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# STS Encounters

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## **War, PowerPoint, and hypnotised chickens**

### Standards and templates at work in a military staff

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# War, PowerPoint, and hypnotised chickens

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### Abstract

*This article discusses concepts to explore decision-making processes in a military headquarters. Military planning is commonly perceived as a systematic and structured approach to organising ways and means to achieve military ends. While standardised procedures and decision-making tools are crucial for large military organisations to function efficiently, these devices are not neutral. Routines within the staff organisation carry implicit beliefs shaping the perception of war as a managerial problem with an optimal solution that can be elicited through a process and presented in a bulleted list. By examining organisational outcomes as socio-material assemblages, this article sheds light on how daily routines influence potential solutions and shape what can and cannot be thought. Conventional approaches in organisational studies have either overlooked the role of organisational tools or studied them as a matter of technology adoption. The entanglement of the social and material in organisational life should be observed and described empirically to understand how order is reconstructed after it has broken down.*

### Keywords

Organisational studies, bureaucracy, military decision-making, staff, assemblages, breakdowns

### Introduction

Well, let's face facts. The army is not exactly renowned for being a repository of intellectual activity. It is not like the Law, or the Church, or the City of London, or something. It is full of reasonably normal people. Staff headquarters are quite clunky and process-driven because they have to [be]. If you allow headquarters to do what it does, which is to be very like a machine pumping out solutions, it will tend to come to answers that are textbook correct, but profoundly wrong (Sjøgren 2022).

According to retired Major General James Cowan (UK Army), the war machine consists of 'reasonably normal people' who rely on standardised procedures to coordinate their actions. Military decision-making, in turn, is affected by this process-driven war machine made up of normal people. A dilemma emerges: there is a need for well-informed tactical decisions prioritising surprise, speed, and disciplined initiative, yet the war machine promotes mundane organisational routines to optimise, align, and synchronise means.

Large-scale military staffs and their excessive and, at times, unfeasible orders have led to a mounting critique from the military profession itself. In an interview, US Army General Mark Milley stated:

I think we're overly centralized, overly bureaucratic, and overly risk averse, which is the opposite of what we're going to need in any type of warfare (...) (Freedberg Jr 2017).

Though no theory of war exists promoting the idea that war is won through centralisation and standardisation, military effectiveness still presupposes that officers, in particular, 'have to think along the same lines in order to get the machinery to work well' (Høiback 2016, 187). Large organisations require standards to work efficiently and, in

practice, must balance the needed standardisation against the needed responsiveness. General Milley seems to be critiquing the military profession for focusing too much on standardisation and forgetting about quick responsiveness.

Contemporary organisational studies mainly consider the human element of the military profession, for instance, how military commanders negotiate different and competing logics (Holsting 2017; Holsting and Damkjer 2020) or the difference between intuitive and structured decision-making processes (Schmitt 1995; Tillberg 2021). From this field, it is often argued that organisations turn bureaucratic and produce textbook solutions because the staff officers or their commanders are not appropriately educated (Storr 2022; Clemmesen 2015; Snider 2015).

Such studies overlook how organisational life is entangled with materiality. As Orlikowski suggests, organisational life can be understood as a socio-material practice (Orlikowski 2007). Examples of a socio-material approach in the military include MacKenzie's study of the development of accuracy in nuclear missile guidance. MacKenzie showed how the development of missile accuracy as a complex process that involved at least three types of actors: political, military, and technological. Eden's study considered why the US developed enough nuclear weapons to set the 'whole world on fire', as her book is aptly titled (Eden 2004; MacKenzie 1990). Eden shows how the development of nuclear weapons and, thus, organisational decisions were partly driven by knowledge-laden routines and handbooks that carried over certain forms of understanding and predictions of how these weapons would be deployed in a war.

