Proceedings of the Seminar on Leadership in a Multi-National Environment *

The Profession of Arms

By Louise K. D. Bastviken**

I would like to focus on the heart and soul of our military profession by drawing on the recently published Norwegian Armed Forces Joint Operational Doctrine and my personal experience.

The military profession is in many ways comparable with other professions, such as the legal, clerical and the medical professions. One is, one does not simply work as a lawyer, priest, doctor or officer. Expanding on the ideas of Samuel Huntington, the concept of a profession can be defined by four attributes: responsibility is the obligation that the profession has to society and to its own members; identity refers to the members’ identification with the profession and their exclusive status in society; expertise deals with the members’ special knowledge and skills; and the final attribute, fundamental values, encompass the norms and codex that govern professionalism.

In other words, the heart and soul of a profession is about ethos. It is here worth mentioning that you cannot determine whether you are a “high-ethos individual” – it is for others to determine whether you have that quality or not, a quality that combines virtues, wisdom and practical skills. The military profession has its own peculiarities, and this is founded in our long-lasting mission. We are the nation’s ultimate instrument of power. Let us not forget the basics: the rationale of the Norwegian military profession is to defend Norway and Norwegian interests, and our core business is conduct of operations.

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Thus, there is an ugly side to the military profession that we need to accept. First and foremost, it is the fact that we can be sent into harm’s way to take lives and, by implication, sacrifice our own lives for the greater good. In contrast to many other professions, we cannot fulfil our tasks in isolation – our efforts only make sense when we work together. There is an extreme inter-dependence in our profession that requires values of comradeship, team-spirit, loyalty and trust – trust both in our own and others’ power of judgment.

Vesting the military with this extraordinary authority and with significant material and human resources, society rightfully expects professional ethos among its members. Even more than in most other professions, officers should, at any time, be conscious of their responsibility as role-models to their peers and subordinates and as representatives of the military to society at large. The importance of ethos is also reflected in the Core Values of the Norwegian Defence (Forsvarets Verdigrunnlag), a document that emphasises respect, responsibility and courage, values that are easy to understand at first glance but often difficult to master under stress and pressure. Society expects us to live by these values and rightly so. I find that General Sir John W. Hackett’s observation is right on target: “...the military virtues – fortitude, endurance, loyalty, courage, and so on – these are good qualities in any collection of men, and enrich the society in which they’re prominent. But in the military society, there are functional necessities, which is something quite, quite different. I mean, a man can be false, fleeting, perjured, in every way corrupt, and be a brilliant mathematician, or one of the world’s greatest painters. But there’s one thing he can’t be, and that is a good solider, sailor or airman.”

At the essence of our military profession lies leadership, the common denominator of what I have touched upon so far. To put it bluntly, success in matters military depends on solid leadership, and failures of leadership are therefore tantamount to failure as an officer. In most other professions leadership is associated with age and experience, although there are, of course, plenty of examples were one finds old experienced men who are bad leaders, and young inexperienced men who are brilliant leaders. The military profession is leadership, however, and this simple fact distinguishes it from most other professions. Professionalism, shown through great leadership, is all about doing the right thing at the right time for the right reasons.
As Commander of the Norwegian Defence Education Command, it is my responsibility and a major leadership challenge to educate officers and leaders. The following discussion of what constitutes the inherent qualities of military leadership is therefore also a description of the core educational aims in Norwegian military education, both at the War College level and at the Joint Staff and Command College level. Needless to say, qualities of leadership, although a prerequisite for success in the military profession, are not enough. Qualities of leadership are of little value unless accompanied by specialised knowledge and experience suitable to the individual officer’s field of duty. Practical experience, training and intellectual education – these are major elements in military education as well as in a successful officer’s career.

As I have already mentioned, successful military leadership is a matter of ethos, and with ethos comes credibility. This brings me back to military leadership being defined in terms of a trinity: military virtues, wisdom and practical skills. What it takes to be a leader of men and women in the armed forces can be summarised in three verbs: to be, to know and to act. In other words: character, being, together with cognition, knowing, leads to the officer’s behaviour, acting – that is, performance as a military leader.

Without doing any harm to Shakespeare’s Hamlet, let me start with to be, the very character of good officership. High on this list of military virtues are the seemingly simple but nevertheless crucial qualities of courage and strength of will – which together may form prerequisites for something which characterise many great military leaders - charisma.

Courage is much more than courage in battle. Its more common application is the ability to make necessary but unpopular decisions and, when needed, to refuse to bow to pressure from peers and subordinates. Strength of will, on the other hand, is a prerequisite for that most important element in successful military leadership: the ability to identify and hold on to key goals even when confronted with a steady stream of competing options, some of which may appear highly attractive and tempting at the moment. Strength of will is also a prerequisite for another crucial quality - the ability to remain calm and act rationally even under strong pressure or when subject to serious deprivation. Again, enduring the battlefield is not the only challenge. To give only one example: More than
one high-ranking officer has suffered his most serious defeat in confrontation with the most unpredictable of adversaries - the media.

Military leadership is an example of an imbalanced relationship between one human being and another: The superior officer is invested with authority, and with authority comes responsibility - and the unfortunate possibility of misuse. As an officer, I feel responsibility not only for the outcome of the task at hand, but also for the well-being of the women and men under my command and for the long- and short-term consequences of my decisions. Empathy and sensitivity, although without sentimentality, should, in my opinion, certainly be considered as military virtues. An officer should have the ability of demonstrating empathy towards peers, subordinates and even adversaries.

Another core military virtue is loyalty, which is closely linked with the broader concept of integrity. The most obvious aspect of military loyalty is towards the orders and intentions of superiors. This requirement may be in conflict with the equally important need to be loyal to one's own judgments and ethical or professional guidelines. What should not be considered an option is continuing to carry out one's duty while in reality counter-acting the long- or short-term aims of one's superior. Loyalty, as part of personal integrity, is equally important in conveying information from subordinates to superiors. The loyal officer tells the truth as he or she sees it, independent of the expected response of the superior officer. Similarly, an officer of integrity will not disregard subordinates' opinions for the simple reason that he or she disagrees.

Let me move on to knowing and herein what to me are central elements of cognition. We need to recognize that the armed forces' role in a liberal democracy is one as executor of the decisions of elected political bodies. Rightly understood, Clausewitz' old dictum - that war is the continuation of politics with other means - is still valid. We do not plan and execute operations for their own sake; such conduct should always be part of politics. Equally important, however, is the ability to comprehend that adversaries as well as allies or partners may operate within a very different setting and according to different rules. A successful officer must therefore have a solid understanding of the foreign and security policy framework within which she or he operates. Good intentions or professional skills are
of little help if they are not applied with societal, cultural and political awareness.

