

PRACTICE-ORIENTED ARTICLE

The Dynamics of Military Skills: The Role of Experience-Based Knowledge in Challenging Situations

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Based on narratives from Swedish officers' experiences from challenging situations, the article investigates the role of experience-based knowledge in military practice. Officers must be prepared to act in situations in which they do not have full control, make decisions under uncertain circumstances, and master tasks with conflicting rules, objectives, and means. These conditions apply in an overseas warfare environment, and also back home. The officers' ability to adequately interpret phenomena in a given situation includes a variety of inarticulate knowledge. The aim of this article is to examine two aspects of military practice: (I) what role experience plays when handling challenging situations, and (II) how different kinds of knowledge are active in forming a professional skill. Using a set of epistemological concepts (phronesis, knowledge of familiarity, skill acquisition model), the article presents an analytical framework that focuses on experience-based forms of knowledge. The results show that experience-based aspects of knowledge which are crucial in military practice run the risk of not being discussed, because established methods and research traditions are focusing on measurable forms of knowledge. Finally, the article discusses the risk of de-professionalization due to unilateral use of monitoring and evaluation methods that primarily focus on forms of knowledge that can be calculated and expressed explicitly.

Keywords: Military skills; experience-based knowledge; phronesis; knowledge of familiarity; de-professionalization; de-skilling; officer

Introduction

What happens in military practice when rules and regulations clash with reality? What do you do in challenging situations when it is not sufficient to follow the rules in order to solve the problem? This article uses officers' own narratives and statements as a starting point to describe the consequences of overlooking or devaluing the importance of experience-based forms of knowledge in education, training, and organization.

A commander of a mechanized platoon during the Swedish FS 19's mission in Afghanistan in 2010 was asked the following question: "Can you describe a situation in which you feel that your professional skills have been tested?" He responded by writing a text about a situation where his platoon came under threat.¹

It's getting dark. Black-clad men are watching the platoon from the roofs. It's just half an hour until it gets dark; women and children are leaving the village in a steady flow. Simultaneously, one of the tank commanders reports that they have been observing armed men advancing on the far side of the village towards the defences and our previous position. Now it's me and my platoon, here and now. Should I engage? Do I know what I'm doing? Can I predict the consequences? Do I just

¹ The text was read out at the series of writing seminars (also called experience forums) held at the Royal Institute of Technology in Stockholm in 2012. Using their own experiences of overseas missions, including Afghanistan, a group of officers reflected on problematic situations they had faced. See note 11 for more detailed information about the research project and methods.

want to take revenge for my fellow platoon member? They may not be insurgents? What would the consequence be in that case? Nine days left in Afghanistan; is it worth it? Memories of Family Day; “get our men home in one piece”. I already have injured soldiers. But all have survived thus far. I can just drive out of here; there are nine days left. If we don’t engage, maybe the next Swedish unit will be attacked. Then it’s my men or someone else. Is it worth it? Maybe there won’t be any fighting. I can’t think like that!

No. This is my task (Tillberg et al., 2017, p. 266).

Which action do officers² take when the situation they must handle and master does not fully correspond to the task, the given instructions, or the existing rules and regulations? Which knowledge do they rely on when encountering unknown, ambiguous, or morally challenging situations? Such skills are tested not only overseas, in the conflict environment, but also within their domestic bureaucratic system. A high-level official at the Headquarters of the Swedish Armed Forces describes the challenge of achieving operational benefits as follows:

It’s about [...] maneuvering in slow structures. [...] In what way should I pursue the issue and in opposition to or with whom? With whom should I ally myself and whom can I “get round”? [...] Bureaucracy is like sniping; it’s important to bide your time, judgment, so that you shoot at the right target at the right time.³

The officers’ ability to adequately interpret phenomena in a given situation includes a variety of articulable *and* inarticulable knowledge. They need to be able to interpret a situation and choose the most suitable course of action, both in a conflict environment and in peacetime. Using officers’ own descriptions of challenging or problematic situations,⁴ this article aims to examine two aspects of military practice: (I) what role experience plays when handling challenging situations, and (II) how different kinds of knowledge are active in forming a professional skill. Using a set of epistemological concepts, the article presents an analytical framework that focuses on experience-based forms of knowledge. Here, experience-based knowledge is defined as knowledge gained by *doing*, i.e. actively participating in a professional practice.⁵ A secondary aim is to draw attention to what is at stake when some forms of knowledge are neglected or misunderstood in the military context. The article starts by describing the Swedish military context, followed by an explanation of the theoretical foundations that informed this investigation. Then follow the qualitative methods used to collect the narratives of Swedish officers. On the basis of the data collected, the article suggests a theoretical framework (**Figure 1**) that is used to finally discuss the consequences of neglecting or devaluing the importance of experience-based forms of knowledge.

