

**Research and Development
at the Norwegian Military Academy**

A policy paper

December 2007

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The purpose of this policy paper is two-fold: ¹

1. to formulate a rationale and purpose for undertaking research and development (R&D) at the Norwegian Military Academy – *Hærens krigsskole*. ²
2. to sketch out a plan for how such R&D goals may be achieved.

Hence, the paper first presents the primary reasons and purposes for the Academy to conduct R&D. It proceeds to stipulate the policies to achieve these ends and briefly drafts the features of a program that could ensure their fulfilment.

Rationale

The Academy's primary task has always been to educate Norwegian Army officers. In addition, some of its staff has conducted R&D. During the last decade, for instance, instructors have completed three PhD degrees, another one is being carried out and two new applications have been forwarded. In addition, a number of master degrees and research projects have been undertaken.

Recently, the Academy has commenced re-considering how it conducts R&D. There are two major reasons for this. The primary one is that the Academy is responsible for providing the academic education of Army officers in the first 15 years of their military careers. Thus, the Academy must be able to cultivate the particular kind of competence of officers at the lower level of the military hierarchy need to deal expertly with future challenges to Norwegian security. To this end, R&D is critical. Properly conducted, it will improve the cadets' learning environment by keeping the Academy's staff competent, vigilant, and motivated. In addition, it will enhance the Norwegian Army's competence in the crucial fields of Military Tactics and Leadership.

¹This policy paper has been prepared by Carsten Rønnefeldt.

²R&D is defined as studies of original nature carried out to foster knowledge or systematic studies applying existing knowledge and practical experience aimed at improved insight in and understanding of processes, systems or activities.

The triggering factor for reconsidering the Academy's R&D endeavours is the Royal Resolution of 6 June 2003, which partly subjects the Academy to the terms of the law of higher education.³ This aims, among other things, to ensure that high educational institutions undertake research.⁴

Against this background, the Academy deems it necessary to clarify and develop its R&D policy and programme.

Purposes

It follows from the rationale that the purposes of the R&D programme are:

1. to develop knowledge of relevance to the military profession in general, and more specifically to improve the educational environment at the Academy in which young Norwegian Army officers form the *particular kind of competence* they need to deal expediently with future challenges to Norwegian security.
2. to communicate the Academy's competence more efficiently within and beyond the Norwegian Army.
3. to fulfil the requirements of the law.

Policy

In order to achieve these purposes the R&D endeavours are guided by a set of policies.

The first purpose is pursued by improving the Academy staff's qualifications. The primary intention with such activities should always be to further the cadets' competence, however. Thus, R&D should be a means to enhance the instructors' ability to develop the cadets' faculties. This policy clearly counter-balances an inclination in the academic communities, to which the above-mentioned law applies, to conceive and evaluate R&D achievements in terms of formal competence, often as the production of academic publications and degrees. Should R&D at the Academy be guided solely by such scholarly standards it would involve the risk that it produced formal competence to individual staff in a manner that did not significantly benefit the Army, in the sense of improving its young officers' process of formation. This could happen if the R&D subjects were of limited relevance to officers at the lower echelon, or if the staff spent little time with the cadets and colleagues.

To avoid such developments, the Academy should prioritise R&D projects that explore subjects related to the particular kind of competence stipulated in the first purpose above. Such a policy should, however, not exclude but rather encourage R&D in fields which "next round" will benefit the educational environment. This includes R&D which will enable the Academy to develop scientifically based and reasoned "explanation" for how its field of

³ *Universitetsloven* of 1 April 2005.

⁴ §1-1 specifically stipulates that institutions that are subjected to this law will conduct research and academic.. development activities at a high international level (the Norwegian text stipulates ' *forskning og faglig... utviklingsarbeid på høyt internasjonalt nivå* ').

study is carried out which is a prerequisite for the national community of education. It is also imperative for how the Academy plans to develop and study of "practical knowledge" of the military profession explores such a field of interest. Finally it is important to shed light on how the Academy should address the "step" and "out-step" between educational demands and Hence, the Academy does not conceive R&D only in terms of formal competence. R&D may well include applied research, for example, to develop a particular course, to explore new learning methods, or to author a text to be used in coming apart of and benefit from the R&D programme to lay the particularities related to the field and then establish activities which can encourage applied research which need for knowledge related to "in-demand" from the field of practice.

In addition, the Academy should prioritise R&D projects that most convincingly justify how they will benefit the cadets. The Academy should encourage that such projects are conducted in a manner that allows staff to teach in parallel to studying, rather than after they have obtained a degree. The former arrangement will facilitate that the cadets learn in a stimulating environment. Moreover, those who receive R&D grants should be obliged to serve at the Academy for as long as the time granted to study.

In order to achieve these second R&D purposes the Academy must be able to communicate internally as well as externally. This implies that the Academy should possess sufficient competence to develop R&D in an academically sound manner and do so in a way that is acknowledged by relevant authorities and institutions. This implies that priority is given to formal competence in the form of academic degrees and publications. Co-operated R&D efforts with relevant institutions should also be encouraged, since it associates the Academy with the established academic communities and facilitates that the Academy is seen as contributing to professional knowledge.

The latter concerns do not necessarily safeguard the achievement of the first purpose, however, viz. that R&D should benefit the cadets. To balance both requirements, the Academy should encourage that formal competence is developed within one of the distinctive subjects presented below. It should further conceive the results of R&D projects in broader terms than simply formal competence.

The third purpose can be considered achieved once the two above-mentioned purposes are satisfactorily fulfilled.

