Thinking militaries or military thinking: the need for education in armed forces

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The recently tabled parliamentary report on the South African Military Academy did not pose the most fundamental question concerning the existence of the Military Academy: why is it important that soldiers should become academically educated? Does sound military training not offer sufficient professional preparation for soldiers? This article attempts to explain why soldiers need to be academically educated, while considering the influence of the "military mind" on the education of armed forces. The underlying argument is that soldiers need to be empowered by acquiring a thorough academic understanding of three particular environments: the higher order politicosecurity environment, the defence environment, and the military environment.

Denkende militêre personeel of militêre denke: die opvoeding van die gewapende magte

Die onlangse parlementêre verslag oor die Suid-Afrikaanse Militêre Akademie het nie aan die mees fundamentele vraag rakende die Militêre Akademie aandag gegee nie: waarom is dit belangrik vir soldate om akademies opgevoed te word? Bied grondige militêre opleiding nie voldoende professionele voorbereiding vir soldate nie? Dié artikel poog dus om te verduidelik waarom dit noodsaaklik is dat soldate akademies opgevoed moet word. Aandag word ook geskenk aan die invloed van die militêre denkwyse op die opvoeding van die gewapende magte. Die onderliggende argument is dat akademiese opvoeding soldate moet bemagtig om drie omgewings te verstaan: die hoër orde politiek-strategiese omgewing, die verdedigingsomgewing en die militêre omgewing.

The South African Portfolio Committee on Defence recently tabled a draft report on the South African Military Academy in the National Assembly. The report considered a wide range of factors presently influencing the functioning of the South African Military Academy and its disposition towards the future. In particular, recommendations were made about the role and function of the Military Academy, the representivity, qualifications and appointment of its staff, its curriculum, its infrastructure and its resources (Asmal Report 2005). However, the fundamental question as to whether South Africa really needs an academic educational institution such as the Military Academy for the education of its officers, was never posed. More particularly, it was left in abeyance whether the expertise of military officers in South Africa requires an academic education at all.

It is the purpose of this article to delineate the need for academic education in armed forces in general. The article reports on a qualitative descriptive analysis of the theoretical arguments underpinning the need for a general scientific education for armed forces. As such, the emphasis is on the need for academic education by means of broad liberal scientific academic curricula (ein gebildetes Offizierkorps) and not on the need for professional military education that is usually provided by the military itself (ein berufsgebildetes Offizierkorps) (Demeter 1965: 63-108). The aim of the article, though, is not to justify the existence of the Military Academy, but to highlight the most salient philosophical arguments as to why officers need to be educated. The article is not based on a quantitative approach, given the general philosophical nature of the arguments. It is exploratory in nature and the expectation is that it will be followed up with quantitative research.

It should also be noted that there is a school of thought which claims that an armed force can be professional, and that all the relevant knowledge and skills are acquired on the strength of thorough training. Mileham (2004: 80) argues that until recently most British officers viewed the military profession in terms of "a career in soldiering". Mileham (2004: 71-2) is of the opinion that the British Army used to view itself as an organisation whose function was largely practical and based on common sense, and not necessarily on intellectual activity. Strachan (1983: 1) also posited that the military profession is not primarily a literate or academic career. It is the challenge of an out-door life, not

that of desk-bound theory, that attracts young people to the military profession. This view is shared by the well-known Israeli military historian and theorist, Martin van Creveldt. In his book *The training of officers: from military professionalism to irrelevance*, Van Creveldt uses the armed forces of Israel and Vietnam as examples to argue that armed forces need to focus on training in the preparation of officers as military professionals (Van Creveldt 1990: 2-3). The central argument in this article, though, is that academic education is of primary concern to the military.

1. The fundamental nature of military education

Two fundamental considerations shape military professionalism and its required expertise. Indeed, any serious examination or analysis of military organisations, their existence, and their use in the form of military power, is rooted in these two assumptions. The considerations are not always very explicit, but their influence is nonetheless definitive. In fact, these two characteristics distinguish the military profession from other professions and from society in general.

The first characteristic is a politically unpopular idea, but one that is fundamental to the existence of force and the ability to put it to use. Militaries are created as instruments of war and must at all times prepare themselves in a realistic way and be ready to apply force whenever they are called upon to do so. In short, the raison d'être of the military is to fight and win wars. The general characteristics of the military profession and its body of knowledge have been shaped by this primary purpose of the military throughout modern history. What has changed over time is the concept of what constitutes war, the successful use of armed force(s), and the military's relationship with society. It is this fundamental nature of military force that Gray (1999a: 38) has in mind when he warns that it is possible to shift the decent, liberal and scholarly focus on military, strategic and security affairs too far from the battlefield. The military cause of winning and fighting wars gave rise to a characteristic that is unique to the military profession: the military professional, unlike other professionals, should prepare and be inclined to give his or her life, if necessary, to achieve professional goals. This consideration underpins the specific culture and ethos of the military profession, namely the natural inclination of the military profession towards the practical dimensions of soldiering, as well as the natural

tension between military commanders, politicians, military staff officers and military theorists (Gray 1999b: 11).

The second fundamental truth about military organisations and power is the driving principle to serve society. In a democratic society, military power should at all times be employed rationally, for a public purpose and with public consent (Young 2004: 1). Without this imperative the military organisation and the use of military power become an end in itself and a self-destructive instrument of power. This is the essential difference between violence and the use of military force. Reynolds (1989: 29) describes this notion in philosophical terms when he argues that "violence is either evil or irrational as a means of achieving political ends when it escapes control and becomes indiscriminate". Consequently, the state is not only the controlling authority of armed force; it also provides armed force with a rationale for existence. Clausewitz (1976: 605) refers to this fundamental truth as the logic of war. In short, the state provides the environment within which the military profession must function:

An army is an emanation of the nation it serves, reflecting social, political, and technological foundations. To study an army is to gain insights into the nation it serves because a nation and its army are interdependent. An army is not a mirror image of the nation, nor a microcosm — the nation write small; it is in organization, purposes, attitudes, and behavior conditioned by the sustaining state (Menard 1967: 5-6).

