The Historical and Contemporary Use of Job Evaluation in South Africa

Jacques Perold

Historical developments

The use of job evaluation systems in South Africa can be seen to have developed in two separate "stages", the first occurring in the mining sector and the second in the manufacturing sector.

The largest company in the mining sector, the Anglo American Corporation (AAC) was the first to introduce job evaluation. Although personnel systems of one form or another had been in use since 1946, job evaluation as a formal system was first used in AAC in 1961. Minimum wages recognised by the Chamber of Mines had not changed since 1955, and the purpose behind the introduction of job evaluation in 1961 "...was to prepare the basis for a new wage scale designed to meet the requirements of the time." (1) A requirement of the new wage scale was that it should allow for greater differentiation of those jobs carried out by Black underground workers than the previous wage structure allowed. The job evaluation system that was developed consisted of three separate 16-factor plans, one each for (i) non-supervisory jobs, (ii) supervisory jobs, and (iii) clerical jobs. This "triple" wage system which allowed for racial discrimination remained in use until 1971.

During the ten years in which this system operated, AAC experimented with other systems in other areas. The most important of these was a job evaluation system in an iron-ore mine in Swaziland that required a single job structure with a single wage system. The job evaluation system that was developed (by W Hudson of AAC) was a 26-factor system which, despite it being a single system, provided for greater job and wage differentiation. The 26-factor system was implemented in all of AAC's gold mines between 1971 and 1973.
reasons why this system was favoured over the old system was from the need to deal with upward pressure on wage scales (due to an increase in inflation, and growing concern about the very low levels of Black wages) (2) to corporate policy with regard to hierarchical organisation without discrimination and the need for a "progressive wage system".

The implementation of this single "unified" wage system was not without its problems, for as it began to take real effect, resistance to it became evident. This came largely from the mine managers who felt that the system tended to discriminate against white clerical workers. (3) That this feeling emerged was more than likely due to the fact that between 1970 and 1973, the increase in white wages was significantly lower than the increase in black wages - the latter rising by 60% during this period.

The resistance of the mine managers was one reason why AAC decided to look for a new job evaluation system. There were however other important reasons which should be mentioned: firstly, there had been strong resistance from the white Mine Workers Union (MWU) to the installation of a job evaluation system which provided for a "unified" wage structure which challenged traditional wage bargaining on the basis of job reservation and classification by race. There was thus the need for a system which was acceptable to the MWU.

Secondly, there had always been a dispute in the Chamber of Mines over AAC's black pay structure, with the other members of the Chamber arguing that AAC tended to corner their own supply of labour by paying approximately 10% above the market rate. In order to resolve this dispute, it was suggested that a standardised system be used throughout the mining industry. Although the 26-factor plan was suggested by AAC, other members of the Chamber argued against this system by pointing out some anomalies in that system when compared with their own wage structures. Thus there was also a need for a system which was acceptable to all members of the Chamber.

Lastly, AAC had by 1973 diversified its operations to the extent that its investments (in terms of its control over
subsidiaries) covered a number of sectors in the economy besides mining. A standardised job evaluation system which could be used throughout the corporation would facilitate planning in terms of a standardised wage structure as well as allow for personnel to be transferred from one company to another within the corporation. In this the 26-factor plan was unsuitable since its factors were chosen specifically for the type of jobs found in the mines.

A number of systems were looked into in order to satisfy the above criteria. Amongst them were the more generalised point systems (which were felt to be too arbitrary in their ranking), and the HAY Guide Chart system (which was rejected because it required too much modification) (4). The system that was finally chosen was the Paterson system. It was felt that besides being able to satisfy most of the corporation's requirements, this system was also an international system; and secondly, it had a high correlation with the 26-factor system which meant that few changes would have to be made in implementation. Furthermore, a pilot study which tested the differences between the Paterson system and both the NIPR Q-method and the Peromnes systems also showed high correlations between them. (5)

Since 1975, the Paterson system has been installed throughout the corporation. It achieved two of AAC's aims in that firstly although it had taken some years, the whole of the mining industry was using the Paterson system by 1982; and secondly, seeing that most of the companies within the corporation used the Paterson system, inter-company transfers were facilitated.

