
<tr>
<td></td>
<td>or, Response to Overt Advancement Challenge</td>
</tr>
</tbody>
</table>
## Table 10.

**Explanation of Abbreviated Demographic and Psychological Variable Names.**

<table>
<thead>
<tr>
<th>MNEMONIC</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAROCC</td>
<td>Father's Occupation</td>
</tr>
<tr>
<td>PARED</td>
<td>Father's Education</td>
</tr>
<tr>
<td>HOMEPRO</td>
<td>Home Prosperity</td>
</tr>
<tr>
<td>RESTAT</td>
<td>Residential Status and Migration</td>
</tr>
<tr>
<td>JOBLEVEL</td>
<td>Level/Status/Seniority of Job/Occupation</td>
</tr>
<tr>
<td>EDUCAT</td>
<td>Quantity of Education</td>
</tr>
<tr>
<td>TATF HOL</td>
<td>Autonomy/Authoritarian Orientation</td>
</tr>
<tr>
<td>LOCUSPC</td>
<td>Locus of Control: Personal Control Ideology</td>
</tr>
<tr>
<td>LOCUSSM</td>
<td>Locus of Control: System Modifiability Beliefs</td>
</tr>
<tr>
<td>ACHOR</td>
<td>Achievement Orientation</td>
</tr>
<tr>
<td>LOCUSPCA</td>
<td>LOCUSPC Scale: Item A</td>
</tr>
<tr>
<td>LOCUSPPCC</td>
<td>C</td>
</tr>
<tr>
<td>LOCUSPCE</td>
<td>E</td>
</tr>
<tr>
<td>LOCUSPCG</td>
<td>G</td>
</tr>
<tr>
<td>LOCUSPCI</td>
<td>I</td>
</tr>
<tr>
<td>LOCUSSMB</td>
<td>LOCUSSM Scale: Item B</td>
</tr>
<tr>
<td>LOCUSSMD</td>
<td>D</td>
</tr>
<tr>
<td>LOCUSSMF</td>
<td>F</td>
</tr>
<tr>
<td>WORCOMA</td>
<td>ACHOR variable: component variable A</td>
</tr>
<tr>
<td>WORCOMH</td>
<td>H</td>
</tr>
<tr>
<td>WORCOMI</td>
<td>I</td>
</tr>
</tbody>
</table>
The more prominent of these correlations are now examined more closely, focussing first on attitudes concerning the likelihood of self-advancement in work.

Table 11 illustrates a cross-tabulation of varying occupation of the respondent's father (classified according to prestige) against the respondent's perceived prospects for advancement in the most challenging work, situation BCI. A clear contrast can be seen in the distributions. Persons with fathers of lower socio-economic status are much better represented among those feeling pessimistic about advancement prospects than among those feeling optimistic. Better-than-average representation of persons with high-s.e.s fathers occurs only among optimists, with the converse characterising the two other types of response. This finding indicates that higher confidence, or positive perception of the prospects for advancement, is associated with higher socio-economic status of father.

The achievement orientation of the respondents, compositely scored from various sources within our questionnaire, varies quite markedly within our sample. A dichotomised distribution of high and low achievement orientation scores is cross-tabulated in Table 12 against perception of advancement prospects in work situation BCI. Signs of the correlation are evident. Persons with a more pronounced achievement orientation are better represented among those who are optimistic about advancement than among those who are pessimistic or among the sample as a whole. Pessimists and equivocals tend to exhibit lower achievement orientation. Among these respondents, then, higher confidence or positive perception of the prospects for advancement is associated with higher achievement orientation.

Table 13 illustrates the distribution of varying system modifiability beliefs among our sample, and cross-tabulates this variable against the perceived desirability of work situation BCI.
### TABLE 11.

**PERCEIVED ADVANCEMENT PROSPECTS IN CHALLENGING WORK (BC1) BY FATHER'S OCCUPATION.**

<table>
<thead>
<tr>
<th>PERCEPTION OF ADVANCEMENT PROSPECTS</th>
<th>OCCUPATION OF RESPONDENT'S FATHER</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HIGH S.E.S.</td>
<td>LOW S.E.S.</td>
<td></td>
</tr>
<tr>
<td>% Pessimistic</td>
<td>12</td>
<td>88</td>
<td>100</td>
</tr>
<tr>
<td>% Equivocal</td>
<td>28</td>
<td>72</td>
<td>100</td>
</tr>
<tr>
<td>% Optimistic</td>
<td>55</td>
<td>45</td>
<td>100</td>
</tr>
<tr>
<td>% All cases</td>
<td>38</td>
<td>62</td>
<td>100</td>
</tr>
</tbody>
</table>

Pearson's $r = -0.36$ $p = 0.00$

Chi-square = 11.093 d.f. = 2 $p = 0.00$

C = 0.34

V = 0.36

Tau C = -0.37 $p = 0.00$

Somers' D = -0.39
### TABLE 12.

**PERCEIVED ADVANCEMENT PROSPECTS IN CHALLENGING WORK (BC1) BY ACHIEVEMENT ORIENTATION.**

<table>
<thead>
<tr>
<th>PERCEPTION OF ADVANCEMENT PROSPECTS</th>
<th>RESPONDENT'S ACHIEVEMENT ORIENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LOW</td>
</tr>
<tr>
<td>% Pessimistic</td>
<td>77</td>
</tr>
<tr>
<td>% Equivocal</td>
<td>72</td>
</tr>
<tr>
<td>% Optimistic</td>
<td>53</td>
</tr>
<tr>
<td>% All cases</td>
<td>63</td>
</tr>
</tbody>
</table>

Pearson's $r = .20$  $p = .03$

Chi-square = 4.004  d.f. = 2  $p = .13$

$C = .21$

$V = .21$

$\tau C = .21$  $p = .03$

Somers' $D = .23$

### TABLE 13.

**PERCEIVED DESIRABILITY OF CHALLENGING WORK (BC1) BY SYSTEM MODIFIABILITY BELIEFS.**

<table>
<thead>
<tr>
<th>PERCEPTION OF THE WORK</th>
<th>LOCUS OF CONTROL : SYSTEM MODIFIABILITY BELIEFS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>INTERNAL/INSTRUMENTAL Low</td>
</tr>
<tr>
<td>% Negative</td>
<td>18</td>
</tr>
<tr>
<td>% Neutral</td>
<td>40</td>
</tr>
<tr>
<td>% Positive</td>
<td>38</td>
</tr>
<tr>
<td>% All cases</td>
<td>30</td>
</tr>
</tbody>
</table>

Pearson's $r = -.24$  $p = .01$

Chi-square = 6.803  d.f. = 6  $p = .34^*$

$C = .27$

$V = .20$

$\tau C = -.20$  $p = .02$

Somers' $D = -.20$

* Significance of the chi-square statistic could be improved by merging all "external/fatalistic" responses into a single category.
Appendix C describes the instrument used to measure the system modifiability variable, which essentially differentiates persons who have faith in the ability of public opinion to influence the ambient socio-political dispensation, and social process at large, from those who do not. The table shows that a more fatalistic outlook is commoner among persons with negative perceptions of the work than among those who view the work neutrally or positively. This is a modest indication that a perception of this work situation as desirable, or higher confidence in response to this work-situation, is associated with instrumental system modifiability beliefs — that is, with an "internal locus of control" orientation in respect of public life.

In Table 14 personality traits varying along the authoritarian-vs-autonomous dimension are cross-tabulated against the perceived desirability of work situation BC1. Respondents were classified by a psychologist into those showing a high incidence of authoritarian traits, those with a lower incidence of such traits, and a small minority actually exhibiting autonomy traits, as evident from thematic analysis of their responses to a projective test designed for this purpose. As can be seen from the table, in the sub-sample of respondents who view the work positively, the representation of persons with autonomy traits is higher, and the representation of persons with marked authoritarian traits is lower, than in the group who view the work negatively. In other words, more positive responses to this type of work tend to be associated with more autonomous personality formations.

Although the findings just outlined all confirm theoretical expectations, the indications are not particularly strong. The measures of association derived from each of the cross-tabulations do not attain high values, nor are their probabilities very significant in some cases. To some degree this is probably explained by methodological factors compromising the precision and "hardness" of the data and analysis, such as:
### TABLE 14.

**PERCEIVED DESIRABILITY OF CHALLENGING WORK (BCI) BY AUTONOMY/AUTHORITARIAN ORIENTATION.**

<table>
<thead>
<tr>
<th>PERCEPTION OF THE WORK</th>
<th>SALIENCE OF AUTHORITARIAN TRAITS</th>
<th>AUTONOMY/TRAITS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HIGH</td>
<td>LOW</td>
</tr>
<tr>
<td>% Negative</td>
<td>79</td>
<td>16</td>
</tr>
<tr>
<td>% Neutral</td>
<td>75</td>
<td>15</td>
</tr>
<tr>
<td>% Positive</td>
<td>57</td>
<td>25</td>
</tr>
<tr>
<td>% All cases</td>
<td>71</td>
<td>19</td>
</tr>
</tbody>
</table>

Pearson's $r = .22$  $p = .02$

Chi-square $= 4.507$  d.f. $= 4$  $p = .34$

$C = .22$

$V = .16$

$\text{Tau B} = .19$  $p = .03$

$\text{Somers' D} = .23$
— inferential, rather than direct, measurement of most variables,
— the difficulty of accurate assessment of respondents under fieldwork conditions, particularly in respect of psychological variables,
— limited sample size,
— the use in some variables of unnecessarily detailed, and therefore numerous, response categories.

Nevertheless, we find convincing indications that committed, forward-looking and optimistic orientations to challenging skilled work are more likely to be encountered in persons who:

— come from parents and presumably homes of higher socio-economic status,
— exhibit more achievement orientation,
— believe in the possibility of progressive social change,
— manifest less authoritarian and more autonomous personality characteristics.

Such persons tend to engage more readily with challenging skilled work, and rate more highly their own ability to advance in it.

4.4 MULTIPLE INFLUENCES UPON CONFIDENCE.

In a further examination of the influence of the proposed predictor factors upon responses to work, multiple regressions of the series of predictor variables upon individual "IMAG" and "CONF" variables were carried out. The regression procedure
gives an indication of the relative influence, if any, of stipulated "predictor" variables upon a given dependent variable. More specifically, by performing a series of partial correlations which take into account possible confounding relationships among the group of predictors themselves, the procedure is able to indicate for each predictor the quantity of the influence which it independently exerts upon the dependent. The resulting discrete values can then be ranked independently or added to show the degree of explanation achieved by a complex hypothesis.

The relative influences, as indicated by multiple regressions, of the ten hypothesized predictor variables upon our "IMAG" and "CONF" variables are shown in Tables 16 and 17. For each dependent variable the predictors are ranked in order of influence, and the degree of influence indicated. The total apparent influence of the available predictors upon each dependent is summarized in Table 15.

<table>
<thead>
<tr>
<th>DEPENDENT VARIABLE*</th>
<th>IMAGC1</th>
<th>IMAGD4</th>
<th>IMAGBC1</th>
<th>CONFC1</th>
<th>CONFD4</th>
<th>CONFBC1</th>
</tr>
</thead>
<tbody>
<tr>
<td>% VARIANCE EXPLAINED</td>
<td>11,0</td>
<td>10,5</td>
<td>22,3</td>
<td>6,5</td>
<td>6,3</td>
<td>24,0</td>
</tr>
</tbody>
</table>

* For clarification of variable names see Table 9.
### TABLE 16.