This leads me to another crucial point, namely that it is becoming increasingly clear that the final outcome of a military operation depends on much more than success on the battlefield. An understanding of civil-military relations is therefore equally important to the officer as mastering of the purely military skills. From such understanding arises the ability to work with non-military actors, such as individuals among the local population, non-governmental organisations (NGOs) or political authorities. Such ability is a prerequisite for being able to adapt to concepts such as “integrated operations” or “the comprehensive approach”.

The officer must also be conscious of the ethical and the moral aspects in the conduct of operations. I am here thinking of the whole spectrum, ad bellum, in bello and post bellum. In all spheres of military activity, ethical conduct must be based on a much more solid basis than the individual officers’ spontaneous perceptions of what is “right” or “wrong”. Military ethics, just as the relevant aspects of international law, requires rational debate and judgement based on solid knowledge and intellectual reflection.

Where does all this leave us in our search for the building blocks of good military leadership? How do we characterise or summarise the cumulative outcome of the interaction between knowing and being as action – the officer’s behaviour? One thing may be obvious at this point: There are no unambiguous dividing lines between these three elements of analysis. Loyalty and integrity, as discussed in the previous paragraph, are characteristics of an individual’s personality, but are at the same time key elements in an officer’s behaviour. Leadership is exercised through action, and action is often an expression of drive and initiative, the seeking of possibilities, the taking of responsibility and the showing of determination. Motivation and inspiration of troops and credibility as a leader come through deeds.

An officer’s behaviour should reflect focus and clarity of purpose. What is the task at hand? Which are the most important or urgent challenges? In the usually long list of deficiencies and shortage of resources, which task should be given priority? In more general terms, the officer should be able
to remain focused on the military’s and the individual unit’s core tasks and rationale, both in combat operations and peacetime activity.

Officers should demonstrate by their own behaviour and instil in their subordinates the understanding that accountability, in human terms, is always individual. To put it somewhat brutally, there usually is someone to blame. The “system” or military as such is no more and no less than the end result of the actions of its individual members. When each individual fulfils his or her duties to the best of his or her abilities, the “system” will at least be close to demonstrating its real capability under the given circumstances.

Flexibility, in various formats and dimensions, is a core requirement of today’s officers, and herein the ability to handle the unpredictable, a classical element of warfare which, if anything, has been reinforced by contemporary developments. Here, however, I will focus on the need to partly balance and partly operate simultaneously, centralised versus the decentralised command. “Mission based command” and similar concepts of decentralisation of command or decision making in general make sense only within an overarching centralised command structure, and an officer must be capable of operating in both dimensions. A one-sided belief in the qualities of one of the modus operandi will hardly serve the attainment of operational or administrative aims.

Finally, in all her or his actions the officer should demonstrate an unambiguous adherence to the “rules of the game” as set by lawful national and international authorities. Such rules, in their turn, reflect the contemporary age with its increasing focus on the rights but also obligations of the individual. Respect for each individual human being, whether friend or foe, should be at the very heart of the officer’s professional ethos.

To summarize, military leadership is but one element of our military profession, albeit an important one, and great leadership is about combining the words be, know and act. There are plenty of challenges under each of these categories, but success lies in the ability to combine these three. Or, to use a Latin phrase: Mēns et manus (“mind and hand”) - when all is said and done, it is all about striking the balance between reason and skill.
Military Leadership During Stressful Conditions

By Gerry Larsson *

There seems to be an ever-growing bonanza of conceptual buzz words on the military leadership arena. Recent examples include joint, multinational operations in multicultural network settings, with mission-specific packaging of forces assumed to exhibit instant interoperability, using an effect-based approach. Getting exited or bored? At the same time it is the same human beings as thousands of years ago, with the same fears, angers, and joys. So, is there really anything new in military leadership? Or is it old wine in new bottles, meaning that old, well-proven principles still hold true?

The thrust of the text will be a description of leadership demands and challenges observed in recent military operations. This will be followed by some theoretical reflections. Most parts of the paper stem from different own research projects. Here, I have taken the liberty to mix ideas and empirical results into a new composition. The text by no means claims to be an extensive review of the literature. Rather, it is intended to be a source of inspiration for reflection and further research.

1. Peacekeeping missions - the typical arena for Nordic officers

Military organisations have historically been seen as placing a great emphasis on the importance of good leadership, hierarchical organisation with clear command structures, clear standard operating procedures, and centralised decision making. In multinational peacekeeping missions today, the fact of broadening tasks and roles puts additional demands on military leaders (Cameron, Kim & Whetten, 1987; Johansson, 2001; Moscos, Williams & Segal, 2000).

There is a great variability in the type and amount of stress to which peacekeeping commanders and soldiers are exposed. In addition to moderate or chronic stressors such as monotony, unusual climate, and cramped accommodation, missions in recent decades have also involved an increased exposure to acute danger, including exposure to fire and terrorist

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A peacekeeping operation is a different task to traditional combat. It lacks the “friend-enemy” relationship and requires much cognitive and emotional control. The role is psychologically complex in that different stressors interact (Vogelaar, 1999; Wallenius, Johansson & Larsson, 2002; Weisaeth & Sund, 1982). Leadership in direct as well as in indirect form during such conditions appears to be a demanding task, deserving research attention.

2. Typical challenges for officers during threatening situations

A series of typical decision making and leadership problems faced by military officers in acute, stressful situations is presented in the following. The idea is to give readers an intuitive feeling of the demands and challenges. The text in this section comes from selected parts from an interview study (Nilsson, Wallenius & Larsson, 2006; Nilsson et al., in press). Ten Swedish high-ranking military officers with recent experiences of leadership in staffs during international peacekeeping missions were interviewed retrospectively.

Intuitive decision making during great insecurity in a high risk environment. Elements of rumours are abundant, which sometimes blur the perception of what is real and what is not. Consequently, the decision making context is characterized by great insecurity. Several informants have described a decision making process based upon hardly any reliable information with little or no time for logical and rational considerations whereas a lot is at stake. Media presence and reporting tends to enhance the fear of making unsuccessful decisions.