<i>Phronetic Knowledge</i>	<i>Knowledge of Familiarity</i>	<i>From Novice to Expert</i>	
Phronesis	Knowledge of familiarity	Expert	Development practice
Techne	Practical knowledge	Proficient	
Episteme	Factual knowledge	Competent	Routine practice
		Beginner	
		Novice	

Figure 1: Concepts framing professional knowledge.

The Swedish context

There has been peace in Sweden for over two hundred years (Sundberg, 1998). The end of the Cold War marked the beginning of a period that saw numerous European countries profoundly reassess their security policies (Snider & Matthews, 2005; King, 2011). Since the 1990s, like the armed forces of other Western countries, the Swedish Armed Forces (SAF) have transformed from an invasion defense to a (smaller)

² In the following the term “officer” will be used unless a distinction is specifically required.

³ Same source as note 1.

⁴ A “problematic or challenging situation” in this context is (broadly) defined as a situation when the officer in retrospect is uncertain whether the decisions and actions taken were correct. It could be about contradictory instructions or goals or being forced to make morally challenging decisions. The focus on problematic or challenging situations has been inspired by Alsterdal (2001).

⁵ A basic assumption in the article is that real professionalism manifests itself in action and can best be understood using concrete examples from inside military practice (in contrast to hypothetical scenarios).

expeditionary force. In Sweden's case, the expeditionary era is mainly characterized by a prolonged presence in Afghanistan, at the time based on the notion that Swedish national security was to be built on Swedish involvement in international crises and conflict areas (SOU 2017:16). A Swedish international presence is still important. However, at the time of writing, the SAF has described the importance of effectively organizing itself to achieve the objectives as follows: "The Swedish Armed Forces should on their own as well as together with our partners, both within and outside Swedish territory, be able to defend Swedish security" (Government Offices of Sweden 2015 p. 5). The SAF would like to see a collective approach: "The skilled military profession requires proficiency and effectiveness *beyond* [my italics] armed combat" (Försvarsmakten, 2017, p. 22). In the light of this, the huge challenge facing both the organization and the individual appears to be the ability to simultaneously maintain a combat capability *and* operate in an administrative structure.

Theoretical starting point – epistemology of practice

The scope of this paper is to explore and examine different forms of knowledge used by officers when acting in challenging situations in Swedish military practice. From this perspective, skills are considered as knowledge expressed in action, with focus on the active sense of *knowing*, rather than the static noun knowledge. The article's epistemological starting point⁶ can be traced back to the English philosopher Gilbert Ryle who distinguished between *knowing that* (propositional knowledge) and *knowing how* (practical knowledge).⁷ Ryle points to *application* as a key determinant:

To be intelligent is not merely to satisfy criteria, but to *apply* them; to regulate one's actions and not merely to be well-regulated. A person's performance is described as careful or skillful, if in his operations he is ready to detect and correct lapses, to repeat and improve upon success, to profit from the examples of others and so forth (Ryle, 1949 p. 28–29).

Ryle goes on by using an analogy to military practice:

"A soldier does not become a shrewd general merely by endorsing the strategic principles of Clausewitz; he must also be competent to apply them. Knowing how to apply maxims cannot be reduced to, or derived from, the acceptance of those or any other maxims" (Ryle, 1949, p. 31).

With support in Ryle's theory, Donald A. Schön later develops a distinction between what he calls a *Technical Rationality* on one hand and a *Reflective Practice* on the other. According to the (dominant) model of Technical Rationality, "professional activity consists in instrumental problem solving made rigorous by the application of scientific theory and technique" (Schön 1983, p. 21). Yet, Schön further describes a more complicated professional practice in his theory of the reflective practitioner, explaining that more is required of the practitioner than just following rules or applying theory:

Every competent practitioner can recognize phenomena – families of symptoms associated with a particular disease, peculiarities of a certain kind of building site, irregularities of materials or structures – for which he cannot give a reasonably accurate or complete description. [...] Over the years, several writers on the epistemology of practice have been struck by the fact that skillful action often reveals a "knowing more than we can say" (Schön, 1983, p. 49–51).

Officers frequently operate in situations where they have to understand what needs to be done *and* do it at the same time. In doing so, their experience—and how it is used—is of importance. This approach is similar to what Snider expresses in an article on the moral agency of senior military professionals: "The professional's actual work *is the continuous exercise of discretionary judgments*" (2017, p. 9, 14).⁸ In the light of these theoretical starting points, this investigation began with officers' own descriptions of experiencing problematic situations.