Content

The substance of the particular kind of competence clarification. In this context, the Academy distinguishes between four different forms of competence: practical, contextual, adapted and distinctive. Among these the latter is particular to the military profession and is given priority in this programme. Before presenting this, each of the other areas is briefly introduced.

Young army officers need *practical competence* to deal expeditiously with future challenges to Norwegian security. Teaching soldiers to shoot is a case in point. Such skills are best acquired by means of on-the-job training rather than at the Academy, which is particularly concerned with the officers' intellectual and attitudinal formation.

Contextual competence refers to an ability which is desirable not at the level of the individual officer, but at the institutional level of the Academy. It concerns the educational context in

which the officers learn. More specifically it comprises, among other things, the Academy's ability to facilitate for the most appropriate learning strategies, to explore and make accessible competence of relevance to the military profession, and to do so in a manner that is acknowledged by external actors.

The particular kind of competence the Academy promotes among its cadets derives partly from established academic disciplines such as English, Engineering, and Physical Education. Instructors see that the cadets approach these fields of knowledge in a manner that is useful to their military profession. Competences in this area are recalled *adapted subjects* since they primarily draw from professions different from the military.

Other fields of inquiry are more particular to the military profession. These are recalled *distinctive subjects* and include notably Military Tactics and Military Leadership but also Military Theory and Military Strategy. These four subjects have gained little attention outside military communities and have not in the same way established themselves as academic disciplines.

This is particularly true for Military Tactics. Despite the fact that such competence is of crucial importance not only to the teaching at the Academy but also to the operational activities of the Army at large, little systematic knowledge has been accumulated in Norway on this subject area. This field of inquiry will be given highest priority.

Equal emphasis will be given to Military Leadership. This subject has traditionally borrowed from established disciplines, such as Pedagogy, Psychology and Management. Yet, it is debatable how useful the latter fields are to a qualified officer to deal with his primordial task: to lead in combat. True, the latter task constitutes only a marginal part of what officers actually do throughout their careers. Indeed, many operational officers will never experience a battle and others may specialise in military support functions such as logistics and administration. Nonetheless, contrary to practical reality other aspects of the military profession, there are no other national educational institutions where young army officers can prepare themselves to fulfil the armed forces' *raison d'être*, which is to succeed in armed combat in pursuance of political goals.

Military Theory and Military Strategy are also distinctive military subjects and will therefore be prioritised in the overall R&D endeavour. Compared to the two above mentioned subjects, however, they will not be as actively encouraged. The reason is that Military Theory and Military Strategy have already received some scholarly attention on which the Academy's staff and cadets can rely when exploring these subject areas.

Based on this understanding the Academy's primary task becomes to further the particular kind of competence the officers need to succeed in battle. The R&D endeavour should support the Academy to this end by primarily exploring the distinctive subjects and among them notably Military Tactics and Military Leadership. In addition but of secondary importance it should develop contextual competence and adapted subjects to serve the Army's purposes. This policy does not only further the overall goal of R&D, it also gives the Academy comparative advantages compared to other national research communities since this guideline explicitly directs research to fields of inquiry where the Army has a unique competence. It is illuminating to briefly present the four above-mentioned distinctive subjects and their centrality within the military profession :

- *Military Tactics* may be defined as the ability to succeed in military engagements.⁵ It may also be described as the art of employing available military resources in the best possible manner to achieve an objective. Tactics require cognitive skills and judgement, and is thus considerably more than mere techniques and drills. It is a distinctive subject at the Academy since this is the crucial task officers will be charged to carry out for the major part of their careers. Nevertheless, this is a field of inquiry that has received little academic attention (see further appendix A).
- *Military Leadership* may be seen as the primary competence officers at the lower level of a military hierarchy should possess. The military profession is, as mentioned, different from others in that it shall lead soldiers into and through tactical engagements, where they risk to set their own life and take that of others, has been the primary focus of the military education throughout the Academy's 250 years of history. In such extreme situations, which are thoroughly studied in civilian settings, primary social and contractual relations, may not suffice to allow officers to prevail. Scholarly work on the military features of these issues is in demand (see further appendix B).
- *Military Theory* is a more established academic subject. It helps us reflecting on how we may win the next war, since it furthers our understanding of the phenomenon of war and the utility of armed force in this context. The subject aims not to list solutions to military problems but rather to explore basic assumptions about how to employ military force. It allows us to appreciate war as considerably more than an battle; to understand that a given doctrine is based on a limited set of assumptions within the much broader field of Military Theory, and that the application of other assumptions to understand the nature of the conflicts at hand and the utility of force with them will result in different doctrines (see further appendix C).
- *Military Strategy* is an ancient subject area that may be defined as a plan of action designed in order to achieve an end. Carl von Clausewitz sees it as "the use of engagements for the object of war." These definitions may be interpreted in different ways. The subject may be seen as dealing with issues relevant only to a particular level in a military hierarchy—the strategic level. It is not such an issue the subject Military Strategy addresses at the Academy. Rather it is in two other senses, which in different ways promote a strategic mindset, the subject forms part of the education. Strategy is here conceived as the instrumental process of developing a plan to use military means to achieve desired ends. Strategy is also seen as a particular form of rationality embedded at all levels of command to operate in an expedient manner (see further appendix D).

Assumptions

This R&D initiative rests on a few critical assumptions that it is deemed prudent to address here. One is that the Academy's staff is motivated to engage with such scholarly undertakings. This assumption cannot be taken for granted among its military instructors who often hold a position for no more than two years before they move on to other units in the

⁵This is the definition employed by Carl von Clausewitz and later developed by the US Marine Corps in their field manual *FMFM1-3 'Tactics'*.

armed forces. Within this organisational culture he generally is seen to be the most efficient way to promote conducting research, has rarely ameliorated officer hierarchy.