Deficiencies identified in staffs. According to several informants, the decision making process as described above is sometimes undermined by shortcomings identified in the staff working process. Acute and threatening situations presuppose direct actions. The staff is often lacking experience regarding the making of decisions when one cannot rely on standard operating procedures. Consequently, officers have not always the time needed to await reports, but instead are forced to come to decisions on their own.
Loneliness. In the decision making context, interviewees perceived a state of loneliness that in one case was referred to as “total isolation.” One cannot depend on anyone but oneself to make the right decisions.

Pressure groups - conflicts of loyalties; the breaking of rules. There are a number of actors, e.g. the UN organisation, non-governmental organisations, and countries on the international scene that seek to influence the decision making processes. Thus, political aspects of war are made topical. Informants described how this can result in conflicts of loyalties as the higher officer cannot fulfil the interests of everybody. Moreover, conflicts of loyalties are described of as phenomena that provoke the breaking of rules as one cannot obey conflicting orders. However, by doing so the officer is exposed to the risk of juridical consequences.

Lack of adequate resources. The lack of adequate resources to handle a crisis is described of as a relatively general problem during decision making processes in the international military system. This complicates for the implementation of decisions and adds more insecurity to the situation.

Multicultural diversity amongst subordinates. Multinational missions are often organized in national contingents. This refers to national units at lower levels of organisation. A national leader serves as a link by handling the contact to over- and underlying organisational levels. Informants described how sensitive information (e.g. sexual abuse) regarding activities within the national units is not always passed on upwards in the hierarchy due to the protection of “national glory.” In this sense, the national leader serves as a gatekeeper in terms of deciding what information reaches officers at higher levels of organisation. Subsequently, officers do not necessarily get information on matters that concerns subordinates at lower levels of organisation.

Anxiety related to the responsibility of subordinates. An environment in terms of warlike conditions and difficult operations is also indicated to define the superior-subordinate relationship. Informants gave an account of how they worry about the well-being of subordinates, in terms of life and death. Such anxiety sometimes leads to strong negative stress reactions.
3. Theory building

Two theoretical themes have constantly recurred in the analysis of our different studies of leadership under stress. These are a time dimension and a hierarchical level dimension. Findings from these are highlighted in the following. The text in this section mainly stems from the following empirical studies: Larsson et al. (2001), Larsson et al. (2003), Larsson et al. (2005), Larsson et al. (2007a, 2007b), Sjöberg, Wallenius and Larsson (2006), and Vrbanjac, Danielsson and Larsson (2006).

Time. Leadership in complex, stressful situations can be understood as a causal process consisting of three broad time-related categories. Pre-operation conditions affect the leadership during operations, which in turn affects what comes after the operation which in turn affects what comes after the operation, which in turn may affect later operations, etc.

Before a stressful event. Pre-event conditions of importance to leadership in stressful episodes include personal characteristics of the leader and a broad array of issues which could be labelled everyday working conditions. Leader attributes which constantly come out as important include a favourable personality profile, emotional stability in particular, social skills, and a good capacity to cope with stress.

The following four aspects of everyday working conditions have repeatedly been identified: training and exercises, previous mission experiences, personal knowledge of co-actors, and organisational climate. All these antecedent conditions can be favourable or unfavourable at the individual, as well as at the organisational, level. I can illustrate this with some brief interview excerpts: “We have been trained to work collectively and live closely together” (favourable training and exercise); “The commanders have had different training, various ages” (unfavourable training and exercise); “No personal experience, may find myself in such a situation once in a life-time” (unfavourable previous mission experiences); “Personal knowledge makes it easier, you know how people act as leaders, particularly in stressful situations (favourable personal knowledge of co-actors); and “Built-in conflicts affect long-lasting missions but not short ones” (unfavourable organisational climate).
During a stressful event. This has been the prime focus of our research and it is the area where we have the richest amount of data. Three mutually interdependent aspects are involved here: the leader’s appraisal of the situation, his or her stress reactions and his or her leadership behaviour and the managerial routines being used. Although all three aspects influence each other, the greatest importance is ascribed to the leader’s appraisal of the situation. This appraisal process acts as a “lens” and strongly affects the leader’s stress reactions, leadership and decision making.

After a stressful event. This aspect encompasses operation-related consequences of the event and the operation. It focuses on the leader of the operation and his or her everyday organisation, rather than on the situation of, for example, victims. Three areas have been identified: the leaders’ evaluation of the outcome, organisational climate, and post-event stress reactions. The outcome can be favourable or unfavourable in all these respects, which, in turn, acts as an input to the continuing everyday working conditions.

The leader’s evaluation of the outcome. The typical comment underpinning this code deals with the outcome in terms of human lives and injuries. I illustrate with two very different quotes: “The outcome was good because nobody was injured, despite the rapidly evolving and long-lasting event” and “A colleague-died, no more comments.”

Organisational climate. A favourable evaluation of the episode was typically followed by comments like: “Another attitude after this, we did it together, it has brought us closer.” When the outcome was unfavourable (the case of the dead colleague), one of the informants said: “Accusations afterwards, from the others and from myself.”

Post-event stress reactions. A comment interpreted as favourable was the following: “It was important to return to work, not to hide to feel the support. This was the place to be.” We end the results sections by presenting a couple of citations showing negative post-event stress reactions: “The hardest thing was when I phoned home and my wife asked me how I was. That’s when all the emotions surfaced” and “We had a number of people on the sick-list afterwards”.

Hierarchical level. Existing research on leadership under severe stress is primarily devoted to direct, or face-to-face, leadership. Therefore, our
research group has taken on the task to study indirect leadership, or the influence of a leader on subordinates not reporting directly to him or her, during severely stressful conditions. The text in this section will focus on some results from this research.

Firstly, we developed a general model of military indirect leadership (see Figure 1).

Indirect leadership can be understood as a process beginning with ideas and mental models of higher organisational level managers on what to do (visions and goals), as well as on how to get it done (implementation). The influence process then follows two routes that take place simultaneously. One of these is more action-oriented and could be called “the link.” It usually consists of a single individual or a small group of directly subordinate managers. The link passes the messages on to the lower organisational levels. The second pathway is more image-oriented and could be labelled “role model.” Higher-level managers influence by being favourable-unfavourable role models.
Both kinds of influence are exposed to filters between each hierarchical level. This means that information is omitted or distorted. In the favourable case, the employees at the lower levels trust the link and the higher management. This is a necessary condition for commitment and active participation. In the unfavourable case, there is a lack of trust. This breeds redefinitions of the messages and necessity to rely on rewards and punishment to obtain obedience. In the words of one of the high-level managers: “If there is no trust between you and your subordinates, how can you be sure that they stand up for your ideas? Without trust it can all break down.”