Accordingly, the profession of arms should, at all times, be examined in the context of the political, economic and societal system from which it evolves. The values, principles and character of the political system within a country serve as the mould for the universal principles of military professionalism within a particular country. Moreover, and unlike other professions, the military profession has only one client: the state.

Together, these two notions demarcate the parameters and focus of professional military expertise and the challenge of education in armed forces. In the modern era, the military profession is confronted by a variety of challenges. One of the most critical of these challenges is the rising scepticism from the polity regarding issues of national security (Sarkesian *et al* 1995: 74). In a situation where there is a clearly defined (external) threat, the armed forces have a clear purpose that reinforces and expands the notion of a profession committed to the

service of a country. In a situation where the military is faced with a variety of complex and difficult issues arising from the domestic and international environments, that sense of purpose falls by the wayside. In such a situation, the military serves as a reservoir of national skills and should provide the intellectual skills for a variety of ill-defined threats and challenges (Sarkesian *et al* 1995: 151-2, Desch 1996). Consequently, the "fog of peace" could well be much more demanding to the military profession than the reality of armed conflict. This "fog of peace" is a fundamental consideration in the education of the military.

2. The rising need for education in armed forces since 1945

Since 1945, two factors dominated the education of military professionals, namely the significant expansion of civilian higher education and the shifting definition of war (Van Creveldt 1990: 102). These two factors were bolstered by a number of more or less plausible reasons for the promotion of higher (academic) education among military professionals. The first was the adoption by most armed forces of an "up or out" personnel management system, in which most officers were expected to retire at a relatively young age and where most of these young retired officers experienced difficulty in securing second careers. This gave rise to a situation where officers were looking for pathways to prepare for such second careers. The most obvious route was a recognisable academic qualification. Foot (2001: 13) explains this phenomenon as follows

[...] as marriages happened, children appear and years seem to pass more rapidly, attention shifts marginally to what time spent in the military will produce by way of preparations for the next stage of an individual's career, beginning roughly any time from ages 30 to 50.

The introduction of nuclear weapons and the arrival of the age of deterrence in the aftermath of the Second World War led to the demilitarisation of war: the military dimensions of armed conflict were de-emphasised in favour of the non-military dimensions. An understanding of the wider ramifications and implications on the use of force became necessary (Van Creveldt 1990: 101-2). The fear that the use of conventional weapons could lead to or escalate into a nuclear war brought to the fore a limitation on the use of force in a conventional

manner. This was one of the contributing factors in the rise of lowintensity conflicts — so-called wars of national liberation. The politicalstrategic emphasis and nature of these conflicts led to the re-invention of a "new" military strategic school of thought: counter-insurgency. In most theories about revolutionary wars and counter-insurgency, the military dimensions of conflict are de-emphasised in favour of the political, economic and political dimensions of the struggle (cf Fairbairn 1974, McCuen 1966, Thompson 1966). The rise of irregular warfare was accompanied by an increasing emphasis, initially, on defence and, later, on the security of the state. Ministries of Defence replaced Ministries of War while defence policies and later security policies replaced military policies. The role of armed forces was extended to peacetime. In addition, the introduction of the notion of security presupposed an extension of defence and military-related matters to other spheres of society. Within the framework of the Cold War, almost every conceivable aspect of human existence was securitised. The role of academic education and the concomitant need to conceptualise these matters were almost self-evident.

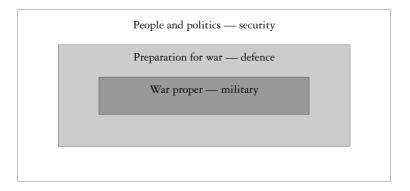
Van Creveldt (1991: 72-3) also argues that the post-1945 geo-strategic situation necessitated armed forces all over the world to retain disproportionately large numbers of middle-ranking officers in service. The rationale was that, should another conflict break out, these officers would act as the backbone of an accelerated mobilisation process. In the strategic context of the Cold War, such an eventuality was always a possibility. Over time, the numbers of these officers rose to a point were they became a serious problem for armed forces, and questions were being raised about what to do with them. Higher education as a solution to these and other problems seemed to be a distinctly economic concern. Officers who studied, required neither units to command, nor equipment to run down. Sending officers to study was cheaper than almost anything else they could be made to do.

3. A theoretical understanding of the need for educated armed forces

The discussion on the rise of education since 1945 outlines the prominence of a number of geo-strategic and other reasons. The need for education in armed forces should, however, always be seen in the context of the

general need for education in societies world-wide and throughout the ages. Yet, it is also true that the military has to produce its own strategic thinkers if it wishes to be effective in the strategic realm. Strategic effect is rooted in a thorough understanding of the complex nature of strategy. The discussion by Gray (1999a: 24) of the seventeen dimensions of strategy provides a solid theoretical framework for an understanding of strategy and the need for education in armed forces. The underlying argument is that cognitive excellence in each of the dimensions of strategy contributes to overall strategic effectiveness. Consequently, it may be argued that each of these dimensions provides a reason why strategists in general and officers in particular, need to be educated.

Figure 1: Security, defence and military knowledge



Gray's seventeen dimensions of strategy are clustered into three categories. The first category, "People and politics", includes people, society, culture, politics and ethics. The second category, "Preparation for war", comprises economics and logistics, defence organisation, military administration, information and intelligence, strategic theory and doctrine, and technology. The last category, "War proper", consists of military operations, command, geography, friction, the adversary, and time. In comparing the different categories an interesting progression is detected — at least from a military perspective (cf Figure 1). The first category is almost on the periphery of the military world. The focus is on those particular issues considered to be part of society in general

and its security in particular. The second category demarcates the defence realm. The emphasis is on those issues usually considered to be part of the defence and the defence establishment of a country. The third category is clearly at the centre of all military activities and emphasises those issues that are related to the military's primary role — warfighting and the employment of armed force in general.