This article provides examples of how a socio-material approach can be applied to advance our understanding of contemporary military staff organisations. By decentring the human subject, attention can be turned to the roles of other forms of non-human actors in the decision-making process. Drawing inspiration from the earliest studies in the sociology of scientific knowledge, the approaches used to describe how scientific facts are produced in laboratories can also be applied

to how organisations make or construct decisions. Because I am more than a neutral observer studying an alien tribe, I have been interested in the phenomenon of breakdowns and the reconstruction of order as entry points for quite some time. Studies of standardisation have similarly considered breakdowns 'events' to understand how standards are used, negotiated, can govern, or are even disregarded to fit local needs (Timmermans and Epstein 2010; Bowker and Star 1999). This study aims to understand the inner workings of the war machinery and how it is influenced by standardisation technologies.

One might argue that the fieldwork presented in this study only highlights the inexperienced and undereducated staff officers clinging to their standards, whereas true professionals would operate outside the rules. However, if 400 staff officers worked outside the rules, they could never coordinate anything. Major General Cowan hinted that bureaucratisation merely ensues if you allow a headquarters to do what it does. This study questions this relatively consistent tendency across Western military headquarters. What drives the tendency to produce predictable textbook solutions?

By examining these mundane organisational routines, such as standardised operating procedures and PowerPoint templates, we can better understand the solutions that can come into being within military staff organisations. These tools are overlooked carriers of certain taken-for-granted beliefs; they cause staff to approach war as a managerial problem with an optimal or rational solution—and can even make commanders and staff act like 'hypnotised chickens'.

This study is informed by the fieldwork I conducted at a multinational NATO military headquarters from September 2000 to June 2021. I observed the main training events during a one-year training cycle in a NATO division. A division is a military combined arms unit led by a major general with up to 400 officers on its staff. In the case of crisis or war, it commands up to 20,000 troops in battle (Sjøgren 2022, 383–84). As a typical NATO headquarters, it was not fully staffed on a daily basis. The vacant positions were filled with designated officers who were called in during the main training events. Most of the research

participants on the staff were mid-career officers in their late 30s or early 40s. They had 15–20 years of experience as officers and held graduate degrees in war or military studies.

The freehand field notes were recorded in a restricted environment, and obligations related to military security prevented me from disclosing certain details of staff operations. The research participants have been fully anonymised, and I urge readers to empathise with them. A critique raised against *Laboratory Life: The Construction of Scientific Facts* was that Latour and Woolgar's close description of how the scientists worked merely showed that they were not following the scientific method (Latour and Woolgar 1986, 274). A similar claim of irrational or unprofessional behaviour might wrongly be raised against the participants in this study.

## Method

My initial interest was to examine how the staff operationalised doctrine to become operational plans. Doctrine is how military organisations codify their organisational knowledge. Armed with the concepts of socio-material assemblage and breakdowns, I ventured into the headquarters to observe doctrine at work; I came away with notes, observations, and interviews that primarily considered mundane organisational routines and how they structured the workdays of staff officers. As I observed and talked to the individual staff officers, it became increasingly clear that their workday was nothing like the abstract processes described in planning doctrines. Instead, the staff officers gave presentations that complied with PowerPoint templates, attended meetings according to the daily battle rhythm, and responded to emails. War and violence, it seems, had become a bureaucratic practice within the military organisation (Malm 2019; Öberg 2020). Because I hold the same rank as most of my informants, my empirical material was gathered as an insider in the uniform (Wegner 2012; Merton 1972), which differs from the classic ethnographic ideal of practitioners as an alien tribe (Latour and Woolgar 1986). The fact

that I was not busy getting the machine to function but looking at it through the lens of assemblage and breakdowns allowed me to capture rich data in the headquarters. I could notice how mundane procedures and PowerPoint templates actively shaped which operational solutions were allowed to come into being and how ideas were immediately discarded when they did not fit the format.

## The article's structure

The article is divided into three sections. First, I briefly introduce the military decision-making processes, the need for order, and the inevitable breakdown of order as the situation evolves. Second, I discuss the concepts of assemblage and breakdown and how they can be operationalised to understand organisational outcomes as a socio-material assemblage. Third, I provide two examples showing how standard operational procedures and PowerPoint templates actively shape which solutions to operational problems are allowed to come into being. More than an STS case study per se, I show what the concepts of assemblage and breakdown yield in terms of our knowledge of organisational decision-making practices.