Thus, it remains a challenge for the Academy to create R&D projects. At a broader organisational level, they are conditioned by the Army's ability to ensure that they are not discriminated in terms of military promotion. The Commander must establish among its staff a sense of appreciation that properly conducted R&D can significantly benefit cadets since it keeps instructors updated and portrays R&D as an activity that anyone can manage. A common misperception is that it is reserved to the production of the armed forces. Basically, instructors should perceive R&D as an activity that anyone can manage. They should also see it as an opportunity to further their careers, improve their skills, and make their daily tasks more stimulating. The Academy should develop a feeling of ownership in relation to the

The other critical assumption is that the particular activity should be scrutinised along academic principles. To avoid this, it is useful that the programme is supervised by a

A more practical consideration is that R&D activities should be undertaken during periods of low operational urgency of daily tasks. Instructors undertaking R&D over prolonged periods. Ideally, such staff should be given a semester a year allowing them to study in the

Programme

In order to give an idea about how the intention of the policy is beneficial to paint the features of a possible programme, two tables suggesting R&D positions and categories of activities that can ensure the implementation of the policy goals.

Having a variety of operational functions is essential to one's career. Teaching, not to mention research, is a means of advancement within the military

among its staff an interest to undertake such activities. The achievement of such R&D endeavours should be recognised and rewarded with appropriate salary. At the level of the Academy, the focus should be on the utility of R&D. Staff should be encouraged to improve the context in which they work. It may also be necessary to identify and particularly to eliminate any barriers to R&D as a formal competence largely irrelevant to the Academy. R&D as an activity that is in the interest of the Academy as officers can benefit from, in their confidence and status as instructors, the Academy's task is to ensure that its staff undertake R&D endeavours.

Competence, officers need, can be developed through R&D activities. At least one experienced scholar

will be jeopardised if interrupted by the operational demands of teaching duties. Teaching tasks should be concentrated to one

If this policy paper can be put into practice, the implementation of the policy goals will be done below by the implementation of the policy goals.

<i>R&D positions:</i>	Tasks:	Time:
Research Co-ordinator	Direct the Academy's R&D endeavour along the stipulated policies to achieve its purposes. In particular, stimulate R&D activities, and facilitate and control progress in projects.	50 percent
Advisory Board ⁶	Give relevant guidance to the general orientation of the Academy in achieving its tasks, including R&D. In particular, the board is meant to improve the utility of such competence, notably, but not only, within the armed forces. The board shall facilitate cooperation with relevant organisations and research institutions, and assist the Academy's staff in being accepted for the study of higher degrees.	2-3 annual meetings

<i>R&D activities:</i>	For example:
Applied R&D	<ul style="list-style-type: none"> • Develop a subject, a module or a military exercise. • Prepare new teaching material. • Develop pedagogical methods.
R&D cooperation	<ul style="list-style-type: none"> • with <i>Høgskoleni Lillehammer</i> : <i>Profesjonsutdanning</i>. • with NUIP: Civil-Military Cooperation. • with the private sector: Strategy, decision-making. • with Sandhurst: Military Tactics.
Master-degrees	<ul style="list-style-type: none"> • Management at BI. • Peace and Conflict Studies at the Australian National University/ PRIO/ Bjørkness.
PhD-degrees	<ul style="list-style-type: none"> • In Military Theory at King's College (UK).
Post-doc	<ul style="list-style-type: none"> • Cooperated project with the Strategic Studies Institute at the US Army War College.
Academic publications	<ul style="list-style-type: none"> • Books and articles in refereed scholarly journals such as <i>International Peacekeeping</i> .

The amount of time allocated to undertaking the above obviously be determined by the task assigned. Applied short-term nature, often counted in weeks if not days, may be carried out over a duration of months, and

the above-mentioned R&D activities should be carried out. Applied R&D projects are likely to be of a long-term nature. R&D cooperation, on the other hand, will often only be part of the

⁶The board will consist of a suitable number of persons. Its members are to be either scholars or practitioners, who have central positions or relevant experiences and together cover the fields of tactics, leadership, international affairs, civil-military cooperation, police and international and humanitarian organisations. The Academy will be represented by its own members and the R&D Coordinator will manage the board.

responsibilities of the staff involved. Producing publications or master- and PhD degrees, takes year solely for the purpose of studying. The Academy should apportioned their position each year, allowing 50 percent for teaching. This is in order to fulfil the primary intention of the R&D policy, stipulated above, which is to ensure that the competence accumulated remains directly useful to the cadets. Further, taking into account the before-mentioned assumption concerning individual staff's possibilities to make progress in their education, the Academy should strive towards allowing study-time to be taken consecutively. It follows that staff, who has a shared responsibility for studying and teaching, should expect a British master's degree to extend for two years and a PhD for six years.

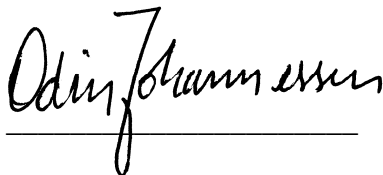
ore formal competence, such as a academic sand require sex extended periods allocated uld facilitate that staff involved have percent for studying and 50 percent for tention of the R&D policy, stipulated above, remains directly useful to the cadets. ssumption concerning individual staff's the Academy should strive towards allowing at staff, who has a shared responsibility for ers degree to extend for two years and a

Commencing an R&D project

It is deemed useful to sketch out how to launch an R&D project. Usually, it should be initiated by an employee or a group of employees at the Academy. He/she will propose an idea to the superior in command. The superior in question will decide whether a project-proposal should be developed. When the idea is considered viable, the superior should ask the employee to write a proposal of maximum 8 pages. On matters of format, the employee is advised to seek guidance from the Research Co-ordinator. The project-proposal is delivered to the Head of division, who forwards it to the Dean for discussion in the Management team (*ie Ledergruppen*). Here the proposal is either declined, returned to the employee with specific instructions on where and how it ought to be revised, or it is simply approved.