3.1 Security thinking: understanding the Clausewitzian trinity — government, society and armed forces

Education underpins the need for military forces to adapt to changing strategic and operational environments. Consequently, Hauser *et al* (1996: 61) argue that militaries need to study the use of force in the context of the social, political, economic, technological and moral factors that influence military institutions and operations. In this particular argument, the ability to cope with the ever-present threat of conflict and the need to minimise the likelihood and severity of international violence form the bedrock of the need for strategic and military knowledge. With the acceptance of war and violence as constant features of the international system, this outlook represents a very realistic view on the need for education and knowledge of strategic and military affairs.

Contemplation of these influences is based on horizons and perspectives not bound by military considerations, and encompasses the view that political, psychological, social and economic factors are an integral part of the use of force, or the threat to use force. The alternative to this intellectual understanding of military affairs is a military isolated from society and remote from the realities of the international security landscape (Sarkesian et al 1995: 158). This intellectual sophistication and development cannot be provided by the military system in any other way than through academic studies. The intellectual expertise and maturity acquired through prolonged academic studies is the only vehicle providing the understanding and sensitivity necessary to deal with the complex security landscape and the increasingly complex military institution (Sarkesian et al 1995: 18-9). Sarkesian et al (1995: 156) argue that education offers a channel for mutual beneficial interaction between the military and the broader society, and between the military and the academic community in particular. In the long term, this interaction benefits both the military and society. More specifically, it helps to break down rigid stereotypes in broad society, as well as in the academic and the military worlds.

The strategic culture of a nation has a decisive influence on the development of successful strategic courses of action, namely ways to optimise the use of a nation's resources to ensure its own security. Gray (1999a: 129 & 141) emphasises that "[n]o one and no institution can operate 'beyond culture'" and "[...] culture is as culture does". Strategic culture not only shapes a country's attitude towards the military instrument of power; it also affects decisions about its employment. Strategic culture¹ flows from the interplay between historical experience, geography and political tradition (Drew & Snow 1988: 57). An individual can only become historically-minded by means of extensive study, thereby developing an in-depth understanding of geo-political matters.

Military power will always have a crucial role to play in the security of states and the management of its defence — which is not necessarily a warfighting role. From this perspective the role of the military is seen as being constructive: to contribute to peace and security within societies, and not as a replacement for peace and security. The military and strategic knowledge that originates from the above emphasises how military power should prevent and end conflict in the international system. This view of military and strategic affairs is rooted in the quest for knowledge on how military power could be used in a positive and responsible manner. In the recent past, this line of thought has been associated with the peace studies school of thought. Ideas, such as non-offensive defence and non-threatening defence that rose to prominence in Europe and elsewhere — also in South Africa — emanate from this school of thought. These ideas represent an inherently idealistic outlook on the need for knowledge on military and strategic affairs. In view of the nature of South African security thinking, this argument alone should feature very prominently in the need for the education of the military in South Africa (Jordaan 2004).

Strategic culture is defined as "[...] the persisting socially transmitted ideas, attitudes, traditions, habits of mind, and preferred methods of operation that are more or less specific to a particular geographically-based security community that has had a unique historical experience" (Gray 1999a: 131).

Acta Academica 2007: 39(1)

This more positive role of military force in the security of states is related to the kind of advice that militaries provide to governments. There seems to be a rising need for enhanced military advice to governments. Governments expect militaries to provide better and more imaginative strategic and policy alternatives. This could only be done if militaries have the cognitive flexibility to move beyond the traditional paradigm of military advice. Military and strategic education is the key in this respect. Taylor & Bletz (1974: 254) describe the traditional paradigm for military advice as follows:

In the past, military professionals have tended to view pessimistically threats to national security [the 'worst case syndrome'], to report optimistically on military capabilities to get the job done [the 'can do syndrome'], and to show progress toward achieving objectives by whatever measures their civilian masters establish.

The calibre of advice that military leaders provide should at all times reflect an understanding that knowledge and ideas, and the ability to generate them, are more important than weapons, economic potential, political acumen or technological advantage. Foster (1996) avers that it is imperative to develop, nurture and engage strategic thinkers on all levels. He is of the opinion that strategically-minded officers are critical, creative, broad-gauged visionaries with the intellect to dissect the status quo, grasp the bigger picture, discern important relationships among events, generate imaginative possibilities for action, and operate easily in the conceptual realm. Thus, he argues,

[...] any institution that relies on professionals for success and seeks to maintain an authentic learning climate for individual growth must require its members to read [to gain knowledge and insight], discuss [to appreciate opposing views and subject their own to rigorous debate], investigate [to learn how to ask good questions and find defensible answers], and write [to structure thoughts and articulate them clearly and coherently] (Foster 1996: 111).

These notions contain some of the essential characteristics of the educational process. It is impossible to perform these with a mere emphasis on training. These indispensable elements empower and nurture strategic thinking. It is needed to develop the ability to grapple with the underlying questions of "whether", "why", and "what if's.

One of the defining characteristics of a post-modern military is a growing civil-military gap. Militaries are becoming increasingly iso-

lated within societies and in the activities in which they engage (Heineken & Gueli 2004). This growing civil-military gap is rooted in a number of considerations. Most countries have done away with conscription, which used to be a vital link between the military and society in general. The ending of conscription was accompanied by a growing apathy in (Western) societies towards political and bureaucratic institutions in general, and the military in particular. With the end of the Cold War and the democratisation of a significant number of countries in the world, militaries have been scaled down, to the extent that people began to question the need for the continued existence of some of these forces.² Militaries have become increasingly less prominent as an instrument of policy in international relations and the domestic environment. This also holds true for its role in domestic policy-making processes. It is believed that the events of 9/11 are due to change this trend and that there would be a return of military force as a more prominent instrument of international affairs. The present wars in Afghanistan and Iraq are probably the first signs in this direction.

