

RATIONALIZATION: AN AMBIVALENT PROCESS IN THE SOUTH AFRICAN ARMY

Rialize Ferreira *

1. INTRODUCTION

Since the termination of the twenty-three year Border War between South West Africa/Namibia and Angola in April 1989, and the demise of apartheid rule in 1992, far-reaching changes have been made to the former South African defence system. During 1990 officers involved in the war had to be reintegrated into the organizational structure of the South African Army (SA Army), a subsystem of the former South African Defence Force (SADF). This took place in accordance with United Nations Resolution 435, which set out the restriction of bases and eventual withdrawal and disarmament of South African and South West African People's Organization (SWAPO) forces (Sass 1995:125).

The reintegration of soldiers caused a bottleneck in the hierarchical pyramid structure of the SA Army. Supernumerary posts which now had to be funded, had not been budgeted for, since they had previously been paid for by the South West African government. At the same time, priorities in state expenditure were changing as a result of the weakening economy and the conclusion of animosities in Namibia/Angola. A defence budget which had peaked at 3,4% of the Gross Domestic Product (GDP) in 1989 was reduced by 35% in real terms by 1992 (Ferreira 1994:45). By 1995, following the establishment of a democratic South Africa, it was slashed to 2,2% of the GDP, and by 1997 to 1,6 % or R8,7 billion of the GDP - a reduction of close to 66% in real terms within a matter of six years (Cilliers et al 1997:27). External factors, such as the fall of the Berlin Wall on 9 November 1989, the consequent demise of major communist states and the ending of the Cold War by 1992 and the associated arms race (Giddens 1993:382) all contributed to far-reaching changes in the internal affairs of South African society. The changing social and political circumstances led State President De Klerk to make a policy statement on 2 February 1990 about unbanning the African National Congress (ANC) and releasing Nelson Mandela from prison. This led to the negotiated settlement (1990-1993) and the eventual founding elections in 1994.

* Department of Sociology, University of South Africa.

For decades South African politicians had warned against the communist threat and proclaimed that South Africa was the last bastion against communism in Africa. However, with the fall of the Berlin Wall and the collapse of communism this argument became invalid and consequently the ANC, SACP and PAC were unbanned. The unbanning became a "watershed event for the SADF" (Shaw 1995:10). This development downgraded the importance of the SADF as a state institution, as well as the fact that a large fighting force was no more necessary or justified. As from April 1989 to April 1994, the military's mission of countering the communist threat came to an abrupt end, "almost leaving the military in search of a mission" (Heineken 2000:1).

In the early 1990s these factors caused the South African government to rationalize most of its state institutions, including the SADF (Ferreira 1994:54). A smaller, more effective, more professional SA Army was envisaged, entailing restructuring and downsizing of its power structure as a state institution, as well as its organizational and its human resource structures. Rationalization had to be implemented to create a more affordable system and to prepare the smaller SADF for future developments after the 1994 elections, when eight former opposing armed forces would be integrated to become the new South African National Defence Force (SANDF).

This qualitative study stretched over the period April 1989 to April 1993, just as the negotiations over the future of the new military began. Military negotiations were held back until early 1993, while the SADF was considered to serve as a bulwark during the period of change (Shaw 1995:13). When negotiations about restructuring eventually began, they were initiated by the military, not by the politicians. In March 1993 generals Liebenberg and Meiring considered it to be the appropriate time to begin discussions with the ANC, which was widely expected to win the forthcoming elections. According to Shaw (1995:13) one of the reasons for the delay was that it was advantageous for both the SADF and the ANC to negotiate once they were no longer formally at war. Now members of the ANC's military cadre, MK, and the SADF for the first time appeared together in public (Frankel 1998:8). While the SADF directly participated in the negotiations, this role ensured that the command structure retained a say in the future of and in the transition to a new South African National Defence Force.

2. RATIONALIZATION IN THE SOUTH AFRICAN ARMY

The rationale, effects and consequences of rationalization in the military is a much debated issue in developed and developing societies. The broad experience of rationalization and demobilization in developing countries, South Africa included, indicate various, if not severe, difficulties when integrating veterans into civilian life. This also applies to social, and more specifically occupational mobility of both rationalized personnel and those who stay behind in the service after the process has been finished.

After the Border War in April 1989 and the subsequent independence of South West Africa (renamed Namibia in November 1989), the consensus developed in the SA government circles that war was something of the past. The decision was made to rationalize the SADF since the SA economy could not afford a defence force consisting of 110 000 uniformed personnel (conscripts and permanent force members), 240 000 part-time soldiers and 180 000 reserves. The first financial cuts were implemented directly after the war (Williams 1991:3). This consensus developed at a time when many other countries, including developed and developing nations, adhered to a similar course in the perceived end of conventional threats (Shelton et al 2001:11, 12). Armaments were cut and personnel rationalized accordingly. A total of **7 400** employees of the Armaments Corporation (Armscor) and the SADF had already been rationalized by April 1990, as a result of the end of the war and the declining economic situation in the country (Van de Venter 1990:30). At the same time a reprioritization of national goals shifted funds away from defence to socio-economic development. On the political level the unbanning of the ANC contributed to the rationalization of the SADF. Since the ANC agreed to the termination of the armed struggle, large numbers of counter-insurgency personnel were no longer needed on the country's borders.

External political factors, most notably the end of the Cold War, led the SADF to believe that no immediate conventional threat existed. On the basis of this assumption and with the shift in focus to socio-economic priorities rationalization was envisaged to release defence funds for more pressing issues such as housing, education and health. The goal of rationalization was to scale down the power structure, which included human resources and relevant financial needs to establish a smaller, more professional and affordable military system.

In accordance with the **1989 White Paper on the Planning of the SADF**, a management approach was used to rationalize the SADF. For the purpose of this article the focus is on power structure planning, set out in the said 1989 White Paper, as part of the strategic planning of the SADF. It focused on the long-term goals of rationalization.

2.1 Power structure planning

The SADF's strategic planning process sets out the strategic goals, guidelines and policy framework of the defence force which serves as a basis for planning, including power structure planning for the maintenance and extension of the long-term development of the SA Army. This is revised annually. Strategic planning and power structure planning differ as follows: The strategic plan, based on the **White Paper on the Planning of the SADF** is the vision of top management as to the form and size of the SA Army. The power structure plan forms part of the strategic plan and sets out the **resource needs** and the **relevant financial needs** required for the execution of the strategic plan. This includes the economic **rationalization plan**. The power structure plan determines how executable the strategic plan is (RSA 1989:13). The power structure planning process was applied to the rationalization of existing SA Army units to execute specific rationalization commands and also determined the resource needs of newly established units. This process involved the determination of both human resources and financial costs for a five year period and was subsequently referred to as the five year plan. This served as the basis for the rationalization of the SA Army. The ultimate goal of this plan was to cut funds yearly by 5% until it reached 2,5% of the total GDP. To achieve this, human resources were cut by 5% per year, as well as 5% of financial expenditure against the Rand value of 1991 (Ferreira 1994:58). Against this background, proposals for the rationalization process were considered and involved reorganization towards a more cost-efficient management in order to cope with the reduced budget and evolving requirements of the SADF at the time.

