



SPECIAL REPORT

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ANALYSIS AND EVALUATION OF BANTU JOBS
AT BENONI TEXTILE MILLS LIMITED

submitted to

INDUSTRIAL SOCIOLOGY DIVISION,
N.I.P.R., JOHANNESBURG

NATIONAL INSTITUTE FOR PERSONNEL RESEARCH
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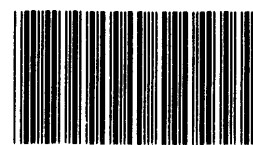
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CONTENTS

	<u>Page</u>
Acknowledgements	(i)
Synopsis	(ii)
1. Scope of the Study	1
2. Project Preparation	1
3. The N.I.P.R. Job Analysis and Evaluation Method	2
3.1 Standard Method	2
3.2 Deviations from Standard Method	3
4. Evaluation Results	4
4.1 General	4
4.2 Grade Definitions	5
5. Conclusions	8
5.1 Comparison of Two Factories	8
5.2 Job Analysis Method	8
Appendix I - Job Listing by Grade	
(i) Unskilled	I
(ii) Semi-Skilled	IV
(iii) Skilled	IX
Appendix II - Copy of Job Analysis Explanatory Pamphlet for Factory Staff	

This project was directed by Mr. D.J.M. Vorster. It was planned and supervised by R.F. Skawran.

The analysts were trained by N. Trethewey.

The jobs were analysed by M.C. Mauer, I. Georg, L. Bloom, S. Hall, P. Myburgh, K. Mauer, N. Trethewey.

The job evaluation and report was completed by N. Trethewey.

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SYNOPSIS

This study provides job classification data on the first stage of a project designed to compare the relative stability and productivity of Bantu workers in an urban industrial area with similar workers in a Border industrial area.

Five analysts were trained in the N.I.P.R. method of job analysis, and they then described and analysed all Bantu jobs at Benoni Textile Mills Ltd. Evaluation of this data enabled the jobs to be classified into one of three grades, viz. skilled, semi-skilled, and unskilled.

Three hundred and twenty four jobs were classified, with 19% of the labour force falling into the skilled category, 55% into the semi-skilled category, and 26% into the unskilled category.

Grade definitions and job listings by grade are included in the report. In addition, a number of recommendations are made regarding minor modifications in the future method of analysis and evaluation to be applied when analysing Bantu jobs in a Border industrial area.

1. SCOPE OF THE STUDY

The Industrial Sociology Division of the N.I.P.R. was approached by the Industrial Development Corporation with a request to undertake research into the comparative stability and productivity between Bantu employed in White urban areas and those engaged in the Border industrial areas. Two factories were selected by the I.D.C. as being suitable for the study because of comparable managerial policies and work content. They were:

- (1) Benoni Textile Mills Ltd. - White urban area.
- (2) Good Hope Textiles Ltd. (King Williams Town) - Border industrial area.

Comparing the urban Bantu worker with his counterpart in the rural area in terms of productivity, one of the basic requirements was to ensure that the jobs were in fact comparable. This indicated the need for a job evaluation of all jobs included in the sample. The Work Study Division was requested to provide assistance for this task in job analysis training, and by planning, and co-ordinating the field work at Benoni Textile Mills Ltd., and by doing the job evaluation of the jobs studied.

2. PROJECT PREPARATION

Initially it was decided to provide two members of the N.I.P.R. with on-the-job training of analysis skills by a competent analyst, and then for the three analysts to complete all Bantu jobs at Benoni Textile Mills. After 67 jobs had been completed a temporary halt had to be called to resolve various difficulties which were encountered. These included:

- (i) Slow and unsatisfactory progress due to inadequate training of the job analyst fieldworkers.
- (ii) Inadequate and incomplete labour records which made any pre-planning of field work difficult.
- (iii) Anxiety amongst a number of supervisors in the factory who felt that the study was linked with current rumours that the entire factory was soon to be moved to a Border industrial area.

To overcome these difficulties some time was needed, particularly with regard to the training of job analysts and the obtaining of more effective labour records.