One aim that was not achieved was that of justifying the system to the MWU. As with the 26-factor system, the Paterson system provided for a "unified" wage structure which was unacceptable to the union. According to the personnel manager of the Gold Division of AAC, the MWU "hates Paterson's guts" because black jobs were sometimes graded higher than white jobs, and also because the MWU often did not agree with the wages that were generated by the Paterson system (6). This occurred because the union did not intend losing the higher wage rates they had fought for in the past.
The second "stage" in the use of job evaluation in South Africa began with the development of a job evaluation system locally in the mid-1960's - the Castellion system initially researched by Prof S Biesheuvel of the NIPR. Together with Dr L Cortis, Biesheuvel developed and tested the system for the South African Breweries Group. In a joint venture with the Sanlam Group, the Castellion job evaluation system was implemented in various companies within and outside these groups. The number of systems implemented grew to the extent that a salary survey (the Castellion survey) was developed to complement the job evaluation system. This early survey made use of a model company in which certain "key" jobs were defined by means of job evaluation. For the survey, participating firms were required to submit information concerning their own pay levels for each of the key jobs. Once all this information was processed, the wage and salary ranges for each job, together with other information such as conditions of service, fringe benefits, etc. were made available to the participating companies.

In the early 1970's, the Castellion job evaluation system and salary survey was taken over by the Peromnes company. In a slightly modified form, both the job evaluation system and the salary survey have since been marketed under that name. Peromnes was marketed in 1982 by a group of management consultants - Fine, Spamer and Associates (FSA).

In parallel with the development of Castellion and Peromnes was the development of two other salary surveys - the HAY survey (which is linked to the HAY job evaluation system), and the P-E survey. The P-E survey grew out of the survey unit of Urwick International (a group of international management consultants), which itself merged with URL Management Services in 1973. The P-E survey has since 1979 been based on the Paterson job evaluation system.

**Job Evaluation in South Africa in the 1980s**

In order to determine the extent to which job evaluation is being used in South Africa today, a postal survey (hereafter referred to as the "Company Survey") of all companies
listed on the Johannesburg Stock Exchange was undertaken between June and September 1982.

In addition to this, a further 20 questionnaires were mailed to local Cape Town offices of multinational corporations (MNC's) operating in South Africa. The companies chosen were the first 20 MNC's operating in South Africa that were rated in the Financial Mail's 1982 "100 Top Companies - Global Giants" survey. The aim of this small survey was merely to explore the kinds of job evaluation systems that MNC's were using. Of the 20 questionnaires that were sent, 10 replies were received. Of the 10 responses, 2 used the Peromnes system; 3 used the HAY system; 4 used their own company's (head office) system, while one company was still considering the implementation of a job evaluation system.

The results of the company survey were as follows:

Of the 152 responses,
- 78 were using (or in the process of implementing) a formal job evaluation system,
- 50 were not using a formal job evaluation system, and
- 17 were considering implementing a job evaluation system, and
- 7 did not (or would not) give the required information.

Table 1: Distribution of Companies' use of Job Evaluation by Standard Industrial Classification (SIC) Economic Sectors:

<table>
<thead>
<tr>
<th>SIC Economic Sector</th>
<th>Use JE</th>
<th>Not Using JE</th>
<th>Considering JE</th>
<th>Info. not given</th>
<th>Sector Total</th>
<th>Sector as % of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Fishing &amp; related activities</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>2.6</td>
</tr>
<tr>
<td>Mining &amp; Quarrying</td>
<td>21</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>25</td>
<td>16.4</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>33</td>
<td>14</td>
<td>8</td>
<td>3</td>
<td>58</td>
<td>38.2</td>
</tr>
<tr>
<td>Electricity, Water &amp; Gas</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>Construction</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>3.3</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>6</td>
<td>3.9</td>
</tr>
<tr>
<td>Retail Trade, Catering &amp; Accommodation</td>
<td>9</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>17</td>
<td>11.2</td>
</tr>
<tr>
<td>Transport, Storage &amp; Accommodation</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2.0</td>
</tr>
<tr>
<td>Finance, Insurance &amp; Business services</td>
<td>6</td>
<td>16</td>
<td>2</td>
<td>2</td>
<td>26</td>
<td>17.1</td>
</tr>
<tr>
<td>Community, Social &amp; Personal Services</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Other sectors not specified above</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td>4.6</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>78</td>
<td>50</td>
<td>17</td>
<td>7</td>
<td>152</td>
<td>100.0</td>
</tr>
</tbody>
</table>
One of the aims of the company survey was to determine the pattern of implementation of job evaluation systems over the last 10 years. Companies were asked to give the month and the year in which the implementation of their system was complete, or indicate whether the implementation of their system was not yet complete. Table 2 shows how there had been an upsurge in the implementation of job evaluation systems in the 3 years leading up to 1982.