## How the staff makes decisions

One of the main tasks of a military headquarters is planning. The result of planning is a plan or an operational order that articulates how 'actions (ways) and resources (means) are employed to achieve (ends)' (NATO 2019a p. 1-1. Brackets in the original). Planning is done through the military decision-making process (MDMP), which translates military doctrine into a plan that considers the characteristics of the operation. The MDMP is considered a logical, analytical, and sequential methodology that can be applied in any context to any military problem. NATO planning doctrine states: "Although all operations are unique, their planning and conduct can be approached in the same manner (NATO 2019a, xi)". While there are variations across levels, between

nations, and in its application regarding the time available for planning, all MDMP versions share the characteristics of deductive analytical and rational processing. The main rationale for a standardised approach to planning is to 'improve alliance interoperability and operational effectiveness' (NATO 2019b, XI). The three-column model is a central tool used to organise the staff officers' mode of thinking within the process (NATO 2019b, 2–26). A factor or question is posed in the first column, a deduction of the factor or question is stated in the next, and the third column states the implications or conclusions for the troops or the mission. Later, these conclusions deriving from all the relevant or possible factors inherent in the given mission are drawn into a synthesis. In some cases, deliberate planning before an operation might be a weeklong process; in others, hasty decisions might be made on the spot. Some decisions require the commander's involvement, others can be delegated to the individual staff officer. The staff utilise many other standardised tools to support this decision-making process, including battle management systems, PowerPoint, and standardised operations procedures (SOP). Though these tools are central to the staff officer's daily work, they are not mentioned in NATO's overall planning doctrine (NATO 2019a).

The military's need for order grows out of the need to coordinate its actions in battle. Military units fight as a part of a coherent whole, and the key to success is collective action. However, there is also an adversary actively resisting. Therefore, a military dictum states that 'no plan of operations extends with certainty beyond the first encounter with the enemy's main strengths' (Moltke 1993, 45). Thus, the order that emerges from the MDMP is inherently unstable at the time of implementation. The military professional, therefore, expects the plan to change. When disorder emerges, order needs to be reconstructed to fight effectively. Often, minor changes to the existing operations order are made or it might even be newly interpreted. The tangible output is a fragmentary order in the case of minor adjustments or an entirely new operations order if a new mission is given.

The military staff follows a standardised structured method aimed

at effectiveness. The tangible output of the process is an operations order. How this order comes into being, is maintained, and justified in terms of why it should come into being as opposed to another are concerns of this article.

## Decision-making as assemblage and breakdowns

Military decision-making is often studied as a purely humanistic endeavour. The decision-making literature and NATO doctrine contrast structured decision-making, also known as the heuristics and bias approach, with intuitive decision-making (Kahneman and Klein 2009; NATO 2016). Staff work according to a structured approach which aims to make complex decisions in a systematic, organised and data-driven manner. However, neither of these approaches considers how organisational life and, thereby, organisational decision-making is entangled with materiality.

To notice and analyse the entanglement of the social and the material this article draws on the concept of the assemblage developed by Deleuze and Guattari. They use the assemblage to analyse and understand complex systems and structures, such as society, culture, and the human psyche. Each assemblage comprises different elements, such as human individuals, institutions, technologies, etc., that co-exist and interact in a specific way, creating a unique whole (Deleuze and Guattari 1987). International relations scholar Antoine Bousquet who has used the assemblage to analyse the entanglement of war and technology, defines the concept as 'any collection of heterogeneous elements that can be said to display some form of consistency and regularity while remaining open to transformative change through the addition or subtraction of elements or the reorganisation of the relations between those elements' (Bousquet 2018, 3). They are, in Bousquet's words, a close cousin to Latour's actor-network-theory (ANT) and, in some instances, used in conjunction with it or synonymously (Gad and Bruun Jensen 2010; Buchanan 2015). The original interests of Deleuze and Guattari concerned questions of power. Thus, the assemblage always

