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WAR and Prefixes

Abstract

This article is a written result of a lecture I was asked to deliver by Bgdr Wolfgang Peischel at the Vienna Strategy Conference 2019. I was to provide an overview of my experience as President of the Swedish Defense University (SeDU) while leading the major academic transformation of Swedish military officer education. Wolfgang Peischel and I shared the view that the relationship between officer education and the civilian academic system is an issue that has rarely been fully penetrated. The crux of the issue is really - what it entails to be responsible for an academic discipline that is not represented in the civilian academic world. In the end, the lecture was not delivered due to illness, an outcome for which I am not ungrateful as I had trouble understanding the role of my lecture at a conference about major about major political strategy.

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This article is a written result of a lecture I was asked to deliver by Bgdr Wolfgang Peischel at the Vienna Strategy Conference 2019. I was to provide an overview of my experience as President of the Swedish Defense University (SeDU) while leading the major academic transformation of Swedish military officer education. Wolfgang Peischel and I shared the view that the relationship between officer education and the civilian academic system is an issue that has rarely been fully penetrated. The crux of the issue is really - what it entails to be responsible for an academic discipline that is not represented in the civilian academic world. In the end, the lecture was not delivered due to illness, an outcome for which I am not ungrateful as I had trouble understanding the role of my lecture at a conference about major political strategy.

However, when Bgdr Peischel renewed his request in advance of the 2020 conference I was reminded of my mantra: academic education and research are the areas where our hope lies when what we call politics and strategy cease to be meaningful. To attempt to predict and manage an extraordinarily long-term macro future is usually unprofitable because we are invariably and inevitably surprised by the unexpected. To deal with this, humanity has, among other things, built a worldwide academic system with the important task to provide young people with intellectual tools to deal with what cannot presently be imagined or anticipated. It is not an impossibility that academia is the only truly reliable long-term strategy available to meet the completely unknown. For many centuries it has succeeded in coexisting with and contributing to changing the radically shifting political, economic, and religious world order.

Still, the design of a specific element within the global academic system, like a discipline suitable to a national context, for example, can very much be a matter of politics and strategy. The better the decision, the better the long-term readiness. My impression from attending many NATO commander meetings¹ is that this issue is rarely given much space. Education is all too frequently seen as a means of providing one's organization with what is currently considered to be a sufficiently skilled workforce, and research is considered primarily as a means of contributing to the resolution of more immediate organizational problems.

Academia, however, is so much more than that. It can be compared to a 'socioorganic' machine whose purpose is to adapt to an unknown future to which it also contributes to create. For this to be successful, the machine must include certain irreplaceable constituent parts: education, research, subjects, exams, teachers, researchers and quality assurance systems. Without all of these constituent

¹ Annually the heads of the NATO countries' higher education programs gather for a joint conference, to which some non-NATO - but partner members are invited.

parts (individual elements may be lacking from an institution because they are available through other universities in the national academic system, such as research, education, law), the academy ceases to be an academy and is transformed into a school that teaches only what is already known. With this recollection in my baggage, I felt ready to write this article.

I have no military background personally and have never nurtured any military ambitions. Therefore, I completely avoid giving opinions about the actual direction and content of officer education and military research. This is an issue for those who have real competence in these areas, i.e. the officer's profession itself and those who represent military education. I would also like to note that I am referring only to education aimed at examining or further educating commissioned officers.

My resume includes being head of the national librarian education, vice-president of the Borås University of Borås, president for 10 years at the Halmstad University, and finally president of Swedish Defence University for just over 8 years until my retirement. My niche is strengthening and reforming education and higher education institutions in crisis, in creating new disciplines within the academic system, and in designing and implementing strategies for introducing professional programs (in my case librarianship, nursing, textile-oriented education, innovation-oriented education, and in the latter part of my career - officer and, to some extent, military-technical-oriented education) into the academic system on the profession's terms without sacrificing academic demands and requirements.

