



ON THE PRACTICE OF WARFARE: UNDERSTANDING THE ROLE OF MILITARY DOCTRINE SØREN SJØGREN

Project overview: Following the Russian annexation of Crimea in 2014 NATO has increased its presence in the Baltics in part to deter Russian aggression. Danish officers play a leading role in building NATO Multinational Division North (MND N) in Latvia and within the military organisation; credible deterrence translates to fighting power. A central element herein is doctrine.

This project seeks to understand doctrine through an empirical investigation of its role in the military staff organization. On the outside military doctrine might seem neatly ordered in written manuals with clear definitions, prescriptions, and guidance. On the inside doctrine is a fuzzy concept. Ideas on what doctrine *is* range from objective fundamental principles to subjective beliefs, from authorized documents to tacit knowledge. Military practitioners navigate this ambiguity when working with doctrine; but they also engage in continuous discussions on what counts as doctrine, how it should be understood and applied in specific situations and ultimately how it is turned into a military operation. Such discussions are central to this study. Focus is on what doctrine *does* from a practical point of view rather than what doctrine *is* from a theoretical point of view. Building on contemporary research on organisational standards, the field of Science and Technology Studies (STS) offers a conceptual framework to understand ambiguous concepts like doctrine by focusing on practices around the use of it.

Very little academic work has been done in this domain. This study will, therefore, add value to different audiences: it will provide empirical knowledge on how doctrine is used which can advance discussions within the military profession on how doctrine can or should be written, designed and taught at different levels during an officer's career. It will also advance debates within STS by introducing empirical material from a practice field, which is not easily accessible. Ultimately, it will open the field for other scholars. Concretely, this project will follow NATO doctrine at work within MND N staff to map and analyse the workaround involved in the practical use of doctrine. The main research questions are how doctrine operates in the military domain and, especially, *how the military staff works with doctrine during the planning and conduct of military operations and on how doctrine shapes thinking and action.*

Problem and state of the art research. In academia, doctrine is often used as an analytical category describing something written in capstone manuals that bridges civilian and military domains (Posen 1984, Rynning 2001, Høiback 2013, Jackson 2013, Doughty 2014, Angstrom and Widen 2015). This definition does not capture how military practitioners use the term and is thus of little practical value. In military domains, doctrine as a folk category can be invoked to mean almost anything; software, fundamental principles, best practice, language, vision, tool, belief (UK army 2011, Sloan 2012, Høiback 2013, Angstrom & Widen 2015, Hærstaben 2016, Sjøgren 2019, Wesley & Bates 2020). These vague metaphors might capture the community's ambiguous attitudes towards what doctrine is, but they are hardly useful for academic analysis. However, scholars and practitioners seem to agree on the doctrine's function. NATO defines it as something that provides *Alliance forces conducting operations with a framework of guidance to achieve a common objective. Operations are underpinned by principles describing how they should be planned, prepared, commanded, conducted, sustained, terminated, and assessed* (NATO 2017:1-1). Thus, doctrine can be understood as a standard defined as *a process of constructing uniformities across time and space, through the generation of agreed-upon rules* (Timmermans and Epstein 2010:71).

Theories of warfare, as well as specific military doctrines, build on what Antoine Bousquet calls *technoscientific regimes of order* (Bousquet 2009:13). On one hand, a positivistic worldview is built into most western doctrine although most often implicitly so. This invites to a linear understanding of problems and solutions on the battlefield (Paparone 2008, Jackson 2013, Sjøgren 2019). On the other hand, doctrinal development diverts in a different direction with references to networks, assemblages, self-organization, chaos theory, and complexity. Such theory tells us that order and creative solutions in complex environments organize best from the bottom and up (Bousquet 2009, Paparone 2013, DeLanda 2016, Beaulieu-B, P. and Dufort, P. 2017, Zweibelson 2017). Examples of tensions and controversies are becoming frequent: In an analysis of NATO comprehensive planning directive (COPD), Erdeniz (2016) points out methodical inconsistencies where causal approaches derived from a positivistic worldview are applied simultaneously with systemic constructionist approaches. However, he never empirically tests his findings. In the field, there are examples of commanders using information technology meant to drive new ways of operating and organizing bottom-up to impose micromanagement (Barnett 1999, Bousquet 2009, Singer 2009).