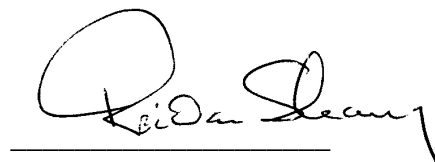
When the Management team supports an R&D proposal, the Head of division will make a contract with the employee. This will stipulate the resources, in terms of time, financial and other forms of support, the employee in turn will commit him-/herself to deliver an R&D product, for example, in terms of a formal academic project exceeding six months, the employee is to establish milestone achievements for every six months.

Norwegian Military Academy



Colonel Odin Johannessen

Commandant



Reidar Skaug

Dean

Appendix A

Military Tactics

In order to properly understand the use of military force one needs to understand all facets of military and political decisions.⁷ The need for understanding politics, Military Theory and strategy seems widely accepted, whereas the decision made further down in the military system are not always as well studied. The explanation for this is difficult to understand as the outcome of a military operation depends heavily on the thought processes and decisions made at the tactical and technical levels.

The reasons for leaving the tactical and technical levels out of the equation are perhaps understandable if viewed from a civilian, academic perspective. Whereas politics, and to some degree Military Theory and Military Strategy, operates within the realm of civilian studies, the field of Tactics seem to demand an intimate understanding of experience of an intricate, and sometimes complex, military structure. This is most to have left the field of Tactics in the hands of the military itself, with some notable exceptions. Another reason for this is of course that Tactics deals with the lower levels within a military organisation and therefore less accessible to and attractive for academic studies.

The Academy's *raison d'être* is to educate and train officers to the fill positions at platoon and company levels. This means that its cadets will work at the tactical level for the best part of their careers, and some will never deal with anything but tactical problems. The irony then is that the competence they need the most is the least academically developed subject they will encounter at the Academy. The Academy's task must be to develop the subject of Tactics academically with regard to teaching, study and research.

Tactics is most often defined as the ability to succeed in engagements or battles with the available resources.⁸ This definition is used as opposed to the definition of strategy or operations, *ie* the ability of linking engagements for the purpose of the war. Following this line of thought, the field of Tactics might be explained as the study of how to win battles and *what we can do* in an engagement or battle, whereas the field of strategy is the study of why battles should be fought and *what we can achieve* with military force.

Approaching the subject

The study of tactics has always been fraught with the problem of defining Tactics as either an art or science. As in all fields labelled "an art", there are no direct links between the theory of tactics and the actual performance in the field. Likewise, the study of tactics cannot be based on purely scientific grounds, as the human element in tactics is too dominant. This dilemma has been one of the main objections when it comes to developing the study of tactics at the Academy.

⁷This appendix has been prepared by Tor-Erik Hanssen.

⁸See: Carl von Clausewitz, *Vom Kriege* (Bonn: Dümmler, 1952) p. 169. See also: USMC *FMFM1-3 'Tactics'*.

However, this problem of subjectivity confronts all the field of tactics, not only military studies in general. Professionals in the field struggle with this phenomenon. To serious study if we treat it only as an art or a seen as a violent expression of a society's will, force in Tactics can we study it properly. Tactics is a human phenomenon.

The definition presented in the previous section is reserved for the lower echelons of a military organization. Problems for the study of Tactics at the Academy, between procedures, drills and techniques on the one hand, and distinguishing itself from mere techniques and drill judgement in its application, and that there are no

Despite the challenges mentioned above, Tactics may still be developed as an academic subject at the Academy.

Method

As the study of Tactics purely as an art or a science is impossible, the study will have to rely heavily on humanistic studies, and particularly history, as it means. The method will therefore have to involve the study of military history. The study of tactics requires a good understanding of science and technology, but ultimately Military Tactics must be studied as a human and social phenomenon. The study of war as well as tactics cannot experiment or test different ideas to completion. In this regard it is more similar to the social sciences. A nomothetic approach, *ie* to develop a common tool of analysis, will therefore be difficult, which leaves us with history and humanities. This is some means that history and the study of tactics must be closely coordinated.

This does not leave out the use of simulation and computer based programs as a departure point for interesting discussions and teaching points in tactics. However, as a means of study it is too far removed from the realities of combat to provide relevant output. In addition the premise of a computer input is far too uncertain.

Condition of the tactical situation

Given that we approach the study of tactics as a human and social phenomenon, there are four main lines that the study of tactics should follow.

Military Theory and is not exclusive to general.⁹ All subjects involving craft or The field of Tactics does not render itself science.¹⁰ The use of military force must be done only by including this element of military must therefore be studied as a social and

pliesthat tactics is a term that should be isation. This has sometimes created because we have been unable to distinguish between procedures, drills and techniques on the one hand, and Tactics on the other. Tactics is that it requires cognitive skills and fixed solutions to a tactical situation.

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⁹ Carl von Clausewitz, *Vom Kriege* (Bonn: Dümmler, 1952) p. 201.

¹⁰ For an opposite view, see: Rupert Smith, *The Utility of Force: The Art of War in the Modern World* (London: Allen Lane, 2005) p. 14.