2.2 Proposals for rationalization in the SA Army until April 1993

The 1985 Geldenhuys report (RSA 1989) outlined the goals and human resource planning in the SADF. This report led to investigations such as the Van Loggerenberg report in 1989, from which Project SA Defence Force Design 2000 emanated. This included the investigation of the power structure of the SA Army, as well as Project Harriet on the investigation into the structure of Headquarters. During 1989, when the Chief of the Defence Force, Lt genl Liebenberg, announced the defence budget and proposed cuts, it also encompassed the weapons industry. This included the cancellation of 11 major weapons and equipment projects which

had been scheduled for 1991, as well as the cancellation of 49 other Armscor weapons and equipment projects which had previously been reduced or postponed (Williams 1991:3).

Besides the cuts to the armaments industry certain structural changes were to be implemented during the financial year 1991/1992 (Williams 1991:66). These involved the rationalization of Group Headquarters and all commando units, the conventional and counter-insurgency brigades of the citizen force into three conventional divisions and three counter-insurgency brigade headquarters. Other units affected by the rationalization were 4 Electronic Workshop, 6 Signal Unit, the amalgamation of 91 and 92 Ammunition Depots, the amalgamation of 1 Military Printing Regiment and the Publication and Map depots into one unit. A changed role was envisaged for the Army Women's College at George (since closed).

These proposals for rationalization were successfully implemented. At the time the exact figures involved were restricted. The ultimate goal was, however, to have 70 000 uniformed soldiers by the end of the millennium, even after the integration of the eight former opposing armed forces that was to follow in 1996.

2.3 Project SA Army Design 2000

During March 1990 the Chief of the Army ordered an investigation into the organizational structures of the conventional forces. This resulted in Project Readhead which investigated the form and size of the Army, and in Project SA Defence Force Design 2000 which determined the power structure of the SA Army (Army/DPlan/502/1/1 SA Army Design 2000).

Criteria that had to be taken into account during the development of the rationalized power structure included both human resources and relevant financial needs and constraints. The criteria for **Project SA Army Design 2000** were also applied to **Project Harriet** in order to establish a new organizational structure for Defence Headquarters. The criteria were as follows (HSOPS/V/503/1/Harriet):

- * The proposed structure must lead to higher cost-efficiency.
- * The SA Army should, despite structural changes, ensure a credible deterrent capacity.
- * The claims for political development must be satisfied, ethnicity should be minimised and discrimination against black or white eradicated.
- * The SADF should remain apolitical despite individual political preferences.
- * The particular military cultures of the defence force units and fighting elements should be considered.

- * Decision-making power must be decentralized.
- * The organizational structure must be established in such a way that it is capable of resisting a coup.
- * The organizational structure must have fewer management levels (hierarchies).
- * The reduction of posts and duplication of services have to be attended to.
- * The geographical placing of military units has to be organized on a regional level.

According to Weber (in O'Donnell 1992:271) these criteria display ideal typical bureaucratic characteristics, such as formal rules and regulations, impersonal, neutral affective relationships, power hierarchies, and so forth, and functionally contributed to the development of a SADF structure to form an orderly system. The coordination of these bureaucratic characteristics contributed to the effective organization of the SADF (Blau & Meyer 1971:22).

The Chief of the SA Army envisaged that the rationalization of the conventional forces would be completed by December 1991. Training scheduled for 1991, was to continue to enable the orderly functioning of the different parts of the SADF and to retain specialist knowledge in the military bureaucracy. The implementation plan for the rationalization of the conventional forces (the Parachute Brigade, 1 and 2 Special Service Battalions, School of Armour and the Artillery brigade, as well as the Signal, Engineering and Logistic formations) occurred according to the following three stages:

- * **Stage 1: Until 31 August 1991:** Planning of and preparing for implementation on all levels.
- * **Stage 2: 1 September until 31 December 1991:** Execution of the implementation plan, which involved the change of officers commanding, amalgamation of units, completion of rationalization of personnel, supplies and facilities, transfers of civilian personnel and the transfers of permanent force personnel to other units.
- * **Stage 3: January 1992 until 28 February 1992:** Final completion of rationalization and administration of the moving and amalgamation of units.

After the planning for the power structure by Project SA Army Design 2000 had been completed, the planning of the organizational structure had to be considered.

2.4 Project Harriet

On 1 November 1990 the Chief of the SADF commanded that Project Harriet be instituted to investigate the organization of the SADF, in view to restructure it in such a way that rationalization would be facilitated. The Headquarters was first in line and included the rationalization of the command and control structures, as well as staff divisions (CArmy/D Plan/503/1/Harriet).

While Project SA Army Design 2000 focused specifically on the combat structures with little attention to the support structures, Project Harriet endeavoured to bring these two structures in line. Where initially project SA Army Design 2000 was the result of changes brought about by external environmental factors such as economic and political factors, Project Harriet served mainly to absorb political and governmental changes. The objective of both these projects was to bring the SADF in accordance with the changing internal and external environment. The capability of the SADF to adapt to both new environments would determine whether the rationalization process would be successful.

All headquarters and regional headquarters were included in the rationalization process. The criteria had to be adapted to the "new" South Africa in terms of the roles and functions of the SADF within the new political system. Besides military and political factors, cost-efficiency was the key criteria. This principle of cost-efficiency was explicitly applied to the rationalization of SA Army Headquarters and Regional Headquarters in order to eventually establish a macrostructure that would be affordable and give effect to the primary goals of the SA Army. Besides these restructuring and cost-effective criteria the new structure had to undergo change because the bureaucratic organization of the structure would be ineffective in a more dynamic environment. Changes to the organizational culture were also required to include values of all sections of the population, such as representation and inclusion in political participation.

The implementation of project Harriet was to be conducted in three phases, namely:

- * **Phase 1:** All structural changes to Headquarters stemming from the recommendations, had to be implemented before 31 March 1991.
- * **Phase 2:** All unfinished recommendations stemming from Project Harriet had to be finalized during the 1992/3 financial year.
- * **Phase 3:** Successive investigations had to be conducted to determine if the implementation was successful and if not, be rectified. These investigations had to begin in 1992 and be completed by June 1993.

The rationalization of all division headquarters were implemented as from February 1991. The Chief of the Army decided that the conventional forces would be restructured. There would be three division headquarters, namely 7, 8 and 9 divisions. Existing headquarters would be amalgamated to form the three new division headquarters in Johannesburg, Durban and Cape Town respectively. Consequently, the SA Army underwent large scale structural adaptations, firstly, to the power structure and secondly, to the size of the power structure, which included the organizational structure. These were affected to adapt to changing political and social requirements. Lastly, the human resource structure was considered.