Consequently, the following steps were taken to streamline the approach:

- (i) A greater number of analysts (N = 5) were trained at the N.I.P.R. in the job classification method.
- (ii) A number of visits were made to Benoni Textile Mills to acquaint all supervisors with the purpose of the study in order to allay their fears and gain their co-operation. (See also Appendix II - Circular for acquainting factory staff with the project).
- (iii) An accurate labour breakdown for each department was obtained from the appropriate departmental head. This information made it possible to do the necessary planning of the field-work.

3. THE N.I.P.R. JOB ANALYSIS AND EVALUATION METHOD

3.1 Standard Method

The N.I.P.R. Bantu job classification system classifies jobs according to the complexity level of the mental demands made upon the job incumbents.

To do this, a general description of a job being considered is prepared, indicating what functions the incumbent of that job performs and the manner in which he does so. This provides a basis for the analyst to obtain more specific information. Seven aspects or factors of the post are then investigated in greater detail. They are the following:

- (1) Decisions and Vigilance.
- (2) Controls and Checks.
- (3) Language Comprehension.
- (4) Language Expression.
- (5) Numerical Computation.
- (6) Education.
- (7) Experience.

Factor descriptions are prepared, setting out the highest complexity level indicated for each of the jobs being assessed. These factor descriptions are then rated against standard factor scale definitions by a panel of raters. The N.I.P.R. system safeguards itself against 'subjectivity' as much as possible by demanding critical incidents to substantiate its job factor descriptions. These critical incidents are actual samples of job functioning.

Once all the jobs have been analysed and rated, the rating scores are converted to standard scores and totalled to give a single numerical value for each job indicative of the level of mental complexity. e.g. the higher the numerical value, the more complex the level of mental demands imposed by the job.

Finally, when all jobs have been assigned standard numerical values, they are placed in rank order of complexity ranging from high to low. This initial classification of the jobs - placing them into a logical sequence - facilitates the later classification when the jobs are divided into skill grades, viz. skilled, semi-skilled and unskilled. Here, each job's factor description is compared to predetermined factor definitions for the various skill grades, and then depending upon the 'goodness of fit' is placed in one of the grades.

3.2 Deviations from Standard Method

The urgency for the analysts to complete all jobs at the factory, together with the need to reduce disruption of the factory flow of production as much as possible led to a number of changes in the standard method. They were:

- (i) The general description, breaking a job into functional components and providing a conceptual framework for the factor descriptions, was omitted completely.
- (ii) Ratings were done by the analysts themselves, immediately after the completion of a job's factor descriptions, instead of by a panel of raters.
- (iii) Analysts were urged to press on as quickly as possible, and in addition the quality of the descriptions was not

checked to ensure that they conformed to set standards.

It was realized that these changes would have an adverse effect upon the accuracy of the job analyses, but that they would also speed up the number of jobs an analyst could complete each day. However, keeping in mind the primary aims of the study, viz. to obtain a "reasonably accurate" classification of these Bantu jobs, it was felt that the more speedy completion of the job analyses would more than compensate for the slight fall-off in accuracy.

4. EVALUATION RESULTS

4.1 General

A total of 324 Bantu jobs at Benoni Textile Mills (including 67 from the initial study) were analysed and classified into rank order ranging from jobs which imposed the least mental demands upon their incumbents (e.g. Weft Carrier, Handlayer, etc.), to those which imposed the greatest mental demands (e.g. Technical Boss Boy, First Aider, Bantu Personnel and Wages Clerk, etc.). The rank order classification was based on standard numerical values derived for each of the jobs from the combined points of four factors:

- (1) Decisions and Vigilance.
- (2) Controls and Checks.
- (3) Education.
- (4) Experience.

By examining closely the rank order listing and comparing the jobs against the skill grade definitions, it was possible to determine cut-off points which categorized the jobs into either skilled, semi-skilled, or unskilled grades. The points range for each grade is:

SKILLED	41 - 72
SEMI-SKILLED	16 - 40
UNSKILLED	4 - 15

Of the 324 jobs analysed, 20 jobs were omitted from the final

grade classification. The information contained in the factor descriptions on these jobs was not sufficient to grade them accurately.