serves some interest outside of the assemblage (Buchanan 2015, 385). The assemblage procures tangible outputs. The 'operations order', which is how the military staff communicates the plan, is an example of the tangible result of a socio-material process. Thus, the assemblage differs from the Latourian network because it possesses a form of materiality; similarly, since the assemblage concerns the question of power, it is deliberately being arranged in some way by somebody. This does not mean it is static; instead, the assemblage, like the actor-network, is always in flux. The assemblage shares with ANT the attitude of uncertainty and is thus a constant reminder 'that research is always likely to encounter conglomerates or hybrids of action rather than pure entities' (Gad and Bruun Jensen 2010, 75). This attitude of radical openness allowed me to observe how non-human actors both generated and stabilised assemblages, which proved helpful during data collection. Thus, the assemblage also consists of PowerPoint templates, standardised approaches like the three-column model, and interpretations of doctrines inculcated into the officers over the years. Breakdowns are handles to analyse how the assemblage works. Breakdowns refer to the failure of the assemblage to provide a stable basis for coordinating actions and interactions. In a military setting, this happens regularly in lieu of Molke's dictum, which, in brief, states that no plan survives first contact with the enemy as well as the assemblage itself being in flux. Breakdowns are when disorder creeps in, threatens the stability of the assemblage, and things are tinkered with to keep the work going. Noticing the micro-processes that guide this reconstruction of order, the analyst can describe the actions of both human and non-human actors. The analyst can show the profound impact of mundane organisational routines or templates on what can or cannot be conceived as a solution to restore order.

Breakdowns do not have to be dramatic events. Minor events in which the plan is consulted or interpreted can be considered breakdowns. In the sociology of standards, breakdowns come in two forms. Breakdowns are different in form but not in kind and are thus also studied symmetrically. First-order breakdowns happen when processes

and standards are tinkered with to get the process going (Orlikowski 1992; Timmermans and Epstein 2010). This can be observed simply by sitting next to the practitioners, watching their actions, and listening to them explain how they go about their business. In the field, first-order breakdowns were more than enough to spark a conversation about the priorities and demands of the situation. Similarly, this allowed the informants to stay in their roles as staff officers instead of forcing them to reflect critically on their choices while working.

Second-order breakdowns occur when the process fails altogether. The researcher can inquire about these by asking what-if questions (Sandberg and Haridimos 2011; Eden 2004; Højholt and Kousholt 2019). Respondents can be invited to reflect on their choices: What was the outcome of a decision, and was the outcome reflective of the doctrine guiding the decision? In interviews, I asked what-if questions about second-order breakdowns, which invited respondents to reflect on why things are the way they are. Alternatively, I used observations and preliminary analyses of first-order breakdowns in the field to spark conversations. Due to my role as an informed insider, I sometimes got the 'you-ought-to-know-the-answer-to-this-question' look from the participants. But I also noticed that the staff officers were eager to talk when someone showed interest in their routine work. Even my hypothetical second-order questions were, at times, amusing invitations to challenge the status quo. Over dinner, I sometimes overheard staff officers discussing variations of the what-if questions I had asked them earlier.

The concepts assemblage and breakdown provide an analytical lens and a methodological handle to examine in the staff organisation what happens when the plan fails to perform according to script. How is order restored in the face of unexpected enemy action or even in more mundane events such as reports of logistical delays, mechanical breakdowns, or a change in the weather preventing aircraft from operating? How are conflicts and tensions within the headquarters resolved verbally? And how do human-actors use the phrases 'what is important in this case', 'the crux of the matter is', or 'we cannot do that,

because'? But there are also non-verbal actors, such as standards and PowerPoint templates, that mediate what can be presented or even what can be thought by silently insisting that the solutions must fit a particular format to come into being.

## Entering the military headquarters

In this section, we enter the military headquarters to notice how breakdown takes form in the staff organisation and how order is re-established. In two short analyses, I show how mundane organisational routines actively shape the military's decisions. To notice these events, I have drawn on the attitude of uncertainty as a constant reminder that research is likely to find 'hybrids of action rather than pure entities' (Gad and Bruun Jensen 2010, 75). This attitude might oppose the common-sense perception of how organisations work. However, the entanglement of the social and the material is exactly what the attitude of uncertainty allows the researcher to notice.