2.5 The human resource strategy for the SA Army

After the restructuring and rationalization of the SA Army, the most important issue and main focus of this investigation pertained to the human resource situation. Would supernumerary officers be carried by the system and how many would be affected by the bottleneck structure and rationalization?

The first phase in the rationalization of human resources was the reduction of national conscription, which had a great impact on the manpower situation in the SA Army, as conscripts formed the broad basis of the human resource pyramid. This situation led to shortages in the lower officers ranks, especially the rank groups lieutenant to captain. Instead of the SA Army hierarchical structure having a broad base of a typical pyramid, it now had a small base with a comparatively wide middle and top structure (rank groups major to colonel), which was economically unaffordable.

The economic situation was exacerbated by the officers and non-commissioned officers returning from South West Africa as a result of the implementation of the United Nations Resolution 435 in 1989. Most of these **450** supernumerary posts had to be funded by units, but where no real activated (blueprint) posts were available. These soldiers had previously been paid for by the South West African government. Supernumerary posts were only "stabilized" after three years (1992). Put differently: only then did activated posts become available in the human resource structure after normal attrition and rationalization. This indicated a gradual evolutionary process of social change in the SA Army.

The Rationalization Board determined, according to specific rationalization goals, which posts were to be abolished and which were to be retained in order to ensure that the 'professionalism' of all sections of the SA Army would not be undermined. During this phase no promotions were made, limiting the vertical upward mobility in all officer ranks. Vacant posts were frozen and all recruitment was stopped.

The rationalization of the SA Army was based on a so-called 'process approach' where all structures were gradually involved until the end of 1994, when a new political dispensation would be instituted. Various factors were to be taken into account, such as financial limitations, internal threats of violence (security situation), available human resources and the morale of security force members.

2.6 Guidelines for rationalization of human resources

According to Project Harriet specific guidelines for personnel planning and rationalization were as follows:

- * **Rationalization**, referred to the down-sizing or disbanding of existing organizational structures of headquarters and units, as well as the down-sizing or centralization of the fulfilment of functions which were decentralized on different levels. Rationalization also involved the decrease in the number of personnel employed and the non-appointment of permanent personnel in the Permanent Force, Citizen Force, Support Services and of general assistants.
- * To bring the **hierarchical system** into balance, supernumerary posts had to be eliminated. Army headquarters controlled the promotion system in order to make vertical occupational mobility in the organizational structure possible.
- * **The employment** practice of filling newly vacant posts was stopped immediately. Commands had to motivate any replacement of personnel and this was subject to approval of the Director Human Resources and had to be accommodated within the personnel budget. Personnel wishing to change from citizen force to permanent force could not be accommodated.
- * **Promotions** were only considered against activated posts which had been budgeted for and which would not cause further bottlenecks in the structure. Also, posts that were vacant **before September 1990** could not be filled.
- * **Personnel reductions** according to **age** had to be in line with the rationalization goals. Personnel due for retirement, despite section or ethnic background, had to be retired by **31 December 1991**. This included all temporary personnel older than 70 years, as well as temporary personnel between the ages of 60 and 65 years. Personnel who reached the normal age of retirement of 55 years, were encouraged to retire. Civilians were compelled to retire at 65.
- * **Retrenchments** of underachievers **in all categories** of permanent personnel were now initiated according to fair labour practices. The work records of such members justified recommendations for retrenchment (Moody 1992:11).

According to the rationalization goals, even members aged **50 and younger** could be rationalized if their posts became redundant or if they had valid reasons for **voluntary retirement before the age of 55**. Persons with low medical classifications and underachievers (too long in the same rank and not course-qualified) were automatically retrenched in order to modify the hierarchical pyramid structure so that remaining officers could be promoted. Human resources could not be based on the total needs of the defence system any more, but on priorities, according to the principle of affordability at all levels. Rationalization was therefore mainly based on personnel reductions over the transitional period until 1994.

According to the abovementioned guidelines a total of **1 158** officers left the service from **April 1989** to **April 1992**. Of these officers who left the SA Army, **167** were close to retirement age, **122** left on pension, and **869** officers resigned voluntarily (normal attrition after the war). The **167** members who went on early retirement due to their posts being abolished, could still have worked effectively, if it were not for rationalization. However, many SA Army officers still remained and were not rationalized at this stage, unlike the SA Navy which was subject to drastic rationalization during this time. (This was later challenged in court and declared unfair and the members affected were duly compensated.)

During September 1992 it was decided that further rationalization be implemented prior to the end of the financial year in March 1993. Now additional, stricter guidelines were created according to which much younger members were **compelled to be rationalized**, in accordance with the available budget. These **additional guidelines** were as follows:

- * Personnel reaching the minimum retirement age of 55 had to leave immediately.
- * Personnel reaching 45 years and older who had contributed to a minimum of 10 years pension were encouraged to leave.
- * Personnel not complying with course qualifications for normal promotion, or who lagged behind when others were promoted and were unlikely candidates for promotion as a result of underachievement or bad attitude or negative behavioural patterns were earmarked for rationalization.
- * Personnel who had low medical classifications, irrespective of their age.
- * Any member who was supernumerary in a specific position had to leave.

Since all personnel in the SA Army, not only officers, were involved in the rationalization process it was decided that a further **3 249** posts would be rationalized by the end of March 1993. Of these **391** officers went on voluntary

early retirement due to their posts being abolished. Significantly, no resignations occurred during this time. The **391** officers who went on early retirement were all between the ages of 45 and 55 years. Persons with low medical classifications, as young as 34 years of age, were rationalized and compelled to search for employment elsewhere, since their severance packages were not substantive. Severance packages were awarded according to years of contribution to the government pension fund, plus 12,5%, plus 1 year extra for every 6 years of work. Thus, if a member had 18 years service, he would receive 21 years worth of pensionable service, plus 12,5%. Members could choose whether they wanted the lump sum or a pension, for example, one-third immediately, and two-thirds as a life-long pension. The following officers' posts were rationalized from **April 1992 to April 1993**:

General	Brigadier	Colonel	Lt Colonel	Major	Captain	Lieutenant	Total
1	16	81	182	81	26	4	391

As indicated above, rationalization specifically rectified the bottleneck shape of the hierarchical pyramid structure that existed after the war. In comparison to other Defence Force sections rationalization was not drastic in the SA Army, since only **1 549** officers were rationalized during the period **April 1989 to April 1993**. A total number of **2 998** officers remained after April 1993 (Ferreira 1994:89).