⁶ Sometimes also referred (or closely related) to as the "epistemology of professional knowledge" or "epistemology of reflective practice", concepts described in more detail by e.g. Schön (1983, p. 21–75) or (Ryle, 1949, p. 317–319). See also Kinsella (2009). This article follows the thinking expressed by Johannessen (2006, p. 229) as "Professional knowledge is a genuine subclass of experiences based on practical knowledge."

⁷ Ryle, 1949, pp. 25–51.

⁸ In this article, judgment is seen as the ability to make intelligent choices in unpredictable situations and in relation to limited resources, institutional frameworks, and multifaceted circumstances (Hammarén, 2006, p. 209).

Method

Qualitative methods were chosen to find and describe a diversity of different challenging situations in military practice. Since the officers' judgment is a central part of the investigation, a hermeneutic phenomenological⁹ approach has been used, focusing on the "lived experience" and its expression in action. The officers' own words (in interviews and self-written examples) make it possible—from an inside perspective rather than through an outside observation—to examine which choices, intentions, and decisions the officer used in the described context. Long quotes, so-called "thick descriptions" are used, as these—according to Denzin—contain the necessary ingredients for a thick interpretation, which "means connecting individual cases to larger public issues" (1989, p. 83).

The examples used in this article are based on two studies: (i) Eleven in-depth semi-structured interviews conducted between 2008 and 2014 with internationally experienced Swedish military commanders with ranks from colonel to general. The interviewed officers were initially asked to choose and describe "a situation in which you feel that your professional skills have been tested". Concerning the examples of the situations described, they verbally answered these open-ended follow-up questions: (a) which kind of knowledge did you benefit from? (b) which rules did you regard as applying in the situation? (c) why did you make the decisions you did? (d) which frictions did you consider? (e) how did you interpret events? (f) and why did you make the decisions you did?¹⁰

(ii) Two series of writing seminars using the Dialogue Seminar Method (DSM) were held in 2012 and 2014. Sixteen participants, officers up to the rank of lieutenant colonel, attended for ten whole days. DSM combines informants' writing about their own experience of challenging situations and subsequently structure and document focus group discussions. The same questions described in the interviews above were posed to these sixteen participants. The data gathered comprises 205 pages of discussion notes (so-called record of ideas) as well as 62 texts penned by the participating officers who described concrete examples of situations where they had experienced that their professional skills were tested.¹¹

From the collected data described above, statements were selected to illustrate the role of different forms of knowledge in military practice. The following criteria were used in the selection of quotes; I) they should contain or connect to a concrete example of "doing" from within military practice, II) they should address complexity, III) they should contain information of general validity, i.e. should be recognizable by others in military practice.

Results

In the following results section, concrete examples (narratives) are intertwined with epistemological concepts so as to provide a broader understanding of different aspects of knowledge in military practice. Combined, the narratives form an illustration of the challenges which officers face. The experiences presented here are based on Swedish conditions, but the issues addressed are probably also relevant to other nations.

Knowing the rules is not enough

Many of the situations which the officers describe as challenging, require a form of knowledge where it is not sufficient to know instructions or rules:

A man is sitting in a cage. This is the sight that greets me at the camp's guardhouse: a man in a small wooden cage. The scene: a company location somewhere in northern Afghanistan. The temperature

⁹ On how to gain access to professionals' intentions and lived experiences, Lindseth and Norberg write in "A phenomenological hermeneutical method for researching lived experience": "Human beings live and act out of their morals, i.e. internalized norms, values and attitudes, without necessarily knowing about them [...] So the challenge for the researcher is to analyze the material and make the morals and the ethical thinking visible (Lindseth, Norberg 2004, p. 145). Drawing from this, a researcher has to engage in a dialogue with the informants. Purely *observing* as a method to collect data on the theme for this article would not provide the necessary information about the individuals' choices, intentions and considerations. Another reason to choose a narrative method instead of observations is the problem of access to military challenging situations which are almost exclusively available to the military itself.

¹⁰ Seven of the interviews have been published in Victor Tillberg & Tillberg (2013) and one in Tillberg et al. (2017) pp. 193–222.