Betts (1997: 8) argues that civil-military relations will always necessitate an in-depth understanding of the checks and balances needed for healthy relations between society and the military in general and between the military and the government in particular. Feaver (1996: 154) summarises this as knowledge about the need to have protection by the military as well as the need to have protection from the military. A military can never discard its accountability in this regard and should at all times be aware of the boundaries of its responsibility in and towards society. It should, however, also be knowledgeable on when and how to engage politicians actively as regards policy issues and their application that concern the military. Such interaction should be underpinned by a thorough understanding of the asymmetrical but mutually beneficial relationship between the military and the polity. Knowledge of civil-military relations is, therefore, important both within and outside the military for a proper understanding of the role of the military within and towards society. This is especially true of new

This is also the case in South Africa. During a visit by the South African Parliamentary Portfolio Committee on Defence to the Military Academy on 19 January 2005 one of its members commented about members of the South African Parliament who question the need for a defence force in South Africa.

democratic societies like South Africa, situated in a region plagued by bad civil-military relations.

The expertise of senior officers — military strategists — is defined less by narrow knowledge and arcane technical, tactical and operational detail. Neither is it defined in terms of dutiful obedience to authority. It is, however, defined in terms of a sophisticated understanding of complex (security) issues and a capacity to influence major events (Foster 1996: 112). Reddel (1998: xi), with reference to the military, argues that no other profession incorporates such a wide range of decision-making challenges posing profound implications for nations and their societies. This holds true for the national, regional and international strategic environments. Military decisions in the contemporary era have a potential for ethical, economic, social and political ramifications far beyond those of the nineteenth century, when military officers were more narrowly focused and when weapons were far less lethal than today.

The trend of increasing complexity in decision-making is due to continue as military forces are faced with advanced military technology, especially chemical, biological and nuclear technologies, and rapidly changing and, sometimes, disintegrating societies. Reddel (1998: xi) is therefore of the opinion that the question is not whether armed forces should be educated; but rather what education could possibly prepare officers to meet these challenges successfully to serve the security of society. Officers need to be educated to deal with the demands of changing and complex security environments. This requires expertise beyond the scope of the battlefield and other traditional military skills. Education is the starting point for acquiring this indispensable expertise.

3.2 Defence thinking: preparing armed forces

Preparation for war delineates the need of military forces to be prepared at all times to deploy on short notice or to react to emergencies that may arise. The preparation of military forces is rooted in the availability of both military "hardware" and military "software". States normally take great care in the procurement of their military hardware — ships, aircraft, tanks, etc. The software side of the coin, though, is often neglected. The need for an updated military doctrine and an ethos characterised by a fighting spirit often fall victim to a bureaucratised peacetime military. An educated, informed and holistic understanding

of what is needed for peacetime forces to be prepared is, thus, of paramount importance (Esterhuyse 2005).

Military "software" — doctrine — is rooted in theory. The need for military education, specifically in peacetime, is closely linked to the need, role and utility of military and strategic theory. Why should officers be schooled in theory — the world of ideas? Gray (1999a: 35) points out that wherever one looks in modern strategic history, testimony is found of the influence of ideas. Clausewitz (1976: 578) explains:

Theory cannot equip the mind with formulas for solving problems, nor can it mark the narrow path on which the sole solution is supposed to lie by planting a hedge of principles on either side. But it can give the mind insight into the great mass of phenomena and of their relationships, then leave it free to rise into the higher realms of action.

It could be argued that theory serves a useful purpose to the extent that it collects and organises the experiences and ideas of other men, providing cues as to which of them may have a valid transfer value to new and different situations. It also helps the practitioner to enlarge his/ her vision in an orderly, manageable and useful fashion — and then to apply it to the reality with which s/he is faced (Wylie 1967: 35). Theory, Strachan (1983: 2) points out, has two purposes: it provides an understanding of conflict and war and it provides insight into the military mind. Stated differently, an intuitive understanding of military and strategic matters, as opposed to a conscious and analytical understanding thereof, negatively influences the military in two ways. First, it restricts the vision of the strategists. A more general theoretical appreciation provides a wider span to the vision of the strategist, namely his understanding of conflict and war. Secondly, it blocks the exchange of ideas and almost automatically inhibits appreciation of the ideas of others. "The remarkable thing is not that there is so much disagreement in the Pentagon", Wylie (1967: 32) points out, "but that there is so much agreement".

Soldiers are not strategic theorists; they are strategic practitioners. They have to translate strategic theory into workable plans, from the highest strategic and operational levels to the lowest tactical and technical levels. Doctrine is the means by which soldiers bridge this gap between theory and reality. Sound doctrine is the only basis upon which large numbers of people could be trained with equipment in standard methods of behaviour to be predictable instruments of the military

commander. Doctrine is written for and used on different levels in the military to ensure that military forces are structured, trained and equipped to apply technology (Sanderson 1998: 229). Doctrine needs to be written not only on and for the joint strategic and operational levels, but it is also needed within the different services on tactical and even lower technical levels. Officers on all levels therefore need to be able to contribute to the writing of military doctrine, both in terms of its content and its physical writing. It stands to reason that the officer's written and analytical skills are of critical importance in this regard. Writing doctrine is probably one of the most important tasks of an officer. The importance of doctrinal writing centres on the need for doctrine to be based on the correct historical lessons and strategic theories. Most military disasters occur because of wrong lessons being learned, or the right lessons being adhered to long after the lapse of their use-by date (Smith 1998: 149).