Secondly, we developed a model of military indirect leadership in severely stressful situations (see Figure 2). This, as well as the following text, comes from a recent interview study (Larsson et al., 2007b).

![Figure 2. Key aspects of indirect leadership under severe stress through the subordinates' eyes (Reproduced from Larsson et al., 2007b. With permission of Emerald).](image)

The model is based on 17 interviews with Norwegian officers and soldiers trying (and succeeding) to handle a riot in the town Caglavica in Kosovo, which took place on March 17-18th, 2004. The town was in the area where Norwegian and Swedish peacekeeping troops served. Between five and ten thousand people participated in this riot. The crowd was very aggressive and used Molotov cocktails and grenades. Several of the peacekeepers were
wounded and a Kosovo-Albanian demonstrator was shot as he tried to ram his lorry through the peacekeepers’ barricade. A possible consequence of the riot, at its most extreme, could have been the extermination of the Serbians in the area. The onset of the riot was described as very fast and unexpected. When it was resumed on the second day, the situation was more predictable. By the end of the day, the crowd was dissolved, “as quickly as it had begun”, as one of the informants said.

The following three categories emerged in the analysis: Situational Characteristics, Organisational Characteristics and the Commanders Intent. Each of these categories is built up from several codes derived from interview response. A core category related to all these three categories was labelled Subordinates’ Appraisal or Sensemaking.

The model in Figure 2 represents an attempt to understand indirect leadership in severely stressful situations when viewed through the subordinates’ eyes. The arrow from Commander’s Intent to Subordinates’ Appraisal or Sensemaking represents the ordinary, hierarchical chain of command. The Situational and Organisational Characteristics respectively constitute the framework of this indirect leadership. Both these kinds of conditions influence the Commander’s Intent in terms of its content and mode of communication. They also influence the subordinates’ appraisal or sensemaking of the commander’s intent. The outcome of this appraisal or sensemaking process is the decision made by subordinates and the actions that accompany this decision. In the favourable case, these actions represent a good balance between formal principles and informal initiatives according to situational demands. In the unfavourable case, there is a lack of balance between formal principles and informal initiatives.

During the highly stressful conditions on the first day of the riot, the subordinates’ appraisal of their action alternatives seemed to be characterised by a constant need to change the balance between actions guided by formal principles and their own informal initiatives. On the one hand, they tried to follow formally expected and trained actions as much as possible. On the other hand, they often found themselves in situations where they felt that informal initiatives were needed, which, in turn, required competence and a trusting environment in their own organisation. The formal principles are designed to be valid for most situations. However, according to the informants, the situation was characterised by
many exceptions from the norm, and trust and initiative were therefore essential. We illustrate with a typical comment from a group commander: “Well, you will have to adapt along the way. You will have to try the techniques you have been trained on, and you will also have to invent new techniques yourself. You just have to do it, otherwise you’ll get stuck behind.”

In terms of the previously developed model of indirect leadership (Larsson et al., 2005), much of the indirect leadership during the second day of the riot could be said to correspond to what is called action-oriented influence. The higher officers’ messages and orders were well-planned and effectively communicated to the subordinate managers. The conditions on day one did not permit much of this form of leadership. Rather, as has been discussed above, it was a mixture of general and open orders and individual initiatives at the lower organisational levels. This indicates that the so-called image-oriented form of influence may be the only remaining part of indirect leadership which works in extreme conditions. If the image is favourable and trust breeding, the lower levels have optimal conditions for handling the balance between the formal and the informal action alternatives. The content of the reported trust-building leadership prior to the riot in turn shows significant similarities to the main ingredients in developmental (Larsson et al., 2003) or transformational (Bass, 1998) leadership. Thus, under severe stress a critical aspect of mission tactics may be a pre-incident leadership which is characterised by leaders being exemplary models, showing individualised consideration and being inspiring and motivating.

In summary, the present study confirms both kinds of indirect leadership paths of influence which have been proposed by Larsson et al (2005). However, it also shows that, in severely stressful conditions, there may be little room for the action-oriented influence pathway. The present study also highlights the appraisal and sensemaking processes which take place among the individuals at the lowest organisational levels. To put this somewhat bluntly, the results disconfirm the old Taylorian idea that the higher management thinks and the lower levels simply do what they are told. The results can also be theoretically connected to the more general and well-documented models of psychological appraisal processes (Lazarus, 1991, 1999) and organisational sensemaking (Weick, 1995).
The findings summarised in this paper ought to have both theoretical and practical implications; the former in terms of applying both multi-level and cultural approaches to the military stress context, and the latter for the design of education and practical preparations prior to missions. The international military organisation comprises of a complex system with numerous stressors that could leave higher leaders in a state of control loss. It might be worthy to draw upon those similarities one appears to find when comparing the military organisation to other international corporations that are characterized by complexity, e.g. conflicts of loyalties, impossibility to follow rules, problems of communicating through organisational levels. Thus, there might be lessons to learn from other contexts.

References:


"As a strategic leader your prime responsibility is to ensure that your organization is going in the right direction. That sounds simple enough, but it is not always easy to achieve. What is the right strategic direction? How or where do you establish it? Why is implementation so difficult?" (Adair, 2002: 164)

Philosopher Aristotle has stated that practical wisdom, in other words phronesis, is the central contents of especially the officers', doctors' and lawyers' profession. Practical wisdom to make a forced decision is an ability in the conditions in which no sure mental starting point exists. This practical wisdom has not changed since Aristotle's times, while western theoretical thinking and information changes its form continuously with an increasingly accelerating speed. Often the reality is the product of the human being and the abstraction which has come off a practical wisdom in many respects according to the central philosophers of the 20th century.

Many times we put together the planning process and thinking process. For example, strategic thinking is a function of practical wisdom, which is neither an art nor a science nor a skill. We forget that strategy really does not exist. In the ancient Greek the concept of strategy meant the whole art of a commander-in-chief, including leadership, administration and working with allies, as well as knowing how to bring an enemy to battle and what tactics to employ. As armies became larger and warfare more complex, strategy was introduced as a new concept in contrast to tactics (Adair, 2002: 165-166).