¹¹ The two series of writing seminars were conducted at the Royal Institute of Technology in Stockholm in 2012 and 2014, arranged by the Swedish Centre for Studies of Armed Forces and Society. A part of the empirical data has been presented in the anthology *Mission Afghanistan. Swedish Military Experiences from a 21st Century War* (2017). DSM is used for research, educational, and development purposes. The participants read, write, and reflect on professional practice, both collectively and individually. DSM has been employed within different professional practices. A common denominator for the users is the need to exchange experiences in order to build and develop knowledge and skills within an organization or workplace. On the method, see for example, Göransson et al. (2006), Hammarén (2006), Ratkic (2006).

is 40° Celsius. I am there because my military mission is to work with and provide support to the Afghan Army. The mission is part of what is called “partnering”, and my mission is to “mentor and support, and plan, execute and evaluate operations carried out by an Afghan infantry battalion”. But it is the Afghan Army, which I will be working together with, and helping to build, that has put this man in the small wooden cage. Why is he sitting there? Maybe he is a soldier who tried to desert. I ask the interpreter. I understand that it was the Afghan company commander who ordered the man to be put in the wooden cage, and that it was to be placed at the camp’s guardhouse. The man in the cage is to act as a deterrent. He is a *statement*; this is what happens (Tillberg et al., 2017, p. 221).

Here, the soldier encounters a situation that requires immediate intervention. What the soldier sees contravenes the rules and regulations they are subject to, i.e. international law. The Western values as to how to treat subordinates are in sharp contrast to the way problems are solved in northern Afghanistan. The example is something that a member of a Swedish Operational Mentor and Liaison Team (OMLT) actually witnessed in Afghanistan. This aforementioned form of “partnering” does not come about by itself or because an agreement has been signed; it requires different forms of cooperation. Rules and regulations, clearly defined missions, and good intentions do not guarantee success. The officer must deal with contradictory values and tasks. How does the officer uphold human rights in a way that does not destroy the trust the OMLT operation requires? A long-term relationship with the partner, the Afghan Army, is important because in the next battle, there must be mutual trust. At best, it is a good start if the soldier has a cultural understanding of and a cultivated sensitivity for people and the environment, they find themselves in.¹² However, there is also a limit to what is acceptable. It is one thing knowing *what* you must do, but another knowing *when* the time is right to make a decision and act. How can this form of knowledge be described?

Phronetic knowledge

In *Nicomachean Ethics*, Aristotle develops a classification of knowledge that is relevant to how we understand diverse forms of knowledge. Among other things, Aristotle differentiates between practical wisdom (*phronesis*) and two other forms of knowledge: practical knowledge/craftsmanship (*techne*) and theoretical knowledge (*episteme*). The latter is also known as declarative or factual knowledge. It is the form of knowledge we use to understand how the world is structured. According to Aristotle, theoretical knowledge concerns what is unchangeable, e.g. the law of nature or the law of gravity. In the military context, a soldier can read the rules of engagement, what a UN Security Council mandate under Chapter VII means, security instructions, etc. But how they *apply* the theories in a complex situation demands something more. Phronetic knowledge (practical wisdom) is a productive form of knowledge which we need in order to create and produce; it is about perfecting physical (bodily) techniques, e.g. unload, peel left, and weapons maintenance. This is something you learn by *doing*, by practicing. The third form of knowledge, phronetic knowledge, deals with the general–particular relationship. It is activated in situations where there is no definite or specific solution, and when good judgment is required. According to Aristotle:

[t]he accounts we demand must be in accordance with the subject-matter; matters concerned with conduct and questions of what is good for us have no fixity [...]. The general account being of this nature, the account of particular cases is yet more lacking in exactness; for they do not fall under any art or set of precepts, *but the agents themselves must in each case consider what is appropriate to the occasion*, as happens also in the art of medicine or navigation (Aristotle, 1984, p. 1742).

Instructions that do not cover what is required to carry out tasks in rule-breaking situations, e.g. the man in the cage, call for more than theoretical knowledge. A person must also want and have the courage to act. Possessing what Aristotle calls phronetic knowledge entails being able to judge *when* the time is right to intervene in a course of events and—this is important—how to do it together with other people. Another example:

¹² Hajjar names these kinds of encounters “cultural stretching”, i.e. when the soldiers/military advisors have to “stretch their cultural, physical, and moral boundaries” in order to build relationships with foreign counterparts (p. 661). Furthermore, “advisors negotiate, create and contribute to a myriad of tensions, contradictions, ambiguities, and distinctive organizational cultural spheres of influence as they conduct their unconventional mission” (Armed Forces and Society 2014, Vol. 40 (4) p. 665).