Rationalization was regarded as an organizational goal, which led to the establishment of a more effective and professional institution, whilst the occupational mobility of officers was regarded as an individual goal, by means of which promotion in rank could prevail and higher status could be achieved. These two goals were in contrast with one another because the organizational goal, as the manifest function, was the higher level one and individual goals needed to adapt to it by means of changes in officers' professionalization, career development and occupational mobility (latent functions). The functional perspective was used to analyse the South African Army as a subsystem of the SADF. Its bureaucratic and organizational form was also studied.

3. RESEARCH METHODOLOGY

This article is based on an exploratory, qualitative study, conducted by means of triangulation, which is a methodological technique using multiple data-gathering procedures which are related (historical documentary procedure, case study and questionnaires) to enhance the validity of the study. This technique indicates the

use of several research methods which complement the methodological disadvantages of each other. They were used as follows:

- (i) **Content analyses of documentary sources** served as the background for the study. (In completion of the study various sources that appeared after 1994, but related to the rationalization period under discussion (1989-1993) were scanned and cross-checked for accuracy.)
- (ii) The data collected from a group of officers (brigadiers) in **ten case studies** and
- (iii) the data collected from **fourteen** officers (different ranks) completing **questionnaires** substantiated the documentary sources and were thus interpreted in terms of the documentary information regarding rationalization and occupational mobility.

For the purpose of this exploratory study a smaller unit of analysis was selected, namely, **two different groups of officers** from the South African Army. The choice was mostly influenced by lack of research funding that made a smaller qualitative study, exploratory in nature, a viable research technique.

In exploratory studies an inductive strategy is used, namely that tentative hypotheses are employed as possible relationships between variables (rationalization and occupational mobility) to eventually build a theory, namely that:

- * Occupational mobility of officers are affected as a result of structural changes caused by rationalization. A relationship thus exists between rationalization of structures and the limitation of officers' occupational mobility.
- * Organizational goal attainment (rationalization) affects individual goal attainment (occupational mobility), which is subordinate to organizational goal attainment since officers must achieve within the rationalized system. A relationship thus exists between organizational and individual goal attainment.

These tentative hypotheses served as indicators in the search for answers to the research problem, which was to establish whether rationalization had any influence on the occupational mobility of officers. Underlying this methodological technique is the functionalist perspective. The main premise is that military matters of institutional nature are regarded as an organized system of activities directed to reach specific goals or functions in order to survive as a system in the greater South African society. With the use of the functionalist perspective the researcher could also make empirical generalizations regarding rationalization and occupational mobility of officers in the SA Army. In short, the working hypotheses employed here were that :(i) **rationalization decreases officers' occupational mobility**, and (ii) **rationalization hampers career development among officers**.

3.1 Limitations of the research

Research on military issues is fraught with difficulties due to the often classified status and the sensitive nature of the information. Information regarding the rationalization process in the SA Army was subjected to security limitations at the time. Only information directly involved in this research was taken into account, and it was decided "to take what they were willing to give me" (Grundy 1987:viii). Therefore, relevant documentary sources were analyzed and employed to determine the effect of rationalization on the occupational mobility of officers in the SA Army. The random selection of **ten case studies** of only brigadiers' (so called at the time) occupational mobility and **fourteen questionnaires** of retrenched officers of all ranks, could also be seen as a **research limitation** (issue of a representative sample). A smaller unit of analysis was selected for this exploratory study. This choice was mostly influenced by lack of research funding that made a smaller qualitative study, exploratory in nature a viable research technique. Another **limitation** of the research was that it had been conducted from April 1989 to April 1993 and did not include the current South African National Defence Force (SANDF).

3.2 The unit of analysis

Two different groups of officers (24 in total) were analysed in order to determine whether occupational mobility of all officers, meaning (i) those who stayed behind in the service after rationalization, as well as (ii) those whose services had been terminated were indeed influenced by the rationalization process. For the purpose of selecting the ten case studies, the personnel department was asked to randomly supply the names of ten officers who had not been rationalized. They supplied information of officers with the same senior rank (brigadier), but from different corps. An analysis of their career development over a period of twenty-seven years was conducted to assess whether they met the compulsory promotional requirements for vertical upward occupational mobility. This served as guidelines for the analyses of the ten case studies which were analyzed according to the following criteria:

- * biographical data, age, qualifications and enrolment date;
- * career development in terms of promotional requirements, and
- * years of service and promotion.

Because the study included ten case studies of the **same social phenomenon**, generalizations could be made regarding the career development of officers in this specific rank group for the given time period (Haralambos and Holborn 1992:726).

The **second** group included officers from different ranks and sections (see table 1) who were notified that they would be rationalized on the basis of redundancy, age, medical reports and qualifications. Eighteen questionnaires were randomly handed to officers. **Fourteen** were returned the next day. The questionnaires included structured questions regarding their biographical data and unstructured questions enabling them to air their views regarding rationalization, the termination of their posts and why some of them did not want to be rationalized and others did. The aim of this questionnaire was mainly to serve as an extension or substantiation of the documentary sources on promotional requirements.

The data of the officers in group one, who remained in service (ten brigadiers) were compared and related to those of the rationalized officers in group two (fourteen of all rank groups) to determine whether the collected data were in accordance with the rationalization criteria of employees and the documentary information regarding their career development. The data displayed similarities between the two groups of officers, such as restricted promotional opportunities. The methodological aim of this sociological study was therefore to supply valid and reliable descriptions and explanations and to arrive at empirical generalizations about the influence rationalization had on the occupational mobility of officers in the SA Army. The structural changes that occurred affected the lives of the individual role-players.

4. OCCUPATIONAL MOBILITY IN THE SA ARMY

The analyses of the ten case studies regarding the career development of officers (group one) who remained in the SA Army after the rationalization process had been completed, were conducted according to the abovementioned aspects, which are reflected in the following example of an analysis of one case study. This analysis portrays the occupational mobility in the SA Army over a period of twenty-seven years (1966-1989), which includes the period of the Border War.

Example of how the analysis of a case study was done:

Biographical data: This member was 50 years of age. He commenced his service in 1963 while studying for a bachelor's degree which he completed four years later. He was a member of the personnel section. **Career development:** In 1966 he qualified for his first promotion after completing functional and promotional courses, which included the junior and senior staff courses, as well as a law course. He achieved the following seven promotions during the research period of twenty-seven years.

Periods of receiving promotion as from 1966 to 1992:

Temp Lt	Lieutenant	Captain	Major	Lt Colonel	Colonel	Brigadier
1/12/66	1/11/69	1/10/73	1/1/78	1/1/81	1/1/83	1/1/92

He was promoted according to relevant promotional courses completed and the organizational or service needs of the SA Army. In some cases he occupied a post for only three years, while in other instances the period for promotion varied from five to nine years. This depended on when the promotional courses were successfully completed, availability of posts as well as the specific service needs of the hierarchical pyramid structure of the SA Army.