CUMULATIVE AND ABSOLUTE PERCENTAGES OF VARIANCE OF THREE "IMAG" VARIABLES EXPLAINED BY HYPOTHESIZED PREDICTORS, AS INDICATED BY MULTIPLE REGRESSIONS (PREDICTORS RANKED IN ORDER OF INFLUENCE).

<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Father's Education</td>
<td>3.9</td>
<td>2.7</td>
<td>9.8</td>
</tr>
<tr>
<td>Home Prosperity</td>
<td>5.1</td>
<td>2.5</td>
<td>15.6</td>
</tr>
<tr>
<td>Father's Occupation</td>
<td>6.2</td>
<td>1.7</td>
<td>19.9</td>
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<tr>
<td>Locus of Control (Personal)</td>
<td>7.3</td>
<td>1.4</td>
<td>11.1</td>
</tr>
<tr>
<td>System Modifiability Beliefs</td>
<td>8.4</td>
<td>1.3</td>
<td>11.5</td>
</tr>
<tr>
<td>Residential Status and Migration</td>
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<td>0.6</td>
<td>11.7</td>
</tr>
<tr>
<td>Education</td>
<td>10.0</td>
<td>0.1</td>
<td>11.0</td>
</tr>
<tr>
<td>Father's Education</td>
<td>12.7</td>
<td>0.2</td>
<td>11.9</td>
</tr>
<tr>
<td>Autonomy Orientation</td>
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<td>0.1</td>
<td>12.0</td>
</tr>
<tr>
<td>Job Level</td>
<td>12.7</td>
<td>0.0</td>
<td>12.7</td>
</tr>
</tbody>
</table>

### TABLE 17.

CUMULATIVE AND ABSOLUTE PERCENTAGES OF VARIANCE OF THREE "CONF" VARIABLES EXPLAINED BY HYPOTHESIZED PREDICTORS, AS INDICATED BY MULTIPLE REGRESSIONS (PREDICTORS RANKED IN ORDER OF INFLUENCE).

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>3.2</td>
<td>1.9</td>
<td>12.7</td>
</tr>
<tr>
<td>Father's Occupation</td>
<td>4.0</td>
<td>1.9</td>
<td>19.4</td>
</tr>
<tr>
<td>Residential Status and Migration</td>
<td>4.6</td>
<td>1.7</td>
<td>22.0</td>
</tr>
<tr>
<td>Father's Education</td>
<td>5.2</td>
<td>0.8</td>
<td>22.8</td>
</tr>
<tr>
<td>Autonomy Orientation</td>
<td>5.7</td>
<td>0.8</td>
<td>23.2</td>
</tr>
<tr>
<td>Job Level</td>
<td>6.2</td>
<td>0.6</td>
<td>23.5</td>
</tr>
<tr>
<td>Home Prosperity</td>
<td>6.4</td>
<td>0.6</td>
<td>23.7</td>
</tr>
<tr>
<td>Achievement Orientation</td>
<td>6.5</td>
<td>0.3</td>
<td>23.9</td>
</tr>
<tr>
<td>Locus of Control (Personal)</td>
<td>6.5</td>
<td>0.1</td>
<td>24.0</td>
</tr>
<tr>
<td>Home Prosperity</td>
<td>6.5</td>
<td>0.1</td>
<td>24.0</td>
</tr>
<tr>
<td>Father's Education</td>
<td>6.5</td>
<td>0.0</td>
<td>24.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>3.2</td>
<td>1.9</td>
<td>12.7</td>
</tr>
<tr>
<td>Father's Occupation</td>
<td>4.0</td>
<td>1.9</td>
<td>19.4</td>
</tr>
<tr>
<td>Residential Status and Migration</td>
<td>4.6</td>
<td>1.7</td>
<td>22.0</td>
</tr>
<tr>
<td>Father's Education</td>
<td>5.2</td>
<td>0.8</td>
<td>22.8</td>
</tr>
<tr>
<td>Autonomy Orientation</td>
<td>5.7</td>
<td>0.6</td>
<td>23.2</td>
</tr>
<tr>
<td>Job Level</td>
<td>6.2</td>
<td>0.3</td>
<td>23.5</td>
</tr>
<tr>
<td>Home Prosperity</td>
<td>6.5</td>
<td>0.1</td>
<td>23.7</td>
</tr>
<tr>
<td>Achievement Orientation</td>
<td>6.5</td>
<td>0.1</td>
<td>23.9</td>
</tr>
<tr>
<td>Locus of Control (Personal)</td>
<td>6.5</td>
<td>0.0</td>
<td>24.0</td>
</tr>
</tbody>
</table>
To digress briefly, it will be noticed that the dependent variables which measure reactions to the work situation B5 ("mine work") have not been included in this analysis. They are omitted because we have indications that these particular variables (IMAGB5 and CONFB5) are not strictly comparable with the other measures of respondent reactions to the work situations. An examination of the intercorrelations among the IMAG and CONF groups of variables (Tables 18 and 19) shows that those derived from situation B5 vary inconsistently with the others — they do not appear to be part of the same series of indices. Almost certainly the explanation is that because of the almost universally adverse reactions to the "mine work" situation — demonstrated in detailed analysis of responses in Chapter 2 — IMAG and CONF variables derived from that situation are measures of repulsion and pessimism with regard to the work, rather than attraction and optimism. These former reactions, and the factors influencing them, are not strictly the opposite of the latter ones, with the consequence that "IMAGB5" and "CONFB5" are qualitatively different variables from the other derived indices. The latter group, however, show signs of validly tapping the same orientations in the respondents, and it is these confidence or self-esteem orientations which primarily interest us.

What can we conclude about the collective effects of personal social and psychological factors upon these confidence orientations in the workplace? Although the evidence is statistically modest these seems little doubt that the favour or disfavour with which modern occupational work is regarded, among this sample, is a product not only of particular characteristics of the work, but also of certain characteristics of the worker. Some specifics of this influence are evident in the results of the regressions.
### TABLE 18.

**INTERCORRELATIONS OF "IMAG" VARIABLES.**

<table>
<thead>
<tr>
<th></th>
<th>IMAGB5</th>
<th>IMAGC1</th>
<th>IMAGD4</th>
<th>IMAGBC1</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMAGB5</td>
<td>1.00*</td>
<td>.00</td>
<td>.16</td>
<td>.00</td>
</tr>
<tr>
<td>IMAGC1</td>
<td>.49</td>
<td>1.00</td>
<td>.42</td>
<td>.00</td>
</tr>
<tr>
<td>IMAGD4</td>
<td>.06</td>
<td>.00</td>
<td>1.00</td>
<td>.00</td>
</tr>
<tr>
<td>IMAGBC1</td>
<td>.09</td>
<td>.09</td>
<td>.01</td>
<td>1.00</td>
</tr>
</tbody>
</table>

**INFERRED RANKING OF VARIABLES IN ORDER OF MUTUAL CONSISTENCY:**

IMAGD4  
IMAGC1  
IMAGBC1  

(IMAGB5 inconsistent)

*NOTE:* Upper figures indicate correlation coefficient, r. Lower figures indicate probability, p.
### TABLE 19.

**INTERCORRELATIONS OF "CONF" VARIABLES.**

<table>
<thead>
<tr>
<th></th>
<th>CONFB5</th>
<th>CONFC1</th>
<th>CONFD4</th>
<th>CONFBC1</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONFB5</td>
<td>1.00*</td>
<td>- .03</td>
<td>-.14</td>
<td>.06</td>
</tr>
<tr>
<td>.00</td>
<td>.39</td>
<td>.09</td>
<td>.41</td>
<td>.40</td>
</tr>
<tr>
<td>CONFC1</td>
<td>1.00</td>
<td>.45</td>
<td>.00</td>
<td>.40</td>
</tr>
<tr>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>CONFBC1</td>
<td>1.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
</tbody>
</table>

**INFERRED RANKING OF VARIABLES IN ORDER OF MUTUAL CONSISTENCY:**

1. CONFD4
2. CONFC1
3. CONFBC1
4. CONFB5 (inconsistent)

*NOTE:  Upper figures indicate correlation coefficient, r. Lower figures indicate probability, p.*
The values of $r^2$ in Tables 16 and 17 are for the most part modest, but in the case of the last work situation in the continuum — which was intended by us to represent the critical "advancement predicament", and the responses to which were therefore of particular interest — almost a quarter of the variance in the orientations to this work is explained by the hypothesized predictors. This is a sizeable proportion, and the bulk of it, both in the case of the direct appeal of the work and of the self-advancement prospects assessed, is accounted for by small groups of three or four factors. It is not the same three or four factors in both cases, however, and this fact will be returned to shortly. Nevertheless, small numbers of factors appear to explain a quantity of variance that is considerable, particularly in view of the modest scope of the study and the experimental nature of the instruments.

The ordering of the predictors in the tables according to their relative influence is not particularly consistent, but in spite of this some patterns can be detected. Moving through the work continuum, i.e. from work C1 through work BCI we can see that the relative weight of attitudinal factors and of demographic factors shifts. Attitudinal variables, and in particular motivational variables, show a more prominent influence upon responses to the more advanced and challenging work. For example, system modifiability beliefs and autonomy orientation influence assessments of the appeal of work BCI far more than they do for the other types of work. Similarly, achievement orientation influences assessments of future prospects much more in the case of work BCI than in the cases of the other types of work. In a sense these trends confirm an indication reported earlier (page 95) that many of the detailed responses to the final, challenging work situation conveyed a recognition that formal qualifications alone were not enough for the aspirant worker — other intangible and personal factors were commonly mentioned as important needs. Most of these were colloquial expressions of personality or attitudinal factors comparable to those being discussed here. Individually-located,
or psychological, characteristics or criteria, then, are apparently decisive in the emergence of "advancement orientations", although other conditions are obviously also necessary. The surprising exception to this pattern is personal locus of control (LOCUS-PC) or personal efficacy, which shows a very low or non-existent influence upon responses to all the given work situations. In contrast, perhaps the most consistently influential associate of positive orientations to work in all the given contexts, albeit to a modest degree, is education. As has been argued earlier, the education variable represents not only a demographic/social characteristic but also by implication a type of global personality characteristic.

The priority of the factors influencing responses to work changes not only with the type of work being considered but also with the type of objective that is demanded within a given work context — in this case, adopting the work on the one hand, and progressing in it on the other. The effects of this latter shift upon priorities is examined in Table 20, which compares the relative influence of factors determining the perceived appeal of the work with the relative influence of those same factors as they determine the perceived advancement prospects, in work situation BC1. In effect this table contrasts the principal antecedents of an attitude of engagement with work, with the principal antecedents of an attitude of advancement in work — concentrating on the work type which was earlier termed the situation of the "advancement challenge". The ranking illustrated in the table is purely diagrammatic, and does not reflect actual quantities of variance explained by the listed factors. Nevertheless the lines connecting the same factors as they appear in the two rankings demonstrate the shifts in priority.

From an examination of Table 20 the suggested predictor variables can be classified into three groups:
TABLE 20.