The ability of an armed force to adapt to changing circumstances and to shape itself for future eventualities is rooted in the need and capability for research on contemporary and future security, defence and military issues. In short, research is needed to incorporate all the relevant lessons of the past, while preparing the armed forces for current demands and likely future challenges. This is especially true in rapidly changing technological, political and strategic environments. Fabyanic (1986) argues that research and writing constitute one of the "four pillars of wisdom" in armed forces. Without research, Fabyanic claims, there can be no in-depth understanding of war. He argues that the primary objective of research and writing is to put war in a clearer focus so that efforts to deter or fight could be made consistent with war as it occurs. A constant re-examination of war is essential for the professional officer for several reasons, the most important of which is that "[...] every age [has] its own kind of war, its own limiting conditions, and its own particular preconditions" (Fabyanic 1986 quoting Clausewitz). It is interesting to note how a large number of civilian academics and theorists in the strategic studies and security environment have succeeded in influencing government and other policies through research and writing. In South Africa, the two Pretoria-based institutes, the Institute for Strategic Studies and the Institute for Security Studies, together with the ANC think-tank of the early 1990s, the Military Research Group (MRG), have been very prominent in the re-orientation of governmental security and defence thinking in the 1990s (Jordaan 2004). This has happened to the extent that the military almost abdicated its responsibility in this regard. There may, however, be a theoretical explanation for this occurrence.

Militaries in general experience some difficulty in redefining themselves on a professional, institutional and personal level in terms of the so-called post-modern military environment. The notion of postmodern militaries arose in the aftermath of the Cold War. Academics argue that the post-modern nature of military forces has a profound influence on the nature and use of armed force. The progression towards post-modern militaries is reflected in a wide array of issues: threat perceptions, force structure, mission definition, the nature or type of the soldier required, public attitude towards the military, media relations, and the roles of civilian employees, women, homosexuals, military spouses and conscientious objectors (Moskos et al 2000: 15). This redefinition of military force, very prominent since the end of the Cold War, occupies the (political and) military leaders of most countries of the world. In South Africa in particular, this has led to an inward organisational focus with an emphasis on issues such as transformation, restructuring and professionalisation. These transitional stresses, brought along by the end of the Cold War and democratisation in many countries, led to a search for ways in which the military in general and military professional in particular could deal with a wide variety of complications (Reddel 1998: xii-xiii). In the past, education has often been an important tool to deal with such complexities.

Betts (1997: 8) emphasises that the nature of defence budgets affects the fiscal, social and foreign affairs of a country. It is, on the one hand, important for the military to have a ready expertise and an understanding of these matters. On the other hand, it is essential that politicians and society involved or interested in these affairs should not be ignorant about military affairs. The recent and ongoing debate on the procurement of new weapon systems for the South African National Defence Force has again brought this point to the fore. The level of the interest and debate on the strategic weapon packages are an important indicator of the need for knowledge about military and strategic affairs within the South African military. The nature and impact of defence

and military decisions are accompanied by a need for management expertise. Military officers need to manage huge defence budgets and sizeable amounts of manpower and material resources in the preparation and conduct of military operations. The only way to inculcate such expertise lies in meeting an increasing and urgent need within militaries for educated military management (Taylor & Bletz 1974: 255-65).

3.3 Military thinking: the use of armed force

Militaries, to a large extent, exist for one reason: organised armed force. Their immediate task is to understand, prepare for and deter war. In fact, the most fundamental and vital task of any professional officer is to understand war. This task, Fabyanic argues, takes precedence over all others. No officer, whatever his military occupation, can be exempted from this responsibility. Fabyanic maintains that militaries in the contemporary era are confronted with the challenge that "[...] technical skills took precedence over the ability to conduct war" (Fabyanic 1986).

Betts (1997: 7-8) argues that the possibility that conflict, or the threat of conflict, would appear on the horizon again is always more likely to happen than not. This is especially true in a war-torn continent like Africa. According to Betts, this reason alone fully justifies "keeping the flame burning". Gray (1994: 360) argues along the same lines when he emphasises two particular points: "bad times will always return" and "there will always be thugs out there". According to Gray, it is not fashionable to emphasise this particular matter, but its political incorrectness renders it unusually important. Hence there is a need to have military knowledge and expertise available in the event of conflict recurring. Obviously, this need for the availability of knowledge is underpinned by an understanding of the constantly evolving nature of military and strategic doctrine based on changes in technology, political doctrine, geo-politics and all other factors that may affect the employment of force. Education is the only appropriate vehicle for exploring and preparing for such changes and future eventualities.

Betts (1997: 7) also highlights the need for knowledge about the role of military forces in non-traditional scenarios. In brief, it is not always clear what the role of the military should be in non-warfighting scenarios. This is becoming increasingly important in an era emphasising the use of military forces not to bring about peace, but rather

to keep the peace that has already been created. This also holds true for South Africa against the background of a debate concerning the so-called primary³ and secondary roles of the SANDF over the last decade (Williams 1999). As Betts (1997: 7) explains in the context of the USA, "confusion continues about what U.S. foreign policy should expect military power to do for less vital interests". With an increasing emphasis on the collateral utility of military forces⁴ there is also a growing need for education and knowledge about these activities and of the environments within which force will be utilised in this regard. Most militaries do not have wide-ranging experience in these domains and in most cases a comprehensive doctrine for the preparation of forces for these kinds of missions is not yet fully developed. The only remaining alternative is to dispose of a theoretical approach, underpinned by the need for research and education.