In the following two brief analyses, both events were triggered by a first-order breakdown. These breakdowns happen naturally in military operations when the adversary acts unexpectedly or when there is 'friction', such as a breakdown in communication, a misunderstanding, poor planning, logistical problems, or unpredictable human behaviour. Some of these breakdowns are enacted by exercise control to simulate combat, others occur by virtue of a large organisation trying to coordinate its efforts.

## The process-driven war machine

A key aspect of decision-making at the headquarters was linked to the standard operating procedures (SOP) / standard operating instructions (SOI). The standard operating procedures or instructions are recorded in a collection of documents describing staff processes and the functions,

responsibilities, and work processes of individual staff members. This SOP/SOI outlines how abstract doctrinal procedures should be applied at the specific headquarters. The purpose of the SOP is two-fold: First, the inexperienced staff officer should be able to read the SOPs related to their function and quickly provide the inputs needed to get the machine to function. Second, they allow for quicker decision-making by setting standards for what is expected at each step. The general idea was that the SOP conveyed important lessons. The analogy of the efficient war machine underlined the importance of SOPs. The command level and the staff recognised the standardisation of routines as an essential means to increase efficiency and organisational throughput.

The SOP actively organised the workday of staff officers and tended to hail them as inexperienced workers whose job was to follow procedure. Decision-making authority was thereby allocated to the SOP. This happened in two ways: First, the staff officers used the SOPs as a guide to handling breakdowns. Thus, the first event could be described as categorisation since different events require different procedures. These procedures, in turn, describe the actions that need to be taken in a bulleted list. Next, the supervisor would often control whether the process had been followed to address the problem. While staff officers were officially encouraged to break with procedure if they deemed it necessary, non-compliance came with the cost of providing a rational reason for breaking with the process. In practice, this led to a culture of compliance in which staff officers became rule-following cogs of the machine. One staff officer explained:

Our practices are entrenched in SOP/SOI. It might be that doctrine says something, but if that is not reflected in SOP/SOI, then it does not matter. We do what is in the SOP (Staff officer, field notes).

In sum, looking at the SOP as an element in the assemblage allows us to see how it guides operations. SOP/SOI complex is not a neutral device; it is neither harmful nor helpful on its own either. Instead, it must be



understood in its specific context. It has both intended implications and unintended consequences. It stabilises some ways of understanding the world and framing problems, in this case, the idea that warfare concerns a managerial issue that can be solved by adhering to a process, hence the process-driven war machine. However, SOP/SOI is also a form of assemblage whose meaning is not predetermined, as can be seen in the fact that officers are encouraged to transgress it when necessary.

## Templates and hypnotised chickens

Officers at the headquarters used templates, or standardised formats, to convey information, present analyses, or offer recommendations. The most prevalent were PowerPoint templates. At times these were provided as part of the SOP/SOI complex; others were brought in by the staff as 'good' templates taken from national general staff courses; and others were issued through the chain of command. For instance, the general's aide made the template required for presenting at the daily commander's update brief. In this case, the left part of the slide was reserved for a bulleted list and the right for tactical graphics on a selection of the map chosen by the aide. Each presenter was allowed one slide. The aide found this approach to be quite rational. A briefing in which the templates constantly change would probably be very difficult to understand for the commander and the rest of the audience. These templates were considered neutral devices and, as such, not given much thought.

Viewing templates as part of the assemblage, it was clear they played an active role in the kinds of decisions that were allowed to come into being. The afforded template required staff officers to make their suggestions 'fit'. While other formats were allowed, they were not encouraged. At one point, a staff officer was asked to present an idea to the commander about a situation change in the form of unexpected adversary action. I observed how the staff officer drew the proposed solution on paper before I had to attend to something else. When I

returned, the commander's solution did not look like the initial drafts in his paper notes. I asked why, and the staff officer replied that the idea could not be drawn in the required template. Another staff officer commented similarly:

We are limited by what we can draw in PowerPoint. This is probably a generational gap. It will level itself in the future (Staff officer, field notes).