Table 2: Number of Job Evaluation systems installed each year from 1972 to 1982.

<table>
<thead>
<tr>
<th>Year</th>
<th>72</th>
<th>73</th>
<th>74</th>
<th>75</th>
<th>76</th>
<th>77</th>
<th>78</th>
<th>79</th>
<th>80</th>
<th>81</th>
<th>82</th>
<th>Not Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systems</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>7</td>
<td>9</td>
<td>12</td>
<td>25</td>
</tr>
</tbody>
</table>

51 of the 78 companies with a formal job evaluation system had completed the implementation of their systems. The average time taken to install these systems ranged from 3 to 12 months.

Of the 78 companies that used (or were in the process of implementing) a formal job evaluation system, the breakdown of the different systems were as follows:

- Paterson - 44
- Peromnes - 21
- HAY/MSL - 6
- Castellion - 2
- Own "in-house" system - 16

Nine companies used a combination of 3 of the above systems. Most of the companies that are using a combination of systems used their own "in-house" systems as part of the combination. Combinations of systems are often HAY for senior and top management, and Peromnes, Paterson or Castellion for middle management downwards. (e.g. AECI, SAB, Argus)

It can be seen from table 3 that the majority of job evaluation users were the large employers. An analysis of the 78 respondents using job evaluation showed that, if the 10
responses which did not disclose their workforce size are omitted, 55 out of the remaining 68 respondents, i.e. 81%, were companies with more than 1000 employees. This suggests that at a certain point (in terms of workforce size), the use of a formal job evaluation system becomes attractive to companies. This was borne out to some extent by the survey to determine how and why job evaluation was being used.

How and why job evaluation was being used

Respondents to the Company Survey were asked to give the three main reasons why they were using (or not using) job evaluation. The five reasons with the highest frequency (in descending order) in each case were as follows:

(a) Reasons for using Job Evaluation

1. It provided the basis for determining the company's wage structure.
2. It provided the means by which jobs could be ranked in an "equitable" manner so that the

Table 3: Distribution of use of Job Evaluation system by company workforce size

<table>
<thead>
<tr>
<th>Company Size</th>
<th>Paterson</th>
<th>Permones</th>
<th>HAY</th>
<th>Castel-</th>
<th>In-house</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;500</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>501-1000</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>1001-5000</td>
<td>10</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>5</td>
<td>22</td>
</tr>
<tr>
<td>5001-10000</td>
<td>4</td>
<td>9</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>19</td>
</tr>
<tr>
<td>10000+</td>
<td>13</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>24</td>
</tr>
<tr>
<td>Size not stated</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>TOTAL</td>
<td>44</td>
<td>21</td>
<td>6</td>
<td>2</td>
<td>16</td>
<td>89</td>
</tr>
</tbody>
</table>
"relative worth" of the job could be determined (i.e. to determine "fair pay").
3. It enabled the company to participate in salary surveys and relate their pay scales to market norms.
4. It provided a means by which "career paths" could be defined.
5. It enabled respondents to identify the "wage gap" and enabled them to create a "unified" wage curve.

(b) Reasons for not using job evaluation
1. The company did not feel that it was necessary.
2. Industrial Council agreements provided for job grading and pay scales.
3. Resistance was experienced from management to having a job evaluation system installed.
4. There was not a personnel department in the company - more than likely indicating that the company was too small (in terms of workforce size).
5. The cost involved in implementing a job evaluation system was too high.