Dixon (1975: 27-9) argues that the employment of force is primarily concerned with two types of activities — the delivery of energy and the communication of information. The former is primarily a mechanistic activity based on the warfighting skills of individuals, their use of military hardware and their co-operation in the military. Commanders are responsible to make decisions — based on intelligence — about the who, where and when of employing the potential energy available in military forces. It is important to understand that this refers to both positive (constructive) and negative (destructive) energy (Esterhuyse 2005). The decision of the commander is based on a large conglomerate of facts about the strategic, operational and tactical situation, the enemy, own forces, geography and weather, to name but a few. The commander should manage this information in such a way that an informed, rational and sound decision can be made. These decisions are rooted in the ability to manage large amounts of information, on an institutional (the so-called C³I system)⁵ and individual level.

³ Defence against (foreign) aggression is considered as the primary role of armed forces.

⁴ These missions are presently referred to under the umbrella term MOOTW (Military Operations Other Than War).

⁵ Command, Control, Communications and Information.

Acta Academica 2007: 39(1)

In the operating environment in particular, a set of complete knowledge on which to base decisions will never be available. Officers should make deliberate efforts in peacetime to develop their cognitive abilities to manage large amounts of information. More than that, they need to develop their military intuition and imagination⁶ to help them construct a full mental picture of situations where complete knowledge is not available. Leser (1997) argues that intuition develops the officer's ability "[...] to see the battlefield without knowing all there is to know". Imagination, on the other hand, "[...] is the ability to consider possibilities that intuition does not see". Whereas academic studies are the principle means of acquiring the ability to manage information, the development of a *Fingerspitzengefühl*, is derived from the interplay between education, training and experience (Turlington 1987: 61).

Kohn (1998: 77) argues that in future military officers will need to be "[...] broad and deep as well as tough and competent — men and women of judgement, wisdom, and balance — to conduct more disparate missions". He argues that officers should develop the ability to adjust to accelerated change not just in technology, but also in concept and strategy. This will necessitate a larger proportion of "thinkers over doers" in the world's armed forces. Kohn also argues that the world is entering a post-capitalist age in which knowledge is the only meaningful resource. In this era, more than in the past, the decisions of officers, particularly senior officers, will be the determining factor in the use of armed force. Kohn is of the opinion that the education of officers should make provision for foreign language proficiency, multi-cultural curricula, rigorous historical study, specific abilities to understand technological change, and an increased emphasis on research and writing, so that officers could learn to think critically and to distinguish explicitly between intellectual rigour and hogwash.

To conclude, officers need to be well-schooled in the skills and knowledge of the use of force. They should be able to assist in all matters of strategy, policy, resource allocation and operations. Officers, in particular, need to be military leaders and skilled military specialists, openminded and adaptable, knowledgeable about military history and the

⁶ The German Webrmacht of the Second World War referred to this ability as Fingerspitzengefühl.

armed forces of the world, and well-versed in the complexities of bureaucratic decision-making and the interests of the country. Furthermore, if military officers refrain from joining the public dialogue on defence matters, and specifically if they fail to write for publications, they abdicate the shaping of the military's future to civilians (Todd 1992). This is what, indeed, happened in South Africa. The military will only be able to fulfil their proper and full role if they are well educated. The education of the military, though, has to contend with one very particular issue — a phenomenon that is often referred to as "the military mind".

4. Educating the military mind?

Understanding the military's disposition towards military knowledge and expertise in general, and education in particular, requires an understanding of the military way of thinking. It is a way of thinking that has often been described as a "military mind". Huntington (1957), for example, argues that there are three ways of understanding the "military mind". The first is a reflection of the ability or quality of the military mind. Huntington (1957: 57) argues,

The intelligence, scope, and imagination of the professional soldier have been compared unfavourably to the intelligence, scope, and imagination of the lawyer, the businessman, the politician.

However, it is difficult to justify these kinds of claims. The second understanding defines the attributes or qualities constituting a military mind or personality. The military mind is thought to be "[...] disciplined, rigid, logical [and] scientific [...]" but not "[...] flexible, tolerant, intuitive [and] emotional" (Huntington 1957: 60). The military mind, Foster (1996: 112) maintains, largely discourages independent thought and critical inquiry. He is of the opinion that pervasive doctrine, regulations and operating procedures breed an orthodoxy in the military that dispels any need for originality. Military officers are regarded victims of a system that values non-objective advocacy, adheres to routine staff procedures, and relies on rigid protocols. A third definition of the military mind focuses on the attitudes, values and views of military men. To be specific, it defines the distinctive and persistent habits of thought that have developed within the military over a very long time. This places

the emphasis on the intellectual roots or sources of the military mind. The question arises as to whether it is possible to demarcate the intellectual roots of the military way of thinking.

Baylis & Wirtz (2002: 6-7) argue that scholars studying strategy — including soldiers — have the same intellectual roots, *i e* they belong to the same intellectual tradition. They share a set of philosophical underpinnings and assumptions about the nature of international political life, and the kind of reasoning which could best handle politicalmilitary problems. These philosophical underpinnings and assumptions are rooted in the realist school of thought. The realist approach to international politics could be summarised as a theory, which holds that states struggle for power and security in an anarchical environment (Lynne-Jones 2002: 54). This means that realists are pessimistic about human nature, seeing people as "[...] inherently destructive, selfish, competitive and aggressive" (Baylis & Wirtz 2002: 6). War, in their view, is not something that can be eradicated. Rather, the ever-present threat of conflict should be dealt with by minimising the likelihood and severity of international violence. The harsh realities of world politics are emphasised and the power and interests of states feature prominently in their view of the world. They also have a pessimistic view of world politics, with states being involved in a relentless competitive struggle. Might is right in international relations, realists argue. As a consequence, realists contend that international and regional institutions have only a limited capacity to prevent international conflict. Realists claim that the history of these institutions shows that when it really mattered, they were not able or capable of acting against the interests of their member states (Baylis & Wirtz 2002: 6).