During the period 1983-1992 he occupied one post (colonel) for nine years. Under normal circumstances he would have been promoted within six or seven years. Had the hierarchical pyramid not narrowed so quickly, he would have been promoted by 1989. However, during 1989 rationalization was institutionalised and no vacancies for promotion were available. This meant that he reached the organizational ceiling long before he reached his personal ability ceiling (Greenhaus 1987:168). Because of the unavailability of posts for promotion he had to wait until 1992 to be promoted to brigadier. This promotional pattern supported the assumption that rationalization constrained and limited the occupational mobility of officers. Because of rationalization due to financial constraints, there was a distinct possibility that this officer would have to retire at the age of 55, still occupying the same position.

After the analyses of the ten case studies had been completed it was generally found that:

- * Career development of officers referred to their formal career planning, career goals, professionalization as well as their promotional requirements. Without compliance to these compulsory requirements of career development there could be no vertical upward occupational mobility of officers in the military.
- * The career development and occupational mobility of nine out of ten officers were delayed after the institutionalisation of rationalization. Only in one case could it not be ascertained whether rationalization had any influence on the career development and occupational mobility of the officer, because the officer had been promoted just before rationalization was instituted.

5. OCCUPATIONAL MOBILITY SINCE RATIONALIZATION

The empirical information gathered from the fourteen questionnaires of the rationalized officers (group two) indicated that the rationalization of the power structure and the organizational and human resource structures of the SA Army focused on aspects which influenced the occupational mobility of officers, namely:

- * the bureaucratic organizational form,
- * human resources planning in the military,
- * organizational goals,
- * changes through rationalization, and
- * the reaching of organizational and personal ability ceilings of officers.

These aspects will be related and compared to the information of the fourteen officers whose services were terminated. Eleven of them were rationalised according to the rationalization criteria, which were redundancy, age, medical reports and qualifications. Three officers decided to leave on early retirement, since no promotions were available within the next few years. They felt that they were young enough to start civilian careers. Three posts were redundant because they were incorporated in different sections according to the system's needs. Three officers were rationalized because of medical reasons. Twelve of the fourteen officers were in the age group between 45 and 55 years, qualifying them for rationalization, which meant they were compelled to leave on pension. Of these officers 57% felt that their posts had been unjustly rationalized. What was interesting, was the fact that 93% of officers thought that they could still have worked productively for a few more years, since they were medically fit and still able to make a valuable contribution to the military. This feedback provided early warning that this stage of rationalization (1989-1993) was to be dysfunctional to affected members.

Data obtained from the questionnaires of rationalized officers (group 2) are reflected in tables 1 and 2:

Table 1: AGE, RANK, CORPS AND REASONS FOR TERMINATION OF SERVICE

Age	Rank	Corps*	Reasons for termination of service
53	Col	TSC	Post redundant and incorporated into another section
48	Lt Col	OSC	Post redundant and incorporated into another section
49	Lt Col	OSC	Post redundant and incorporated into another section
50	Lt Col	TSC	Medical reasons
43	Maj	OSC	Medical reasons
34	Capt	FSC	Medical reasons
53	Maj	SAA	Close to retirement age and also medical reasons
53	Lt Col	OSC	Compulsory retirement - age group for rationalisation
53	Col	TSC	Compulsory retirement - age group for rationalisation
52	Col	SAA	Compulsory retirement - age group for rationalisation
55	Lt Col	OSC	Compulsory retirement - age group for rationalisation
50	Lt Col	SAIC	Voluntary early retirement - no promotion available
46	Lt Col	SAIC	Voluntary early retirement - no promotion available
45	Maj	SASC	Voluntary early retirement - no promotion available

*TSC - Technical Service Corps, *OSC - Ordnance Service Corps, *FSC - Finance Service Corps, *SAA - Artillery Corps, *SAIC - SA Infantry Corps, *SASC - SA Signal Corps

Table 2: OFFICERS' OPINIONS REGARDING RATIONALIZATION

OPINIONS	YES	%	NO	%
In favour of rationalization process	9	64	5	36
Want to stay in service longer	8	57	6	43
Post is unfairly abolished	8	57	6	43
Could still be economically effective	13	93	1	7
Satisfied with termination of service	7	50	7	50
Termination of service is compulsory	11	79	3	21
Termination of service is voluntary	3	21	11	79
Reasons for application of rationalization				
Promotional opportunities better outside SA Army	5	36	-	-
Young enough to start a new career	2	14	-	-
Educated for effective new career	3	21	-	-
Promotional opportunities restricted	4	29	-	-
Not promoted according to personal expectations	2	14	-	-
Reasons for not wanting to be rationalized				
Too few years paid-up pension	5	36	-	-
No other education or training	-	-	-	-
Not interested in other careers	4	29	-	-
Satisfied with present position	2	14	-	-

Many conclusions can be drawn from the data obtained. For the purpose of this article the data is related to the structural aspects of the SA Army that had a direct bearing on individual occupational mobility in order to arrive at empirical generalisations (Ferreira 1994:182). The data or results were related with the aid of relevant theoretical viewpoints of the functionalist perspective and the bureaucratic organizational form. The focus was on the causal relationships between variables as well as system changes.

Causal relationships, referring to the structural aspects, were found in the analysis of both groups, i.e. the questionnaires and the case studies.

5.1 The relationship between a bureaucratic organizational form and individual occupational mobility

The bureaucratic organizational form of the SA Army displayed an open hierarchical pyramid structure, which allowed vertical upward occupational mobility. The higher the hierarchical structure, the less posts were available and consequently promotional possibilities were limited. Watling (1977:80) is of the opinion that "...in an organizational world where rewards and status depend upon position in the hierarchy, pyramids narrow far too quickly". The scarcity of posts was aggravated by the bottleneck structure created by supernumerary posts, which became unaffordable in the poor economic climate after 1989. This resulted in the disequilibrium of the hierarchical structure. To change the bottleneck structure into an optimal pyramid form, the SA Army was compelled to rationalize in order to normalize the structure for occupational mobility. One of the key criteria for rationalization was that the organizational structure be in accordance with the hierarchical pyramid form.

The aim of rationalization was that the power structure, which included human resources, be rationalized in order to establish a smaller, more professional and more effective subsystem (manifest function). This was attained by rationalizing 1 549 officers' posts over the period April 1989 to April 1993. To attain new organizational goals for a smaller, more professional SA Army the career goals of officers had to adapt to the changing organizational goals, in the sense that their role positions were terminated or incorporated with other sections. The responses from the questionnaire indicated that 79% of officers had been compelled to end their military careers, while the other 21% had decided to leave voluntarily. This meant that individual goals leading to occupational mobility were not always possible to attain, because no vacancies for promotion existed in the hierarchical pyramid structure (Ferreira 1994:184). According to Rosenbaum (1984:8) there is a relationship between occupational mobility and the type of organizational structure, in this case the bureaucratic structure, which is seen as a limitation to the vertical upward occupational mobility of officers.