CONTRAST IN RANKING OF PREDICTOR VARIABLES ACCORDING TO QUANTITY OF VARIANCE THEY EXPLAIN IN APPEAL, AND IN PERCEIVED ADVANCEMENT PROSPECTS, OF THE MOST CHALLENGING WORK SITUATION (BC1)

<table>
<thead>
<tr>
<th>% Variance* explained</th>
<th>ORDER OF INFLUENCE OF PREDICTORS UPON APPEAL (IMAGBC1)</th>
<th>ORDER OF INFLUENCE OF PREDICTORS UPON PERCEIVED ADVANCEMENT PROSPECTS (CONFBC1)</th>
<th>% Variance* explained</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>SYSTEM MODIFIABILITY</td>
<td>FATHER'S OCCUPATION</td>
<td>13</td>
</tr>
<tr>
<td>6</td>
<td>AUTONOMY ORIENTATION</td>
<td>ACHIEVEMENT ORIENTATION</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>HOME PROSPERITY</td>
<td>EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>1</td>
<td>EDUCATION</td>
<td>SYSTEM MODIFIABILITY</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>FATHER'S OCCUPATION</td>
<td>HOME PROSPERITY</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>ACHIEVEMENT ORIENTATION</td>
<td>LOCUS OF CONTROL</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>LOCUS OF CONTROL</td>
<td>AUTONOMY ORIENTATION</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>FATHER'S EDUCATION</td>
<td>FATHER'S EDUCATION</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>RESIDENTIAL STATUS AND MIGRATION</td>
<td>JOB LEVEL</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>JOB LEVEL</td>
<td>RESIDENTIAL STATUS AND MIGRATION</td>
<td>0</td>
</tr>
</tbody>
</table>

* rounded to nearest 1%.
I. Factors which influence how the work itself is perceived, in particular its appeal.

SYSTEM MODIFIABILITY BELIEFS
AUTONOMY ORIENTATION
HOME PROSPERITY
(Education)

II. Factors which influence how well the prospects for advancement in the work are perceived.

FATHER'S OCCUPATION
ACHIEVEMENT ORIENTATION
EDUCATION
(System Modifiability Beliefs)

III. Factors which have very little or no influence upon perceptions of either aspect of the work.

PERSONAL LOCUS OF CONTROL
FATHER'S EDUCATION
RESIDENTIAL STATUS AND MIGRATION
JOB LEVEL

We have indicated earlier that psychological characteristics of the individual come increasingly into play in explaining the adoption of "advancement orientations" toward the more challenging type of work. This is a relative increase, however. In absolute terms, other necessary but apparently not sufficient characteristics still loom large. For example, in the case of the work situation BC1 we have just found that an individual's favourable assessment for self-advancement is strongly controlled by his possession of what we suggest could be called "advancement technique" — a type of know-how and experience. We are referring here to the factors "Father's occupation" and "Education". A person with a father of higher occupation is more likely to be familiar with (and believe in) job mobility. Similarly, those with higher education have by virtue of it, inter alia, a type of schooling in the art of advancement. What we find, in effect, is that those with the most confidence in their own advancement prospects are not only those
with a certain necessary drive, but those who also know how to advance. This latter "advancement know-how" factor very much resembles the factor termed "understanding production" by Inkeles and Smith, who found it to be a significant component of Individual Modernity — a personal quality or characteristic constituting both an aptitude for, and a derivative of, factory work. The apparent influence upon advancement aspirations of this "advancement technique" factor — if we are conceiving it accurately — confirms the notion that education and factory work are indeed "schools in modernity" (Inkeles and Smith) and that school experience incorporates useful and functional models of organizational behaviour.

4.5 CONSTRAINTS UPON THE SCOPE OF THE INVESTIGATION.

Unfortunately, limitations on the scope of our investigation imposed by the adopted research methodology prevent us from taking account of the direct effects of organization contingencies upon advancement orientations. This is a work study rather than an organization study or economic study. As such, it focusses on individually-located (psychological, phenomenological) elements of the work situation rather than on group phenomena. It looks at the psychology and technology of the work situation rather than its sociology. Correspondingly, the context within which reactions to employment are examined, and in terms of which appropriate questionnaire stimuli are directed at respondents, is limited to the immediate workplace, and does not take into account directly the systems of forces and factors outside it. Factors external to the work situation are considered only insofar as they affect the outlook or worldview of workers, not the conditions or co-ordination of work. Consequently, systematic in situ investigation of the effects of the social, transactional and organizational characteristics of the employment setting upon advancement orientations and advancement behaviours would be the logical complement to a study of this kind. Also required is investigation of the relationship between realistic advancement orientations, as assessed by the type of projective instruments used here, and actual advancement behaviours.
CHAPTER 5.

CONCLUSIONS

The study described here is part of a broader investigation into problems of black advancement in South African commerce and industry. As a result of economic pressures, manpower shortages, foreign influence upon multinational companies and changes in the political culture in South Africa, opportunities have increased in recent years for some blacks to move into positions of greater authority and responsibility in occupational organizations. To some degree all parties to this process of change have been caught unprepared by the pace of events. Even where black advancement has been accepted in principle, white employers have tended not to fully trust the judgement of newly-advanced black staff. Black employees for their part have found themselves projected into unaccustomed challenge and stress, doubts over conflicting values and commitments, and unsupportive or hostile relations in the workplace. And in organization terms the development of structures and procedures to accommodate contrasting types of individual ability, outlook and manner has not been anticipated. Under these conditions occupational black advancement, even where actively promoted, has been neither as forthcoming nor as effective as might have been expected.

As indicated in Chapter 1, the principal subject of this study has been the phenomenon of work commitment among black employees -- the degree to which optimistic, lasting, realistic engagement with a given form of work, in this case industrial work, is manifested by workers. It has been assumed that an understanding of work commitment among black employees in blue-collar industrial jobs would throw light on their attitudes toward job advancement at that level. Work commitment has been treated as both an effect of meanings attached to work, and as an attitude in its own right.

The study commenced with a detailed examination of black workers' perceptions of and reactions to industrial work. This aspect of the investigation focussed upon a variety of particular meanings and
feelings associated with industrial work, from the point of view of a participating worker. Workers responded to projective simulations of four types of increasingly skilled and challenging industrial work. The last type of work shown to the respondents was specifically designed and presented so as to represent both the rewards and challenging conditions of job advancement. For brevity this work-type will here be termed the "advanced work situation". The standard set of general and open-ended questions put to the men in association with each work-type was designed to encourage them to indicate freely what they thought of that work, whether they valued it to any degree and in what way, and whether they felt any attachment to it or long-term interest in it. We were, in other words, looking for spontaneously-volunteered signs of work commitment, under working conditions of increasing challenge and difficulty.

The men responded to each of the work-types at length and in detail. The effect of the pictorial depiction of the work and the projective evocation of responses was that the respondents gave very much the responses they would have done had they themselves been in the depicted work situations.

The responses to the various work-types were first analysed in detail. For each work-type the analysis sought to identify, among other things, the image or appeal typically associated with that work, the characteristics typically associated with the type of worker doing that type of work, and the long-term professional outcomes typically associated with that type of worker doing that type of work. On each of these, and other, dimensions responses varied considerably across the sample -- from positive to negative, from emotional to rational, from naive to realistic, and so on. Full details of this analysis appear in Chapter 3. The relative appeal of the different work-types, in terms of these different dimensions, became evident.

The distributions of the various kinds of detailed response to each work-type, in terms of the dimensions just noted, were
calculated. Three broad findings emerged: First, the relative appeal of the four different work-types differed. Second, the relative appeal of a particular work-type as evident in terms of one dimension or criterion tended to be confirmed by the relative appeal as expressed by other dimensions. The one exception to this pattern was the dimension of workers' needs. In this respect the third finding was that whereas the perceived image or appeal of work and the perceived likely future outcome of work tended to vary with, or be a function of, the type of work considered, the perceived worker's principal needs tended not to vary with the work-type but to remain relatively constant. The attribution of needs to the worker independently of the attribution of meanings and values to the work confirms our assumption that our technique would bring about projective identification of our respondents with the depicted worker. In effect, the perceived workers' needs varied with the type of worker assumed, which, however, was a relatively constant unchanging factor because the respondents were, via their identification, unconsciously assuming that in each type of work the worker was themselves. In this way the respondents demonstrated that in respect of almost every type of work a similar proportion of them felt a particular type of need as a priority. The relative salience of the needs thus expressed as primary were:
- first, "pragmatic assets", such as training, tools, and other formal advantages;
- second, personal qualities intrinsic to work ability, such as motivation, intelligence, courage and other less formal advantages;
- third, personal resources or assets extrinsic to own work ability, such as assistance, food or warmth;
- and finally, education, a large, fairly undifferentiated category of responses which could be classed either with pragmatic assets or with personal intrinsic qualities.

These types of responses indicate to us that our respondents, and presumably the members of the workforces they represent, can be classified in more general terms according to three main types of input into the work situation which they may see as the most
necessary for them to be able to work effectively. In the same order as above, the need types just described can be summarized as follows:

<table>
<thead>
<tr>
<th>TYPE OF NEED CONSIDERED FOREMOST IN WORK SITUATION</th>
<th>AVERAGE PROPORTION OF RESPONDENTS CONSIDERING NAMED NEED MOST IMPORTANT*</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABILITIES** (technical/formal characteristics)</td>
<td>63%</td>
</tr>
<tr>
<td>MOTIVATION (personal/informal characteristics)</td>
<td>34%</td>
</tr>
<tr>
<td>SUPPORT/ASSISTANCE (characteristics of the working environment)</td>
<td>24%</td>
</tr>
</tbody>
</table>

Against these types of need, imputed with almost the same frequencies to all four types of depicted worker, other perceived characteristics or outcomes of the work situation were imputed with varying salience across the four work-types depicted. However, this does not mean that all our respondents felt identical sets of needs; rather that our sample, with different need priorities represented within it, was constant.

A detailed account of the many types of characteristics and meanings attributed by the respondents to the different work-types and different workers depicted is given in Chapter 3. These details convey some of the multi-faceted character of the implied work commitment, or lack of it, manifested by the respondents in response to the different work situations.

Following the analysis of responses in detail, the many responses of the men to each work-type were assessed holistically. From each total response to a given work-type two single measures of the

* Totals more than 100 percent because respondents sometimes mention more than one type of need as foremost.

** Now including education.
overall appeal of that work to the individual were holistically scored. As explained fully in Chapter 4 and Appendix B, these are situation-specific measures of confidence which express the degree to which the respondent can realistically foresee himself, unassisted, (a) doing that work, and (b) advancing in that work. As such, we regard them as indices of respectively the "work commitment" and the "advancement orientation" evoked in the respondent by each work-type.* Of particular interest of course are the work commitment and the advancement orientation evoked by the last, most challenging work-type, the "advanced work situation". For convenience, these two holistically assessed measures are together termed the "work commitment variables".

From discussion in Chapter 1, it will be recalled that whereas industrial commitment is an orientation to the world of industrial work in general, influenced mainly by longstanding sociohistorical factors, work commitment is an orientation to a particular work situation. Work commitment is influenced partly by the general industrial commitment of the individual but mainly by immediate situational factors. Accordingly, the degree of "work commitment" and "advancement orientation" evoked in the respondents was assessed separately for each of the four depicted work situations.