Drew & Snow (1988: 47-62) outline a number of characteristics underpinning realist military thinking. First, military thinking has a fundamental nature. To be precise, armed forces have as their primary objective the military security and protection of a country and its citizens from those with harmful intentions. Every citizen has an interest in this basic purpose. Failure to live up to expectations in this regard may well be fatal for a nation as a whole. In everyday political life, this issue translates into the so-called guns vs butter debate (Henk 2004: 13-31). What percentage of the national budget needs to be spent on

defence to secure the nation and how should the military utilise its budget to optimise its capabilities?

Secondly, the external or foreign nature of its task directs military thinking. Drew & Snow (1988: 48) argue that it is "[...] generally directed towards foreign problems rather than domestics priorities". The foreign nature of the task is influenced by a lack of knowledge of this realm. Defence officials are likely to be less knowledgeable about the motives and influences of foreign governments and non-governmental groups than is the case vis-à-vis domestic policies. This is even more so in situations where the particular government or non-governmental group is a potential adversary. The task is complicated by the fact that militaries do not have control over events outside their country's borders and can only hope to influence foreign governments and groups (Drew & Snow 1988: 48). The external nature of (traditional) military missions also places support from the general public for such missions under the spotlight, since the public may well have even less knowledge of particular foreign issues and the role their military may be able to play in resolving these issues.

Thirdly, military thinking is influenced by the negative nature of the objectives being pursued (Drew & Snow 1988: 49-50). It may be negative to the extent that the purpose is not so much to promote positive goals as it is to prevent others from engaging in hostile, harmful actions. How does one demonstrate the success of negative objectives? Positive objectives are relative easy to measure. An example would be encouraging other states to become democracies. Is it possible to conclude that the present absence of conflict in Burundi could be ascribed solely to the presence of the South African peace mission contingent?

Military thinking is, fourthly, characterised by "[...] a built-in conservative bias" (Drew & Snow 1988: 51). Military thinking is influenced by the disastrous consequences of what may flow from a military miscalculation. The conservative nature of military thinking tends to manifest itself in the political strategic domain as realist thinking. In the operational realm, it reveals itself as the well-known worst-case planning syndrome. In most instances, the worst-case planning syndrome leads to an exaggeration of the threat beyond what it may actually be. This may indeed have disastrous consequences if the worst-case preparations exceed the capabilities and intentions of an adversary and,

instead, become provocation. Worst-case planning could also be very expensive and may lead to a focus on one particular scenario — conventional war planning, for example (Drew & Snow 1988: 52).

On a lower level, however, the military mind is characterised by a paradoxical nature: discipline and disunity (Besley 1973). Discipline flows from the subordination of the military to governmental policy and the need to execute it, while disunity is rooted in inter-service rivalry between the different services and organisational entities. In South Africa at present, for example, the "problem" of discipline is manifested in a "follow the leader" mentality. This mentality has its roots in political affiliations (support for the ruling ANC, to be specific) on the one hand, and the need to have so-called "struggle credentials" on the other hand (Kenkel 2003: 20). The result is a military organisational climate of political correctness and an uncritical acceptance of everything that is generated on higher levels.⁷ Any form of criticism, initiative and originality is looked upon with disapproval. The end result is an intellectually bankrupt or rotten military.

Military inter-service rivalry, however, is rooted in the difference in strategic outlook of soldiers, airmen and sailors. The best-known arguments in this regard are those of Wylie (1967: 48-57). He argues that two factors shape the soldier's conception of strategy: geography, terrain in particular, and the soldier's continuous and direct relationship with combat. Armies are confined and constrained by the harsh realities of the terrain that limit their speed and manoeuvrability. Moreover, in war, their central problem is often immediate, because the enemy is right in front of them. As a result, the soldier's conception of war and strategy is sharply constrained, and often limited to the immediate (battlefield) problem. The worldview of maritime forces is constrained only by the shorelines of the world's oceans. The air force's view of the world is limited only by the capabilities of its equipment and

The military elite also forms part of the elite inner circle of ANC supporters in the South African public sphere described by Du Plessis (*Rapport* 2005: 16). He is of the opinion that this elite is "[...] so uit huis uit ANC [...] as wat kan kom". By referring to this elite, Du Plessis argues, "[d]ie kern hiervan is die magdom van ministers, direkteurs-generaal, hoofde van staatskorporasies en ander politieke aanstellings wat hul status en invloed ontleen aan die regeermag van die ANC. En hul leërskare van ondergeskiktes".

has expanded over time, as capabilities have expanded (Drew 1988). As a consequence, the landpower strategist thinks in terms of theatres, campaigns and battles,⁸ while the air power and maritime strategists tend to think in terms of the whole world (Wylie 1967: 49).

The services also differ in their experience and conception of combat. Airmen and sailors experience war as a separate series of encounters from which they withdraw or which they pursue as deemed appropriate. Pilots would typically be able to drink cold beer every night and navy officers would dress up for dinner! Once engaged, the soldier, on the other hand, tends to stay in contact with the enemy. Each piece of terrain is gained at a cost of life and effort. While the sailor and airman tend to move through their respective geographical mediums water and air — their medium plays a relatively small role in the actual use of force. For this reason, navies and air forces seek to exercise control over their mediums while landpower occupies its medium.⁹ The soldier's conception of war and battle is very much Clausewitzian in nature: the occupation of terrain and the destruction of the enemy in battle in order to bring the war to a decisive end as rapidly as possible. The destruction of forces and the occupation of terrain take place on the tactical and technical levels of war (Wylie 1967: 50-1). Consequently, the soldier has a natural inclination to be a master of the tactical domain with its emphasis on the development of military skills through training. Considering the worldviews of navies and air forces, as well as their respective focus on strategic blockade and strategic bombing, they have a natural inclination towards the higher levels of war and concomitantly a focus on education.