Most officers in this study (57%) also felt that their posts had been unfairly terminated. The rationalization of posts was therefore functional for the military as such, but for the individual role player it was dysfunctional and even nonfunctional, because careers were constrained and terminated hereby.

5.2 The relationship between the planning of human resources and individual occupational mobility

In the SA Army the strategic planning process (RSA 1989) also included human resources planning. This served to ensure that the subsystem maintained the right quality and quantity of people, that available human resources were utilized optimally and that problems with regard to surpluses and shortages were detected timeously. When supernumerary posts originated, the subsystem had to fund these posts until the situation had stabilized through normal attrition. Supernumerary officers had to be identified timeously so that surpluses could be abolished by means of rationalization.

According to Glueck (1982:89) the planning of human resources is usually a process by which institutional goals are changed into human resource goals, but in the case of the SA Army the primary aim was to attain institutional goals (rationalization) first, and not as such to take individuals' goals (occupational mobility) into account. Officers were rationalized or transferred to other sections in order to attain organizational goals. This again indicated the functionality of rationalization for the SA Army and simultaneously stressed the dysfunctionality which it held for officers. According to the opinions of rationalized officers, 36% were not in favour of rationalization and only 50% of officers were satisfied with the termination of their careers, because they were nearing retirement age anyway.

Due to the process of rationalization some sections were already restructured by downscaling and therefore vertical upward occupational mobility was limited for the next few years (Ferreira 1994:129). This limitation suspended prospects for younger officers in terms of career development. The older officers who stayed on in the SA Army after rationalization were seen as an investment, because of their experience. Such officers could rotate in role positions and horizontal/lateral occupational mobility could prevail in order for them to stay stimulated and motivated. This would prevent the knowledge of 'stable workers' to become obsolete as well as prevented them from changing into 'deadwood' (Greenhaus 1987:174). Some of the officers chose not to resign because they were nearing retirement age, while the younger officers chose to leave to accept more satisfactory jobs elsewhere.

5.3 The relationship between organizational goals and individual goals

For individual goals to be achieved, they had to be in accordance with the goals of the subsystem, which often meant that individual goals were not always attained and occupational mobility not achieved. It was important for the SADF to develop

the remaining officers' careers and their functional effectivity after rationalization had taken place, so that new organizational goals could maintain functionality for the subsystem. In practice it was important to have the right officer at the right time in the right role position in order for the subsystem's needs to be satisfied.

The organizational goals also determined how many officers were necessary to fulfil manifest functions and the expected qualifications as well as compulsory qualifications for the attaining of organizational and individual goals. Clear organizational goals served as criteria for officers who stayed behind in the SA Army and reduced their uncertainty regarding their vertical upward occupational mobility. Therefore, officers had to be constantly aware of the organizational goals by means of prescribed rules and regulations which had to be adhered to in order for them to ascertain their occupational career, before their own goal of personal promotion could be attained. The organizational goal was therefore at a higher level and officers had to meet organizational goals first.

5.4 The relationship between change through rationalization and individual occupational mobility

Any institution or subsystem will change as a result of growth and development. The opposite is also true, namely that as a result of downscaling of all structures the institution will change. According to the rationalization criteria, some officers were rationalized whilst others had to adapt to the new organizational structure by means of resocialization, which prepared them for changed circumstances and future occupational goals. However, officers were not prepared for changes caused by rationalization. If officers had been acquainted with the goals of rationalization they would probably have readapted their career goals when they were confronted with rationalization. This viewpoint reflected Weber's (in Etzioni-Halevy 1981:16) sentiment that rationalization is an ambivalent process which can lead to dehumanization, eliminating and limiting the acknowledgment of human values and norms which is in contrast to individual freedom. At the same time it indicates the degradation of human values as a result of work circumstances which exerts an influence on social behaviour and relationships in the subsystem. This ambivalence stressed the dys- and nonfunctionality which officers experienced as a result of rationalization, but focused simultaneously on the functionality it had for the subsystem itself. Rationalization, therefore, did not only influence rationalized officers, but also those who remained in the SA Army.

5.5 The relationship between the reaching of organizational and personal ability ceilings

As a result of the hierarchical pyramid structure of the SA Army and the consequent limitations placed on vertical upward occupational mobility, officers reached their organizational ceilings long before they reached their personal ability ceilings. Data gathered from the questionnaire on the opinions of officers proved that three relatively young officers aged 45, 46 and 50 years respectively, reached the organizational ceiling too early and, because no promotions were available, asked for early retirement. Thus, officers did not reach and utilize their full potential, causing possible role conflict. Because of this, occupational mobility was no longer functionally effective for officers and they were rationalized or chose to go on early retirement. Only 14% of officers in the present research indicated that they were satisfied with their present position or rank.

The abovementioned causal relationships were all consequences of the rationalization process in the SA Army and indicated the ambivalence of the process.

6. THE AMBIVALENCE OF THE RATIONALIZATION PROCESS

Although rationalization is a process prevailing in all institutions and, according to Weber (in Etzioni-Halevy 1981:16) is regarded as the central process in a bureaucratic organization, it does not only hold advantages, but also disadvantages for role players and for society. Both the positive and negative effects of rationalization in the SA Army were found in the power, organizational and human resource structures. In this study the order of the State to rationalize the SADF focused upon aspects like effectiveness and calculability, but this occurred at the expense of officers' human dignity and personal ambitions.

6.1 Advantages of rationalization for the SA Army

The advantages of rationalization for the SA Army are summed up by the comment of the deputy minister of Defence at the time, namely:

"We never said that the ability of the Defence Force will not be affected. What was said, was that the cuts should be applied with care so that the Defence Force will be able to undertake its task under the present circumstances. This could imply a lower profile, but definitely not a weaker profile" (Anon., 1992:12).

This also meant that the smaller, rationalized SA Army would still attain its goals and primary function to defend the sovereignty of the State, leading to organizational goal attainment. This was to the **advantage** of South African society, since a smaller, economically affordable SADF was created, while socio-economic priorities such as housing and education now received the necessary funds for development. These funds had previously been allocated to defence.

What the empirical research findings revealed was that rationalization had permanently changed the power, organizational and human resource structures of the SA Army, but not the function of the subsystem (Ferreira, 1994:214-5).

6.2 Disadvantages of rationalization for the SA Army

The specific goal of rationalization to create a smaller, more cost-effective, professional SA Army did not take into account the personal goals or considerations of officers. Individual goals were subordinate to the state's rationalization goals, resulting in **dehumanization** and the breakdown of human dignity. According to Gerth and Mills (1977:50) the rationalization process is identified "with mechanism, depersonalization, and oppressive routine. Rationality, in this context, is seen as adverse to personal freedom".