Job evaluation and salary surveys

The salary survey most widely used in South Africa in 1982 was FSA's Top Executive survey which has the greatest number of participating organisations, followed by the P-E Top Executive survey, with Hay trailing below. The P-E's General Staff survey is far bigger than the Peromnes or FSA General Staff survey. These surveys were one of many services offered by management consultants such as FSA (who market Peromnes), P-E Consultants and the HAY group. FSA produce two General Staff surveys - the Peromnes survey (solely for use by those using the Peromnes job evaluation system) and their General Staff survey which is based on FSA's new TASK system of job evaluation. (This system is almost identical to the Paterson system and has a direct correlation.)

The surveys consisted of a large number of companies (sometimes well over 1,000) contributing information concerning their own pay scales for each job in their company. Since
job evaluation provided the means by which jobs were analysed, described, graded and assigned pay scales, companies that participated in these surveys were encouraged to implement a job evaluation system, although it was not essential for companies to have a job evaluation system to participate in a salary survey. By linking job evaluation to salary surveys, standardisation was facilitated in that when a company submitted information concerning a particular job, and it was compared with information concerning the same job for other companies, job evaluation's grading process could ensure that the jobs being compared were the same. In other words, besides allowing for the comparison of jobs within a company (ie. in determining the company hierarchy), the job evaluation systems being used also allowed for external comparisons to be made (ie. outside the company).

The collected information was processed and analysed by the management consultants conducting the survey, who publish the results either annually or bi-annually. These results were made available only to the companies that participated in the survey. For each job, the following information was given: median pay; minimum and maximum pay; average pay; the upper and lower quartiles and in some cases the 90th percentile of the pay range; information concerning benefits and incentives; as well as comparisons between different geographical regions, economic sectors, and comparisons over time periods.

The information for all jobs was then pooled so that more general conclusions could be made. These include statistics on pay differentials by sex, race, location and "employee function", eg. clerical, financial, data processing, etc; staff turnover; difference between industries and economic sectors, as well as general notes on benefits that companies provided, their pay policies, and their conditions of employment. It is clear that companies armed with such information were in a powerful position in that the information provides them with a clear picture of what the labour market looked like (ie in terms of the price of labour). It meant that rather than competing with each other on an unknown labour market, companies could price them-
selves into a particular section of the market - in essence it enabled them to see what they could get away with. This has been clearly stated by Prof Biesheuvel of the Wits Business School who argued against the idea that salary levels could be used by companies to compete with each other. If companies used salary surveys, he maintained "...they would be acting on valid information, whereas without it they are more likely to be guided by guesswork, by the starting salaries demanded by those responding to advertisements, who frequently overstate their current earnings, and by a desire to play safe and not lose out in competition for scarce resources. No one wants to pay more than he needs to, and the survey indicates how much that should be."(7)

The fact that only companies who participated in the salary surveys had access to this information is significant in that it is indicative of the phase of monopoly capital in the South African economy: the use of salary surveys was a very real example of how capitals combined (their information in this case) to maintain their power over labour in general.

Furthermore, the linked salary surveys and job evaluation systems rivaled the industrial council system as a method of wage determination in the country. In fact they probably surpassed the industrial councils since the job evaluation systems set the actual wage rates within fairly narrow limits whereas industrial council agreements only lay down the minimum wage levels for the various grades.

Footnotes:

1 W Hudson, 1973
2 S Van Coller, 1974, pl
3 Interview with Bill Roodnick, Divisional Personnel Manager, AAC Gold Division, 22.4.82
4 Interview with Bob Goodbrand, Personnel Manager, AAC Head Office, 19.4.82
5 Interview with Bill Roodnick
6 Ibid
7 Prof S Biesheuvel, unpublished MBA lecture notes, 1976
A Guide to Job Evaluation Systems Used in South Africa

Len le Roux

This article provides a description of three of the most commonly used job evaluation systems in South Africa, namely the Paterson system, the Peromnes system, and the Castellion system, and mentions two other systems also in use.