Here, I have chosen only to report my own, subjective personal observations, reflections, and perceptions of military education around the world. I do so from a relatively abstract comprehensive system perspective. I refrain from substantiating my statements by singling out any individual officer training primarily because I wish to avoid being accused of attempting to rank them. From my own experience, I am well-aware of how easily brief descriptions of complex institutions and processes are perceived as simplified and, consequently, unfair. I also acknowledge that my knowledge of other countries' officer education and civilian academic systems could be more extensive. However, I believe that informed readers will recognize several of the abstract type-features presented. This essay should be seen as something which problematizes this situation and which is somewhat provocative rather than a scientific text. To mark the subjective nature of the text, I have refrained from scientific footnotes and literature lists.

Common features – results of military logic

One apparent similarity noticeable when officer educations are compared internationally is uniformity. This uniformity, with its basis in military logic, is consequently, reasonable and functional. What follows are some of the most typical features:

National officer education programs globally offer degrees that closely follow the respective Armed Forces' promotion systems. An officer's career begins with cadet training and concludes, for relatively few, with preparatory and/or supplementary education for prospective and/or recently appointed flag officers. Between these ranks, continuing professional development courses are offered to varying degrees which lead to, or may lead to, the individual being promoted to captain, major/lieutenant-commander, lieutenant colonel or commander and colonel and captain, respectively.

Officers' education is based organizationally on the concept of services i.e. the army, the navy/marines and the air force, and to some extent on specific capabilities/branches within these services such as military technology and intelligence.

The officer's profession is usually divided into three main categories: commissioned officers, non-commissioned officers, and reserve officers (only the first category is dealt with here). These distinctions are also reflected in the organization of education for the different categories of military personnel. Officers are separated by officer category throughout their education, but at times may attend the same courses.

Strategy, operational art, and tactics are the most important intellectual starting points for officer education. These concepts can be differentiated at the various levels. Training elements related to tactics predominate in lower-level officer education while operational art and strategy are more prominent at the higher levels. The boundaries are fluid.

A significant part of officer training is in the form of in-garrison/work-experience training, which means, among other things, that cadets receive "on-the-job training" in their particular service, trade, or area of specialization, such as land warfare, air warfare, maritime warfare, air defense, interpreter skills, and intelligence. Higher officer training entails, by its very nature, a more comprehensive approach to defense and is therefore more focused on higher-level military command and planning. Field exercises and staff exercises are important elements in education at this level.

Many forces grapple with problems related to their relationship with the civil society. Several military academies, therefore, provide education that is tailored to the civil community often in the form of crisis management training and, in some cases, they also provide purely civilian education.

Differences also exist between different countries' officer education systems. These differences are often a result of the design of their national defense forces. This can be a consequence of everything from the extent to which defense is prioritized relative to other public spending areas, the economic conditions in the country, or the access of qualified teachers. The ability to attract aspirants, membership in international alliances and the country's major political influences are also factors. In general, the defense forces of large countries can build highly diversified military education systems with separate cadet schools, separate schools for prospective captains and/or majors, and schools for future lieutenants-colonel and/or colonels. However, smaller defense forces are often forced to rationalize, and because of this, diversity is minimized. Besides, the length of the training may even be reduced. Some countries have chosen to conduct all officer training at the same military education institution, and to organize the education in such a way that all three services are educated at the same campus. The level of education directed at the civil society and the range of purely civilian education is also variable, as are the possibilities to conduct research. The same situation applies to the extent to which students in officer training can count any civil education they might have received towards a military degree. In the officers' world, the interest in different countries' military and defense policy-related educational conditions is fairly large.

Distinctive features stemming from legislation on civil higher education

National, civil academic systems are very similar wherever you go in the world. Simply put, they consist of: A (hopefully) meritocratic admissions system. The levels of education provided are similar from bachelor's level, masters, and other postgraduate levels as well as professional and vocational degrees. Different categories of teachers/researchers can be found from junior lecturers to professors. The systematization and organization of research include postgraduate programs and, to a certain extent, master programs. Advanced quality assurance systems in terms of hiring teachers/research, educational content, research results, collaboration and strategic development.