At this point a little more must be said about the basis of the work commitment variables and hence the likely character or composition of the work commitment measured by them. An assessment of which aspects of the work situation these measures do, and do not, take into account -- derived as they are from projective simulations of industrial work -- helps to indicate in which respects they authentically reflect the reactions to work and the work commitment of our respondents as they would obtain in real work situations. In

* These two variables were mnemonically named "IMAG" and "CONF" in the formal analysis described in Chapter 3.
Chapter 1 a model of the essentially situational factors influencing work commitment was proposed (Section 1.1.3). Of the various different factors listed there, we consider that the following selection mainly influenced the overall response of the workers under the conditions of our experimental method, and hence determined the character of the whole "work commitment" measured by our instrument. This estimation of the dimensions of "work commitment" as here measured is based on our awareness of which aspects of a whole work situation were suggested by the scenes depicted in our method, complemented by our knowledge of the scope of the detailed responses received (which have been reviewed in Chapter 3.) On this basis we consider that the workplace factors mainly influencing our work commitment variables were:

1. self-esteem/confidence of the respondent*,

2. assumed remuneration and work conditions of the depicted worker**,

3. assumed objective prospects for progress associated with the depicted work**,

4. assumed technical skills/capabilities associated with the depicted worker**, and

5. "ideological allegiance" to industrial work (consisting mainly of general industrial commitment, and partly of "valuing of more specific content and meanings in work done") of the respondent*,

* characteristic of the individual respondent, and therefore fairly constant through the four work-types

** characteristic of the depicted work situation, and therefore varying through the four work-types.
with factors 1. and 2. strongly influencing the net response, factors 3. and 4. moderately influencing the net response, and factor 5 weakly influencing the net response. The same sources suggest that the situational factors not influencing our work commitment variables were:

- formal organizational characteristics of the work,
- informal social characteristics of the work (including organization culture, supervisory styles, race relations),
- formal abilities and skills of the respondent *
- reputation of the worker with co-workers, and
- assumed degree of participation by the worker in decision-making concerning the work situation.

The qualifying observation that has to be added in respect of the determining factors is that it is the most unconscious attitudes of the respondents which are projected onto the depicted worker (regardless of great variation in the quality of the work situation depicted) while other aspects of the work situation are accepted as inferred from the varying scenes depicted.

The more unconscious determinants of net work commitment are a particular interest of this study. Under the conditions outlined, then, we consider our work commitment variables to be partial but valid approximations to work commitment in real working conditions, and that as such they accurately describe our respondents.

With measures of commitment and advancement orientation established, the disposition of the sampled workers in terms of these construct

* This factor evidently did not consistently influence responses, because many unskilled workers in our sample still expressed "naive optimism" in their responses to advanced work, apparently by identifying with the depicted skilled workers to the extent of assuming their implied abilities.
variables was analysed. First, the distribution of high and low scores on the work commitment measures, in the different work situations, was calculated. Essentially two broad findings emerged. First, respondents differed considerably in the degree of work commitment and advancement orientation evoked in them by the same work-type. Second, with the exception of the first work-type ("minework"), the distribution of high and low degrees of work commitment and advancement orientation evoked did not vary very much from one work-type to the next. For example, excluding the effect of "minework", the salience of higher "work commitment" is seen in Figure 26 to vary but little with varying work-type; while the salience of higher "advancement orientation" is similarly seen in Figure 27 to vary even less according to work-type. With the effects of the first work-type ignored for reasons argued in Chapter 4 (pp. 116, 121, 142), these findings suggest that the work commitment variables are influenced as much by differing characteristics of workers as by differing characteristics of work situations. In particular, recalling the mood of challenge built into the depicted work situations, we proposed at this stage that a large proportion of the variation in the commitment variables is accounted for by variation in the workers' innate confidence, or self-esteem, having its effect as they confront the work situation.

With these conclusions reached we became more interested in seeking attitudinal correlates of work commitment. Accordingly, tests were performed to check for correlations between our two work commitment variables and a number of other variables describing the attitudes and background of the worker. As explained in Chapter 4 (Section 4.2), the particular selection of variables was based mainly on our proposal that the work commitment measured by our method was based significantly on self-esteem. Most of the independent variables chosen for correlation analysis are arguable attitudinal or biographical associates of self-esteem and/or modernity, and in any case fairly fundamental elements or determinants of outlook.
It was found that a number of these variables describing the worker did indeed show correlations with our work commitment variables. Modest but very significant associations were found, particularly between attitudinal variables describing the worker and the work commitment measures generated by the last and most challenging of the four work-types, the "advanced work situation". The general discovery that measures of work commitment show relationships with attitudes and other characteristics of the individual strongly supports our general supposition that commitment to work is influenced not only by the nature of work and workplace but also by longstanding characteristics of the worker. The particular relationships found also go some way toward supporting our particular proposal that work commitment as measured in our respondents is influenced by their self-esteem. To the extent, then, that work commitment is an effect of individual personal attributes, it can be seen as something which the individual brings with him to the workplace, and to that same extent understood as varying independently of the actual work and its circumstances.

What are the specific worker characteristics shown by our findings to be associated with this propensity for greater work commitment or more positive responses to industrial work among our respondents? The strongest relationships always involved the work commitment variables scored from the final, most challenging work situation, suggesting that our method had succeeding in getting the respondents to take this situation the most seriously. By both correlation and regression analysis it was found that of the factors tested the ones most strongly associated with "work commitment" in the advanced work situation were:

- SYSTEM MODIFIABILITY BELIEF (partial correlation $r^2 = 10\%$), and
- AUTONOMY/AUTHORITARIAN ORIENTATION ($r^2 = 6\%$).

In support of these findings, one item from the system modifiability attitude scale, item D, showed a firm correlation with the "work commitment" variable. A few indices of types of socialising experience showed weaker associations with "work commitment", as did education.
Similarly, by both correlation and regression analysis it was found that the factors most strongly associated with "advancement orientation" in the advanced work situation were:
- FATHER'S OCCUPATION ($r^2 = 13\%$), and
- ACHIEVEMENT ORIENTATION ($r^2 = 7\%$),
with a weaker association shown by:
- OWN EDUCATION ($r^2 = 3\%$).

In support of these findings, three component variables of the composite achievement orientation variable also showed notable correlations with the "advancement orientation". In addition, one item from the personal locus of control attitude scale, item I, correlated substantially with the "advancement orientation" variable, while the system modifiability belief variable showed a faint association with "advancement orientation".

Altogether, then, nearly one-quarter of the variance in both of the work commitment variables was explained by the range of ten hypothesized predictor variables.

In more detailed terms the first group of findings means that men with more "work commitment", those who show more confidence, interest, and commitment in response to challenging work, tend also to be persons:
- who believe that social institutions, particularly ones that discriminate against them, can be changed for the better by the efforts of ordinary people;
- who have more autonomous and less authoritarian personality formations (the full significance of these characteristics has been discussed in Chapter 1, Section 1.2.6, q.v.); and
- who come from backgrounds of higher socio-economic status and prosperity.

Such men are also significantly more likely to endorse the system modifiability scale item: "By taking an active part in public and social matters, the people can control world events." This is an
item which actually expresses a marked degree of personal activism, or internal locus of control orientation, just as much as the general changeability of discriminatory institutions expressed by the scale as a whole.

The second group of findings show that men with more "advancement orientation", those who expect more to be able to advance in challenging work, tend also to be persons:
- whose fathers hold a higher occupational rank; and
- who are themselves more concerned with achievement, production and planning.
They show these achievement concerns nearly always in respect of the simulated work situations shown to them by us, and often in evaluations of their own real employment situations. The advancement oriented men are also significantly more likely to endorse the personal locus of control scale item: "It is impossible for me to believe that chance or luck play an important part in my life", a statement reflecting a philosophy of high rationality and high efficacy tantamount to a work ethic.

From those findings the essential profiles of the man with commitment, who engages with work, and the man who in addition expects to be able to advance in work, can be summarized as follows (characteristics in order of salience):

HIGHER WORK COMMITMENT:
1. Belief in system modifiability
2. Autonomous personality
3. "People can control world events"
4. (Higher-SES background)

MORE ADVANCEMENT ORIENTATION:
1. Father of higher occupation
2. Achievement orientation
3. "Don't believe in chance or luck in life"
4. (Higher education)
These observed correlates are interesting, and certainly do not appear to be fortuitous. Attitudes are better represented than biographical/socialising variables, justifying our original interest in the role of attitudes in the worker's personal adjustment and response to work. Many of the attitudinal associates of the work commitment variables are central aspects of the independence and motivation we associate with the "Protestant Ethic". The linked orientations of independence, individuation and autonomy, in particular, have been contrasted by some writers with the more group-oriented approach to work which is held to characterise work in traditional societies. Nearly all the observed associates, both attitudinal and biographical/socialising, are aspects of, or determinants of, the "modern" outlook discussed in Chapter 1; most are congruent with higher self-esteem; and several (1, 3 & 4 of work commitment, and 1 & 4 of advancement orientation) reflect greater general industrial commitment*. At the same time many of the observed associates have significance in their own right.

Characteristics 1 and 3 of the man inclined toward commitment can be seen as sociopolitical dimensions of a general industrial commitment orientation*, as well as attitudinal preconditions for autonomous motivation. Characteristics 2 and 4 of the more committed man are associates of greater self-esteem. Appropriately, self-esteem and general industrial commitment were argued earlier to be factors influencing work commitment as measured here. In the face of challenging new work, characteristic 2 of the more committed man can also be seem as an asset in its own right, reflecting the likelihood of greater independence, adaptability, trust, less anxiety, more risk-taking, and so on. Characteristics 1, 2 and 3 of the man inclined toward advancement are, appropriately, all signs of achievement: the achievement of the parent (and hence probably of the household where the individual grew up), the achievement of the worker himself, and the achievement values implicit in controlling life by work rather than trusting to luck. The biographical characteristics 1 and 4 of the more advancement-oriented man are also

* Defined in Chapter 1, Section 1.1.3
associates of internal locus of control. The fuller interest and significance of this orientation, and of several other of the observed associates of work commitment, both attitudinal and biographical have been further discussed in Chapter 1.

The profiles of the committed and the advancement-oriented man, modest though they are, tell us something about the very general attitudinal requirements for black advancement in work, under the conditions we studied. Particularly for novel and challenging work, we discern three major groups of attitudinal assets which are needed as preconditions for advancement in modern industrial work. Generalising from the observed associates just reviewed and the implications of the detailed responses to industrial work discussed in Chapter 3, we propose three distinguishable species of factors at work in the emergence of an attitudinal "aptitude for advancement":

1. CONFIDENCE / SELF-ESTEEM / AUTONOMY ORIENTATION
2. CONVICTION / LOCUS OF CONTROL / INDUSTRIAL COMMITMENT
3. DETERMINATION / MOTIVATION / ACHIEVEMENT

(The different terms used to describe each factor can be seen as different aspects of essentially the same precondition.)

From the point of view of the worker these factors correspond, respectively, to:

1. Appropriate definition of self (beliefs about oneself and own capabilities, and a corresponding image of self, and orientation to self).
2. Appropriate definition of ambient conditions (beliefs about conditions -- as e.g. predictable, trustable, calculable*, rewarding -- and a corresponding image of conditions, and orientation to conditions).