Two SOPs [standard operating procedures] provided instructions from two different perspectives on how discovered IEDs [improvised explosive devices] should be dealt with. One prescribed how to act when encountering mines so that these could be disarmed at the scene by specially trained personnel. The other dealt with rules and regulations on how to secure evidence at a location where an IED has been found. We ended up in a situation where one of my vehicles had set off an IED and had detected one right beside it. We followed the normal procedure of reporting to the Swedish PRT [Provisional Reconstruction Team], which was responsible for the area. The response they got was that the unit should remain there, secure the terrain and await orders in accordance with the SOP that prescribed how to act when encountering mines. So, my unit was to secure the terrain until the PRT dispatched a mine clearance team to detonate the IED at the location. But of course, no one would ever come out to them because they were in the area on which the Swedish contingent had put restrictions. My company commander reported that in the light of the firing going on, they had to continue ahead, and he intended to act in accordance with the other SOP and disarm the IED at the scene and take it back to base. The PRT repeats its order to secure the terrain and await further orders. As a consequence of the order, my soldiers who have just had an IED explode and are in combat, are to remain there: eight men in this hellish terrain. The order was obviously wrong, and whoever issued the order also had no authorization to give the order. Now, the company commander, who was the on-site commander, was too hardened to fall for something like this. The upshot was a so-called “nothing heard”, which indicated that he hadn’t been able to make out the order. (Tillberg et al., 2017, p. 209–210).

In this experience from Afghanistan, two contradictory rules on how to deal with IEDs put the officers in a position where they had to choose the right thing to do. A “nothing heard” was a necessary part of the solution. Staying put would have risked the soldiers’ lives. Phronetic knowledge includes knowledge on how discernment works in a changeable situation where it is important to be able to judge and observe what is unique and divergent. It is also about knowing when it is appropriate to make an exception.

Knowledge of familiarity

Another set of usable concepts concerns the distinction between *theoretical knowledge*, *practical knowledge*, and *knowledge of familiarity*.¹³ Since theoretical and practical knowledge are similar to the previously described Aristotelian tradition, I will here focus mainly on knowledge of familiarity, which, in the military context, is crucial when the unexpected occurs. This form of knowledge means that due to your familiarity with a specific practice, situation, or environment, you will be equipped to deal with the unique or unforeseen. Moreover, it is dependent on a form of analogical thinking, a mental ability to establish connections between memories and experiences of earlier events. The analogical thinking is what you have to rely on in challenging situations when you have to make quick decisions. According to Wittgenstein’s later philosophy, this is a form of knowledge that, logically speaking, cannot be expressed in a direct language or exact terms. Wittgenstein describes it as not just an individual process.

– Can one learn this knowledge? – Yes; some can. Not, however, by taking a course in it, but through “experience”. – Can someone else be a man’s teacher in this? – Certainly. From time to time, he gives him the right tip. – This is what “learning” and “teaching” are like here. – What one acquires here is not a technique; one learns correct judgments. *There are also rules, but they do not form a system, and only experienced people can apply them right. Unlike calculating rules.* What is most difficult here is to put this indefiniteness, correctly and unfalsified, into words (Wittgenstein, 1958, p. 227).

Thus, experience is a central aspect of developing knowledge of familiarity; another is the ability to make comparisons.

Skill is dynamic: When we speak of developing skills we are speaking of refining behaviour that is generated in response to situations we have not encountered before, we have only encountered situations that are comparable. And in this situation, we only have recourse to comparison, comparing one situation with another, one course of events with another (Hammarén, 2006, p. 206).

¹³ Comes from the Norwegian philosopher Kjell S. Johannessen’s interpretations of the philosopher Ludwig Wittgenstein (1999, p. 40).

You learn this in a specific work practice through direct contact with “prototypical” examples (Janik, 2000). Here, a prototypical example means that you have faced a situation or a challenge that has affected, i.e. severely tested, you. This experience allows you to read between the lines and understand the situation’s subtext, and what it requires of you. It is knowledge of familiarity that enables you to act and conduct yourself with confidence despite not having been in the same situation before. Having experienced similar situations allows you to act in a manner appropriate to the situation. One battalion commander describes how he escaped mortar shelling in Bosnia using what he calls proven experience:

For me, proven experience is having been exposed to a lot of different situations. None of this can be found in books. When a new situation arises that you have not previously experienced, you’re able to act because you recognize situations you’ve been *involved* in before (Victor Tillberg & Tillberg, 2013, p. 94).

From novice to expert

The following skills acquisition model, based on the work of the philosopher Hubert Dreyfus and his mathematician brother, Stuart Dreyfus, shows how to identify skills by focusing on rule-following in different degrees of practical complexity in “unstructured problem areas”.¹⁴ The model is described here in a (very) abridged form.

Novice stage: The novice has no personal experience of the professional situations in which he/she is expected to perform. A novice’s tasks must be simple and unambiguous because he/she lacks experience and thus has a limited understanding of the context.

Advanced beginner stage: The advanced beginner learns by imitating what others who are more skilled, do in different contexts. Thus, experience is gradually accumulated.

Competence stage: The competent person has acquired experience and knowledge so that he/she can act independently and deal with various situations. The competent person can—through instructions—learn new skills similar to those previously learned. The competent person can relatively easily follow rules.