In its entirety, the global academic system (and thus the national systems) aim to deliver well-trained staff to all other sectors of society, to produce research results that contribute to the development of society, and to regenerate the academy by producing the next generation of teachers and researchers (a significant portion of all research aims more to produce new teachers than to produce new, globally-significant, unique findings). For centuries, this very large global system has had an enormous impact on all human activity.

The relatively small differences that the national civilian academic systems exhibit is most often due to legislation that regulates several topics. For example, the regulation includes: the courses and

programs permitted in a particular Higher Education Institution (HEI)²; the kinds of HEI that are allowed to offer certain subjects; the HEI that are permitted or not permitted to pursue masters and/or research degrees; the levels at which various subjects are allowed to offer education; how a country appraises subject progression³; as well as the design of the system of quality. However, national differences are reasonably easy to handle provided they are part of the global system (here can be mentioned the Bologna Process System, developed in Europe to facilitate compatibility and collaboration across national borders).

Being completely excluded or only partially included in the system may make things different. Distinctive national features can have major consequences. In one country, a professional education that is fully part of the academic system can establish academic quality-assured programs at all levels and build up impressive research resources. In another, the same profession can be completely excluded and experience significant problems, for example, recruiting academic teachers.

In my view, officer education is the kind of education where distinctive national features - a consequence of legislation governing higher academic education - have disproportionately negative impacts. I would argue that systemic differences regarding officer training around the world are to a greater extent due to civil law regarding higher civilian education rather than the needs of the military.

Consequently, some officer education systems have no formal connection to the civil academic system, and some military higher education institutions, through collaboration with civilian higher education institutions, can offer graduate level and/or master's level or other postgraduate degrees. There are also military educational institutions that can independently issue a degree at some or all levels. Further, there are variations such as military educational institutions that can independently offer degrees at a lower level, but which must cooperate with a civilian higher education institution to be able to offer degrees at a higher level. The right to conduct research (and postgraduate programs) may also be subject to regulation. How the military educational institutions have or have not been given the right to issue civilian degrees and research is always reflected in the structure of their internal organizations.

It can be argued that a strong link to the civilian academic system ensures that there is access to more teachers (both military and civilian) with higher academic qualifications, a stronger research

² In many parts of the world military education has not been given the opportunity for full integration.

³ The legislation of some countries requires that the main discipline at the graduate level must also be found as the main discipline at the master's and other postgraduate levels, while in other countries the possibility to various subject matters between the different degree levels exists.

experience, education programs with a clear foundation in research, greater ability to enter into educational collaboration with civilian educational institutions, and better prospects of monitoring and remaining up to date with international research.

Conversely, military educational institutions with weak connections to the civilian academic system are only included to a limited extent in the civil academic communities' quality assurance system. Instead, educational responsibility falls heavily on the leadership of the forces and the officers' profession itself as does the responsibility for quality assurance. The most rational option and results-driven is a matter for discussion. The question is particularly relevant if it concerns a small or medium-sized defense force that already has difficulties in meeting all of the other operational requirements imposed by government policy.

One may wonder why national defense forces choose to fully exploit or even act to expand the opportunities offered by their own country's legislation on higher academic education. There can be many reasons. Here are some examples: The need to strengthen one's resources to enable easier access to a range of civil subjects and disciplines that are of relevance to the military may be one factor. Degrees that are compatible with the needs of the adjacent civil society can be attractive. The ambition to improve educational quality by being able to attract more highly educated academic teachers (military as well as civilian), better-organized research, postgraduate programs and access to global academic quality assurance systems are also common arguments. Academic freedom (to the extent permitted) and the possibility of examining the conditions for one's activities (including political decisions) are tempting. The ambition to strengthen the status of the profession is a particular reason that is often advanced.