The humanelementintactics

The starting point of the study of tactics would be human behaviour in war. The most important “resource” and human beings. Tactics must deal with how soldiers under extreme physical and mental pressure. It must be shaped by the behaviour and thought of soldiers.

It necessarily has to be the study of human behaviour. The object of study in tactics will always be human thought, reason, and solving tactical problems. Therefore, it is of interest to study how soldiers and how tactics must adapt to this.

The socialelementintactics

Given that war is a social phenomenon, an interest in how military units choose their military tactics. In what manner? A tactical decision is a result of the human element above, but it should also be seen as a result of the social setting in which the tactical decision is made. Tactical decisions are made by soldiers and their collectives. From the lowest unit up to the societal level, tactics is influenced by the ideas, culture and organisation of these collectives. These doctrines, training and concepts for how the tactical

decision is made. The field of inquiry would be to identify the human and mental challenges briefly described in the social setting in which the tactical decision is made. It is a part of many different social settings. At the societal level, tactics is influenced by the ideas, culture and organisation of these collectives. These ideas are in turn developed into tactical decisions. Problems should be solved.

This line of thought could be developed into the study of conditions, organisational developments and doctrines pertinent today, as a tactical decision more than a political decision making, international law, human factors today might influence a tactical decision and terrain.

The study of how ideas, social and political conditions influence tactics. This is particularly relevant as it will be influenced by, and influence, the rights and the media picture. All these factors are more than traditional factors such as enemy and terrain.

The surroundingsandtactics

A third line of approach would be the study of how various surroundings influence military tactics. Climatic conditions, terrain features and demographic differences all have a profound influence on the development and understanding of tactics.

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Technologyandtactics

Studying tactics without understanding the influence of technology would be dangerous. This line of approach could deal with assessing the influence and impact of technology on tactics, today and yesterday. “Correct and sober assessment” of the available technology must be an important part of any study of tactics.¹¹

The influence and impact of technology on tactics, today and yesterday. “Correct and sober assessment” of the available technology must be an important part of any study of tactics.

Relationship between method, theory and practice

A problem with the historical and humanistic approach is that it is difficult to define precisely what time periods, what geographical areas and which military forces are relevant to the study of tactics. This has been a source of great debate at the Academy. This issue could be resolved by focusing on the conditions behind any tactical decision, rather than focusing on only contemporary events. The question of relevance changes from a question of relevance only regarding proximity in time, to a question of whether the conditions of the tactical decision can be discussed.

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¹¹H.Dv.300/1, *Truppenführung* (Berlin: Mittler und Sohn, 1936) p.1. (My translation)

In Tactics, certain basic situations repeat themselves and organize the field of tactical studies into fundamental and conflictual ways. It always includes certain basic positions of conflict which in turn have implied certain fundamental situations. This shows how tactics have been organized and how the study of tactics has rather changed into a background for presenting the

various tactical situations. The starting point of tactical situations such as offence or defence. These tactical situations have been studied so far at the Academy and this should not be totally discarded, but conditions.

Examples of fundamental tactical situations could

be:¹²

- The relationship between attack and defence.
- The various forms of attack, for example attacks on prepared positions, hurried attacks and counter operations and operations in pursuit.
- The various forms of defence, for example prepared defence, hurried defence, delaying operations and withdrawal operations.

These fundamental situations must be treated with themselves. We should not try to develop principles tend different historical incidents. The fundamental practitioner's view on tactics and a background for practitioner.

They are not objects of study in of attack and defence, based on a study of situations should be seen as a link to the presenting problems familiar to the

Concluding remarks

The development of Tactics should include all departments at the Academy, as the subject probably is the most important one at the Academy, one subject that could give everyone at the Academy a sense of direction. Elaborations of tactics, along the lines suggested here, will require contributions from more than just the traditional military environment.

recontributions from more than just the

¹²H.Dv.300/1, *Truppenführung* (Berlin: Mittler und Sohn, 1936) p.v-vi.

Appendix B

Military Leadership

For generations higher education has lived in sheltered worlds. ¹³ Societal change or economic difficulties have not altered the inner structure of the academic organisations. The Academy is not an exception. An issue in question which surely has influenced the Academy is the separation between theory and practice and belong to a long history of shifts in focus for research and development activities compared to real-life problems in the field of military practice. The consequence is a departmentalised education, which causes these separations of faculties such as Tactics and Military Leadership. This situation has among other things caused cadets to advertise for leadership concepts applicable to the

If theories on leadership are separated from the field of practice, the graduating officers may be left with inadequate skills and may be unfamiliar with useful concepts for developing able military units. The question is not what theories signify or what they might mean, but *how to grasp* their applicability in a military context. This means that discussions addressing the distinction between civil “grand theories” and military “personal experience” are pointless, because such discussions leave out the key question, how to develop successful practice. Therefore, the Academy, as an educational arena for developing military leadership and successful change, should provide future military leaders with conceptual as well as practical tools useful in enhancing the battle units’ ability to conduct battle.

Intention

Military organisations are in a continuous process of transformation. Fundamental to teaching and for developing new knowledge in Military Leadership is therefore to educate leaders, who may understand, and hold skills needed to guide and manage these transformations in ways that result in improved operational effect on the ground. Complying with such complex, mythat has the tools and professional capacity to develop knowledge on how to carry through appropriate organisational transformations.

Developing such an educational capacity related to military leadership, will not only contribute to graduate officers skilled in developing adaptable military organisations, but of equal importance, to comply with this approach requires an enhancement in the interplay between education and field of practice.