But firstly, what is Job Evaluation? It is primarily concerned with the description of jobs and their subsequent grading in order to determine their wage levels. "Job Evaluation is a method to describe, analyse, compare and evaluate jobs within a unit, a branch, or an industry on the basis of the work content and the job requirements in order to place them under particular wage or salary grades." *

The Paterson system

The Paterson system bases the grading of jobs purely on the level of decision-making which a job entails. To facilitate the grading Paterson has identified six levels of decision-making, which he has called Bands, and these Bands he correlated with six levels of organisation. These levels are:

Band F - policy making decisions - top management
Band E - programming decisions - senior management
Band D - interpretative decisions - middle management
Band C - routine decisions - skilled workers
Band B - automatic decisions - semi-skilled workers
Band A - defined decisions - unskilled workers

The bulk of workers in South Africa are restricted to the Bands A and B, the lowest levels of decision-making, which limit and restrict the control they have over the operation of their work. A worker in Band A (defined dec-

* H Pornschlegel, Job Evaluation and the role of trade unions, ILO Geneva, p12
is ion) has little choice; the worker is told exactly and precisely, how and when to perform a certain operation. However, there is a further sub-division within these Bands. Each Band is divided into two grades, (except for Band A) to give eleven grades. The upper grade is a supervisory grade and co-ordinates the work of the people in the lower grade of the Band, except for Band A whose supervisors are in Band B. Then there are also a number of sub-grades in the lower grade, to give a total of five sub-grades in each Band, except for the lowest Band A which only has one grade, divided into three sub-grades. This then gives a grand total of 28 grades. Table 1 illustrates what the Paterson job hierarchy looks like.

Table 1: Paterson Job Hierarchy

<table>
<thead>
<tr>
<th>Band</th>
<th>Decision level</th>
<th>Title</th>
<th>Grade</th>
<th>Kind of grade</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Policy Making</td>
<td>Top Management</td>
<td>5</td>
<td>Co-ordinating</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td>or supervisory</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>Policy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>Programming</td>
<td>Senior Management</td>
<td>5</td>
<td>Co-ordinating</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td>or supervisory</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>Programming</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Interpretative</td>
<td>Middle Management</td>
<td>5</td>
<td>Supervisory</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>Interpretative</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Routine</td>
<td>Skilled</td>
<td>5</td>
<td>Supervisory</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Paterson has suggested some technique for subgrading. These are not highly satisfactory, so many South African organisations using the Paterson system make use of four major criteria:

(a) Variety of tasks. The more tasks, or the higher complexity of tasks within a job will require a higher subgrading than less complicated tasks.

(b) Length of cycle. If the cycle of a task is longer, and involves additional activities, then it requires a higher subgrade than a task that is shorter.

(c) Pressure of work. This is usually related to stress - mental or physical, and where the stress related to a job is judged to be higher than a less demanding job, a higher sub-grade is required.

(d) Tolerance or precision. Jobs that require a high level of precision, and where the consequences of error are higher, demand a higher sub-grade within a Band.

Any one, or a combination of these criteria can decide the level at which a job will be sub-graded. However, if one scrutinises these four criteria carefully it becomes apparent that what is being employed here is a mere job ranking technique. Having established what Band a job falls into, (its relative level of decision-making) and then what grade, lower or higher depending on whether it
is supervisory or not, the final stage of sub-grading simply decides whether job X is more or less important than job Y, and these four criteria merely serve as a guideline to establish the relative importance of a job. Very often company participants in the Paterson system defend the obvious shortcomings of a single factor system (decision-making) by quoting these criteria as additional factors that legitimate the Paterson system. However, as mentioned above, these criteria as additional factors are misleading because the way in which they are used simply hides the real technique, that of job ranking, and all the problems of subjectivity and lack of substantiation that exists in that particular method are encountered.

How Paterson is implemented

Companies in South Africa have implemented the Paterson system in a very random fashion so it is difficult to establish any regular pattern for installing this system. Even so it is possible to outline some of the general procedures that occur here in South Africa.