Conversely, arguments rejecting an overly close connection with the civilian academic system also abound. Civilian academic regulations can be seen as unnecessarily complicated (not least if they are perceived as complicated enough to deal with overly detailed political defense directives). Anticipated cost increases are usually mentioned. Academics and research are perceived as being out of touch with reality. Some argue that it is too difficult to reconcile the military education tradition and promotion systems with the civilian academic degree system. Academic training is assumed to be far too theoretical which in turn is assumed to lead to professional and practical knowledge receiving less space. Fear that the profession will lose control over the regeneration of its profession is also a common argument.

It is usual for military educational institutions in all countries to adapt to prevailing circumstances and to the legislation that regulates higher education and recognizes the virtues of the military's solutions. However different these solutions happen to be, they share one thing. While in all the armed forces

many officers are well acquainted with their own country's legal conditions for civilian academic education and research, and how it has come to affect officer training, the officer profession still generally seems rather uninterested in issues related to this. Furthermore, comparative international knowledge in these respects appears to be even less evident.

As I have already mentioned, I have no ambition to take a position on which educational institutions have chosen the right path or which of all those referenced opinions are reasonable. My aim, instead, is to emphasize that the relationship with the civilian academic system varies greatly around the world and to point out that if the academic status of the officers' education is discussed at all, it is primarily related to issues similar to those discussed in this and the previous sections. While this is fine, there is an even greater intellectual challenge to take on, a challenge that is all too infrequently in the spotlight.

The perceptions of what subjects or disciplines define the profession

There is a fundamental intellectual challenge that is at least as crucial to the design of the officers' education and the organization of the research as it is to the national legislation on higher academic education. It is concerned with a challenge that is all too infrequently analyzed or discussed, but which all officer education and consequently all the defense forces are required to deal with daily, albeit usually subconsciously. In my opinion, this challenge has been made invisible by focusing too often on the issues that have been addressed in the previous two sections. It is the perceptions of what subjects or disciplines define the profession.

Let us address the core of this problem. The subjects offered at the military universities can roughly be divided into three categories: Civil subjects, Prefixes, and WAR.

Civil subjects

Civil subjects are subjects that some military educational institutions offer education in that are not packaged in military terms such as international law, political science, language, mathematics, mechanics, and economics, as well as other subjects that can be studied at civilian universities which can be included in an official degree. Here I refrain from discussing the status of these subjects at the military colleges. I only note that their problems are partly reminiscent of the problems that characterize Prefixes.

Prefixes

Prefixes are subjects that are usually attributed to military sciences such as military logistics, military history, military sociology, and military technology, i.e., usually civilian subjects with the '*military*' prefix added. In other words, these are subjects that are of great importance for military activities and which, for segments within the officer corps, maybe more profession-defining than what is usually considered to constitute the profession's defining knowledge base (see WAR below). For example, for fighter pilots, military aviation technology will inevitably be of great importance in their training and sense of their professional identity. Thus, different prefixes are included to varying degrees in the education of different officer categories depending on the purpose of the training.

All prefixes are subsumed under other disciplines. Most of these disciplines are found at a very large number of civilian academic institutions around the world both in the forms of education and research. These are characterized by a long history; well-developed defined disciplines; great knowledge of the different directions of the discipline; well-tested substance-specific quality systems; exchanges between higher education institutions in their own country and/or other countries; large access to students and thus future teachers and researchers; qualified academic staff; well-developed systems for regenerating their subject in the form of master's education and even higher levels of postgraduate education; well-developed systems for research and dissemination of research; and a good insight into the topics suitable for the academic landscape.

All military educational institutions, and thus most defense forces, also decide the extent to which and the way Prefixes should be linked to the overarching subject. If nothing else, through such simple acts as hiring staff and designing curricula. A simplified example is outlined here:

If a military HEI chooses, for example, to refrain from hiring military technicians, they have likely either opted out of a connection to the overarching subject of technology and the military technology option as well as of the inclusion of the subject in their curriculum.