To improve officers’ professional ability calls for a leadership education that makes extensive use of real life situations and the everyday problems from the field of service. Fundamental to developing new knowledge relevant for Military Leadership, is therefore to apply a perspective on officers as reflective practitioners. This means practitioners that are competent in improving military units’ ability to conduct battle. However, to achieve this ambition

¹³This appendix has been prepared by Svein Tore Kristiansen.

requires expanded and improved linkages between the army units, and research activities. Leadership education at the Academy,

Outlining the context

The development of new knowledge relevant to Military Leadership is outlined in response to three interrelated challenges, which significantly influence the contemporary context in which military leadership is performed.

First, the mission of military organisations are unpredictable. It can be argued that this loss of stability has amplified the requirement for military organisations able to improve and adapt their training, education and their operations using procedures facilitating experience-based learning. The rise of the knowledge society inevitably makes knowledge and expertise more important than ranks and files. This new context requires exploration of both *methods* and *procedures* in order to allow experience facilitate improvement in military units' ability to conduct battle. Second, the increase in numbers of professional soldiers and NGOs makes it pertinent to develop knowledge on how to utilize experience. Experience must become a powerful means for improving military organisations and individuals' ability to cope. The army currently encounters a major challenge in utilizing experience for generating desirable practice.¹⁴ This unsolved challenge relates to issues of how to preserve experience, retain key personnel, and hence, bring about continuity within battle units. The argument is therefore that to facilitate professional knowledge enabling development and learning in a career perspective, is essential for maintaining the ability to fight and for transforming inexperienced newcomers to knowledgeable participants. Third, there is a need for developing an educational design or concept that links Military Leadership to applied operational effect. The Academy strongly rejects notions of building leadership education for professionalism on theories detached from practice. The Academy conveys a perspective on leadership education nurturing practical skills that allows for inquiry in military organisation as a system for learning and development. The Academy looks for an educational design that draws extensively on a variety of practical cases that may develop reflective practitioners able to orchestrate procedures for professional and organisational coping. In other words the Academy must be able to improve officers' ability to learn from their proper experience and existing knowledge when they in the future are to carry out their tasks.

These three challenges reflect a pertinent objective considering the necessity for army organisation to improve practices by implementing experience based learning as the heart of their doings (see the army plan for education and training, *ie HUT*).

¹⁴The inspector of safety management and the ongoing R&D project "mastering and decision-making processes in military units" have identified this as a critical issue. It is found that the senior managers lack skills in organizing procedures and systems that involve the employees in processes that allow for experiential learning to facilitate knowledge production and change. Two recent bachelor studies written at the Academy sustain these conclusions.

Research and development activities for improved Military Leadership

Against this background the Academy's overall R&D goals within the field of Military Leadership emerge. These are:

- to develop applicable knowledge, that is knowledge enabling action, necessary for professionals successful conduct in military contexts.
- to make experience based learning facilitate knowledge production and development.
- to develop the role of the Academy in educating officers able to carry through work and achieve results based on learning and development.

These three interlinked objectives provide a direct indication for the forthcoming R&D activities on military leadership. As a point of departure in this endeavour three general questions should be explored:

*1. What are the **characteristics** of learning systems allowing for the development of practical knowledge that may be put into action?*

This question addresses military organisations' ability to adapt to changing situations. An issue of major concern is the need to develop knowledge allowing military organisations to bring about transformations from within their practice. New army contexts require a deepened insight into how learning may transform military organisation and what such learning and transformation demand of military leadership. This approach asks for a research perspective on military leadership that makes experience based learning a vehicle in producing operational effect. This is a reorientation from a managerial (top-down) perspective on knowledge production towards a co-generative approach, in which senior officers and experienced soldiers, NGO etc. cooperate in improving training, education and operations. The Academy believes that the characteristics of what might become sustainable learning systems able to improve practice need more attention.

*2. What is the nature of the **process** that allows military organisations to transform themselves?*

This research question emphasises the need to know how knowledge creation as a part of peoples' everyday obligations can be carried out in military organisations. How to create and diffuse knowledge across different "communities of practice" within the context of an army is an important question to answer. The reason for making this issue a subject for research is the need to develop more knowledge about how military organisations transform through iterative processes of action and reflection. To improve an organisation's self-transforming capacity needs involvement and collective reflections, where descriptions and analyses of important situations can be developed and transferred into new routes of action. To accomplish such processes in an organisational context encompasses identifying significant experience, exploration of what they might entail, and at last, the process of institutionalising these lessons in manuals regulating combat units' procedures. An organisations' ability for self-transformation cannot simply be obtained by means of decrees or by sending scholars offering lectures to those that may have a lesson to learn. Against this background, a key issue underlying this research and development activity is to develop and explore military vocational didactics in relation to military units' capacity to train and fight.

Such didactics may offer a viable approach to educate the Academy faculty in methods for developing military organisations from within.

3. How to make military *practices* impact the education in Military Leadership?

This does not address various techniques for mastering the battleground (tactics), but focuses on leadership education that builds on situations the cadets may recognize when later encountering the field of practice. The content of Military Leadership education must be valued and assessed in relation to the cadets' ability to develop transformable battle units. To comply with these notions this R&D activity will seek to:

- educate *reflective practitioners* by deriving extensively on cases from the field of practice.
- connect Tactics and Military Leadership to develop knowledge and skills to act.
- develop officers' skills in applying concepts to solve practical problems.
- enhance the network between the Academy and other army units in regard to Military Leadership.

Concluding remarks

The results of such a research and development program in Military Leadership aim at conceptualising:

- procedures and conditions that improve military units' capacity to conduct battle
- an educational design for developing reflective practitioners' able to explore military organisations as systems for learning and development.