The percentage of jobs in each skill grade in relation to the total labour force was calculated to provide an indication of the validity of the cut-off points. This revealed the following:

Grade	No. of Jobs	%age of Labour Force
Skilled	61	18.82
Semi-skilled	179	55.24
Unskilled	84	25.92
Combined	324	99.98

Previous classification studies carried out in factories, where the nature of the work differs considerably from that found in the textile industry, indicated the trend for few skilled jobs and many unskilled jobs. The results obtained in the present study deviate from this trend. They are considered nevertheless valid since a large proportion of the Bantu jobs at Benoni Textile Mills consists of machine operatives. The job demands for such machine operatives are more typically of a semi-skilled nature.

4.2 Grade Definitions

Definitions typifying the complexity level of jobs falling within the three skill grades (the alphabetical listing of jobs by skill grade can be found in Appendix 1) are as follows:

UNSKILLED

Jobs are typically those involving straightforward tasks carried out on direct instructions, or else jobs which are of a short cycled, highly repetitive, nature (e.g. Can Carrier in the Spinning Department continually transports full cans from the Card Room to the Draw Frames, and then returns the empty cans back to the Card Room).

Decisions are based on simple perceptual cues easily distinguished from their background and requiring the roughest discrimination. Alternatives are clearly delineated by either superior's instructions or set procedure (e.g. Can Carrier observes which Draw Frames require full cans so that there will be no production delay, and then knows to transport cans to them).

The jobs are closely supervised, but some simple checks may be performed by the incumbent according to set rules and procedures (e.g. Porter in Cotton Store works under the direct supervision of the Boss Boy, but must ensure that he reads off the correct shipper's number when offloading bales from railway trucks).

Jobs at this level do not require either education or experience, although the incumbent may be required to recognize and associate words and signs with appropriate actions.

SEMI-SKILLED

Jobs involve a number of short-cycled interrelated processes of a repetitive nature (e.g. doffer on the speedframes in spinning department), and there is a limited field within which a particular skill or knowledge is required.

Decisions are based on more pronounced perceptual cues, involving increased acuity, which are repetitive but have slight variations (e.g. issues and receiving clerk in cotton store receives daily cotton issues requirements from blow room specifying number of bales and bale codes, and then has to select appropriate bales from stacks and modify records accordingly). Reasoning is straightforward with a limited number of alternatives (e.g. packer in the towel sewing department must be able to distinguish between three qualities of towels and napkins on the basis of their texture, and pack them into different sized boxes accordingly).

The incumbents perform own checks against a background of set rules and regulations, and there are thorough, but less frequent, checks from the supervisors. There is some scope for unrectifiable mistakes (e.g. if oiler on cards maintenance does not oil adequately, the card can seize up, necessitating the replacement of a bearing and loss of production of up to 5 - 6 hours).

Educational requirements range from no formal education but the ability to recognize numbers, words, sounds, and sizes (e.g. fitter's assistant in engineering workshop must be capable of distinguishing between different types and sizes of spanners), up to education to the equivalent of standard III.

Experience ranges from no previous experience up to experience in related routine tasks leading to a simple background knowledge.

SKILLED

Jobs involve semi-repetitive work ranging from lengthy and varied processes (e.g. Technical Boss Boy), to a more limited variety of processes (e.g. Hyster and Tractor Driver in the Spinning Cotton Store). They require the constant application of fairly intimate knowledge (e.g. first aider's knowledge of how to apply initial assistance to an injured worker), or specific skills within a particular field (e.g. assistant Boss Boy-Inspection in the Towel Sewing Department must ensure that the Inspectors do not pass towels and napkins for despatch which have dyeing, weaving, machinist, or cutting faults).

Decisions are based on semi-repetitive cues involving abstract reasoning, e.g. following of written instructions, ranging from cues which must be interpreted against specific memory content (e.g. 'End breaks in mill' from Technical Department must decide upon the cause of single, double, and multiple end breaks for intermediates, ringframes, cone winding, beaming, looms, etc.), to cues which require considerable perceptual acuity against some memory content and past experience (e.g. chauffeur must be on the alert continually to see that he adheres to rules and regulations of the road, and must have a good understanding of the layout of the Reef roads).