Usually the motivation for job evaluation originates from management, and the workers and their unions have little, if any, say in which system is to be used, and how it is to be implemented. The result of this is that a job evaluation system is usually installed by the personnel department of an organisation. The procedure is relatively simple. The personnel department identify the different jobs and decide on the number of job writers who have to be trained to write up the job descriptions. The Paterson system requires written job descriptions that should be read and signed by job-holders. The number of job writers can vary, from a single writer to a writer for each job. These writers can also be employees of the organisation, or alternatively they can be outsiders, although it is more common for them to be employees. Job descriptions get written up, identifying the tasks, conditions and responsibilities of a job, including the skills and qualifications necessary for the job. Standard procedure is for the worker to describe the job, and then the workers' immediate supervisor is asked to verify the description.
Having written up descriptions for all the jobs, these job descriptions then go to an evaluation (grading) committee which proceeds to grade the jobs. Firstly a job is located in a Band, depending on which level of decision-making it falls into. It is then graded, high or low depending on whether it is supervisory or not, and finally sub-graded as described above. A job then has its final grade, either A1 or B3, B5, etc.

Although the Paterson system stresses that evaluation and grading assess the job content and not the wage assigned to each job, any job evaluation structure determines the basis of a wage structure.

The Paterson system is seen as a simple and inexpensive system to install. For management's purposes it formalises wage structures and "positions" each job in the pay structure, using one factor (decision-making) to create a job hierarchy. The implication here is that each job is "fairly" graded according to the level of decision-making, thus justifying the validity of the job hierarchy.

However, from the worker's viewpoint, and especially those confined to Band A, a number of problems arise. Firstly, the large number of grades (28 in total) atomises jobs to a large degree, and yet in Band A there is little differentiation, fixing a lot of jobs into this Band without any chance of moving up the scale. Secondly, the single factor, decision-making, supports the existing hierarchies, in that it assumes higher decisions being made by members of the upper Bands. Effectively this excludes members situated in the lower Bands from decisions that concern their work and working conditions, and supports the pattern of decisions being made from the top downwards. There is no exchange of ideas, all the system allows for is a more efficient way of executing orders from the top, and it formalises channels of communication.

The Peromnes System

The Peromnes system has been applied in South Africa for at least fifteen years, and can best be described as a
modified point-rating method, based on eight factors. These eight factors are:

(a) Problem solving. This factor examines the complexity of problems encountered in a job, and the level of decision-making necessary to solve these problems, taking into account the information available and the accessibility of that information.

(b) Consequences of error judgement. This measures the consequences of wrong decisions and their effect on the organisation. The checks and controls that exist to prevent an error must also be taken into account.

(c) Pressure of work. This factor assesses the amount of "stress" inherent in a job, e.g. deadlines to be met, volume of work and regularity of decisions to be made.

(d) Knowledge. This is the knowledge necessary to perform a job completely.

(e) Job impact. This assesses the extent to which a job has influence on other activities both within and outside the organisation.

(f) Comprehension. This assesses the general level of understanding, written and spoken, that is expected in the job.

(g) Educational qualifications or intelligence level required of a person for a job. This is the minimum essential requirement necessary for the job, and NOT a measure of the job-holder's qualifications.

(h) Subsequent training and experience. The time needed to achieve a level of competence in the job.

Each factor is divided into nine progressive definitions, which are outlined in a "Percynes job rating scale" chart. These nine stages are also assigned a numerical scale ranging from 0 - 36, so that when a job is evaluated against each of these eight factors a points value can be given to the description which most satisfactorily describes the nature of the job on that particular factor. The points scored on each factor are totalled to give the number of "rated points", and the job can now be graded according to a conversion scale.

The Percynes system is a comparatively complex system, and it necessitates a high level of skill and understand-
ing of the system to implement it. Although the multiple factors give a wider range of flexibility than the Paterson system for instance, and possibly a more accurate means of grading a job and individual, the large number of factors can also be very confusing, especially when one has to interpret the degree which satisfactorily describes the job on any particular factor. This generally makes the system inaccessible to workers, and the functioning of the Peromnes system is left to a select few (usually in personnel management) or to an outside consultancy group.

The Peromnes system does not require a written job description when a job is to be evaluated. This verbal job description could possibly result in an inaccurate account of the job content, and then result in an inaccurate grading. The criteria determining a job's grade is hidden from the job-holder making it extremely difficult for him or her to provide a job description that reflects the required information for those particular criteria.