However, more than an issue of technical proficiency, the notion of the assemblage allows us to notice how templates command attention. The individual staff officer is limited by the template since any deviation from it risks being called into question merely because it deviates. Thus, questions and answers must be presented in a specific format regardless of their complexity: a map with tactical graphics and a bulleted list. Questions and answers that do not fit have great difficulties coming into being.

Before PowerPoint, the staff would prepare a 2-3 page summary of key issues. Today, 'a decision-maker will sit through a 20-minute PowerPoint presentation followed by five minutes of discussion and then is expected to make a decision' (Hammes 2009). A similar practice of using a 25-minute PowerPoint-assisted brief followed by 5 minutes of questions was used in media sessions during the war in Iraq to prevent critical questions. The approach was known as 'hypnotising chickens' (Bumiller 2010; Crean 2012). Considering the risk of hypnotising commanders, this way of making decisions has also led to an increase in the use of so-called pre-meetings, where the commander is briefed before the actual brief. In turn, some of the staff officers in the headquarters labelled the subsequent formal briefs as an act of 'absurd theatre' since the decisions, in their understanding, had already been made before the meeting ever took place.

In sum, the templates actively shaped what problems and solutions could be presented by the staff. This is not to say that the 2-3-page summary of critical issues is inherently better—it also shapes what

kind of problems and solutions can come into being. In the process- and PowerPoint-driven headquarters, suggestions for operational solutions must fit the template. Even the most complex matters must be boiled down to a bulleted list that can be conveyed in a 20-minute briefing, which could turn decision-makers into hypnotised chickens. Insisting that organisational decision-making is a purely humanistic endeavour misses the profound impact of mundane organisational routines. Empirically, researchers can only offer descriptions of how these formats shape decisions. Whether they are good or bad is a normative discussion, since they also enhance efficiency and throughput, which might be an organisational objective.

## Conclusion and suggestions

This article started by considering Orlikowski's call to understand organisational life as a socio-material practice. The concepts of assemblages and breakdowns were used as critical conceptual tools to analyse how different actors in military staff organisations perform their jobs. The analysis provided examples of how standards and PowerPoint templates are not neutral tools but instead actively shape the war machine, namely, affecting what problems and solutions can be considered in the first place. The work of such hybrid actors is ignored in the purely humanistic approach to organisational decision-making. More empirical work needs to be done within the military staff organisation, and it needs to be presented more coherently than the two examples I have provided here. This work must also consider research ethics and military security, making very detailed descriptions challenging. One may argue that the article merely found unprofessional staff officers clinging to their standards and PowerPoint templates and that true professionals operate outside the rules. However, we should try to emphatically understand the staff officer who has had to revise their suggestion for the commanding general so that it fit the template. As academics, have we not adjusted our work to fit certain templates such as journal formats or grant applications? Have we been hypnotising

co-workers or students with PowerPoints without considering the alternatives? Perhaps we are, at times, also rule-followers making abstract machines work.

The concepts of assemblage and breakdown illuminate how organisations work. They highlight how organisational givens are often the result of choices. I understand this as liberating, as it allows for change. Whether things need to change is a normative choice. Perhaps rule-following leads to quicker decisions, and speed might be of such central importance that we accept textbook solutions—as long as they are fast. However, an intended move away from the 'overly centralized, overly bureaucratic, and overly risk averse' approach to warfare that General Milley addressed in the opening quote seems to involve more than human deliberation. This article indicates that the idea of war as a bureaucratic practice is embedded in the staff's tools. Thus, the calls for more reflective, creative, or intuitive practice also need to consider the entanglement of the material and social. Following the approach in this article, we must expect that any alternative would also have unintended consequences. What is 'best' is an empirical question sensitive to context. However, understanding the effects of certain forms of standardisations is an empirical question that can be elucidated if we look closely at how the war machine makes decisions.

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