If one chooses to employ only a few military technicians (regardless of whether they are military or civilian academics), then the decision has likely been made that the officer program should primarily have only the limited focus in military technology that those employees happen to represent, that no further competency development research will be conducted (teaching assignments are likely to consume all of the available time), and that the connection to the overarching subject(s) is maintained only in a very limited way.

If one chooses indiscriminately to hire a group of military technicians, they will be more easily able to cover various parts of the enormous diversity that is included in the concept of military

technology, even if they are unable to encompass the entire field. The quality of education will be improved somewhat. Some research will be possible and the opportunities for more systematic connection to the parent subject(s) will be improved.

If one chooses to limit the concept of military technology to the study of methods for the evaluation and procurement of military equipment, for example, then it becomes possible to form a research and teaching group which covers that entire field and which can create a strong position internationally. Such a research group will be more able to connect with the parent subject(s) and will contribute to the development of a specific niched field of technology.

If one chooses to link postgraduate education to a well-functioning and well-defined research and teaching group, which is also responsible for education at the bachelor's, master's and doctoral levels, all the necessary tools to regenerate the defined subject orientation from a long-term perspective are provided. Also, it is possible to contribute to the development of other military universities in the field of military technology, as more newly graduated Ph.Ds. will then enter the labour market. In this way, one also contributes to the development of the subject(s).

If one chooses to cover most of what can be included in the concept of military technology seriously, then one will create a broad technical university with military characteristics that may potentially also include civilian students.

I am well aware that the example I provided is naive and that in many circumstances such choices are never simple. Many aspects must be considered such as financial realism, access to qualified staff, and the extent to which one's plans correspond to legislation. Additional considerations include whether one is obliged to complement the education with content that usually belongs in the civilian elementary and secondary school system because the students' entry educational level is low, etc. Contextual factors such as these tend to limit choices. However, even if circumstances remove the active choice option and in effect make the decision, the result has just as well been made: on how the subject is to be designed; on whether the links to the overarching subjects(s) are to be strong or not, whether the ability to collaborate with other representatives at other military educational institutions with a focus on the subject(s) and subject orientations they represent, on the level of quality in teaching, on the ability to develop the competence of the HEI's teachers.

However, these decisions are made, they have long-term effects, and should, therefore, be of fundamental strategic importance to the officers that the education fosters them to be. This applies to all officer education programs globally, and thus, also, to all defense forces.

There is good news, though. If you choose, or rather say, circumstances compel you to choose one organizational alternative that everyone knows in advance may not do the prefix subject justice, then there will always be a second chance in the future. Why? Because the overarching subject exists and is well established around the world in civil universities.

WAR

WAR, is often considered to be the officer's profession's core competence or knowledge. Terminology such as strategy, operational art, and tactics are usually used to describe this knowledge. The reason I use the term WAR here is because WAR is much more problematic than the term Prefixes. Because as a subject, WAR has no civilian equivalent.

There is no common, civil international canon that defines the object of the '*study of WAR*', its demarcation (s), or its name. Nor does there seem to be such a canon in the military world. What should the subject be called? Not Military Sciences because it includes Prefixes. Maybe War Studies but with the reservation that Prefixes can be included. Traditionally this subject is more about the study of the war as a phenomenon (war itself) and the effects of war, rather than the study of how war should be conducted. And how to lead the unique organization that military forces are in preparation for as well as the de facto exercise of war and warlike circumstances in complicated political and social contexts. I think WAR should include both options provided that the study of "how" gets at least as much attention as the study of "of". Perhaps WAR should be regarded as three subjects: strategy, operational art, and tactics. However, this could be unfortunate as this kind of division rarely occurs neatly in reality. There is no strategic plan that cannot be stifled by a minor tactical mishap, nor is there any tactical success that cannot prove meaningless because of unrealistic strategic judgments. In the absence of guidance, I tentatively use the word WAR. I also firmly claim that any officer education that omits WAR is not officer education (which I think everyone will agree with me about).