This reality is further underlined by the nature of the different forces. Landpower is a people-centred instrument of military power. "Landpower" Johnsen (1998: 9) argues, "more than the other components of military power, depends on human interaction or innovation". Maritime and air power, on the other hand, are technology-based instruments

⁸ It is interesting to observe how this manifests itself in the concepts used by soldiers. For example, areas of operations, arreas of responsibility, areas of influence and areas of interest.

⁹ For navies command, or at least control, of the sea, is an important step in the use of sea power for strategic purposes, while air forces strive for air superiority or some form of control of the airspace.

of power. As Johnsen (1998: 9) explains, "[a]ir and sea forces essentially are built around weapon systems or support platforms". One cannot exercise any air power if there are no aircraft and one cannot dispose of any maritime power in the absence of ships. To be true, one always needs personnel to operate these technological platforms. But personnel alone does not provide power in these domains that could typically be expressed in terms of the example of a country with a navy of 50 ships or an air force of 500 aircraft, but an army of one million men. In itself, this reflects something of the nature and difference between the armed services. From an educational point of view, though, it is understandable why sailors and airmen are more interested in technology-related education and soldiers more in the so-called soft or human sciences.

There is also a difference in the role of land, air and maritime power in the development of strategic effect. "The land matters most" Gray (1999a: 212) argues and "defeat on land equals victory or defeat in war". Underlying this argument is the Clausewitzian notion that war is an act of violence to compel the enemy to execute our will (Clausewitz 1976: 75). Those people, who have to be compelled to do our will, live on land. Consequently, strategic effect or strategic leverage is needed on land, and only landpower can occupy terrain. Yarger (1999: 25) argues that

[...] ultimately the resolution of armed conflict among nation states is always predicated on land armies defeating the opposing armies and physically occupying or threatening to occupy the enemy's territory, thereby controlling its government and its ability to resist one's will.

The fact that no war has ever been won by maritime and air power on their own further highlights this reality. Maritime and air power in their purest forms are only enabling instruments: "[...] navies and air forces are in support roles delivering men, supplies, and fire support or creating conditions allowing landpower to be applied" (Yarger 1999: 25). This does not mean that air and maritime power are not of the utmost importance as indirect coercive instruments. The reality, however, is that each of the different services has its own strategic outlook and importance. This is demonstrated by the geo-strategic inclination of countries to be either continental or maritime powers. Germany, for instance, is a traditional continental power; Britain a traditional maritime power. South Africa is without doubt a continental power.

Esterhuyse/Thinking militaries or military thinking

The education of the military mind has to contend with these differences: the difference in strategic outlook or worldview, the difference in outlook on combat, and the differences and unity in the strategic effect of the different instruments of military power. In the end, military education should reflect an understanding that the military, theoretical and strategic outlook of soldiers, sailors and airmen is coloured by a green, blue or white lens.

On a more positive note, Richardson (1984: 24) argues that militaries have to be military-minded if they seek the proficiency that will first keep the peace and then prevail, should war occur. The military or anyone else should not see the existence, development and nature of a military mind as a negative trait. It ought to be actively developed and pursued by militaries in a positive manner. The real question concerns the nature of the military mind that needs to be cultivated. Richardson (1984: 24) is of the opinion that it should be

[...] a mind steeped in the methods, procedures and fundamentals of the profession, but bold, original and creative in their application; a mind that is tactically competent and technological current yet sensitive to the variable and incalculable human factors in war; a mind that understands the uses of knowledge and intelligence, the importance of fitness and the power of good character. It must be a mind tempered by systematic training, broadened by progressive education and deepened by increasing experience, both real and vicarious. In short, it must be a mind that rigorously and continuously pursues mastery of the art of war.

From this discussion it should be clear that militaries share a common framework of thinking about the world that surrounds them, and more particularly about the role of military force and forces in the world. Militaries have a unique approach to thinking about their task in a world characterised by complexity and change. It is a way of thinking that tends to be conservative and to a certain extent also dogmatic. However, the uniqueness of the military mind does not mean that it cannot or should not be educated. Two particular historic views in this regard are of particular importance. Frederick the Great referred to his mule that had carried a pack on several campaigns, but remarked that it never developed a better understanding of war because of that role (Drew 1997: 44), while Bismarck argued that "fools say they learn by experience — I prefer to learn by other people's experience" (Liddell Hart 1946: 10).

5. Conclusion

The need for education in armed forces is rooted in a number of considerations. In particular, soldiers need to have a cognitive and higher order understanding of the fundamental nature of the military profession, of the nature of the politico-security, defence and military worlds in which they operate, and of their own way of thinking — the military mind. The fundamental nature of the military profession demarcates the boundaries of the military professional's duty. It draws the academic education of the military towards its primary role warfighting — and simultaneously assures that the military's use of organised violence is contained through subordination to society and its polity. Yet the fundamental nature of the military profession also influences the way soldiers think – how they use their military minds. The realist or conservative thinking of the military mind, is an important factor in the need for academic education in armed forces. A broad liberal academic education is an important catalyst in influencing the military mind to contemplate the higher order security, defence and military considerations in the execution of officers' daily duty.

Complexity characterises the modern politico-security, defence and military worlds. The South African military — being part of the most war-torn continent of the world — is not an exception in this regard. There is without doubt an urgent need for the education of the military in South Africa. This need becomes even more urgent if the socio-economic and disadvantaged backgrounds of the majority of South African officers are considered. In South Africa, this is an extremely important notion, since unequal access to jobs and education — and consequently extreme levels of income inequality — was one of the defining characteristics of apartheid (Handley 2004: 196). Consequently, the provision of military education underpins the success of the SANDF in the same manner that the provision of education in general lies at the heart of a successful new South Africa.

Esterhuyse/Thinking militaries or military thinking

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