Random checks are made by supervisors, or else checks are dependant upon reports from the incumbents. The incumbents perform some own checks against a background of set rules and regulations, and in the higher jobs take limited action using their own discretion (e.g. General Boss Boy in Towel Sewing Department will decide whether an incumbent who is not coping with his job requires further training, transfer to another job within the department, or is incompetent, and will then recommend the appropriate steps to the supervisor).

Education requirements range from standard III to standard X.

Experience ranges from that acquired in routine tasks not necessarily related to the present job, through that acquired in related routine tasks (e.g. Booking Clerk in Finished Cloth Inspection), to specifically related experience to gain accuracy, competence, and more varied background and depth knowledge regarding a specific area (e.g. Bantu Personnel and Wages Clerk in Administration).

5. CONCLUSIONS

5.1 Comparison of Two Factories

The job analysis and evaluation of the Bantu posts at Benoni Textile Mills provides a sufficiently accurate breakdown of these posts into three skill grades. Provided that a similar classification exercise is performed at Good Hope Textile Mills in King Williams Town, it should be possible to compare jobs at the two factories which are at a comparable level of complexity in terms of the mental demands which the jobs impose upon their incumbents.

5.2 Job Analysis Method

In view of the limited future assistance the Work Study Division can provide on completion of this study, the following four recommendations should be considered seriously when proceeding with the job analysis study at King Williams Town:

- (1) The general description should be re-instated in the method of analysis to provide a more solid framework on which the

the factor descriptions can be based.

- (2) The analysts should make greater use of critical incidents to validate their factor descriptions, bearing in mind that this calls for actual samples of job functioning and not fabricated possible samples dependant upon the imagination of the interviewee.
- (3) The panel method of rating should be reverted to in order to introduce a greater degree of uniformity and accuracy to the analyses. This could be done on the return of the analysis team to Johannesburg and will depend upon recommendations (1) and (2) being implemented.
- (4) Time should not be wasted in analysing jobs where it is obvious into which skill category they should be placed, e.g. sweepers in the unskilled category, and drivers, first aiders, etc., in the skilled category. This recommendation should be treated with appropriate caution, and only strikingly simple or complex jobs should be placed straight into the two extreme categories.

APPENDIX I

Job listing by grade in alphabetical sequence

- (i) Unskilled
- (ii) Semi-skilled
- (iii) Skilled

UNSKILLED

JOB TITLE	SECTION	DEPARTMENT
Beam Carrier		Weaving
Beam Dyeing Helper		Dye House
Blanket Cutter	Raising & Finishing	Blanket Mill
Bobbin Collector and Layer	Speedframes	Spinning
Bobbin Stripper	Speedframes	Spinning
Bricklayer's Asst.		Engineering
Can Carrier	Card Room	Spinning
Carpenter's Asst.		Engineering
Clearer/Cleaner	Ringframes	Spinning
Collector and Layer	Doubling	Spinning
Cooling Down Operator		Dye House
Creelor	Warping and Sizing	Weaving
Cutting Table Boy		Orange Pockets
Dryer Operator (Centrifugal)		Dye House
Drying Ovens Operator	Waste Opening and Dyeing	Blanket Mill
Empty Pirm Collector		Weaving
Floor Cleaner		Dye House
Floor Sweeper		Weaving
Garbage Collector		Engineering
Handlayer	Weaving	Blanket Mill
Hemmer	Raising and Finishing	Blanket Mill
Hopper Boy	Carding & Spinning	Blanket Mill
Hydro Extractor	Waste Opening and Dyeing	Blanket Mill
Incinerator Attendant		Engineering
Label Sewer	Raising & Finishing	Blanket Mill
Lap Carrier	Card Room	Spinning
Lasher/Boiler Cleaner		Engineering
Loader	Carding & Spinning	Blanket Mill
Loader		Despatch
Loom Cleaner		Weaving
Machine Cleaner and Steam Operator		Dye House