Proficiency stage: The proficient person has learned to assess when it is opportune to act in a certain way, and when it is not. Drawing on experience and a wealth of acquired knowledge, the proficient person can choose between different courses of action and differentiate between what is covered by a rule and what must be an exception to a rule.

Expert stage: The expert assesses the situation and acts almost simultaneously. While the proficient person considers and chooses between alternative courses of action, experts see themselves as part of a situation and act based on what the situation requires. Rules and instructions are of secondary importance. (For a more detailed discussion of this model, see Dreyfus, 2006; Dreyfus & Dreyfus, 1986a; Janik, 2000.)

The Dreyfus and Dreyfus skills acquisition model has been used in military contexts to, among other things, understand and discuss the relationship between intuitive actions, moral, and experience.¹⁵ In this study, I have used the model to clarify which kinds of situations officers are expected to deal with. The first three stages—novice, advanced beginner, and competent—concern dealing with anticipated tasks and following rules. The emphasis on what is learned, thus representing practical knowledge (of mastering a technique) and theoretical knowledge (theories, instructions, and facts). The nature of the tasks is that they can be described in instructions and often have a clear beginning and end. In these (unavoidable) stages, the basis is

¹⁴ The Dreyfus brothers’ skills acquisition model has been much used in various contexts. For instance, Patricia Benner (1984) employed it to investigate and describe the clinical knowledge of nurses. In Swedish teacher training, an applied variation of the model is used as a progression matrix in which the student teacher’s development can be followed in depth. In the article “Should Soldiers Think before They Shoot?” (2010) which focuses on intuition and moral behavior, Jorgen Weidemann Eriksen uses the Dreyfus model to examine to what extent the soldier’s response to a situation has a legitimate foundation in experience-based intuition.

¹⁵ See e.g. instance Weidemann Eriksen, J. (2010).

laid for practical wisdom (or knowledge of familiarity), which is more active and prominent at the proficient and expert stages. To be able to act wisely when encountering unstructured problem areas, the person needs to have a better understanding of the importance of experience as part of a professional skill.¹⁶

Routine or development practice?

To understand the specific skills that are needed in situations where rules conflict or when handling unstructured problems, it is appropriate to add two more perspectives, i.e. a distinction between *routine practice* and *development practice* (Göranzon, 2009). An activity comprising stages that can be fully formulated in instructions—in other words: Do it this way—can be called *routine practice*. The rules here are close-ended, i.e. the officer can only carry out a certain task using specific predictable rules, and these can be written down in manuals and instructions. When working in environments characterized by uncertain conditions, unpredictability, and contradictory contexts, the term *development practice* is more relevant. Its rules cannot be predicted or fully expressed in instructions. In a development practice, the degree of complexity is so comprehensive that you must be able to act independently and under circumstances not covered by rules and prescribed regulations and, in situations where rules conflict, you need to be able to relate to different incompatible rules at the same time.

When describing what is required of them, the officers often depict situations as a combination of difficult to assess, unpredictable, and taking place under unfavorable conditions. As a basis for the following discussion, **Figure 1** summarizes the concepts presented in the text.

Discussion

In the public sector—and not just in Sweden and Europe—explicit standards and measures of performance have been increasingly implemented, resulting in organizational systems where, nowadays, the definition of goals, targets, and indicators of success is the priority (Pollitt & Bouckaert, 2017; Lindgren, 2014). This thinking is based on the notion of the predictability of routine practices. Results and progress toward goals are expressed quantitatively, especially for professional services (Hood, 1991, pp. 3–19). This trend applies to the business community, the government, and the public sector, but also to military organizations.¹⁷ Gathering of information and processing it in computerized business systems are supported by technological developments. However, knowledge and information are often mixed up. Monitoring and evaluation methods and lessons-learned concepts preferably deal with the latter, even if the terminology *appears* to also focus on the practical and experience-based aspects of knowledge.¹⁸ In this process, we view knowledge differently, and too often without a necessary discussion about its implications. An example: One introductory paragraph in the SAF handbook on teaching methods states that “knowledge fulfills a function, solves a problem, or facilitates an activity. Knowledge serves as a tool” (Försvarsmakten, 2013, p. 15, author’s translation). In this statement, knowledge can be understood as something neutral and impersonal, as a tool anyone with the right information can use. Statements such as these convert education and training into “information packages”, something that can be delivered and traded rather than an activity that takes place within a subject. In many aspects, this limited view of knowledge is the opposite of what the above described examples from military practice tell us. From a converse perspective, Sookermany argues that in a military context “the relationship between knowledge and the knower is of essential importance to understanding skills and who is skilled”. He adds that “the form and matter of knowledge cannot be separated from those who have it and from the situations in which it is learned and used” (Sookermany, 2012, pp. 582–603). These two radically different positions can be compared with how a major general describes decision-making:

We can compare it to a puzzle with hundreds of different pieces. Only when all the hundreds of pieces have been put together will you be able to say that you know what it looks like. However, as commander you can never wait until you have all the pieces of the puzzle. You have to act on what

¹⁶ The Dreyfus brothers make the following observation about unstructured problem areas: “Such areas contain a potentially unlimited number of possibly relevant facts and features, and the way those elements interrelate and determine other events is unclear” (1986b, p. 20).