* An external locus of control is an "alienated" locus of control, an attitudinal analogue of the socio-political powerlessness which alienates the worker from the industrial order (correspondingly limiting his industrial commitment).
3. Appropriate volition (drives, motives, behaviour, adequate to exploit perceived situation (as created by perceived self (1) in perceived conditions (2)), judged worth investing effort in).**

While the isolation of these factors may not seem particularly surprising at first sight, we consider that the general factor of confidence/self-esteem/autonomy orientation, which must be highly pertinent to the self-image of the worker, especially interesting in the case of the black worker, and worthy of further investigation. Along with conviction/locus of control, but perhaps more difficult to change and more far-reaching in its effects, self-image is very probably an important early casualty of race discrimination. As such, this characteristic does not appear to have been very much researched. Needless to say, further vital conditions for advancement in work would also necessarily involve more formal prerequisites (including assets such as education, training and skills; and above all situational/structural opportunities for placement, for further training and experience, and for advancement). And indirectly, such opportunities to experience advancement would to some extent gradually act to change the personal characteristics described in 1. and 2. above.

Assuming the desirability of work commitment as one asset among several favouring individuals for advancement in work, what would be more likely to encourage the emergence of the commitment and advancement orientations measured in this study? This question can be answered qualitatively and quantitatively. Nearly all the demonstrated and argued attitudinal associates of work commitment — such as internal locus of control, autonomy, achievement orientation and system modifiability beliefs* — are products of better education, processes of modernization, and the kind of emancipation conducive to general industrial commitment (as discussed in Chapter 1). While the first two processes confer abilities, the last condition promotes the motivation needed to actualise these assets. We also know from theories of individual modernity and

* Implying "activism" (Kahl) and "civic participation" (Inkeles & Smith)

** N.B. It will also be appreciated from these descriptions that these major factors apparently encouraging an "advancement orientation" strongly resemble the three principal elements of a "valence x expectancy" model of work motivation (Porter & Lawler, 1968; Vroom & Deci, 1970), namely:
1. EXPECTANCY (or Effort → Performance) belief,
2. INSTRUMENTALITY (or Performance → Outcome) belief, and
3. Perceived VALENCE of outcomes, respectively.
associated research that most of the attitudes in question are at the same time effects of enduring exposure over time to relevant socialising experiences. Therefore improved access to educating, modernizing, nurturant, and democratic institutions would help promote in individuals the attitudinal basis of work commitment. In the case of blacks, moreover, mere equality of access to such institutions would alone mean a great quantitative improvement in access. However, developments of this kind represent major social changes which although desirable would probably be daunting in their scale, costly to execute, complex in their execution, and controversial in view of the changes in political attitudes involved.

All these observations raise the question: What does it mean to the individual to feel "committed" to work? Arguably it means to be not just competent (formally and attitudinally) to work, but also to be "not alienated" from work, to have reasons, convictions, motives, for proceeding with it, and for investing effort over time in it. Commitment, then, involves ability plus motive. These observations also raise wider questions as to how work commitment dispositions or assets are distributed in the population at large, and why. A further brief consideration of the social determinants of the orientations connected with work commitment, while not the direct subject of this study, help to put our findings into perspective -- particularly in the context of black advancement in industry in South Africa.

It is a general finding of this study that up to a point characteristics of the worker's own innate outlook and background can primarily influence the degree of engagement with work and commitment to work. Apparently only when meanings associated with the work itself become very extreme, and in particular negative, does this latter and essentially environmental factor exert a stronger influence upon perceived desirability of work, engagement, and net commitment. Examples of extreme meanings of this kind are those associated with very poor conditions of work or dangerous forms of work, and those associated with race discrimination in employment practices, particularly as it affects tenure, prospects for personal
progress, and control over the work process.

This study has shown that work commitment is based significantly upon deep-seated attitudes, while in Chapter 1 it has been argued that "industrial commitment", a wider factor influencing work commitment, is also based significantly on internalised orientations -- particularly orientations to the socio-economic-political order. It is these various internal and relatively unconscious determinants of net work commitment in workers which particularly interest this investigator, because it is likely that as fairly deep-seated attitudes they have in turn been negatively influenced in blacks by long-term psychohistorical factors such as chronic discrimination and differential processes of early socialisation. As such they may, if inappropriate, be among the most intractable, though subtle, individually-located barriers to black advancement. In the event, 67 percent of our sample of blue-collar industrial workers showed little or no sign of the "work commitment" orientation in response to the advanced work situation, and 49 percent showed little or no sign of the "advancement orientation" in response to that work situation.

A little earlier it was observed that commitment is based on ability plus motive. The nature of that ability and motive, with probably more weight on the motive, has been examined in this study. However, an understanding of the factors affecting advancement which focusses on the particular situation of blacks has to take into account not only qualitative variation in the nature of ability and motive in members of the population but also quantitative distribution of these qualities across the whole population. This is because a central feature of the predicament of black workers in general is that society distributes the antecedents of both ability and motive -- in respect of industrial work -- unequally. For one reason or another the antecedents of aptitude for advanced industrial work are not in South Africa equally available to all people, with the differentiation tending strongly to take place along racial lines.

As has been discussed more fully in Chapter 1, social, cultural and economic differentiation in the macro-structure of South African
society tends to compromise the personal development, progress, "modernity", and eligibility for industrial work of certain categories of person, usually limiting blacks the most. Differential processes of socialization are producing individuals who are varyingly equipped, in terms of outlook, values, abilities and dispositions, to be best suited to a particular socio-occupational niche: in this case the world of industrial work. Long before particular institutional discriminations confront adult blacks, pervasive general social discrimination, poverty, rural life, and certain aspects of traditional culture and values together tend to generate in many persons individual qualities which are, rightly or wrongly, dysfunctional in modern industrial work. The attitudinal differentiation taking place at the stage of socialization is both "natural", insofar as it may be based on language and culture, and enacted or "artificial" insofar as it is based on legislated rights of access to, for example, urban residence*, education, and urban employment. In both cases the effects tend, under the existing socio-political dispensation, to discriminate negatively against the same category of people: blacks. By contrast, those to whom society has allocated more resources and consequently more socialising experiences conducive to informed, "modern" dispositions and abilities -- typically, whites -- are, by a process not only of "natural selection" but also of conscious and matching institutional discrimination, surviving and faring better in the industrial system.

Another set of discriminatory social determinants, acting in the present, is also handicapping black workers. While differential processes of socialisation tend to limit the abilities of blacks, differential access to the means of control over life and work is compromising their motivation. Higher-order, endogenous motivation is closely connected with "procedural"**, or decision-making,

* Including, by implication, access to health services, wage employment, improved living standards, access to mass media, and other associated modernizing experiences.

** Fox (1971) pp.8-10.
aspirations. Restrictions upon the participation of individuals in controlling their world of work and related circumstances limit the quality of their motivation*, particularly long-term "career motivation". Again, as argued in Chapter 1, features of the socio-political dispensation in South Africa compromise in this way the general industrial commitment** of blacks far more than that of whites. The proposed macro-factors limiting the industrial commitment of blacks in South Africa induce a form of alienation which also limits the quality of their motivation. Value-contrasts mean that industrial work is not intrinsically valued. Contrasts in meaning mean that industrial work is not fully understood. Contrasts in access to the benefits and lifestyle generated by the industrial system mean that industrial work is not closely identified with, nor does it necessarily feature in long-term future aspirations. Contrasts in political rights mean that the industrial order is ultimately run primarily in the interests of whites. Industrially-employed blacks consequently feel that at many levels -- political, organizational, cognitive even -- they have limited control over the world of work in which they are involved. The black worker in effect attempts to confront work in a condition of thoroughgoing powerlessness. With limitations such as these on the meanings and personal significance of industrial work, the degree to which work motivation can be endogenous and lasting is severely limited. Poor industrial commitment rules out the broad and longstanding sociohistorical bases of involvement with work, leaving only a transient situational basis to motivation and work commitment. Involvement with industrial work is superficial and "motivated" mainly by the extrinsic reward of remuneration.

With the institutional bases of both ability and long-term motivation thus in restricted supply to blacks, their personal capacity for commitment and advancement in formal industrial work is correspondingly limited. In this sense we can conclude that a

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* Essentially, the development and the endurance of the needs, and corresponding satisfactions, upon which motivation is based.

** Defined, Section 1.1.3, q.v.
significant individually-located type of barrier to black advancement -- namely, attitudes limiting work aptitude and work commitment -- appears to be virtually institutionalised. At the same time, we are acutely aware that more immediate institutional factors bearing directly upon the employment and work processes in industry are much more directly limiting occupational black advancement, and with much greater effect. These directly discriminating conditions, both formal and informal, have also been outlined in Chapter 1 (Section 1.1.1.). Assuming this larger context of limitations, this study has nevertheless focussed on individually-located factors affecting advancement.

Commitment to industrial work has been shown in this study to relate directly to major attitudinal dispositions with known socialization correlates. Therefore, although it is clear that formal institutional constraints are the principal immediate barriers to black advancement*, an indirect indication of this study is that aspects of social process in society at large are deeply affecting the inclination of individual blacks toward advancement in the world of industrial work, and their disposition to master or sustain advanced work. In respect not only of abilities but crucial attitudes too, participation in different socializing institutions of society confers upon individuals contrasting characteristics which may either equip them or handicap them for performance in modern work. To some degree, then, black advancement in work is being constrained not only directly by institutional barriers and by present conditions in the employment market, but also, and arguably more profoundly, by longstanding characteristics of the whole fabric of society. The importance of these formative influences and the urgency of the issues they raise in broader socio-political terms, while not the immediate domain of this investigation, should not be underestimated.**

* An evaluation shared by the subjects of this study (p. 85)
** See also Orpen (1976) pp.150-162.
In effect we discover that while the problems investigated (variations in the nature and degree of commitment to industrial work) exist on one time scale and level of phenomena (i.e. in the immediate present, and manifested in behaviours in work organizations), their determinants, and therefore a large measure of their ultimate solutions, exist on another, more sociopolitical and long-term level of phenomena. The disquieting effect of this, in practical terms, is that the persons most directly involved with, and facing, the problems of commitment within industry are unfortunately not the persons responsible for the determining sociopolitical phenomena. Nor do the former persons have, traditionally, much direct influence over the latter. To this extent, then, the very broad national factors that would have to be involved in any potential problem-solving strategies directed at influencing popular Black industrial commitment are beyond the immediate control of the persons of all kinds within industry who are directly affected by the actual nature of industrial commitment and work commitment.


<table>
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<th>Author(s)</th>
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<tr>
<td>Möller, V. and Schlemmer, L.</td>
<td>1977</td>
<td>Images of Mine Work Among Non-White Migrants in Durban. Durban: Centre for Applied Social Sciences, University of Natal</td>
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</tbody>
</table>


Suzman, R.M. (1973)  
*The Modernization of Personality.*  
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Harvard University.

Weir, M. (Ed.) (1976)  
*Job Satisfaction: Challenge and Response*  
in Modern Britain.  
Glasgow:  
Fontana/Collins.
APPENDIX A.