JOB TITLE	SECTION	DEPARTMENT
Offcut Packer		Finished Cloth Inspection
Oil Boy	Weaving	Blanket Mill
Opener		Towel Sewing
Packing Boy	Raising & Finishing	Blanket Mill
Parcelling		Grey Room
Plaitor		Dye House
Plating Boy		Finished Cloth Inspection
Pockets Transporter		Orange Pockets
Porter	Cotton Store	Spinning
Rag Tearer	Waste Opening and Dyeing	Blanket Mill
Reed Boy	Weaving	Blanket Mill
Removing Tubes	New Auto Winder	Spinning
Roll Carrier		Weaving
Roller Picker	Ringframes	Spinning
Rolling Off & Brushing Boy	Raising & Finishing	Blanket Mill
Roll Trimming		Grey Room
Roof Cleaner		Weaving
Set Carrier	Ringframes	Spinning
Singe Operator		Dye House
Sorter & Sweeper	Waste Opening and Dyeing	Blanket Mill
Stitcher		Finished Cloth Inspection
Stoker		Engineering
Sweeper		Engineering
Sweeper		Finished Cloth Inspection
Sweeper		Grey Room
Sweeper		Orange Pockets
Sweeper	Drawframes	Spinning
Sweeper	Speedframes	Spinning
Sweeper	Ringframes	Spinning
Sweeper	Doubling	Spinning
Sweeper	Conewinding	Spinning

JOB TITLE	SECTION	DEPARTMENT
Sweeper	Card Room	Spinning
Sweeper	Warping & Sizing	Weaving
Sweeper & Waste Opener	Blow Room	Spinning
Tape Sewing	Maintenance	Spinning
Teaboy		Administration
Teaboy		Weaving
Tiger Teaser	Waste Opening and Dyeing	Blanket Mill
Transport	Doubling	Spinning
Transport	Warping & Sizing	Weaving
Tube Collector	Ringframes	Spinning
Turning Machine Operator		Orange Pickets
Vacuum Cleaner	Ancillary	Spinning
Waste Collector	Ancillary	Spinning
Waste Collection Boy	Waste Opening and Dyeing	Blanket Mill
Weft Carrier	Weaving	Blanket Mill
Wet Opener	Waste Opening and Dyeing	Blanket Mill
Willow Machine Operator	Waste Opening and Dyeing	Blanket Mill

SEMI-SKILLED

JOB TITLE	SECTION	DEPARTMENT
Assistant Clerk		Stores
Assistant Roller Coverer	Maintenance	Spinning
Bale Press Operator	Waste Opening and Dyeing	Blanket Mill
Bale Press Boy	Raising & Finishing	Blanket Mill
Baling Press Operator		Orange Pockets
Batching		Grey Room
Beam Boy	Warping & Sizing	Weaving
Beaming Clerk	Warping & Sizing	Weaving
Black & White Op.		Weaving
Blender	Waste Opening and Dyeing	Blanket Mill
Boilermaker's Asst.		Engineering
Boss Boy	Raising & Finishing	Blanket Mill
General Boss Boy		Despatch
Beninger and Open Soaper		Dye House
Boss Boy		
Boiler Cleaning B/B		Engineering
Boss Boy		Engineering
Electrical Boss Boy		Engineering
Yard Boss Boy		Engineering
Oiler Boss Boy		Weaving
Box Packer	Raising & Finishing	Blanket Mill
Bundler		Orange Pockets
Can Spinning Operator	Carding & Spinning	Blanket Mill
Canvas Inspection		Grey Room
Checking Loom Changes		Technical
Cheese Winder	Doubling	Spinning
Clerk		Dye House
Clerk		Grey Room
Clerk	Weaving	Blanket Mill
Condensor Boy	Carding & Spinning	Blanket Mill
Cone Dyeing Operator		Dye House
Cone Inspection and Stamping	Conewinding	Spinning

JOB TITLE	SECTION	DEPARTMENT
Cone Winder (Single)	Conewinding	Spinning
" (Folded)	Conewinding	Spinning
" (Grey)	Conewinding	Spinning
" (Rewind)	Conewinding	Spinning
Contract Hotting Clerk		Finished Cloth Inspection
Contract Inspector		Finished Cloth Inspection
Cotton Feeder and Bale Opener	Blow Room	Spinning
Counter		Orange Pockets
Creelor	Conewinding	Spinning
Cutter		Towel Sewing
Cutting Tread Boy		Orange Pockets
Denim & Drill Inspection		Grey Room
Doffer	New Auto Winder	Spinning
Doffer	Ringframes	Spinning
Doffer	Speedframes	Spinning
Drawers and Reachers		Weaving
Dye Cheese Winder	Doubling	Spinning
Dyeing Boy	Waste Opening and Dyeing	Blanket Mill
Dye Plant Operator		Orange Pockets
Farmer Norton Padding Machine Operator		Dye House
Finishing Boy	Raising & Finishing	Blanket Mill
Fitter's Asst.		Engineering
General Clerk		Finished Cloth Inspection
Gestetner Machine Op.		Administration
Grease Boy	Dye Shop	Engineering
Hamel Operator	Doubling	Spinning
Head Doffer	Ringframes	Spinning
Heavy Platt Op.	Doubling	Spinning
Helper	Warping & Sizing	Weaving
Humidity Checks in Mill		Technical
Humidity Repairer		Weaving
Inspector		Orange Pockets