¹⁷ The consequences of “marketization” in the military context, for example, in the United States, have been described in depth in *The Future of the Army Profession* (2005). According to the authors, “efficiency had become a dominant goal, surpassing military effectiveness” (p. 14).

¹⁸ Examples of monitoring and evaluation methods and lessons-learned concepts addressed by officers in this article are connected to administrative systems, such as financial control, management, logistics, staff support systems. My ambition with the article is to draw attention to a *tendency* rather than criticize a specific model or concept.

you have. What I mean is that you must be able to make decisions based on unreliable data, on very unreliable data (Victor Tillberg & Tillberg, 2013, p. 61).

This quote emphasizes the importance of personal judgment; in this perspective, being skillful is more than having relevant information or access to the right toolbox.

What is at stake?

We have reason to reflect upon what is at stake when we neglect or exclude the significance of experience from the concept of knowing. The officers testify that they work in a kind of organizational paradox where they (often) need to handle routine practice and developmental practice at the same time. This has consequences, on different levels. One is the *development of shadow practices*: “I call it the tyranny of special interests. What is happening now is that the room for maneuvering decreases with each new rule.”¹⁹ This is a quote from a Swedish officer talking about the administrative control system. The officer expresses the view that administrative systems do not support the core practice. On the same theme, another officer adds: “It gets more and more difficult [...] a shadow world is created, a kind of *parallel practice of unspoken ways of solving problems*.”²⁰ What happens when officers consider administrative structures as not supporting the core tasks or even as something that interferes with the tasks? Organizational research findings describe how evaluation activities can produce perverse side effects in the form of strategic behavior. Other documented effects are defensive routines, i.e. tasks or actions that produce documented negative results are avoided (Alvesson, 2013). In the military context, these forms of strategic behavior, here called shadow practices, have been described in detail in the report “Lying to Ourselves: Dishonesty in the Army Profession” (2015). The report observes how American soldiers experience administrative impositions from above as a “deluge of mandatory requirements” (p. 5). When they regard administrative tasks as unwarranted or even stupid, a breeding ground for a “compensatory act against the injustice” is created (p. 20). They begin to take shortcuts in the system (or lie) for the sake of a higher purpose, such as supporting the troops or completing the mission. Thus, a shadow practice is established: “As a result, Army leaders learn to talk of one world while living in another” (p. 27).²¹ The empirical data in this article does not go that far in its criticism of administrative impositions, but it is nevertheless worth highlighting. One lieutenant colonel expressed the following view:

- I have to submit monthly, quarterly, and half-yearly interim reports. But all the information is already in the system. I guess it’s easier for them to have someone else compile it.
- What do they want to know?
- It’s easier to say what they don’t want to know...
- Who wants the information?
- You tell me. I have no idea how this is disseminated.²²

This officer has to feed information into the system but does not see the point. He views himself as a victim of managerialism.²³ Officers express a frustration at spending more and more time doing activities decoupled from the professional practice:

I think that some kind of planning zeal causes us to produce far too many SOPs. Each staff function is supposed to have its own, and the number of pages just grows and grows. The result is numerous uncoordinated steering documents that, in addition, are not known within the organization (Tillberg, 2017 et al., p. 208).

Monitoring and evaluating activities can also lead to window-dressing behavior, where the formal structure becomes a façade displayed and disconnected from the actual activities (Alvesson, 2013; Ydén, 2008). This observation corresponds well with the statements in Wong and Gerras’s report (2015), in which American

¹⁹ Quotes from my field notes from a participant observation at a Swedish regiment during the spring of 2016.

²⁰ Quotes from my field notes from a participant observation at a Swedish regiment during the spring of 2016.

²¹ One conclusion the report draws is “that many Army officers, after repeated exposure to the overwhelming demands and the associated need to put their honor on the line to verify compliance, have become ethically numb” (Wong & Gerras, 2015, p. ix).

²² Quotes from my field notes from a participant observation at a Swedish regiment during the spring of 2016.