WORK PICTURES AND ASSOCIATED RESPONSE FORMATS AS USED IN QUESTIONNAIRE.
LOOK CAREFULLY AT PICTURE NUMBER B 5
Then answer the following questions, as quickly as you can.

a. What is happening here? What are these people doing?

b. In just a few words, how would you describe this kind of work?

c. As you see them now, how are these people feeling?

d. What are these people thinking?

e. Why are they thinking this?

f. What kind of people usually do this work?

g. To do this kind of work, what do these people need most?

h. Usually, what are the effects of this kind of work on people who do it?
LOOK CAREFULLY AT PICTURE NUMBER C 1
Then answer the following questions, as quickly as you can.

a. What is happening here? What is this person doing?

b. What kind of place is this?

c. As you see him now, how is this person feeling?

d. What is this person thinking?

e. Why is he thinking this?

f. How does this person feel about working alone?

g. To do this kind of work, what does this person need most?

h. In five years' time, what work will this person be doing?
LOOK CAREFULLY AT PICTURE NUMBER D 4
Then answer the following questions, as quickly as you can.

a. What is happening here? What is this person doing?

b. In just a few words, how would you describe this kind of work?

c. As you see him now, how is this person feeling?

d. What is this person thinking? Why?

e. How does this person feel about working alone?

f. To do this kind of work, what does this person need most?

g. Usually, what are the effects of this kind of work on people who do it?

h. In five years' time, what work will this person be doing?
LOOK CAREFULLY AT PICTURE NUMBER B C 1
This picture shows a person who has recently started in a new job. This job is paid better than his last job, but it is more difficult.

a. What is happening here? What is this person doing?

b. How does this person feel? What is he thinking?

c. To do this kind of work, what does this person need most?

d. Will this person be able to succeed in this new job, or not? Why?

e. In five years' time, what work will this person be doing?
Now look at ALL the work pictures again.

Imagine you have to choose one of the jobs in these pictures, to work in yourself.

a. Write in this box the number of the job you would like best.

Write here your main reason for choosing this job.

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b. Write in this box the number of the job you would choose as second best.

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c. Write in this box the number of the job which you would like least.

Write here your main reason.

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APPENDIX B.

DETAILS OF "IMAG" AND "CONF" VARIABLES, AND SCORING PROCEDURES.
APPENDIX B.

DETAILS OF "IMAG" AND "CONF" VARIABLES, AND SCORING PROCEDURES.

1. The variable "IMAG", describing Perceived Desirability of the Work, was scored according to the criterion question: 
"Would the respondent want this job?"

Responses were assigned to one of three possible categories or values, as follows:

<table>
<thead>
<tr>
<th>MAJOR CLASSIFICATION</th>
<th>CORRESPONDING ALTERNATIVE CLASSIFICATION*</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Yes</td>
<td>Conveys definitely good image.</td>
</tr>
<tr>
<td>2. Conditional yes, or</td>
<td>Conveys less favourable image or neutrality</td>
</tr>
<tr>
<td>equivocal</td>
<td></td>
</tr>
<tr>
<td>1. No</td>
<td>Conveys bad image, avoidance.</td>
</tr>
</tbody>
</table>

In practice these categories were found to cater for all responses encountered.

2. The variable "CONF", describing *Perceived Prospects for Own Advancement in the Work*, was scored according to the criterion question: "Is the respondent confident in his own ability to progress in this job?"

Responses were assigned to one of three possible categories or values, as follows:

<table>
<thead>
<tr>
<th>MAJOR CLASSIFICATION</th>
<th>CORRESPONDING ALTERNATIVE CLASSIFICATION*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Conditional yes, or equivocal</td>
<td>Less confident or neutral response.</td>
</tr>
<tr>
<td>1. No</td>
<td>Response conveying low self-esteem or lack of self-confidence.</td>
</tr>
</tbody>
</table>

In practice these categories were found to cater for all responses encountered.

* Derived from Schlemmer, *ibid.*
APPENDIX C.

DETAILS OF LOCUS OF CONTROL VARIABLES.
APPENDIX C.

DETAILS OF LOCUS OF CONTROL VARIABLES.

Two types of LOCUS OF CONTROL orientation were assessed by means of the forced-choice attitude scale which is reproduced, from the questionnaire, on the following pages.*

For each item on the scale, an initial choice within the basic dichotomy was then qualified according to strength of personal agreement with the choice, generating four possible values for the variable.

The components of the factor "PERSONAL CONTROL IDEOLOGY" are items A, C, E, G and I.

The components of the factor "SYSTEM MODIFIABILITY.BELIEFS" are items B, D and F.

Item H is a filler item.

The item-whole correlations of the two sub-scales, for the present sample, are as follows:

* Item content is based on the most reliable and appropriate items reported in Gurin, P. et al. (1969) pp.36-41.
Personal Control Ideology:

<table>
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<tr>
<th></th>
<th>Item A</th>
<th>Item C</th>
<th>Item E</th>
<th>Item G</th>
<th>Item I</th>
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<tr>
<td>Correlation (r) with</td>
<td>.53</td>
<td>.62</td>
<td>.57</td>
<td>.55</td>
<td>.49</td>
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<td>whole PC variable</td>
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<td></td>
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<td>Significance (p)</td>
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<td>.00</td>
<td>.00</td>
<td>.00</td>
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</table>

System Modifiability Beliefs:

<table>
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<tr>
<th></th>
<th>Item B</th>
<th>Item D</th>
<th>Item F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation (r) with</td>
<td>.71</td>
<td>.64</td>
<td>.53</td>
</tr>
<tr>
<td>whole SM variable</td>
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</tr>
<tr>
<td>Significance (p)</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
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LOKU AKUKONA UKUVIVINYWA. SITHANDA UKWAZI IMIBONI YAKHO.

EZINDABENI EZININGI, ABANTU NGOKWAHLUKANA BANEMIBONO EHLUKE. NGENZANSI UZOBONA IMIBONI EHAMBA NGAMIBILI, ABANTU ABAKHULUMA NGAYO KWESINYE ISIKHATHI.

SIFUNA UKUBA UKHETHE. KULEYO NALEYO MIBONO, NJENGOBA INHAMBANGAMIBILI, KHETHA UBE MUNYE OBONA SENGATHI USONDELENE NEYAKHO IMIBONI, UWUKHOMBISE NGESIPHAMBANO (X).

BESE UFAKA ESINYE ISIPHAMBANO FUTHI (X) KWELILODWA LAMABHOKISI AMABILI ANGENZANSI, UKUKHOMBISA UKUTHI IMIBONO OYIKHETHILE "ICISHE ISONDELANE" NEYAKHO, NOMA "ISONDELENE KAKHULU" NEYAKHO.

---

a. Many of the unhappy things in our lives are partly due to bad luck.
   
   ![Choice](choice-a1.png)

   ![Choice](choice-a2.png)

   □ quite close to my opinion
   □ very close to my opinion

b. Racial discrimination is here to stay.
   
   ![Choice](choice-b1.png)

   ![Choice](choice-b2.png)

   □ quite close to my opinion
   □ very close to my opinion

People may be prejudiced, but it is possible for our society to rid itself of open discrimination.
c.
What happens to me is my own doing.

Sometimes I feel that I do not have enough control over the direction my life is taking.

☐ quite close to my opinion
☐ very close to my opinion

d.
In world affairs, most of us are the victims of forces we cannot understand or control.

By taking an active part in public and social matters, the people can control world events.

☐ quite close to my opinion
☐ very close to my opinion

e.
When I make plans, I am almost certain that I can make them work.

It is not always wise to plan too far ahead, because many things turn out to be a matter of good or bad fortune anyhow.

☐ quite close to my opinion
☐ very close to my opinion
The racial situation may be very complicated, but with enough money and effort, it is possible to get rid of racial discrimination.

We will never completely get rid of discrimination. It is part of human nature.

For me, getting what I want has not much to do with luck.

Many times we might just as well decide what to do by spinning a coin.

A good leader expects people to decide for themselves what they should do.

A good leader makes it clear to everybody what their jobs are.
195.

Many times I feel that I have little influence over the things that happen to me.

It is impossible for me to believe that chance or luck play an important part in my life.

☐ quite close to my opinion

☐ very close to my opinion
APPENDIX D.

EXAMPLES OF RAW RESPONSES GIVEN TO THE WORK PICTURES.
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*Outcomes vis-a-vis advancement are described and abbreviated in terms of the following scale of terms:

- Optimistic: + or ++
- Neutral/Neutral: =
- Pessimistic: —

**Salience of motivation, vis-a-vis work, is summarised as follows:

- A1 Strong achievement imagery
- A1 Achievement imagery
- UI Irrelevant concerns/motives
- AI Demotivation
a. What is happening here? What are these people doing?
They are holding water hoses to splash at the rocks as they dry.

b. In just a few words, how would you describe this kind of work?
It is menial work.

c. As you see them now, how are these people feeling?
They are feeling afraid to make mistakes that can cause death to them.

d. What are these people thinking?
They are thinking of rules and techniques of doing the job accurately and safely.

e. Why are they thinking this?
Time will save their lives; time, energy.

f. What kind of people usually do this work?
Black people.

g. To do this kind of work, what do these people need most?
Safety devices and tricks.

h. Usually, what are the effects of this kind of work on people who do it?
It affects their hearing and they get irritated quickly at random questions.
LOOK CAREFULLY AT PICTURE NUMBER C 1
Then answer the following questions, as quickly as you can.

a. What is happening here? What is this person doing?
   He is inspecting the boilers
   if they are not leaking

b. What kind of place is this?
   It is in the factory where
   they boil products

c. As you see him now, how is this person feeling?
   He is afraid that anything
   can burn or out and splash him
   with hot hot water.

d. What is this person thinking?
   He is thinking of certain formulas
   and of the temperature.

e. Why is he thinking this?
   The degree of the temperature can
   decide the function of the boilers
   and for our safety.

f. How does this person feel about working alone?
   It gives him personal pride
   and at the same time great sense
   of responsibility as everything depends
   on him.

g. To do this kind of work, what does this person need most?
   Necessary equipment

h. In five years' time, what work will this person be doing?
   He will be instructing others
   how to do his job.
LOOK CAREFULLY AT PICTURE NUMBER D 4
Then answer the following questions, as quickly as you can.

a. What is happening here? What is this person doing?
   The man is driving an iron with a steel drill/er

b. In just a few words, how would you describe this kind of work?
   Joining Irons

c. As you see him now, how is this person feeling?
   He is feeling proud of his skill in handling such complex machines

d. What is this person thinking? Why?
   He is thinking of being accurate and safe. This may result in the success of his job and saving time and energy.

e. How does this person feel about working alone? His life
   He likes it. Though he would prefer to have his job checked by someone.

f. To do this kind of work, what does this person need most?
   He needs the necessary tools and skill.

g. Usually, what are the effects of this kind of work on people who do it? It makes them precise in their work.

h. In five years' time, what work will this person be doing?
   He will be all learning his craft and working of this kind.
LOOK CAREFULLY AT PICTURE NUMBER BC 1

This picture shows a person who has recently started in a new job. His job is paid better than his last job, but it is more difficult.

a. What is happening here? What is this person doing?
   The man is fixing up electric lines.

b. How does this person feel? What is he thinking?
   He feels very important as people watch him from below. He is thinking of doing it correctly and successfully.

c. To do this kind of work, what does this person need most?
   He needs food, support and safety techniques.

d. Will this person be able to succeed in this job, or not? Why?
   He will succeed. He has all the incentives in terms of money, publicity and responsibility for the light in the city.