Since WAR has no foundation in the civil, academic system, it will not find support there. Responsibility for the subject of WAR's long-term development rests entirely on the military academies and armed forces. There are no loopholes. It is not possible to replace what WAR mediates with Prefixes and civilian subjects. Accordingly, WAR must always be the most important priority of military academies regardless of the great importance of Prefixes and civilian subjects. Not because WAR is the most important, but because WAR cannot be ignored and that no one else in the civil academy system is to

take responsibility for the discipline. To clarify though, I oppose the idea that WAR should be developed at the expense of Prefixes. On the contrary, they overlap and are mutually incorporating.

What courses of action can be taken? There are only two ways in which the core knowledge of the profession can be communicated:

1. The profession itself (through the armed forces) can organize how the specific core knowledge is to be communicated. This can occur in many ways: older officers can serve as role models for younger officers in their daily work, education can be organized based on the experience of those that represent the profession, the trading of experience-based knowledge and dedicated training, building systems for an internship, purchasing training and education places, sending student officers and researchers to other armed forces, participating in exercises and operations, and creating military educational institutions that offer training in WAR under the terms of the profession but without necessarily living up to the academic requirements normally required of a discipline. Nothing prevents teachers from picking up and disseminating knowledge based on scientific evidence. The military schools can organize their research, though usually within more or less randomly shaped organizational frameworks.
2. Establish the subject of WAR by current civilian academic tradition with all that it entails in terms of degree levels, postgraduate programs, research, quality assurance systems, etc. (which has happened in some countries). However, all of the components I have listed must be present. If an element is missing in the country's civil academic system (because the subject has never been established in the civil sector) it will be impossible to "borrow" the permission to conduct postgraduate programs in WAR from a civilian higher education institution because they simply don't know what WAR is all about. There is no help available in this case. However, some limited assistance can be obtained from other countries' military educational institutions, provided that they have progressed further in the academic establishment of the subject of WAR (e.g. can accept doctoral students from other countries).

It is easy to believe that the choice is between these two approaches. That is not the case. The uniqueness and autonomy of the profession in terms of how it is organized does not necessarily entail that there exists a single complete academic subject that is of interest to the profession. On the other hand, a complete academic profession-oriented subject cannot exist without the profession. Thus, the choice is between, on the one hand, the capability of the profession to autonomously organize the knowledge transformation between generations that matches the profession's unique and

autonomous organization (many defense forces have been impressively successful in this regard) and, on the other, the profession's autonomous organization in symbiosis with a complete academic profession-oriented subject.

The real question is this: are the armed forces and its officers capable of disseminating the core competence of the profession autonomously and in a manner that is qualitatively satisfactory and satisfies their own needs and wishes? To answer this question, several considerations need to be taken into account. In the individual Armed Forces, are there representatives who have a sufficient overview of what the subject WAR covers (or at least significant elements of WAR) and who also have a well-developed insight into how WAR should develop over time? Is there enough educational power to convey the subject - WAR? Is there enough organizational strength? Is WAR at risk of becoming random in the sense that important experiences and knowledge are lost because of rotation and retirement? Can the system determine whether or not traded knowledge is adequate? Might WAR become too dependent on the individual and thus too conservative or too radical? Can the results of the research be effectively managed to washback into educational programs, for example? Are the successful and unsuccessful experiences of previous generations systematically recorded for the future? Is the Defence Force so understaffed that the best candidates cannot be made available for education?

If the answers to these questions are satisfactory, it is simply a matter of proceeding. Without satisfactory answers, the logical consequence is that the national defense force and the military educational institution(s) should work together (if they are not already doing so) to fully develop the subject of WAR following current academic principles. This is laborious and time-consuming work. However, if it is carried out methodically, over time one establishes an outstanding sustainable subject and educational structure which is positive in a military world otherwise characterized by very rapid upheavals and dramatic political twists. Seen over time, this approach is far more rational and economically advantageous compared to short-term approaches.