Mental alertness, problem-solving ability and keen perception of relationships are all implicit in intelligence. The concept of phronesis, practical wisdom, means action that is the outcome of wisdom gained by experience (Adair 2002:73). The problematic relationship between free will and determinism is tied in with the history of human thought, such as

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questions in economics (e.g., rationality and rational choice), ethics (e.g.,
moral responsibility and dignity), psychology (e.g., addiction and self-
deception), law (e.g., criminal liability and punishment), theology (e.g., the
problem of evil and divine foreknowledge), and natural science (e.g., causal
laws and quantum reality) (De Rond & Thietant, 2007).

The question of ultimate goal is also a key question of the military culture.
This question has always been the question of victory, but now in the
information age there will be less and less discussion of victory, like in Iraq
or Afghanistan.

In his book The Concept of Corporate Strategy (1971), Professor Kenneth
Andrews made an important contribution to understanding and improving
the process of strategic thinking that precedes any form of planning. He
advocated what became known as a SWOT analysis - the organizations
should carefully appraise their Strengths, Weaknesses, Opportunities and
Threats as a prelude to corporate strategy. He also stressed the importance
of scanning the changing environment, using the ready-made headings of
Political, Economic, Social and Technological (PEST) to consider the
salient factors. The pattern of decisions essentially means a plan (Adair,
2002: 169).

In the Finnish culture of the command and control process, it has been
accustomed to combine planning, education and management. This way
one and the same officer can have been for his part responsible for all the
dimensions at his own organisation level. In the United States and NATO
operations, the planning is performed so that it is not connected to
education and management of the practice. Different persons are
responsible for education, the make-ups of the groups and management.

1. The concept of strategy

As we see in Figure 1, in strategy, rationality combines with intuition,
chance, and a myriad of processes in which internal and external agents act,
interact, tinker, and hesitate, taking advantage of some opportunities while
failing to spot others. Formality, structure, and control are confronted with
the informal, non-structured, and autonomous. In the former, decisions
follow an orderly progression of problem identification, the search for
solutions, selection, and implementation. In the latter, strategic choices
originate from organizational garbage cans in which problems are generated from inside and outside the organization, and solutions are the outcome of random and opportunistic processes between actors. The relation between subunits and higher-level (or population level) units is deterministic, where population-level forces provide a comprehensive account of the behaviour of individual units, leaving no scope for choice. By contrast, when subunits are different from higher-level units, yet related to them, the relation is one of heterogeneity (De Rond & Thietant, 2007).

Figure 1: The concept of choice and change in strategy context

The main question is where we start the investigation of strategy. According to Tolstoy, to study the laws of history we must completely change the subject of our observation, and leave aside kings, ministers, and generals, and study the common, infinitesimally small elements by which the masses are moved. First, strategy is seen to emerge from multiple, complex, interacting processes, only some of which are under managerial control. We have learnt to think that history obeys certain laws and the only thing is to discover its purpose. That is the reason why we find it so difficult to concentrate on the presence and being. The axiom that everything has a cause is a condition of our capacity to understand what is going on around us. Thus, throughout human history we have found it meaningful, even necessary, to think of events as somehow interconnected, as contributing to a grand, logical purposeful plot. Likewise, strategy, by
most definitions, is naturally teleological in focusing on the means to an end (De Rond & Thietant, 2007).

Managerial behaviour is ordinarily directed to achievement of goals, intentions or objects and the social sciences have generally concentrated principally on teleological determination. By contrast, natural science is primarily interested in efficient causes: formal and final causes are considered not amenable to experimentation, and material causes are taken for granted in natural phenomena. The strategic choices are fixed by the laws of nature and events in the distant past; given that it is not up to us what these laws and past events are, our choices are fixed by circumstances outside of our control. Hence, we are not free. By implication, we cannot be held accountable. If we are undertaken or a product of a Darwinian evolutionary process, we can still choose the place, velocity and time of action. Still, the causal background is not in and of itself sufficient to produce strategic choice (De Rond & Thietant, 2007).

The organizational actors need not only regard themselves as free but also need the concept of causation to be free. Causation as a strategic choice is implicated in a relationship of necessity; genuine freedom of choice cannot exist without presupposing causation. But, unlike the determinist, these causes are not in and of themselves sufficient to bring about strategy. Choosing requires deliberation. Hence, determinists and libertarians alike accept the presence of a causal background. But whereas the determinist will find their presence sufficient to account for particular choices, the libertarian insists on a gap between these and deciding. Where causal background is sufficient to determine a particular outcome we speak of strategic inevitability. The strategic choice can only ever be understood in terms of its relevant social and material context. A thing can only be homogeneous, heterogeneous, or independent with respect to something else. Causal background can be understood as the social and material context for decisions (De Rond & Thietant, 2007).

2. The organizational structure and decision-making

When we look at western military history, we can find that it does not matter what formation the military unit or organization starts in - square, diamond, arrow, line, column or squashing matchbox - it will always end
up in the same formation – small groups rallying around the bravest men or natural leaders (Adair, 2002: 83).

The writers (Alberts & Hayes, 2003) claim a radical change in the art of war and meet to think of the soldier organisation and its management. According to the writers, the interaction between the individuals and an organisation requires new processes. They claim that the basic task of the organisation of the industrial time was to serve the leader and that the information exchange and communication of the organisation aimed at the serving of the decision-makers. This view of command could be characterized as power to centre, although the information age command can be characterized as power to edge. It is a shared and distributed responsibility. What, in fact, does “in charge” mean in the networked warfare?

The writers establish their whole thought in that the undivided responsibility as a starting point for the soldier management is no longer true. The division of the responsibility to more actors is justified just in the utilising of the variety of the network. Putting someone in charge did not result in effective command and control, but it made the question of responsibility absolutely clear (Alberts & Hayes 2003: 204).

In 1963, Stanley Kubrick directed classical film of the black humour “Dr. Strangelove Or: How I Learned To Stop Worrying And Love The Bomb” with Peter Sellers and Georg C. Scott as star actors. The film describes aptly the situation in which an accident caused by the human being happens to the management system which leads nuclear weapons. Commander Jack D Ripper (Sterling Hayden) of the air forces of the United States gets muddled and things get out of control.