e. In five years' time, what work will this person be doing?
   He will be assisting the city engineering office.
LOOK CAREFULLY AT PICTURE NUMBER B 5

Then answer the following questions, as quickly as you can.

a. What is happening here? What are these people doing?
   These are digging in mines.

b. In just a few words, how would you describe this kind of work?
   It's a very hard work but does not pay and is dangerous too.

c. As you see them now, how are these people feeling?
   They are feeling very tired and sad.

d. What are these people thinking?
   They are thinking of dying.

e. Why are they thinking this?
   Because they are working in a dangerous place.

f. What kind of people usually do this work?
   People who are not allowed to work in towns or city.

g. To do this kind of work, what do these people need most?
   They need good pay plus safety.

h. Usually, what are the effects of this kind of work on people who do it?
   They get sick; hard hearts and old young.
LOOK CAREFULLY AT PICTURE NUMBER C 1
Then answer the following questions, as quickly as you can.

a. What is happening here? What is this person doing?
   He is servicing the machine.

b. What kind of place is this?
   It is a dangerous place.

c. As you see him now, how is this person feeling?
   He is afraid and unsafe.

d. What is this person thinking?
   He is thinking of his life and his family.

e. Why is he thinking this?
   Because the place is not safe.

f. How does this person feel about working alone?
   Because of being black, he can die.

g. To do this kind of work, what does this person need most?
   Training on safety, safe dress, and a good pay for his job.

h. In five years' time, what work will this person be doing?
   Same job if he's still alive.
LOOK CAREFULLY AT PICTURE NUMBER D 4

Then answer the following questions, as quickly as you can.

a. What is happening here? What is this person doing?
   He is working, he's drilling

b. In just a few words, how would you describe this kind of work?
   This is a good work

c. As you see him now, how is this person feeling?
   He's not worried because he does his job

d. What is this person thinking? Why?
   He's thinking of his boss because when he does wrong he'll be fired

e. How does this person feel about working alone?
   Fill very lonely

f. To do this kind of work, what does this person need most?
   Safety devices, good training, good pay

g. Usually, what are the effects of this kind of work on people who do it?
   Get hurt, get sick

h. In five years' time, what work will this person be doing?
   Same, because no promotion for black
LOOK CAREFULLY AT PICTURE NUMBER B C 1

This picture shows a person who has recently started in a new job. This job is paid better than his last job, but it is more difficult.

a. What is happening here? What is this person doing?  
   Repairing telephone lines

b. How does this person feel? What is he thinking?  
   Not happy - He thinks that he may fall down

c. To do this kind of work, what does this person need most?  
   Safety devices, help

d. Will this person be able to succeed in this new job, or not? Why?  
   Will not - no promotion that may encourage him

e. In five years' time, what work will this person be doing?  
   Same job
LOOK CAREFULLY AT PICTURE NUMBER B 5
Then answer the following questions, as quickly as you can.

a. What is happening here? What are these people doing?

b. In just a few words, how would you describe this kind of work?

MILLING AND EXTRACTING OF MINERAL
UNDERGROUND

c. As you see them now, how are these people feeling?

They feel to live

There is no life

TENSE

d. What are these people thinking?

They are thinking the job. They are tired

TENSE

e. Why are they thinking this?

The work is hard. They are tired. The work may fall and kill them

f. What kind of people usually do this work?

Usually unskilled labour


g. To do this kind of work, what do these people need most?

Safety equipment


h. Usually, what are the effects of this kind of work on people who do it?

After working time. They are nervous and ill.
LOOK CAREFULLY AT PICTURE NUMBER C 1
Then answer the following questions, as quickly as you can.

a. What is happening here? What is this person doing?
   (SLO MO LASSLYogne ORPERE) jT IS ARRENCE. TH  
   (Steeing WARE, 

b. What kind of place is this?
   THIS IS THE KERIERY

   _________________

   ______________________

c. As you see him now, how is this person feeling?
   (SHE IS RESPONSIBLE FOR REPERCUTION OF HIS JO.) 
   (LEON OF HIS JOB.

d. What is this person thinking?
   HE IS THINKING OF WORKING OUT WORKS
   (WORCING, 

   _________________

   ______________________

e. Why is he thinking this?
   (PULATION MEANS MORE RESPONSIBILITY AND MORE MONEY.

   ______________________

f. How does this person feel about working alone?
   RESPONSIBLE.

   ______________________

   ______________________

g. To do this kind of work, what does this person need most?
   (ELENT.

   ______________________

   ______________________

h. In five years' time, what work will this person be doing?
   (ENGAGE KNOWLEDGE.

   ______________________

   ______________________
LOOK CAREFULLY AT PICTURE NUMBER D 4
Then answer the following questions, as quickly as you can.

a. What is happening here? What is this person doing?

b. In just a few words, how would you describe this kind of work?

c. As you see him now, how is this person feeling?

d. What is this person thinking? Why?

e. How does this person feel about working alone?

f. To do this kind of work, what does this person need most?

g. Usually, what are the effects of this kind of work on people who do it?

h. In five years' time, what work will this person be doing?
LOOK CAREFULLY AT PICTURE NUMBER B C 1

This picture shows a person who has recently started in a new job. This job is paid better than his last job, but it is more difficult.

a. What is happening here? What is this person doing?

b. How does this person feel? What is he thinking?

He feels unsafe. He thinks he may fall off anytime.

c. To do this kind of work, what does this person need most?

Tools.

d. Will this person be able to succeed in this new job, or not? Why?

He will not succeed. He is not safe because he is not using safety working equipment.

e. In five years' time, what work will this person be doing?

Cleaning streets or not working at all.
They are digging a hole. They are breaking the rocks of diamond or gold.

This work is bad because the holes collapse and it is a hard work.

They are living a painful life, working and watching if the hole is collapsing.

They are thinking of stealing diamond or gold so that they can sell it.

So they can be released from this slavery in which they are and always worry for death.

It is people who have no permit to work in the town and who are not educated.

It is to use strength and brains and to eat enough and money.

It is to be enclosed in a collapsing hole, death and never to be discovered.
LOOK CAREFULLY AT PICTURE NUMBER B 5
Then answer the following questions, as quickly as you can.

a. What is happening here? What are these people doing?
   Bantu umgodi. Baphetega amathile
   Edayimise noma ングide uMhlongo

b. In just a few words, how would you describe this kind of work?
   Lonsebenzi, umlali. Ngoba uyakhele
   Umgodi kanti suthi uMhlongo uKhokhho

 c. As you see them now, how are these people feeling?
   Baphile umfelo ethulweni. Uyasebenza
   Ubhekile umgodi. Uthu umgadikatik.

d. What are these people thinking?
   Bucabango ukuthi lokho. Edayimise
   Uhera, noma ングlide ukhize lathi

e. Why are they thinking this?
   Ukhize kakhumele, futhi ukhize, abu
   Kubhona nokubhla, ukhile ukufana

f. What kind of people usually do this work?
   Bani, abangamago izimwene zo. U
   Sebenza lyabopho. Kune notungaphu

g. To do this kind of work, what do these people need most?
   Ukhusebenza amandla nomzindo
   Is notuthi kubale busuthe kanye

h. Usually, what are the effects of this kind of work on people who do
   it?
   Uthetho umgodi kanye
   Notsho, notungaphu.
a) It is pipes for sucking petrol, he is warning
    that nothing goes wrong.

b) It is not completely free because nobody is
    watching him here.

c) It is a bad place with danger where one needs
    to work with care.

d) He is unwilling that the work is generally spoiled
    he might be chased away from here.

e) It is because he sees the pipes are too hot
    and the degree is high.

f) He gets frightened when he works alone because
    he might meet an accident.

g) He needs higher pay because his work is
    delicate.

h) He will have attained a noted position
    as indicated or been
LOOK CAREFULLY AT PICTURE NUMBER C 1
Then answer the following questions, as quickly as you can.

a. What is happening here? What is this person doing?

b. What kind of place is this?

c. As you see him now, how is this person feeling?

d. What is this person thinking?

e. Why is he thinking this?

f. How does this person feel about working alone?

g. To do this kind of work, what does this person need most?

h. In five years' time, what work will this person be doing?
He is dirty even with a machine. His person is working with a machine.
He hurts the hands, ears and eyes.
He is not free because he may get injured and not be paid any money.
He is lucky about his work so that he may not report it and it will always be right.

He feels he is not working alright because there is no one to write to.

It wants to do it well so that he can get money that satisfies him.

It is knowledge of work.

He will still be doing the same job until he dies or gets pension.
LOOK CAREFULLY AT PICTURE NUMBER D 4
Then answer the following questions, as quickly as you can.

a. What is happening here? What is this person doing?

b. In just a few words, how would you describe this kind of work?

 c. As you see him now, how is this person feeling?

d. What is this person thinking? Why?

e. How does this person feel about working alone?

f. To do this kind of work, what does this person need most?

g. Usually, what are the effects of this kind of work on people who do it?

h. In five years' time, what work will this person be doing?
They are working. He is repairing damaged electricity or he is changing the globe.

It is free. He is also thinking about doing his job.

He wants to have knowledge of the job and earn top pay.

He will be successful in this job because he was trained for it and he knows it. He will have knowledge of electricity and he is keen on his job.

c. He will be doing the same because for a person (black?) there is no position he can get.
LOOK CAREFULLY AT PICTURE NUMBER B C 1

This picture shows a person who has recently started in a new job. This job is paid better than his last job, but it is more difficult.

a. What is happening here? What is this person doing?

b. How does this person feel? What is he thinking?

c. To do this kind of work, what does this person need most?

d. Will this person be able to succeed in this new job, or not? Why?

e. In five years' time, what work will this person be doing?
This job is heavy and dangerous.
They are tired and angry but because they are forced, they are working.
They are wishing to win at the (horses) race so that they can stop doing this job.
This work eases them into business and yet the money they get is too little.
It is people who have no right to work where they please because of influx control.
They need more pay to console them because the work is hard.
They are very fast and if they are injured, they are not well compensated.
LOOK CAREFULLY AT PICTURE NUMBER B 5
Then answer the following questions, as quickly as you can.

a. What is happening here? What are these people doing?
   Labo bangazizengi.

b. In just a few words, how would you describe this kind of work?
   Inyama ungayi umadlalanga.

C. As you see them now, how are these people feeling?
   Lethu ngemva nokuphila wase bangazizengi.

D. What are these people thinking?
   Phezu, umintshi isithathale iindlela. 
   Imahume, abanye bakakazane nasebiza.

E. Why are they thinking this?
   Umthembiso abenzwa uMzimkulu. 
   Inyama inyembeni kantu imindawo yiluntu.

F. What kind of people usually do this work?
   Lethu, umkhathwa abahlali ngesi
   Sokwenzweni sapho beThanda. 
   Nokuphila [Inflow content].

G. To do this kind of work, what do these people need most?
   Ladingu, imali abantu abe
  友善的, umandla bangazizengi.

H. Usually, what are the effects of this kind of work on people who do it?
   Zinga ngayo, munye nepimi
   dinele kuhlala. 
   Nokuphila.
The man is weak.

It is a section of a machine

It is unhappy and fearful

He thinks if he gets injured nobody will see him as
he is alone.

It is because he has support (money) problems that he
does not need.

It feels like a prisoner because he is alone.