Alternatively, of course, you can just ignore the questions posed above and hope that everything will be solved through ad hoc solutions, relying on Prefixes, individual initiatives, and the purchasing of educational solutions from national and international civilian and foreign military universities. Whether you like it or not, you have then chosen the first alternative outlined here. The only difference is that the choice has been made subconsciously.

WAR, what is it?

Professional subjects are comparable to what an academic collegiate (in this case, both military and academics - including those with and without Ph.Ds.) together with the professionals decide to teach and in which areas to research. However, with the addendum that the subject must be delineated somehow. It is pointless to assume responsibility for what other established subjects already lay claim to.

The academic system, with all its constituents, maybe surprisingly sustainable over time, but the content of the subjects themselves can change from one year to another, that is, provided that the educational institution itself has the right to decide on its curricula and syllabuses (naturally - in consultation with the profession and government). If, on the other hand, every decision is lifted to defense force command or government level, the rate of change will be slower.

It is understood that a professional-oriented academic education requires very close collaboration with the profession. That being said, nothing should prevent military and academics (both with and without Ph.Ds.) from participating in the education itself. It is advantageous if officers with fresh experience from recent operations, for example, to be rotated into the military education system. However, it should also be added that the higher the level of education, the higher the demands on scientific understanding and academic skills.

It should also be emphasized that a subject is not the same as an educational program. The main subject in officer education is typically WAR, but this is also usually supplemented with Prefixes and civilian subjects. Similarly, it should be emphasized that academic education does not exclude extensive practice-oriented teaching. On the contrary, it is the norm in professional-oriented academic education. The requirement is simply that practical elements should also include reflection grounded in scientific research findings and/or empirically verified experience.

I have already suggested that a subject must have some kind of reasonable demarcation. What are the defining boundaries of the subject WAR? As previously stated, WAR is usually linked to the terms strategy, operational art, and tactics which are, however, divisions of phenomena that are in reality inextricably linked and difficult to distinguish. Moreover, the terms are used in many other non-military contexts. For my part, I have therefore come to prefer the following tentative approach:

The subject or discipline of WAR focuses on the unique intellectual challenges that the officer profession is designated to deal with and which no other subject takes responsibility for, studies, or teaches. Overall, this involves knowing best how to manage the legal right to plan to destroy and kill,

as well as the de facto execution of this right. More specifically, it concerns: 1. The leading of preparation and planning for war and de facto leading and managing extreme situations. This concept is usually associated with the term tactics, but is significantly broader than that. 2. The leading of peacetime preparations and planning for war as well as the leading of wartime efforts or efforts to prevent a war which may include "a reverse logistical logic" that aims to systematically and rationally destroy one's resources to destroy the adversary to an even greater extent. This concept is usually associated with the term operational art, but is broader than that. 3. The leading and managing of a section of civil society whose most important purpose is to constitute the state's ultimate deterrent and aggressive tool with all the political dexterity and leadership required to manage an organization that, in extreme situations and for a limited time, can be forced to take over the responsibilities of an entire state at a battlefield, for example. This is usually associated with the term strategy but constitutes a demarcation of the political strategy concept.

This tentative demarcation of the subject has not been added because I believe that I have solved the demarcation problem of WAR, but because it illustrates some problems that are related to the immature nature of the subject.

Since the subject of WAR deals with the unique intellectual challenges that the officer profession is required to address, it is of the utmost importance that a significant proportion of teachers and researchers are officers with Ph.Ds. This is linked to how higher education institutions and education are governed. The collegiate has an incredibly important impact on the actual content and focus of education and research. *If the profession does not gain enough influence where content issues are decided, a potential risk arises that the education and research will be marked by the study of the war as a phenomenon (which is also important) rather than the study of how war should be conducted.* This is the case because civilian teachers rarely have a subject background that prompts them to ask questions about how to best destroy and kill.