The film hits a delicate section of information management. The indirect management which takes place in the networks always contains a danger that the responsibility and the control of the operation slide from the hands of the management. In the film, the President of the United States, presented by Peter Sellers, indeed demands repeatedly from his generals how it is possible that the B-52 bombers break into the air space of the Soviet Union even though he has not given such an order. The divided leadership is a target of the parody of the whole film. Eventually on the brim the nuclear war which is to meet the world the President of the
United States has a personal telephone conversation with the President of the Soviet Union so that the destroying of the world can be prevented. With the methods of the slapstick comedy, the telephone conversation points out the discussion between two people with which mankind is conducted out of the catastrophe of nuclear weapons. So the film underlines the fact that in the end the responsibility for human lives is undivided.

We are all familiar with the inability of economists to predict economic performance and the lacklustre track record of various attempts to control the economy. All of us are familiar with efforts by meteorologists to forecast just one day into the future. In the information age, Alberts and Hayes (2003: 205) separate the commander(s) from the function of command because commanders perform a variety of functions. This means that command and control process no longer seek to optimize, but try to keep a situation within bounds while accomplishing an objective. Because of media and the individualization of western society, risk management and protection of one’s own force has an increasingly important role for defence forces. The cost of single soldiers has changed. In the information age, the control can only be achieved indirectly. The control is not achieved by imposing a parallel process, but rather emerges from influencing the behaviours of independent agents. Instead of being in control, the enterprise creates the conditions that are likely to give rise to the behaviours that are desired.

Table 1: The Difference between Hierarchies and Edge (Alberts & Hayes, 2003:220)

<table>
<thead>
<tr>
<th></th>
<th>Hierarchies</th>
<th>Edge</th>
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<tbody>
<tr>
<td>Command</td>
<td>By directive</td>
<td>Establishing conditions</td>
</tr>
<tr>
<td>Leadership</td>
<td>By position</td>
<td>By competition</td>
</tr>
<tr>
<td>Control</td>
<td>By direction</td>
<td>An emergent property</td>
</tr>
<tr>
<td>Decision making</td>
<td>Line function</td>
<td>Everyone’s job</td>
</tr>
<tr>
<td>Individual</td>
<td>Constrained</td>
<td>Empowered</td>
</tr>
<tr>
<td>Information</td>
<td>Hoarded</td>
<td>Shared</td>
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</tbody>
</table>

Today, the network connects young people but at the same time separates the ones belonging to different social classes into their own pigeonholes. Instead of an income level, race or sex seeking a community, where a young person knows he or she belongs to, now has an even greater effect. The network is a question of identity. In addition to the advertisers, the
division is utilised for example by the army of the United States who closed
the entrance to the Myspace site favoured by the line soldiers but left open
the connections to Facebook favoured by the officers (Boyd, 2007).

Still, the military ranks and the resulting control of the soldier organisation
cause authority conflicts, even though the snapshot has moved to a netlike
organisation structure. In the networks, information and what is to be done
change place from one expert to another, and often the information does
not go through the superior because he does not belong to the expert
network any more. The network as a technological solution has broken the
forming of a management culture, and planning, an executive group and
snapshot are separated from each other.

The leaders of the so-called line-staff organization will experience a defeat
of authority when the subordinates network according to practical needs.
We notice that, from the point of view of safety, more important than an
ability to make quick decisions is to give birth to information and
understanding. The speed of the black and white simplifying fascinates us
but at the same time leads to the constant inflation of the making of
decisions. The ability of decision making is a play.

Earlier, one could live in a situation in which the leaders' decision preceded
planning. The subordinate experts were allowed to look at the justifications
for decisions made afterwards in the management teams. Now the
junctions will dictate the forming of the snapshot in the networks to the
planning and decision-making in chronological order.

Strategic thinking should differ from strategic planning which gives the
model to the decision-making. However, the management of national
security is a culture in which a small core group often makes a decision
before the scientific study of a matter or phenomenon and before the
administrative planning. The role of the scientific study in management of
security is indeed to look for the grounds to already made decisions.

However, the globalisation and the networking of environments and
mycelium together are changing this traditional order of management. Now
planning is a foundation for the learning and informing of the whole
organisation. Complexity of the situations and infinite amount of the
information compel giving up an ability of decision making as a starting
point for everything and to move the focus of the management for the success of communication and interaction. The global media and the different publics react in real-time to the decisions made by the organisations and to their practical consequences. To the organisations, management of the reputation has indeed risen past the ability of decision making to the centre of management.

According to “General Field Doctrine of the FDF” (Kenttaohjesaanto, 2007:32), leadership in all situations is based on a model of the so called “line and staff organization”, and tasks are bound to the military rank, rights and responsibility of every one in the organisation structure in all the situations. In addition, the principle of performance management is also used, and different phenomena and matters, such as the delivery of a weapon system, are carried out with the methods of process management.

In practice, many processes, such as the delivery of a weapon system, begin with a clear ownership, but in a “line and staff organization” the tasks also often change in the organisation, and the owners of the process will change. In the “line and staff organization”, the power and the responsibility are bound to a hierarchical and bureaucratic position whereas in a process responsibility is based on the time span of the project. When an officer owns processes and changes tasks in the “line and staff organization”, verifying power and responsibility issues will be difficult. In principle, simultaneous process organisation and matrix organisation which functions over “the line and staff organization” possibly makes the questions of power and responsibility dimmer.

The overlapping of two different management methods is manifested as a challenge especially in the acquisition of weapon systems and military material. The weapon systems of the high technology of the information time and their possibilities of use are based on complex networks of studies, development and the international court, in which the time span required for carrying out a project is considerably longer than the turnover of the staff of the the “line and staff organization”.

When an officer is in the situation in which he “sits on two chairs”, the power and the responsibility issues will be very complex. One can ask: if the officer changes the station and the task in the “line and staff organization” during the management of the project, according to which
management structure will the officer's power and responsibility be estimated? How will the quality of the process be secured when its owner changes? Furthermore, more and more outside actors of the soldier organisation and outsourced subprocesses often participate in the process. In this area, power and responsibility issues often depend on the agreements which are based on the law, and the combining of the ways of action of different organisational cultures has not taken place.

The existence of two overlapping structures makes advocating of the personal interests of an officer possible. A person who is unscrupulous and reaches for his own interest can seek his way for the starting of new and interesting projects, but in the “line and staff organization” can fall back to a protection which is based on the position of the quick withdrawal when the project experiences difficulties. The next officer to lead the project may receive a task the grounds of which and the ways of action are unknown to him. For the new owner of the process in question, the possibility to succeed is non-existent for the task already before he/she takes it. The failure of the next officer in the promotion of the process will weaken his/her status in “the line and staff organization”.