It needs money if he is to work willingly

He will be deny for some jobs because we (Blacks)
are stinged all chances of promotion.
LOOK CAREFULLY AT PICTURE NUMBER C 1
Then answer the following questions, as quickly as you can.

a. What is happening here? What is this person doing?

b. What kind of place is this?

c. As you see him now, how is this person feeling?

d. What is this person thinking?

e. Why is he thinking this?

f. How does this person feel about working alone?

g. To do this kind of work, what does this person need most?

h. In five years' time, what work will this person be doing?
This man is pretty hard.

This is a job that you should be trained in and it does not pay (the job).

It looks like he knows what he is doing.

He is not happy to work alone.

He needs enough money.

They get knowledge and chances to help themselves.

He will be doing the same jobs because we
LOOK CAREFULLY AT PICTURE NUMBER D 4
Then answer the following questions, as quickly as you can.

a. What is happening here? What is this person doing?

b. In just a few words, how would you describe this kind of work?

b. In just a few words, how would you describe this kind of work?

(c. As you see him now, how is this person feeling?

d. What is this person thinking? Why?

e. How does this person feel about working alone?

f. To do this kind of work, what does this person need most?

(g. Usually, what are the effects of this kind of work on people who do it?

h. In five years' time, what work will this person be doing?
This man is working with electricity.

It is unlikely that he is doing a delicate job and yet he is not paid well.

It needs to be trained on it.

It will succeed if he is paid satisfactory.

Because money makes one satisfied.

He'll be doing the same job because there are little chances of promotion.
LOOK CAREFULLY AT PICTURE NUMBER B C 1

This picture shows a person who has recently started in a new job. This job is paid better than his last job, but it is more difficult.

a. What is happening here? What is this person doing?

b. How does this person feel? What is he thinking?

Mebandza nthuthi mosebenzi
umsebenzi sinzazi kodwe imali agiyakho.

To do this kind of work, what does this person need most?

Mebandza nthuthi sengemadlala.

Will this person be able to succeed in this new job, or not? Why?

Ngikhumela inqa ekhophelwa
njendlela izikusayi. Ngoba imali
sengemadlala onqaba iyo.

In five years' time, what work will this person be doing?

Mebandza nthuthi sengemadlala
ngiyakho.
LOOK CAREFULLY AT PICTURE NUMBER B 5
Then answer the following questions, as quickly as you can.

a. What is happening here? What are these people doing?
   Working in a mine. The people are digging.

b. In just a few words, how would you describe this kind of work?
   Strenuous and uncomfortable.

c. As you see them now, how are these people feeling?
   Tense.

d. What are these people thinking?
   What they will do and whether they reach their homes.

e. Why are they thinking this?
   To avoid thinking about the possibility of the mine collapsing.

f. What kind of people usually do this work?
   Black who are from rural areas with few schooling.

g. To do this kind of work, what do these people need most?
   Physical strength.

h. Usually, what are the effects of this kind of work on people who do it?
   Become invalid at a young age.
LOOK CAREFULLY AT PICTURE NUMBER B 5

Then answer the following questions, as quickly as you can.

a. What is happening here? What are these people doing?
   - Building
   - Concrete mixing using
   - pipe lines
   - truck on a flat place

b. In just a few words, how would you describe this kind of work?
   - Very noisy
   - shore people working,
   - setting up, safety hat required for avoiding injuries

c. As you see them now, how are these people feeling?
   - Angry


d. What are these people thinking?
   - They are looking for somebody to
   - relieve them. We are working with our
   - own clothes like overalls here


e. Why are they thinking this?
   - They wanted to smoke, going to feel
   - toilet, so our dust/protective duty quite good

f. What kind of people usually do this work?
   - Skilled labor


g. To do this kind of work, what do these people need most?
   - Safety hats, glasses, protective
   - clothing, overalls


h. Usually, what are the effects of this kind of work on people who do it?
   - Stop working, feel a strain
This picture shows a person who has recently started in a new job. This job is paid better than his last job, but it is more difficult.

a. What is happening here? What is this person doing?
   Work on electric wires. This person is changing fuses.

b. How does this person feel? What is he thinking?
   He feels too much excited on this work. He is thinking he will be a good electrician very soon.

c. To do this kind of work, what does this person need most?
   This person needs education, skills and knowledge to do this kind of work.

d. Will this person be able to succeed in this new job, or not? Why?
   Yes, this person will be able to succeed in this new job, because as a new job to train he has got a lot of interest in what he does, and this rate how become sweeps well.

e. In five years' time, what work will this person be doing?
   In five years time this person will be a...
LOOK CAREFULLY AT PICTURE NUMBER B C 1

This picture shows a person who has recently started in a new job. This job is paid better than his last job, but it is more difficult.

a. What is happening here? What is this person doing?
   He is working. He is an engineer.

b. How does this person feel? What is he thinking?
   He feels happy. He is thinking to be efficient.

c. To do this kind of work, what does this person need most?
   He needs most good education and good practice.

d. Will this person be able to succeed in this new job, or not? Why?
   He is going to succeed because he got a good education before he was trained to this job.

e. In five years' time, what work will this person be doing?
   He will be as a self-employed man.
LOOK CAREFULLY AT PICTURE NUMBER B C 1

This picture shows a person who has recently started in a new job. This job is paid better than his last job, but it is more difficult.

a. What is happening here? What is this person doing?
   The person is fitting electrical wires

b. How does this person feel? What is he thinking?
   He feels unsafe in case he falls or gets shocked by wires

c. To do this kind of work, what does this person need most?
   Knowledge of electricity

d. Will this person be able to succeed in this new job, or not? Why?
   He will not be able to succeed because of the risk involved.

e. In five years' time, what work will this person be doing?
   He will be doing another job not as risky
LOOK CAREFULLY AT PICTURE NUMBER B C 1

This picture shows a person who has recently started in a new job. This job is paid better than his last job, but it is more difficult.

a. What is happening here? What is this person doing?
   - Work near electricity. With ladder. Take care with electricity.

b. How does this person feel? What is he thinking?
   - Feels like high job. He thing about the damaged old job switched.

c. To do this kind of work, what does this person need most?
   - Skill and ability.

d. Will this person be able to succeed in this new job, or not? Why?
   - Yes. It has taken most of his youth to study to come to where he is. He can't just throw in the last moment and be almost triumphed.

e. In five years' time, what work will this person be doing?
   - Fully fledged Electrician with work and certificate.
a) He is fixing electricity at the top of a pole.

b) (Irans) →

c) (Irans) →

d) No [crossed out] I see that he cannot do this job.

e) →
This picture shows a person who has recently started in a new job. This job is paid better than his last job, but it is more difficult.

a. What is happening here? What is this person doing?

b. How does this person feel? What is he thinking?

He's feeling right because he knows that he can do it well.

c. To do this kind of work, what does this person need most?

This man needs a good pay.

d. Will this person be able to succeed in this new job, or not? Why?

No way. Some big job.

Ruthie

Please care.

e. In five years' time, what work will this person be doing?

He will farms.
LOOK CAREFULLY AT PICTURE NUMBER B C 1

This picture shows a person who has recently started in a new job. This job is paid better than his last job, but it is more difficult.

a. What is happening here? What is this person doing?
   This is engineering work. The person...

b. How does this person feel? What is he thinking?
   The person feels nervous in front of the work. The work is very new to the writer.

c. To do this kind of work, what does this person need most?
   The person needs experience in this work and must be mechanically inclined.

d. Will this person be able to succeed in this new job, or not? Why?
   He will succeed in this new job because he will work hard and learn.

e. In five years' time, what work will this person be doing?
   This person will be a fully-fledged engineer.
APPENDIX E.

FORMAT AND SCHEMATA USED FOR SCORING COMPOSITE ACHIEVEMENT VARIABLES.
APPENDIX E

FORMAT AND SCHEMATA USED FOR SCORING COMPOSITE ACHIEVEMENT VARIABLES*

p.237 Format used for scoring incidence of types of achievement imagery.

pp.238,239 Definitions of types of achievement imagery.

ACHIEVEMENT-RELATED IMAGERY IN T.A.T. STORIES, WORK DESCRIPTIONS, AND JOB-EVALUATIONS

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SOURCE

I : p.16, q.8
II : p.17, q.a
II : p.22, q.h
II : p.22, q.i
TOTAL

(-AI indicates "non-achievement" imagery or demotivation.)

CASS. 5/80
DEFINITIONS

AI: Achievement Imagery:
1) Any Reference to achievement goal (success in competition with some standard of excellence) this could be stated explicitly or "fairly safely inferred".

2) Criteria for scoring:
   a) Competitive activity (other than pure aggression) where winning or doing as well or better than others is actually stated as the primary concern.
   b) As a, but not explicitly stated - i) affective concern over goal attainment, ii) certain types of instrumental activity.
   c) Self imposed requirements of goal performance.
   d) Unique accomplishment with inventions, artistic creations and other extraordinary accomplishments.
   e) Long term involvement in goal-directed activity.

- AI: Non-achievement Imagery: Negative values attitudes etc. in relation to success in competition etc. Actual mention of any wish, motive, or activity implying a motive, which actively impedes relevant instrumental activity and/or achievement;
   or, DEMOTIVATION

   Clear mention of changes of motivational state, or relevant attitudes, in a negative direction - i.e. in such a direction as to clearly reduce or impede instrumental activity and/or achievement.

N. Need for Achievement: Clearly stating the desire to reach an achievement goal. (wants, hopes, determination, etc.) Need is not inferred from Instrumental Activity.

I. Instrumental Activity: (+,?,-) There must be an actual statement of activity within the story, independent of both the original statement of the situation and the final outcome of the story. (Actual striving).

Ga. Anticipatory Goal States: (+,-) Anticipates goal attainment, or frustration and failure, respectively.

G. Affective States: (+, -) Emotional states associated with goal attainment and/or active mastery, or a frustration of the achievement-directed activity, respectively.

Nu P. Nurturant Press: Forces in the story, personal in nature, which aid the character in story who is engaged in achievement-related activity (aids, sympathises, encourages).

AchTh: Achievement Thema: When AI is elaborated in such a manner that it becomes the central plot or thema of the story.
NOTE: The following categories are not necessarily sub-categories of AI.

S. Act/Mot: Concern with, interest in, active awareness of, own self-actualisation*/Hertzberg "motivators" (responsibility, work itself, expertise/competence)

AI/Ach: Achievement imagery/concern with achievement.

Adv./Prom: Concern with, interest in, active awareness of, own advancement/promotion in work, but based on professionalism and commitment to the employer, NOT ON MERE DESIRE FOR STATUS.

Nu P: Nurturant press.

Fil: "Filialism". A particular, and somewhat gross form of Nu P. Desire for HELP tending toward FIRM LEADERSHIP or CONTROL.

SCORING QUALIFIERS

Nv "Naive" Qualifies imagery which is technically valid, but which is based on a recognizably naive or uninformed view.

SI "Sloganeer" Qualifies imagery which is technically valid, but which fairly evidently consists of the inauthentic or unreflecting reiteration of learned ideological/management/text-book/popular slogans or phraseology which are not the respondent's own considered views.

OR, Fine-sounding generalizations rather than remarks applicable to own particular situation.

* Involving, inter alia, interest in additional responsibility, further training, personal growth, broader understanding of functioning of Co., etc. IN THE REALM OF THE JOB.

** In the realm of (own) work.
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