JOB TITLE	SECTION	DEPARTMENT
Inspector		Towel Sewing
Issues Clerk		Stores
Issues & Receiving Clerk	Cotton Store	Spinning
Issuing Carding Clerk		Stores
Jig Operator		Dye House
Knotter		Weaving
Knotter Repairer	Ancillary	Spinning
Laphead Tenter	Blow Room	Spinning
Light Platt Op.	Doubling	Spinning
Loader	Warping & Sizing	Weaving
Machinist		Towel Sewing
Marking Boy		Despatch
Messenger/Teaboy		Engineering
Messenger		Stores
Messenger/Post Boy		Technical
Micronaire Clerk	Cotton Store	Spinning
Motor Mechanic's Asst.		Engineering
Multi Winder	Doubling	Spinning
N/S Artisan's Asst.		Engineering
Oil Boy	Carding & Spinning	Blanket Mill
Oiler	Maintenance	Spinning
Oiler	Speed Frames	Spinning
Oiler/Greaser		Weaving
Opening Machine Op.	Waste Opening and Dyeing	Blanket Mill
Open Soaper and Continuous Drying		Dye House
Packer	Ancillary	Spinning
Packer		Towel Sewing
Packer/Spare Spinner	Carding & Spinning	Blanket Mill
Pad Roll Operator		Dye House
Painter		Engineering
Painter & Window Repairer		Engineering
Physical Stock Taker		Stores
Pirn, Cop, and Holt Winders		Weaving
Pirn Stripper		Weaving
Plaiting Machine		Grey Room

JOB TITLE	SECTION	DEPARTMENT
Plumber's Asst.		Engineering
Police Boy		Weaving
Preparer/Finisher		Weaving
Production Clerk		Orange Pockets
Pump Station Att.		Engineering
Raising Boy	Raising & Finishing	Blanket Mill
Receiving Carding Clerk		Stores
Roll Carrier Clerk		Weaving
Sample Room Clerk		Finished Cloth Inspection
Scale Boy	Waste Opening and Dyeing	Blanket Mill
Scaling Boy		Despatch
Scaling		Finished Cloth Inspection
Scaling		Grey Room
Scotch Feed Boy	Carding & Spinning	Blanket Mill
Sewing Machinist	Maintenance	Spinning
Sewn Pockets Inspector		Orange Pockets
Shift Clerk		Weaving
Shrinkage Tester		Technical
Shuttle Repairer		Weaving
Spanner Boy	Carding & Spinning	Blanket Mill
Spanner Boy (Blow Room)	Maintenance	Spinning
Spanner Boy (Cards)	Maintenance	Spinning
Spanner Boy (Conewinding)	Maintenance	Spinning
Spanner Boy (Drawframes)	Maintenance	Spinning
Spanner Boy (Doubling)	Maintenance	Spinning
Spanner Boy (Rings)	Maintenance	Spinning
Spanner Boy (Speeds)	Maintenance	Spinning
Spanner Boy (Looms)		Weaving
Spanner Boy (Winding)		Weaving
Spinner (4 sides)	Ringframes	Spinning
Spinner (6 sides)	Ringframes	Spinning
Spinning Count and Strength Control		Technical
Stamping Machine Op.		Finished Cloth Inspection