The notion that a sufficient number of officers must have a Ph.D. is because, in the civilian academic world, the views of those with a Ph.D. have greater weight than those who do not have one. Ultimately, this is about the future development of WAR and who can be in charge of it (see previous paragraph). Representatives of the National Defence Forces can interpret this to mean that a large number of officers have to complete a Ph.D., which can be perceived as a problem in that these officers will then not be available for operational positions. That is not the case. It may be enough for a handful of officers to complete a dissertation on the subject of WAR per year (depending on the size of the armed forces), and that some of them eventually become professors, to cover the needs both within the military educational institutions and the defense forces (see the paragraph below on the ability of the force to

order/procure the correct educational package). At least if we are talking about nations with small and medium-sized defense forces. Accumulation over time solves this problem.

Some portions of the subject of WAR related to strategy can also seem to belong to political science. An overlap appears naturally as it is difficult to determine when politics transitions into military strategy and vice versa. This overlap need not be a problem, but there is good reason to be vigilant about distinguishing them because demarcation problems can easily lead to research digressing from what was originally intended. A research group formed to focus on war and strategy issues can, over time, be transformed into a unit primarily engaged in international security policy (which may have both advantages and disadvantages). However, the somewhat unclear delineation between subjects also generates a clear advantage - There is an abundance of political scientists with Ph.Ds. around the world. Thus, the recruitment base is relatively large.

Officers who intend to complete their Ph.D. tend, in my opinion, to choose subjects for their dissertations that focus on more comprehensive, abstract issues. This could reinforce the problem addressed in the previous paragraph and reinforces the problems described in the following three paragraphs.

It is difficult to find officers with Ph.Ds. and civilian academics who have researched how to plan for and lead war and deterrence efforts. Unfortunately, finding researchers who have studied how to plan for and lead during extreme situations is even more difficult. Of course, the paucity of such academics is a consequence of the relatively immature subject of WAR globally and that research in this area has rarely been conducted in civilian subjects.

The Research focused on how to plan for and lead during the war and war deterrence efforts require the use of research material closely connected to the actual field (e.g. participant observations and in-depth interviews) along with methods and theories that are not usually associated with the concept of strategy. A scarcity of knowledge and experience for praxis-related research exist. There is a lot of potentially useful praxis-related methods and theories that are rarely tested within the WAR. This lack is unfortunate as military representatives often indicate how important practical research is for WAR.

Many defense forces appear somewhat ineffective to order/procure the right content in officer education and even more so in determining the content of military research (at least in the field of non-technical research). Having stated this, a certain number of Ph.Ds. are necessary within the subject of the entire width of WAR (including the important Prefix subjects) who are active in defense forces and who can help to improve ordering/procurement competences. Employees with such doctorate degrees are also useful regarding the quality assurance of education organized by the Armed Forces

themselves and which can be included in the officer student's academic degree, including courses conducted at vocational and branch schools for example. The ideal would be for officers with Ph.Ds. to rotate between the military institution(s) and the national defense force.

A fully developed subject cannot exist only at one or a few HEIs. For a subject to develop and thrive, effective dialogue, competition, and collaboration (not least in research) with like-minded people who view issues in different ways are prerequisites. Hopefully, enough dynamic and productive research environments and Ph.D. programs can be found around the world today that see themselves as part of the subject of WAR. Unfortunately, however, I only know of a few officer HEIs that are in progress or have achieved this. Perhaps this says more about my limited knowledge than about how the current situations are.

However, in the unlikely case that too few research-level Ph.D. programs and environments focused on WAR around the world do exist, then there is much left to do. We can only hope that with time, more countries will join those that have already begun the journey. Alternatively, we may have to rely on the ability of the officer profession to autonomously organize the dissemination of its core knowledge. This ability is, as I have already mentioned, often good but unfortunately increasingly strained as a result of an ever more complex world.