Etzioni-Halevy (1981:16) adds to this viewpoint by saying that although Weber held the view that the uniqueness of the modern Western society and that of military institutions lay in the rationality thereof, Weber was also aware of the imperfections of rationalization. Etzioni-Halevy (1981:30) was of the opinion that:

"as rationalization proceeds even further it is apt to become self-defeating, for it will lead to the domination of the bureaucratic way of life. Weber regarded the bureaucratic structure as technically superior to all other forms of organization, but he mistrusted bureaucracy's overemphasis on order and organization, and he did not cherish the prospect or bureaucratic values dominating the totality of social life".

Bearing the above quotation in mind, rationalization could therefore not be seen as a promise for a better occupational career in the SA Army, but rather as an ambivalent process institutionalized within the bureaucratic administrative system of the SA Army. It also had a dehumanizing effect on the officers involved (cf. Aron 1977:249; Ritzer 1983:143). The changed organizational climate brought about by rationalization meant that officers' career planning and goals had to be adapted. They had to be resocialised before it was possible to even stay in the SA Army, or to practise another occupation. (These officers were still caught up in the

Cold War mindset. Not only had the security environment changed, but Apartheid had ended, bringing with it other institutional and racial challenges, as well as another series of rationalization.)

The most important **disadvantages** of rationalization for the human resource structure of the SA Army were as follows:

- * The limitations rationalization placed on the vertical upward occupational mobility were not anticipated.
- * The abolition of officers' role positions led to the immediate termination of their occupational mobility.
- * The individual goals, which implied vertical upward occupational mobility, were subordinate to the organizational goals and were directly in opposition thereto.
- * The effectiveness of the SA Army was influenced by rationalization, because the capability of the power, organizational and human resource structures were limited and downscaled.
- * The downscaling and termination of officers' positions left a gap in the level of expertise with the loss of older experienced, professional officers in the SA Army.

Apart from the ambivalence of the rationalization process, criticism could also be levelled at the bureaucratic organizational form of the SA Army.

6.3 Criticism on the bureaucratic organizational form

As a result of the hierarchical, bureaucratic organizational form of the SA Army individual goals were not necessarily attained, because of a scarcity of posts in the hierarchical structure as well as the fact that control and decision-making were enforced from top management down to the subordinate officers. Seen from this viewpoint rationalization was dysfunctional for officers because they did not have control over their own occupational mobility and as a result their careers were terminated without them having much say in the matter, nor were alternatives in place to reskill personnel to enter into civil society with some capabilities to guarantee upward mobility. Rather, rationalisation inflicted lateral or lateral-downward mobility leading to dissatisfaction with the bureaucratic institution and a measure of negative public perceptions.

Merton (in O'Donnell 1992:274) refers to various dysfunctions of bureaucracies which lead to ineffectiveness in the structure, such as strict adherence to rules and regulations because individual decision-making is avoided by only adhering to laid-

down rules. This undermines initiative and innovation, resulting in officers becoming ritualistic and attaching more value to following rules than achieving goals. This is often referred to as goal transfer. Ritualism is seen as a mistake institutionalized by the bureaucracy and transferred to workers. Thus, bureaucratic and ritualistic workers are seen as dysfunctional, unadaptable and inefficient for the system.

7. RECOMMENDATIONS FOR A NEW HUMAN RESOURCE STRUCTURE IN THE SA ARMY

Despite the objectives of the rationalization process, a smaller human resource structure in the SA Army would not necessarily prove to be cheaper, because trained professional officers would need to be paid more in future. The proposal was that the future permanent force would consist of the following components (Kruys 1992:17-18):

- * A small permanent long-term service component consisting of professional soldiers who serve to the age of sixty. This group will include colonels to generals.
- * A medium-term service component up to the rank group of lieutenant colonel or to twenty-five years duty. These officers could extend their contracts subsequent to available posts. Alternatively their contracts could be terminated with appropriate pension and gratuity for service, rank and specialization.
- * A short-term service component, with contracts from 2-10 years forming the junior leader component.
- * A volunteer component where civilians could be recruited for one year service whereafter they would be included in the citizen or reserve forces.

The recommended new human resource structure for the SA Army after 1993 consisted of a permanent force component complemented by a larger part-time force component. With the hierarchical structure normalized, vertical upward mobility of officers would be easier to attain in this smaller permanent force.

Since these abovementioned recommendations were made, many changes have occurred in the SA military. The SADF was primarily a part-time force, reliant on its Citizen Force and Commando Forces for combat power and on white conscription. Shortly before the April 1994 democratic elections, in January, conscription was abolished in January. The new South African National Defence Force (SANDF) which came into being on the eve of the elections, was an all-volunteer force comprising the structure previously described.

The human resource structure as described by the Minister of Defence, Mr Joe Modise (1995:15), remains very much the same. The main premise, namely that "South Africa's basic defence strategy is to have a relatively small affordable 'core force', consisting of elements of the full-time and part-time components...backed by a sufficiently large part-time component". By 1995 the new SANDF envisaged a force of 70 000 full-time regular uniformed members with a part-time component of 200 000 members by the end of 2000 (Cilliers & Heinecken 2000:246).

Based on the 1989 White Paper on Planning, the SADF thus succeeded in rationalizing its power, organizational and human resource structures in order to cope with financial constraints and new requirements of a new political dispensation after April 1994. The officers and other personnel totalling approximately **4 600** were rationalized from **April 1989 to April 1993** to make way for new personnel to be integrated after April 1994. Human resource management now faced renewed challenges with the integration of eight former armed forces after the April 1994 elections. The integration of these forces led to almost a 35% increase in personnel numbers, which again was unaffordable according to the defence budget (Uys 1997:58). Restructuring and rationalization still continue, with the SANDF not yet at optimal force levels as envisaged for the year 2000.

8. CONCLUSION

This article reflected on a qualitative, exploratory, sociological investigation that was conducted after the Angolan/Namibian war in April 1989 to April 1993 regarding the rationalization process, which affected the occupational mobility of officers in the SA Army, as a subsystem of the SADF. Rationalization resulted in social change in all structures of the military system. The focus was on attaining the organizational goal, which was rationalization, in contrast to attaining individual goals of officers, which referred to their occupational mobility. Rationalization was seen as the higher level goal and individual goals had to adapt to this goal. The **advantages** of the rationalization process for the SA Army was that rationalization as a social process was functionally effective, sufficient and necessary for the system, and it contributed to peaceful and orderly changes in the power, organizational and human resource structures of the SA Army, leading to a smaller, more affordable, professional SADF.