Alongside traditional classic power and responsibility based on station and task, a horizontal leading of the project and process management based on professionalism take place, giving birth to exceptionally strong competition and pursuit of one’s own interest in the culture of the soldier organisation. Passiveness of particularly the peacetime environment allures the competitive and victory-oriented soldier culture to also utilise the ruthless pursuit of one’s own interest that the two systems make possible. When, furthermore, our time favours the promotion of social and well mannered people in the leader tasks, there is the danger that the overall interest of national security and defence system is endangered by individual and personal aims. The situation of two systems does not make the required democratic principle of transparency of power and responsibility possible either.

When it comes to pursuing Revolution in Military Affairs, hiring the consultants often becomes one of the favourite solutions. But they would come to the organisation and perform the necessary changes without feeling and being familiar with the organisational culture. The management can hide behind the consultants' work; the management outsources the
responsibility for its unpleasant decisions. The consultation produces a social distance in which control is detached from responsibility. The power becomes concentrated, the social value difference increases but authority does not increase. Similarly one can think that in a bureaucratic organisation the transition from the line to the matrix operation distances the civil servant from the responsibility in some projects and moves it to the line. Thus projects are consultant activity inside a bureaucratic organisation (Sennet, 2007: 56-58).

For an individual with weak self-esteem and also for the organisation, credibility often means the same as an attempt to similarity with other actors. However, often this aim is not credibility in the eyes of the others. For a weak actor, originality is often an arrangement in the relation; the only method to an asymmetrical status against a stronger competitor or opponent.

In Finland, there are a few examples of how, for example, in the purchase of weapon systems, the basis for the purchase has been credibility based on similarity. The bombers acquired before the Winter War tell about how other countries around the world also believed in the bombers. However, the problem in Finland’s situation was the fact that enough machines were not quantitatively obtained so that the strategical target would have been achieved with the machines. A similar situation arose with the submarines. Heated discussion has been provoked especially by helicopter acquisition in recent projects.

3. Organizational culture

In the culture of security, decisions do not even still network or democratise. The logic and framing of a question and time span of political, military and economic decision-making do not correspond to the time span of the scientific basic research that has been traditionally thought. Instead, the study of the technology will be well successful to adapt to the future which is also suitable for economical and political decision-making. The central question is indeed heard: which stage in the globalisation and networking will break the station and have traditional authority move the decision-making to the network? What does the change mean for the structures of managing security and defence?
According to Kesseli (2006), to some extent, internationalisation also confuses the definition of military culture in Finland. Because Finnish units are nowadays essential elements of multinational troops on different peacekeeping missions, we prepare to take part in Rapid Deployment Forces (RDF) in the European Union, and global cooperation in Multi National Experimentation (MNE) exercise has also started, so it is only natural that definitions of military art must be standardised.

The first steps have been taken, including translating Guidance for Operational Planning (GOP) – including definitions – into Finnish (FINGOP). In addition to standardising definitions, FINGOP has tried taking into consideration local special demands as well. However, learning about a new culture does not occur overnight. This also poses – and has already posed – challenges to both the research and teaching of military art, as our traditional understanding of the levels of military art is changing, or at least we can say that the scale of military art is changing by virtue of internationalisation. However, it also has to be said that somehow the Finnish practical way of tying the levels of military art to the size of the organisations or to the range of the areas of responsibility helps us to revise the definitions. It remains to be seen whether the definitions described above are enough, if ever-smaller and more scattered forces will have more and more challenging tasks on an ever-larger battlefield.

When at the same time the industrial society becomes an information society, it will change from a society of threats into a society of capacities. New threats, like terrorism, organized criminally or illegal immigration, call for new capabilities. The central foundation of the capacity of a defence system at the FDF is the citizens' national defence spirit. The citizens' values and traditions and the general liability to military service have been cornerstones of the national defence spirit. This spirit is based on the everyday using principles, knowing and motivated staff, and materiel (Kenttaohjesaanto, 2008: 31).

In Finland, the basic structure of the management of the FDF is a commander central line and staff organization. The commander is responsible for carrying out the tasks ordered to him and commanders lead his subordinates on their tasks. The task of staffs is to support the commanders in their management. A process is observed like an action. The owners of processes are responsible for the quality of their products.
With the management system as a command and control system, a situation awareness and consciousness is created and designed, and the use of the defence system is carried out. The basic idea of the management is performance, or the so-called result management (Kenttaohjesaanto, 2008: 33-34).

4. The concepts of leadership and management as academic question

The study and teaching of management and leadership for the soldier have changed, because the 1990s brought new contents for the threats environment. From the point of view of strategic management, the concept of the information warfare were brought already to the contents of the teaching of management and leadership of the basic degree and the complex phenomenon worlds of the environment (for example the international trainings) and the examination of the challenges concerning the behaviour and management of crowds (the groups) with it.

At the moment, one can anticipate the factors which affect study and teaching; the ones materialising in connection with the revision of the tasks of the FDF (for example, the emphasis on cooperation between authorities and crisis management which is bigger than before). On the other hand, the effects of developing the network defence that has been brought up for the management and leadership can be anticipated in connection with the developing of the regional national defence. The network defence describes how the data networks of the future and the different networks, together with the advanced information processing systems and weapon systems, make it possible to reach the goals of total defending of the carrying out and cooperation between authorities of common and regional operations. Naturally this also has effects on the contents of soldier management.

The so-called “four-matrix”, based on the interaction of leadership, management, organisation structures and organisational culture, forms the theoretical background of the study of the environments (war, peace, crisis management, and cooperation). To use “four-matrix” in analyzing the different kind of environment creates the concept of “leadership environment”. The commanding or know-how of the wholeness of the management and leadership requires the know-how of management and leadership of the people, of the organising of functional units, of the issues,
in other words of the entire decision-making and management process. The leader must also be able to identify the effects of the organisational culture for the general manager according to this model.