JOB TITLE	SECTION	DEPARTMENT
Starch Mixer	Warping and Sizing	Weaving
Steel Cone Winder	Doubling	Spinning
Stenter Operator		Dye House
Stillage Making		Grey Room
Store Clerk		Weaving
Stripping Boy	Carding & Spinning	Blanket Mill
Summarizing End Breaks		Technical
Sweeper/Oiler/Cleaner		Orange Pockets
Tensile Testing		Technical
Tenter (8 deliv.)	Drawframes	Spinning
Tenter (10 deliv.)	Drawframes	Spinning
Tenter (16 deliv.)	Drawframes	Spinning
Tenter (20 deliv.)	Drawframes	Spinning
Tenter	Card Room	Spinning
Tenter	Speed Frames	Spinning
Tenter	New Auto Winder	Spinning
Towelling Inspector		Finished Cloth Inspection
Transport	Conewinding	Spinning
Transport		Grey Room
Trende Inspector		Finished Cloth Inspection
Turner's Assistant		Engineering
Warping Clerk	Warping & Sizing	Weaving
Warping Machine Op.	Warping & Sizing	Weaving
Watchman		Security
Weaver	Weaving	Blanket Mill
Weaver		Weaving
Weft Carrier		Weaving
Weight Clerk	Conewinding	Spinning
Weight Clerk	Doubling	Spinning
Weight Clerk	Ringframes	Spinning
Weigher	Raising & Finishing	Blanket Mill
Welder's Assistant		Engineering
Winch Operator		Dye House
Yarn Carrier		Weaving
Yarn Store Issue Clerk	Ancillary	Spinning

SKILLED

JOB TITLE	SECTION	DEPARTMENT
Assistant B/B (Inspection)		Towel Sewing
Asst. B/B (Packing & Wrapping)		Towel Sewing
Bantu Personnel and Wages Clerk		Administration
Beams Boss Boy		Weaving
Beam Gaiters		Weaving
Booking Clerk		Finished Cloth Inspection
Boss Boy	Carding & Spinning	Blanket Mill
Boss Boy	Waste Opening and Dyeing	Blanket Mill
Boss Boy Jigs		Dye House
Boss Boy Starch & Dryer		Dye House
Boss Boy		Finished Cloth Inspection
Boss Boy		Grey Room
Boss Boy		Orange Pockets
Boss Boy General		Orange Pockets
Boss Boy	Blow Room	Spinning
Boss Boy	Card Room	"
Boss Boy	Conewinding	"
Boss Boy	Cotton Store	"
Boss Boy	Doubling	"
Boss Boy	New Auto Winder	"
Boss Boy	Ringframes	"
Boss Boy	Speedframes	"
Boss Boy		Stores
Boss Boy		Technical
Boss Boy	Warping & Sizing	Weaving
Card Setter	Maintenance	Spinning
Chauffeur		Administration
Chief Clerk		Orange Pockets
Clerk	Carding & Spinning	Blanket Mill
Clerk & Hyster Driver	Waste Opening and Dyeing	Blanket Mill

JOB TITLE	SECTION	DEPARTMENT
Clerk		Towel Sewing
Colour Store Boy		Dye House
Compressor Attendant		Engineering
End Breaks in Mill		Technical
First Aider		First Aid
General Boss Boy		Towel Sewing
General Boss Boy		Weaving
Head Clerk	Warping & Sizing	Weaving
Head Roller Coverer	Maintenance	Spinning
Head Scourer	Maintenance	Spinning
Humidification	Ancillary	Spinning
Hyster & Tractor Driver	Cotton Store	Spinning
N.E.P.Count and Tachometer Operator		Technical
Pirm Winding Clerk		Weaving
Rope Slicer & Belt Boy	Maintenance	Spinning
Sargeant		Security
Scourer	Maintenance	Spinning
Senior Clerk		Weaving
Shift Boss Boy		Engineering
Shift Boss Boy		Weaving
Sizing Machine Operator	Warping & Sizing	Weaving
Spindle Setter - Rings & Doubling	Maintenance	Spinning
Staff Clerk	Warping & Sizing	Weaving
Stock Control Clerk		Despatch
Store Boy		Engineering
Tie on and Inspector		Weaving
Typist/Shrinkage Records/ Filing		Technical
Weaving and Break Tests		Technical
Wrapping	Ancillary	Spinning

APPENDIX II

Pamphlet acquainting factory staff with the purpose for,
and requirements of a job analysis exercise.