Traditional research on command tends to focus on the commander (Van Creveld 1987, Keegan 1988, King 2019). Empirical research on the use of doctrine within the military staff is very sparse. Heltberg and Dahl (2019) have investigated military planning at the operational level and have shown how the course of action development process described in COPD to be an iterative

brainstorming phase in practice turned out to be a process of stacking and combining pre-established bricks of knowledge, a process they coin as *brickstorm*. Anthony King does empirical research at the level of the divisional staff but does not discuss doctrine *per se*; instead, he discusses the uses of decision points. These are central to King's hypothesis that command *has evolved from individual virtuosity into a professionalized teamwork* (King 2019:452). Decision points are tools to promote rational decision-making by stating in advance points and conditions in time and space where a decision is needed. King observes that decision points are not neutral devices. They play an active role in orienting the staff to the plan (King 2019:382). But their use might lead to rigidity that does not reflect the uncertainty of battle and in the event of a crisis they might become counterproductive (King 2019:401-404).

Orlikowski (1992) suggests that we analytically understand human interaction with technology in organizations, as two iterative modes: the *design mode* and the *use mode*. The design mode is where doctrine is written and where most of the academic discussion on doctrine is. This project is interested in doctrine in the *use mode* where doctrine mingles with other human and non-human actors and becomes part of the network that plans and conducts military operations at the divisional level. Here as elsewhere, the power of standardization depends on whether standards are implemented in the use mode. This calls for empirical analyses (Timmermans and Epstein 2010, Bowker and Star 1999). King's description of the decision points comes from its use mode. It serves as an example that technology (standards) act. Decision points are *scripted* (Akrich 1992) to specify roles for the staff and the commander. They re-distribute authority to the staff to speed up decision-making but they also promote ideas about the nature of military operations, that do not reflect the uncertainty of battle. The staff officers acknowledge this double-sided nature of technology and they can explain how they work around or with it anyway (Eden 2004, King 2019).

Theory. The field of Science and Technology Studies (STS) offers a framework to gain a deeper understanding of doctrine-at-work. As an emergent field in the 1970s, STS initially explored science and technology (Latour & Woolgar 1979, Callon 1984, Pinch & Bijker 1984). In recent years the STS framework has been utilized to understand categorization and organizational standards where the term technology is used in a broader sense (Akrich 1992, Olikowski 1992, Bowker & Star 1999, Latour 2005, Jensen 2010, Timmermans & Epstein 2010, Star 2010). The STS framework allows us to deal with unstable social objects and sheds on the practices and workarounds that happens where doctrine meet the organization and its pre-established frames and knowledge-laden routines and is *translated* as it moves from the realm of abstract ideas into concrete military action

(Eden 2004, Latour 2005). Contemporary scholars in the STS tradition use the framework to raise questions to how technologies reproduce power structures, the conditions for critique, and how they might be biased (Feenberg 1993, Gertz 2018, Jensen 2010, Latour 2004, Verbeek 2011, Vallor 2016). To this project, the point is that doctrine shapes our understanding of military operations and plays an active role in the staff's understanding of the battlefield. That doctrine is supposed to do this is hardly a novel observation. The aim, however, is to develop knowledge on how this works in practice and on the intended as well as unintended consequences of working with doctrine. Thus, the act of *translating* doctrine into action sits at the very core of the military profession.