²³ This example can be interpreted in the light of the New Public Management trend which has also influenced the SAF. In the name of greater accountability and efficiency, the implemented economic control system can be considered “an attack on professionalism” (Noordegraaf, 2016, p. 787).

officers say that you always find a way in which “words and phrases such as ‘hand waving, fudging, massaging, or checking the box’ would surface to sugarcoat the hard reality that, in order to satisfy compliance with the surfeit of directed requirements from above, makes officers resort to evasion and deception” (p. 8).

De-professionalization

The above reasoning draws attention to another aspect of the context; i.e. how officers use their time. What are the implications when officers do not *practice* or *use* the knowledge required of them in situations demanding skills from the development practice?

The increasing amount of administration can also lead to de-professionalization. Professionals working in the public run the risk of being deprived of autonomy [...] The problem that arises when professionals are forced to engage increasingly in administrative work, e.g. as a result of reducing administrative staff or introducing computer systems, where everyone should do their own administration themselves, *is that they cannot execute their professional duties* [my translation] (Forsell & Ivarsson, Westerberg 2014, p. 235).

One definition of de-professionalization is that it is a “‘condition’ in which autonomy—a defining characteristic of a professional—is lost by a professional.” (Deprofessionalization, n.d.) One chapter of *The Future of the Army Profession* highlights “the McDonaldization in the U.S. Army” as a real threat to the military profession. “McDonaldization”²⁴ is an umbrella term for four main applications—strong driving forces—within modern society today: efficiency, calculability, predictability, and control (Hajjar & Ender, 2005, p. 516). This is a development that, according to the authors, is made possible and driven by “the Army’s obsession with researching and integrating new technology” (p. 522). They believe that this leads to a process where “de-skilling is continually taking place, whereby human skills are being taken away from workers and built into nonhuman technologies” (ibid.).

Conclusions

The aim of this article was to examine what role experience plays when officers meet challenging situations and to investigate how different kinds of knowledge are active in forming military professionalism. The examples in this study show that challenging situations involve acting in contexts that contain both routine and development practices. Officers use different forms of knowledge which cannot be separated from each other or pitted against each other in a case of *either/or*. Instead, training, education, support structures, and organization must be able to support and make use of the knowledge, simultaneously. As for understanding and evaluating the role of expertise, practical wisdom, and knowledge of familiarity in organizations, there is lack of effective methods for comprehending and describing forms of knowledge that cannot be precisely expressed in language or by a number in a questionnaire. Aspects of knowledge crucial in military practice, such as how experiences are connected to the judgment power, imagination, courage, responsibility, guile and resourcefulness, thus run the risk of not being discussed. Lack of methods that emphasize expertise, knowledge of familiarity, or practical wisdom leads many organizations to unilaterally engage in developing and evaluating formal theoretical knowledge.

For the future

A person develops professional skills by practicing a particular profession. Experience, practice, and reflection provide the route to well-developed professional skills. This requires theoretical knowledge, but that knowledge comes to life and gains meaning by practicing a particular profession. Practitioner use their judgment and deal with “unexpected” events under adverse conditions. The proficient and expert stages (according to Dreyfus and Dreyfus, 1986, pp. 27–35) presuppose knowledge of familiarity, a form of knowledge that many monitoring, evaluation, and learning concepts overlook. To understand a professional work practice, concrete examples from *within* that practice will serve as the cornerstone for comprehending the different forms of knowledge that are acquired, and how they interact in practice. In this epistemological perspective, examples are the language of experience (Nordenstam, 2009). By using examples, you can learn something about rule-following in practice. That a rule is documented does not necessarily mean it can always be followed. When officers find themselves in situations where rules conflict, their judgment is tested. Sometimes

²⁴ The term is taken from George Ritzer, *The McDonaldization of Society* (2000).

a “nothing heard” is necessary. For the armed forces to understand military professionalization, it is critical that they comprehend the *relationship* between rules and how they are adhered to, i.e. rule-following. How else can they prepare and support those soldiers who might encounter a man in a cage?

Suggestions

One broad and one specific recommendation is suggested for officers and decision-makers within the armed forces who recognize themselves in the themes described.

1. As shown in this article, officers engage in a complex and problematic practice, which involves mastering of both routine practice and development practice, as summarized in **Figure 1**. To do this, officers need to develop and maintain the ability to handle different forms of knowledge. There is a need to explore and describe what impact knowledge that cannot be expressed in numbers or words has in developing military professionalism.
2. I recommend that military organizations expand their methodological toolbox and to a greater extent use perspectives derived from e.g. epistemology, ethnography, and hermeneutics. The dialogue seminar method (DSM), which supports knowledge development at the proficient and expert stages, is suggested as a way of developing a better understanding of the role of experience-based knowledge in the military organization.

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