The core of the policy is to develop a Military Leadership education based on close interconnectivity to the operational army community. Enhancing the collaborative ties between the Academy and the army constitutes a powerful means for speeding innovation within both education and army units. However, the Academy recognizes that as a sustainable development process is time-consuming. Therefore, knowledge creation anchored in the field of practice requires a well-organized interface between the Academy and external army units.

Appendix C

Military Theory

The Academy has had Military Theory, or military thought, on its curriculum as a separate subject since the mid-1990s.¹⁵ Initially, it was studied as a means to understand the US Armed Forces' doctrines and thought. The subject has developed gradually from there, developing from a school in manoeuvre warfare into a more balanced subject with the object of understanding the history of military thought and from a military perspective to understanding the theory of war of conflict.

The purpose of this paper is to provide ideas as to how we could develop the subject of Military Theory further at the Academy. It is a brief and quite a summary introduction that aims to stimulate discussion concerning the direction of this broad task.

What is Military Theory?

Compared to the subject of tactics, the subject of military thought, or Military Theory, is somewhat better developed as a subject. Military Theory is sometimes defined as "basic assumptions about how to employ military force", and the subject has a long history, reaching back into antiquity.

If Military Theory is the basic assumption of how to use military force, doctrines may be seen as the choice of Military Theory that a military organisation finds "relevant" at a particular time given an overall political, societal and military situation. Military Strategy means for political ends and is often a doctrine developed into a plan for a specific military and political situation.¹⁶ The subject of Tactics might be defined as the ability to win engagements and battles with available military resources.¹⁷

In its beginning, the subject of Military Theory was indistinguishable from the field of Tactics or strategy, as writers like Vegetius, Maurikios, Machiavelli and writers up till the 18th century mostly thought in the terms of campaigns and tactical encounters. From the Enlightenment and onwards however, the subject was gradually treated as separate from the actual engagements and eventually also separate from the campaigns. Today most writers see Military Theory as a fundamental assumption about war and conflicting general, related to, but distinct from the fields of doctrine, strategy, operational thought and tactics.

¹⁵ This appendix has been prepared by Tor-Erik Hanssen.

¹⁶ *Design for Military Operations - The British Military Doctrine* (MoD: 1996) p. 1-1; and Harald Höiback, *How Can We Learn from History?* (my translation) (UiO: 2000).

¹⁷ Carl von Clausewitz, *Vom Kriege* (Bonn: Dümmler, 1952) p. 169. See also US Marine Corps' *FMFM 1-3 'Tactics'*.

- Military Theory vacillates between the descriptive and the normative. The latter being the main source of doctrine. This leads us in to one of the major debates in Military Theory: What is the purpose of Military Theory, to be prescriptive or descriptive?
- Military Theory will rely heavily on history as its major source of understanding. This is not limited to military history, but also to understand how Military Theory has been influenced by other historical processes.
- As opposed to Tactics and Operational Art, Military Theory has civilian and academic counterparts. This means that the study of Military Theory is related to other fields of study: Political Science, Sociology, Philosophy, and Anthropology.
- The development of military thought- The condition of military thinking:
 - Ideological currents in society.
 - How ideology and currents of thought influence Military Theory.
 - Ideological currents within the armed forces.
 - Throughout history the armed services have often developed thoughts contrary to the currents of thought prevalent in the civilians society. What is the relationship between the cultures within the armed services and the civilians society when it comes to Military Theory?
 - Previous military thought.
 - How does the understanding of previous military thought influence new writings in Military Theory?
 - Technological advances.
 - How and to what extent does the development of new or existing technology influence Military Theory?
 - History and practical experience.
 - How does practical experience influence Military Theory?
- What is war?
 - How do we understand war?
 - Military Theory has developed alternative ways of understanding war and to understand the nature and character of war.
 - How do writings in Military Theory justify and explain the use of military force ethically and philosophically?
 - The impact on the “battlefield”- How does Military Theory help us to approach and understand war at the lower levels in a military organisation?

- How to win wars?
 - Military Theory has throughout the ages developed discussions on how to win wars. This is an area of the study of doctrines and strategy. It provides the strategic and doctrinal thoughts which are more practical. Military Theory that overlaps the backdrop for developing tactically oriented.
 - The question of how to win wars is by nature less esoteric than the other fields of Military Theory. To limit the normative element of Military Theory the subject could be developed along the following lines:
 - ❖ When studying the normative elements of Military Theory it must be studied in historical context and with emphasis on understanding the conditions of the normative thought. On what premises does it rest? This applies to the historical as well as the current premises so that we also are to understand why we think as we do today when it comes to military matters.
 - ❖ The last element I would like to draw attention to would be to show Military Theory is developed into doctrines, strategies, operations and tactics? To what extent is there a link between the military thought and the actual operations on the ground? Students of Military Theory seem to postulate a close tie between Military Theory and the actual conduct on the ground. Is this a viable hypothesis?

Appendix D

Military Strategy

The word “strategy” has its origin in the ancient Greek term for generalship: “strategos”.²⁰ Strategy may generally be defined as “a plan of action designed in order to achieve some end”.²¹ Although strategy has its roots both conceptually and etymologically in military activity, it is used today in a wide variety of contexts such as business and marketing, party politics and social reform, where it is also referred to as “strategic behaviour”. This wider use and conception of strategy makes it necessary to clarify the meaning of military strategy. The traditional Western understanding of military strategy emphasizes the link between war and military power and national policy. The most central thinker on the subject of Military Strategy, Carl von Clausewitz, defined strategy as “the use of engagements for the object of war”,²² the latter being the political aims of the government of one state in relation to another. In other words, strategy in this connection refers to “the instrumental link between political ends and military means”.²³ Strategy is the heart of using military force to achieve a desired outcome in relation to another state or group. The use of military force includes the elements of offence and defence, coercion and deterrence. These are expressions of strategic behaviour in the military connection, and can be applied to all levels of military activity from the strategic to the tactical, the distinguishing condition between these levels being the time perspective.