Table 2: Planned change versus change forced by external factors (A dair, 2002: 220)

<table>
<thead>
<tr>
<th></th>
<th>Planned change</th>
<th>Change forced by external factors</th>
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</thead>
<tbody>
<tr>
<td>MANY OPTIONS</td>
<td>FEW OPTIONS</td>
<td>NO OPTIONS</td>
</tr>
<tr>
<td>Proactive</td>
<td>Sense of urgency</td>
<td>Reactive</td>
</tr>
<tr>
<td>Good communication</td>
<td>Have a focus - cannot do all the good things you would like</td>
<td>Catch-up</td>
</tr>
<tr>
<td>Involvement</td>
<td>Trying to keep up with competition</td>
<td>Trying to do too many things at once</td>
</tr>
<tr>
<td>Training for new ways</td>
<td>Doing the same things everybody else is doing</td>
<td>Falling behind in the competition</td>
</tr>
<tr>
<td>Anticipating customer needs</td>
<td></td>
<td>Driven by short-term, crisis decisions which change frequently</td>
</tr>
<tr>
<td>Staying ahead of competition</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The leadership applies to leading of the people in the “four-matrix”. However, the definition of the concept of leadership is problematic. Here it is based on the point of view of the FDF to the central study trend or, in other words, to the definition which has been created within the sphere of the new paradigm of management and according to which one can talk about leadership. When based on certain motives and objectives organisational, political, psychological and other resources are brought into use so that the subordinates will bind themselves to common objectives. The starting point for this thinking is the fact that the leader takes the needs for his subordinates actively into consideration. The precondition for this kind of a leadership is real interaction.

The required professional skill that is expected from all the authorities (soldier) leaders includes management, in other words the decision-making concerning issues and the know-how of the process of management. Management contains the following sectors (according to the description of the consecutive process established in the soldier activity), among other things as a process and described phase by phase:
1) follow-up of the situation;
2) evaluation of the environment and of the situation;
3) applying the means selection and solution alternatives to decisions;
4) field-specific planning;
5) control and supervision of the execution and operation of plans;
6) the whole process is cyclic and the control, and the supervision stage form the connection to the follow-up of the situation.

In the presented model of decision-making, the will is expressed and proceeds hierarchically down in the space from above without controls or interaction. In this model, a description of parallel processes is not included; it is both schematic and simplifying the reality. The commanding of the process can be striped to the core knowledge of the vocational know-how of details which are related in spite of the description of the process or to the adapting.

The organisational culture is seen as a way of action and behaviour which expresses the values and opinions, the people's basic defaults and attitudes. People in the organisation do not necessarily act, however, according to the declared values and goals because the core of the culture, the lowest basic defaults, directs operation. These defaults are often unconscious or self-evident beliefs, ideas, thoughts and feelings. The operation of the organisation is also influenced with the superiors' management methods and practices.

By scientific analysis, tasks in the environments are bound to phenomena describing the state of the war. Some of the phenomena can be the information warfare, among other things, and the threats which are related to the information society and terrorism. The analysis of phenomena that has been made from the environment affects the emphasis on the interaction of the “four-matrix” of C2. For example, the analysis of the phenomenon of information warfare affects the mutual emphasis of the sectors of the wholeness of management in the environment of crisis management, so that significance of an organisational culture and organisation structure for the process of management will be more emphasised for self than, for example, for leadership or management.
Conclusion: toward leadership environment

Strategy, as a product of a mind or minds, once incarnated as a plan, is like any other artistic product – a book, or poem, a musical composition – in that it can take on a life of its own, quite independent of its creator. A plan is a very good basis for changing your mind. We know from military history how, for example, the so-called Schlieffen Plan was not successful because of its lack of flexibility. The idea behind the plan was great, but the time and political environment had changed, and so the idea and the plan were no longer in balance (Adair, 2002: 192-193). It is difficult in military culture to understand that some new process or political change may have come along overnight and you have got to adjust yourself and your organization to it.

I would like to summarize some key points of my arguments. First, strategy is a military concept of origin. Strategic thinking should be distinguished from strategic planning. Strategic thinking leads to strategic planning. Strategy is the art of the leader-in-chief. The practical wisdom – intelligence, experience and goodness – is the basis of strategy. It cannot be taught like a science or skill, but like any art, it can be learned by those who have an aptitude for it. Planning is a process, not a destination. The golden rule is flexibility of mind, so that you can adapt after the plan but still make forward progress as circumstances unfold. Vision is the art of seeing things invisible.

Second, the change of thinking is central to leadership. The change process is based on the understanding of culture. Culture is wider than behaviour: it embraces the distinctive customs, achievements, products, outlook, values, and beliefs of a society or group, and the way of life. Third, the difference between leadership and management is that in leadership it is not enough to merely read a new order, but you have to also see it in praxis (Adair, 2002: 227). Only face-to-face communication can change the organizational culture. Culture is not the same as structure, which is relatively easy to change. It is the deeper-seated pattern – unique to every organization – of assumptions, beliefs, attitudes, habits, and customs (ibid).

The living condition for the success of companies is the creation of their own databank with the help of their own study and development. In the FDF, the possibility to spend money on consultant services that began in
the 1990's is a development path in which the following turn will be the creation of an own study and research culture. Instead of the consultants, researchers and information leaders are placed in their own organisation. However, this change requires a new separation of powers and opening of operative decision-making for a wider discussion within the organisation. The commander-centrality and the personifying of the omnipotence of the information are no longer suitable for leadership of the information time. How well networking and divided leadership will stay in crises remains to be seen when the abilities of the new management will be weighed in the future.

The philosophy of C2 information warfare is that in the industrial time management was from the hierarchy and all honour, communication and creativity were concentrated to one visible commander. Therefore the creativity and snapshot of the organisation were always late, of course, also because of a deficient technology. Now we are going through time of leadership or C2 network centric warfare. In the networks every one is “a leader” and the time of one visible leader is over. When earlier a leader made the art and the staff the science, it is now actually the other way round. But RMA leaves two factors open: First, how is responsibility specified in the networks? Who will be responsible in the ultimate situation if the technological system causes a catastrophe? Second, because ordering no longer proceeds downwards more from above in the line, the commanding of the organisation in the middle of all creative chaos requires indirect control: the end users (human beings) are influenced so that by changing their behaviour they will be compelled, for example, to use information processing systems of a certain kind and mobile phones. The technical battle solutions direct people “to learn”, and this way the self itself is controlled, in other words we can call it as “development” as a human being. What happens to those people "who do not learn" or who are not able to use the available military technological solutions?

References:


De Rond, Mark & Thietant, Raymond-Alain (2007) “Choice, chance, and inevitability in strategy” 

Kenttaohjesaanto (2007) Yleinen osa. Puolustusjärjestelmän toiminnan perusteet. Pääesikunta, 

Andreas Olsen (eds.): War Studies. Perspectives from the Baltic and Nordic War Colleges, Oslo Files on 