The Peromnes system now has 19 (or perhaps more accurately 21) grades (1982 revision of system)

Table 2: The Peromnes Grading System

<table>
<thead>
<tr>
<th>Related points</th>
<th>Grade</th>
<th>Example levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>271 - 288</td>
<td>1++</td>
<td>Most senior executives</td>
</tr>
<tr>
<td>259 - 270</td>
<td>1+</td>
<td>and specialists,</td>
</tr>
<tr>
<td>249 - 258</td>
<td>1</td>
<td>nationally</td>
</tr>
<tr>
<td>231 - 248</td>
<td>2</td>
<td>Other top management and</td>
</tr>
<tr>
<td>216 - 230</td>
<td>3</td>
<td>very senior specialists</td>
</tr>
<tr>
<td>201 - 215</td>
<td>4</td>
<td>Senior management,</td>
</tr>
<tr>
<td>187 - 200</td>
<td>5</td>
<td>high-level</td>
</tr>
<tr>
<td>173 - 186</td>
<td>6</td>
<td>specialists</td>
</tr>
</tbody>
</table>
The Castellion System

This system was developed and used for the South African Breweries, by Messrs Cortis and Biesheuvel. The Castellion system is based on three dimensions, each of which has two elements (factors).

This system is a points-rating system, based on these six factors. A numerical value is allocated to each factor and the points scored are totalled to give a points value to each job. "By adding the sub-factor scores and products, the total points value for the job is obtained. Grades are empirically established by the application of the system. The range runs from 4 to 1248 points, and it is divided into 15 grades, from the labourer to the top executive, ..."* How these points are allocated, and the procedure for implementing the Castellion system will be discussed below, in broad outline.

The first dimension, effort, has as its two components the complexity of decision-making, and the pressure of work. Pressure of work is seen as the time stress under which decisions have to be made, and decision-making is seen as the choice of judgements which a person in a job is expected to make. The points scale is based on the extent of the complexity involved in these judgements.

A major underlying aspect to the Castellion system is that of time period discretion which is defined as the longest period required for a manager to assess whether his subordinate has been working at a substandard level. This is used, for example, in the decision-making scoring where the following periods of discretion are used: 2 months, 6 months, up to 15 months, up to 3 years, up to 10 years.

The second dimension, that of responsibility is broken down into two components; consequence of error which assesses the possibility of losses and their extent, and controls and checks which measures the degree of control exercised over the job. The consequence of error factor measures the extent of losses as a result of wrong decisions or lack of concentration, and includes material as well as human losses. This factor effectively measures the extent of the potential damage that can be incurred by a person in a job. The second factor, that of controls and checks looks at direct and indirect controls exercised over a job-holder.

The third and final dimension is that of competence, dealing with the factors of qualification and experience. Both these factors involve the essential education and experience necessary for the performance of a job, and do not measure the levels of education or experience held by the worker. For example, if a job can be done with no formal education or minimum period of experience, then the score allocated for that job must reflect these facts, even if the job-holder has some educational qualifications above the required minimum.

The usual procedure for job evaluation, using the Castellion system, goes as follows. Once a job has been iden-
tified a job description gets written up. Usually the person doing the job is consulted, and the details are generally checked by his immediate supervisor. Once again it is usual procedure for the written description to be signed by the worker and supervisor.

The next step is the grading of the job. Ideally the most effective results are obtained through a grading committee who can discuss the job with each other. The job is systematically checked against each of the six factors so that a points score can be allocated for each factor. The total points scored will give a value to the job. This point score will give an indication of the approximate grade that a job will fall into, and not necessarily the final grading. Like most job evaluation systems a job-ranking exercise is carried out to compare the job with other related jobs, higher and lower, to see whether there is a consistency within the job hierarchy. Only then can a final grade be assigned to the job.

The other job evaluation systems

It is necessary to make a brief mention of two further job evaluation systems used in South Africa. The NIPR-Q system was developed in the early 1960's in a study of the CSIR's administrative posts. It is a very cumbersome system and does not seem to have gone beyond the civil service.

The Hays/MSL method is another complex system which enjoys a considerable amount of international success. This system is particularly successful when evaluating managerial positions and more recently it has been successfully used for white-collar jobs.