In the thinking of Clausewitz and in the age of industrial warfare, which ended with the Cold War, the desired outcome of using military force was to resist. In the post-industrial, information age, this outcome has become winning and influencing the will of the people. What used to be a supporting activity—winning “hearts and minds”—has now become the overall strategic objective.²⁴ In this newer military force subject, although there is a movement away from the concept of “security” in some circles, enough there is a movement away from the instrument of political purpose and, therefore, as a strategic studies, remain[sic] just as relevant today, “the utilization of military power as an instrument of political purpose and, therefore, as in the past”.²⁵

²⁰This appendix has been prepared by Richard Blucher.

²¹J.C. Wylie quoted in John Baylis, et al., *The Contemporary World: An Introduction to Strategic Studies* (Oxford: Oxford University Press, 2002) p. 4.

²²Carl von Clausewitz, *On War*. Trans. & ed. Michael Howard and Peter Paret (London: Everyman’s Library, 1993) p. 146.

²³John Stone, ‘Introduction: Course Description’ in *SWMI43 Strategy* (London: Department of War Studies, King’s College, 2005).

²⁴Rupert Smith, *The Utility of Force: The Art of War in the Modern World* (London: Allen Lane, 2005) p. 277.

²⁵John Baylis et al., *Strategy in the Contemporary World. An Introduction to Strategic Studies* (Oxford: Oxford University Press, 2002) p. 12.

It is inherent in their identity that military personnel possess a unique authority to exercise force—and ultimately lethal force—on behalf of their government and its policies. Lawrence Freedman describes physical violence as “the ultimate political instrument [which], if available, can overwhelm all others”.²⁶ It is important for military personnel to have a basic understanding of the relationship between the aims of government policy and the means to achieve them, which may involve the use of military force. The force applied should match the goal to be achieved. As professionals, military leaders need to grasp the basic principles of how to employ armed force, and the role of strategy in effort to attain “proportionality between the costs and benefits” of war, should it be necessary.²⁷ They should also be able to see how the nature of strategy “is not fixed over time or place”, but is part of “the social and technical context in which it is conducted”.²⁸ Related to this is insight into “the changing period”.²⁹ Finally, intelligent strategy involves effective use of military power with a minimum of loss of life and of economic and material cost.

The cadets at the Academy are being educated to be platoon commanders in the Norwegian Army. They will serve in Norway and many will serve in international operations. During their education, they need to gain an appreciation of the complex nature of modern conflict and strategic thought, and the importance of the most appropriate strategy to achieve the desired outcome. It is important for them as military leader to grasp the dynamics in the use of force: the costs and benefits of offensive, defensive, coercive and deterrent behaviour in the full spectrum of conflict from high intensity warfare to Peace Support Operations. The study of strategy is transferable to their developing analytical thinking and decision-making skills, as they learn to employ force, not against a lifeless subject, but against a thinking opponent with a dynamic, free will, leading them to achieve “smart” solutions to the challenges of conflict.

The cadets must also understand their role in being part of the strategic means to fulfil their country’s policy; the strategic context of the operation. Strong unit morale is dependent upon military personnel being able to relate their daily tactical activity to a strategic purpose.³⁰ Connected to this is the importance of each individual soldier and officer comprehending that their actions can have strategic consequences affecting positively or negatively the operation in which they are involved, as well as the policy aims. This is popularly known as “the strategic corporal” phenomenon,³¹ and has arisen because today the military must operate at a rate with the omnipresent mass media, creating an environment of greater transparency.

²⁶ Lawrence Freedman in John Baylis et al., *Strategy in the Contemporary World. An Introduction to Strategic Studies* (Oxford: Oxford University Press, 2002) p. 339.

²⁷ Stone, *op. cit.*

²⁸ *Ibid.*

²⁹ *Ibid.*

³⁰ Colin S. Gray, *Modern Strategy* (Oxford: Oxford University Press, 1999) p. 45.

³¹ Charles Krulak, ‘The Strategic Corporal: Leadership in the Three Block War’ in *Marine Corps Gazette*, vol. 83, nr. 1, January 1999, pp. 18-22.

The cadets must also be taught about the domestic actor that can place restraints on Military Strategy, such as the internal political costs and benefits of using military power. The study of strategy helps young officers to understand the political decisions of their government. Through the study of strategy, an officer gains an understanding of when use of military power is legitimate to correct injustices, and should therefore also be able to defend the destructive use of force against a greater evil.³²

The following topics should be included in the study of strategy at the Academy:

- What is strategy? How has the thinking of Clausewitz shaped and influenced the Western understanding of strategy?
- Study of the different levels of military activity, strategic, operational and tactical levels, and how the relationship between them, *ie* the strategic behaviour is connected to all three levels. Related to this are the recent technological developments that have contributed to a compression of levels.
- Examples of strategic behaviour in military leadership.
- Historical overview of the changing currents of strategic thought.
- The “craft” of using military force, including such aspects as: weapons, personnel, logistics, use of information and intelligence, use of battlespace/manoeuvre, role of the media, etc.
- Norway’s strategic response within the international system; the strategic rationale for its membership in the UN, NATO.

³²Sverre Diesen, *Militær Strategi* (Oslo: Cappelen Akademisk Forlag, 2000) p. 14.