Method. One can tease out the logic of practice at points where things do not work out as expected. In STS, such events are called breakdowns. This is where actors reveal themselves and where controversies become apparent in attempts to restore order. First-order breakdowns happen daily when things temporarily fail and standards are tinkered with to get things going, second-order are often constructed by the researcher by asking what-if questions or through high involvement research (Eden 2004, Sandberg & Haridimos 2011). Acknowledging that doctrine is an ambiguous object, the military staff will deliberately create second-order breakdowns to discuss doctrine as part of the staff training. The first task will be analysis of NATO doctrine in the design mode, specifically the operations and planning series to understand their worldview. At MND N, I intend to conduct fieldwork within the current operations cell where breakdowns are expected as a natural part of its functioning. I intend to follow the training of the divisional crisis staff over two years. This training is scheduled as two weeks of staff training before a yearly two-week divisional exercise. I also intend to analyse the parts of the division's standard operating procedures/instructions (SOP/SOI) that address work in the current ops cell. The SOP/SOI will be an archive of previous discussions now formally settled. I intend to conduct semi-structured interviews with 5-8 staff officers on each occasion preferably during training or exercise totalling around 50 interviews over two years. I expect the respondents to be able to explain and rationalize why and how their actions make sense. Should breakdowns not occur naturally, I can install them during the interviews with reference to NATO manuals or divisional SOP/SOI (Latour & Woolgar 1979, Eden 2004, Nørgaard & Holsting 2015, Nørgaard & Sjøgren 2019). Additional interviews and field observations at a foreign division will serve as a mirror to spot differences and similarities with the practices at MND N. Doctrine will be followed across three modes: (1) the design mode, (2) deliberate second-order breakdowns, and (3) the use mode. This will make it possible to see how doctrine is translated from design to actual use. I intend to direct the analysis using following analytical devices: timelines and process stages to

analyse translations; relations between actors with emphasis on who and what acted at specific stages and what the consequences were; and finally, focusing on controversies and disagreements in the material and how these are solved. The analysis aim is to provide knowledge on how the military staff works with doctrine, and on what elements of doctrine and other material or conceptual tools are important to practitioners to do their job. Throughout the study, my aim is neither to de-mask nor to judge the staff officers; rather it is to understand how they work with doctrine in practice. Names and dates will be changed to protect respondents and only fieldwork observations and interview quotes that are not likely to cause social or political repression will be used.

Outcome. The results of this study will be published in 5 articles. The first article will address doctrine in the design mode aimed at *Armed Forces and Society*. The second article will contribute with a theoretical discussion on problems and opportunities of STS in a military setting and points to future research directions. The last three articles will present the study's empirical findings to an academic audience, one on the use of deliberate breakdowns and two on doctrine in the use mode supplemented with workshops or reports aimed at military practitioners at RDDC, MND N or Multinational Corps NE in Szczecin, PL.

Timeline and activities

Terms	Main activities
2 / 2020	Developing research design; literature review. Attending Ph.D. courses. Staff ride (fieldwork) with MND N. Conference attendance: Philosophy of Human-Technology Relations, University of Twente with 2 weeks under supervision of Peter-Paul Verbeek or Nolen Gertz. Plan fieldwork in the '21 exercise cycle.
1 / 2021	Ph.D. courses and data collection (fieldwork and interviews, MND N exercises and staff training). First article main draft on doctrine in the design mode. Outlet: Armed forces and society.
2 / 2021	Data analysis. Plan participation in the '22 cycle. Second main article draft.
1 / 2022	Data analysis. Data collection at foreign division HQ and further at MND N. Write articles. Presentation at DASTS conference in Copenhagen (second or third article). 2 weeks abroad under Prof. Anthony King or Prof. Hew Strachan.
2 / 2022	Write articles. Conference attendance with a paper presentation
1 / 2023	Conclusion and writing up the thesis frame.

Supervision. Institute for Military Operations at RDDC will host the project. The suggested supervisor is associate professor dr.phil. Søren Riis at Roskilde University. Secondary supervisor at RDDC is suggested to be Anne Roelsgaard Obling.

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