1. INTRODUCTION.

To determine the differences and similarities which exist between Bantu employed in White urban areas and those working in Border industries, in respect of stability and productivity and to identify those factors that give rise to these differences and similarities.

During this study, therefore, quite a number of comparisons will be made. As mentioned already one of these will involve the comparison in terms of productivity between the urban Bantu worker and the rural labour. To do this it will be necessary to conduct a job analysis programme to ensure whether the jobs studied are in actual fact comparable or not. To avoid any misunderstanding as to what such a job analysis programme entails we are providing you with the necessary details on the job analysis programme.

2. WHAT IS JOB ANALYSIS?

2.1 Job analysis is the detailed study of jobs within an organization. This type of study makes it possible to compare jobs for classification purposes, e.g. how a job compares with another in two different factories. In this particular instance, the jobs are being compared with one another in terms of the complexity of mental demands, i.e. arranging them from those jobs where the mental demands are the most complex, down to those in which the mental demands are the least complex.

2.2 The following seven factors have been isolated as giving a good indication of the level of required mental demands for jobs.

1. Decisions and Vigilance - the key factor in the job analysis system. It refers to the degree of alertness required, as well as to the level of decision making needed to perform a job satisfactorily.
2. Controls and Checks - highlights the method and extent of supervision, as well as the presence of standard rules and regulations.
3. Language Comprehension - refers to the number of languages, i.e. English, Afrikaans, vernaculars, which the incumbent must understand, together with the extent required of technical knowledge and reading ability.

4. Language Expression - refers to the range and complexity of language which the incumbent must use, together with the necessary writing ability.
5. Numerical Computation - the extent of arithmetical knowledge which the incumbent must be capable of using.
6. Educational requirements - the preferred level of standard schooling indicated by the previous three factors.
7. Required experience - the type and extent of experience, i.e. general experience in a wide field or specifically related experience, etc.

The analyst obtains the necessary information on each of these factors, and then proceeds to classify the jobs according to a grade classification system.

- 2.3 It must be emphasized that job analysis is concerned with the mental demands of the job only, and not with the merits of the individual performing that job. The analysis is independent therefore of the extent to which a job incumbent answers to the demands made upon him, i.e. whether he is a good or a bad worker.

3. WHAT DOES JOB ANALYSIS INVOLVE?

- 3.1 When dealing with Bantu jobs as is the case in this exercise, information on the jobs is obtained mainly by interviewing the supervisors. The advantages are twofold. Firstly, it avoids language difficulties between the Bantu job incumbents and the analyst. Secondly, it saves time as the supervisor usually can give all the information required on the jobs he supervises. Explanations to Bantu workers become unnecessary therefore, and they are not interrupted in their work.
- 3.2 The analyst will ask the supervisor to show him around the department very briefly. This enables him to understand how the various jobs within that department tie up with one another.

- 3.3 After this, the analyst dealing with one job at a time, will ask the supervisor to give him a general description of WHAT the incumbent does. This is a straightforward account of his activities and serves to assist the analyst in forming a clear and more specific impression of the job together with his earlier on-the-job observations.
- 3.4 The last stage involves the actual analysis of the jobs with the assistance of the previously mentioned 7 factors. Interest shifts from viewing the job as a whole, to viewing and analyzing specific aspects of the job.

4. WHAT WILL BE REQUIRED FROM THE SUPERVISOR?

- 4.1 The supervisor will supply the analyst with the information he requires on the jobs in his department. He will not necessarily need to describe the job of every individual in his department, as in certain instances a number of individuals perform identical jobs and a description for each individual would involve unnecessary duplication. For example, shift work involves two groups of people performing the same work at different times, and a description of the one group is adequate.
- 4.2 The analyst has been trained in the techniques of job analysis and will therefore be able to guide the supervisor into supplying the necessary information. The supervisor will have a good idea of what is wanted from him after one or two jobs have been described and analyzed.
- 4.3 The length of time taken to deal with the jobs varies from one job to another depending upon how involved they are. For example, a floor sweeper's job will be easier to describe and requires less information than will a machine operator's or a clerk's job. It has been found that the length of time taken to describe and analyse a job varies between 10 to 30 minutes.