The most important **disadvantages** for the human resource structure of the SA Army pertained to the limitations on the vertical upward occupational mobility of officers which had not been anticipated; the abolition of posts which terminated

their occupational mobility and of course, their livelihood; the subordination of individual goals to organizational goals; the impact of downscaling on military effectiveness of the SA Army; and the loss of experienced, professional army officers. Disadvantages also prevailed for the officers who remained in the service after April 1993. They were insecure and unmotivated because they did not know how affirmative action in the new political dispensation after April 1994, when the eight former armed forces would be integrated into the new SANDF, would influence their occupational mobility. In short, they did not know for how long they would still have an income to support their families, since another round of rationalization was already envisaged for 1995-2000. Since rationalization proved to be dysfunctional for all officers as it affected their occupational mobility and daily lives negatively, due procedures needed to be developed to assist ex-staff members to be reskilled and reinserted into the civilian economy. These findings provided an early warning that the process was fraught with mistakes and if heeded early enough the second round of rationalization or demobilisation (1995-2000) should have been better managed with priority given to skilling and reskilling of staff within view of reinsertion into the civilian economy.

This ambivalence not only influenced the lives of officers, but also influenced South African society, because changes in social and structural processes did not only involve the SADF, but society as a whole. To substantiate this notion, Frankel (1998:5) is of the opinion that "militaries are always at the cutting edge of social change" and they are "provided with enormous power to shape society". This process could be interpreted in many ways. The shaping of society by the rationalized SADF referred, *inter alia*, to the high unemployment figure of ex-soldiers in the South African society, which is cause for societal concern. Many ex-soldiers in Pretoria (personal acquaintances and friends) can still not find new employment after their rationalization from the Defence Force, partly due to affirmative action in the new South African democracy, which has an unemployment rate of 40%. This is causing various social problems for families, eg. deprivation and poverty. The severance packages proved not to be substantial.

Recommendations for a new, smaller human resource structure after 1993, where occupational mobility would be easier to attain seemed to be effective, since the affordable 'core force' idea assisted by a large part-time force is still presently propagated in the new SANDF. This idea introduced the military to a new system of armed forces within the democracy. Eight former opposing armed forces were constitutionally compelled to integrate into one institution as from July 1996 with the responsibility to defend the territorial integrity and political dispensation in South Africa after the first democratic elections. It soon proved that this huge integrated force was impractical and too expensive and consequently the

rationalization of the new SANDF has started all over again to eventually adhere to the 'core force' idea. The most important lesson was, however, not learnt. While the 1989-1993 process allowed space for lessons learnt for later rationalization exercises very few of these were heeded. Subsequently the 1995-2002 process provided not only major challenges, but created a proto-reservoir of social problems in South Africa as a result of less than optimal planning and management of rationalization and demobilization and even less after-care for the affected. In turn, military sociologists and practitioners alike now face various social challenges that need to be addressed urgently.

REFERENCES

- Anon.1992. Paratus kry antwoorde op kwelvrae. **Paratus** 43(10):12-3, October.
- Aron R 1977. **Main currents of sociological thought**. Middlesex: Penguin.
- Blau, PM and Meyer M 1971. **Bureaucracy in modern society**. New York: Random House.
- Cilliers JK and Heineken LPT 2000. South Africa: Emerging from a time-warp. In: **The post-modern military**. New York: Oxford University Press.
- Cilliers JK, Schutte C, Liebenberg I and Sass B 1997. Public attitudes regarding the image and the future of the South African military and defence industry. **African Security Review**6(5), 25-35.
- Etzioni-Halevy E 1981. **Social change: the advent and maturation of modern society**. London: Routledge and Kegan Paul.
- Ferreira R 1994. **Die invloed van rasionalisering op die beroepsmobiliteit van offisiere in die Suid-Afrikaanse Leër: 'n sosiologiese ondersoek**. Potchefstroom: PU for CHE (Unpublished PhD thesis).
- Frankel P 1998. **Marching to the millennium: The birth, development and transformation of the South African National Defence Force**. Pretoria: SAADF Communication services.
- Gerth HH and Mills CW (eds) 1977. **From Max Weber: Essays in sociology**. London: Routledge and Kegan Paul.
- Giddens A 1993. **Sociology**. Oxford: Polity Press.
- Glueck WF 1982. **Personnel: a diagnostic approach**. 3rd ed. New York: Business Publications.
- Greenhaus JH 1987. **Career management**. Chicago: Dryden.
- Grundy K 1987. **The militarization of South African politics**. Oxford: University Press.
- Haralambos M and Holborn M 1992. **Sociology: themes and perspectives**. London: Collins Educational.

- Heinecken LPT 2000. South Africa: **Preparing for and participating in operations other than war**. Unpublished paper delivered at the Research Committee 01 of the International Sociological Association held at the *Sozialwissenschaftliches Institut der Bundeswehr*. Strausberg, Germany. October 2000.
- Hodge GJ and Anthony WP 1979. **Organization theory: an environmental approach**. Boston: Allyn and Bacon.
- Kruys G 1992. A forward-moving military: strategic study of SA's Defence posture in the nineties. *Paratus* 43(8):14-8, August.
- Modise J 1995. Preparing the Army for the 21st century: New Volunteer Part-time System. In: Institute for Defence Policy. *African Security Review* 4 (6), 49.
- Moody J 1992. Uncompromising standards. *Paratus* 43(2):10-2. February.
- O'Donnell M 1992. **A new introduction to sociology**. Walton-on-Thames: Nelson.
- Ritzer G 1983. **Sociological theory**. New York: Alfred A Knopf.
- Rosenbaum JE 1984. **Career mobility in a corporate hierarchy**. Florida: Academic Press.
- Republic of South Africa (RSA) 1989. **White Paper** on the planning process of the South African Defence Force. Pretoria: Government Printer.
- Sass B 1995. The Union and South African Defence Force - 1912-1994. In: Cilliers J and Reichardt M (eds). **About turn: The transformation of the South African Military and Intelligence**. Halfway House: Institute for Defence Policy. pp. 118-39.
- Shaw M 1995. Negotiating defence for a new South Africa. In: Cilliers J and Reichardt M (eds). **About turn: The transformation of the South African Military and Intelligence**. Halfway House: Institute for Defence Policy. pp 9-34.
- Shelton G, Monye D, Pullinger A, Simmonds M and Williams R 2001. Demobilisation and its aftermath. In: A profile of South Africa's demobilised military personnel. ISS Monograph Series. No 59, August 2001.
- South African Defence Force:
SADF (CArmy/DPlan/502/1/1SA Army Design 2000.
SADF (CArmy/DPLan/503/1 Harriet).
SADF (HSOPS/V/503/1/Harriet).
- Uys F 1997. The SANDF transformation process. *African Security Review* 6(1). 58-63.
- Van de Venter A 1990. Die Weermag bring sy kant. *Paratus* 41(5):30, May.
- Watling T 1977. Plan for promotion: advancement and the manager. Oxford: Alden Press.
- Williams R 1991. Back to the barracks: changing civil-military relations under Botha and De Klerk (Paper presented at the 22nd ASSA Conference). Cape Town. pp. 1-90 (unpublished).