Military Operations Planning and Goal-management: A Philosophical Perspective

Thoughts on how decision theory and ethics can help improve military goal-management

Robert Frisk¹ and Linda Johansson²

Introduction: Military design thinking, goal-management and operations planning

A previous issue of the Journal of Military and Strategic Studies (JMSS, 2017), named Reflexive Military Practitioners: Design Thinking and Beyond, describes the first “collective publication” of an alternative approach to military operations planning called Military Design Thinking.³ A reason for developing Design relates to lessons

¹ Division of Philosophy, KTH Royal Institute of Technology, Stockholm, Sweden.
² Department of War Studies, Swedish Defence University, Stockholm, Sweden.
³ We henceforth denote ‘Military Design Thinking’ as only ‘Design’ and scholars arguing in favor of Design is denoted ‘Designists’. Further, we abbreviate military operations planning as only operations planning.
learned and the academic debate concerning the outcomes of NATO’s military interventions in Afghanistan, Iraq, and Libya.4

One could argue that “this special issue [of JMSS] is an unprecedented collection of primary sources from among the most respected reflexive military commanders, planners, developers and educators without academic or journalistic interference”.5 Briefly, Designists argue that conducting operations planning based on rationalism planning theory is flawed, as they argue is the case with NATO’s contemporary military doctrine (AJP 5) and planning framework (COPD).6

This paper focuses on another topic related to the ongoing debate on military doctrine and Design, namely ‘goal-management’, in order to discuss how to set, apply and evaluate goals (or objectives) when conducting operations planning.7 Yet, is military goal-management not trivial?

Rarely are the real strategic motivations of a politico-military intervention clearly formulated. This is certainly the case when we are confronted with a complex political situation and hence equally complex decision-making. In the case of Afghanistan it has been unclear from the beginning whether

---


6 This paper discusses NATO’s doctrine AJP 5 (NATO. Allied Joint Doctrine for Operational-Level Planning (AJP 5). (Mons: NATO Standardization Agency, Supreme Headquarters Allied Powers Europe, 2013a) and the COPD (NATO. Comprehensive Operations Planning Directive (COPD). Mons: NATO Standardization Agency, Supreme Headquarters Allied Powers Europe, 2013b). For an introduction and critic on NATO’s contemporary AJP 5 and the COPD concerning different planning concepts (e.g. Design or a Systems approach) and their methodologies, see Robert Erdeniz, Military Operations Planning and Methodology: Thoughts on military problem-solving. Licentiate Thesis. (Stockholm: KTH Royal Institute of Technology, 2017). Erdeniz argues that NATO’s AJP 5 and the COPD is methodologically inconsistent due to a flawed combination of planning approaches and a vague description of how to conduct operations planning. A counterargument is that one should not expect NATO’s documents to be neither methodologically consistent nor assume a common view on values within the alliance, see Harald Hoiback, “What is it all about”, Krigsvetenskapsakademiens Handlingar & Tidskrift 17, 4 (2017): pp. 164-168.

7 NATO defines an objective as “a clearly defined and attainable goal to be achieved”, see NATO, “Comprehensive Operations Planning Directive (COPD)”, (2013): L-4.
for the US state-building and reconstruction was a key objective in itself, or merely a condition to achieve success in its Global War on Terror.²

A common view concerning goal-management within War Studies (Military science) focuses on discussing and reviewing the ends-ways-means of an operation, implying an engagement with strategy.

This emphasizes the political influence on goal-management within operations planning. However, the debate on ends-ways-means does not address the methodological challenges of setting, applying and evaluating the specific goals/objectives. Although there seems to be a common agreement of the importance of goals within operations planning, literature on the methodological challenges of goal-management when conducting operations planning is scarce.⁹

One could perhaps expect other academic subjects to contribute to the discussion on goal-management, like philosophy for instance. Surprisingly, the philosophical interest in goal-management is modest, even though related topics like intentions, intentional action, policies or plans, have generated greater philosophical interest.¹⁰ Nonetheless, we will assume that agents typically set goals because they want to achieve the states corresponding to those goals and because they believe that setting goals enhances the prospect of reaching those states. In other words, the typical function of setting military goals/objectives is actually to enhance goal-achievement,

---

⁹ One could argue that ends and means are too complex for ranking values consistently in public policy, e.g. military objectives for interventions, and hence that strategy actually is some kind of metaprocess for linking ends and means effectively however not efficiently. Richard K. Betts adhere to such an opinion in, “Is Strategy an Illusion”, *International Security* 25, 2 (2000): pp. 5-50, as he states the following: “Strategy fails when the chosen means prove insufficient to the ends. This can happen because the wrong means are chosen or because the ends are too ambitious or slippery. Strategy can be salvaged more often if peacetime planning gives as much consideration to limiting the range of ends as to expanding the menu of means.” (Betts, “Is Strategy an Illusion,” p. 50.)
which we will argue is an underestimated methodological challenge when conducting operations planning.

Figure 1 visualizes our suggestion on a framework/guideline for managing the methodological challenge of conducting goal-management within operations planning.\textsuperscript{11}

![Achievement-inducing military goals diagram](image)

Figure 1: A guideline (a planning tool) when conducting goal-management within operations planning.

This paper aims to explain and answer the following question:

\textbf{In what way could a review of previous philosophical thoughts on goal-management, decision theory and ethics improve contemporary military operations planning concerning goal-management?}

\textsuperscript{11} Our framework relates to and expands the previous work conducted and presented by Karin Edvardsson and Sven Ove Hansson, “When is a goal rational?,” \textit{Social Choice and Welfare} 24, (2005): pp. 343–361. The previous work is expanded by further clarification and examples on how the management of goals can be conducted within operations planning and its possible connection to military design thinking.
The next section offers a background to the methodological challenge of conducting goal-management by describing and discussing three perspectives (section 2) that (we argue) can represent an empirical-, normative-, and cognitive dimension of operations planning. After that our framework/guideline presented (section 3) and illustrated by two examples on goal-management within operations planning. The paper ends with conclusions (section 4) concerning the methodological development and practical application of goal-management within contemporary doctrine.

A philosophical perspective on goal-management

This section discusses the previous work on goal-management as well as three specific perspectives concerning goal-management. We also identify the criteria that constitutes the foundation for our guideline presented in section 3.

Some previous work on goal-management and important concepts

Decision theory often focuses on other related concepts, such as preferences and values rather than the actual goal-management and the same holds for philosophy of action. A possible explanation for this lack of attention – at least from a decision theoretical perspective – is that “goals are usually taken as given inputs to the analysis, and the focus is instead on what means are most efficient to achieve the goals”.

Even if concepts like ‘goals’, ‘objectives’, or ‘targets’ are used frequently in individual as well as social decision making, these concepts and the issue of goal-management are often vaguely formulated. Turning to agency, one could argue that agents typically set goals because they want to achieve the states corresponding to those goals and because they believe that setting goals enhances the likelihood of reaching

---

14 Patrik Baard. *Cautiously Utopian Goals. Philosophical analyzes of climate change objectives and sustainability targets*. Ph.D. Thesis. (Stockholm: KTH Royal Institute of Technology, 2016). Baard (2016) uses the following rough definition of goal: “a desired future state of affairs an agent intends to achieve or approach through a set of actions justifiably believed to suffice”.

5 | Page
those states. This indicates that the typical function of setting goals is actually to enhance goal-achievement.

Further, one can divide the concept of ‘rationality’ into different categories – theoretical and practical. Theoretical rationality is concerned with what is rational to believe, and practical rationality is concerned with what is rational to do (when the goal is already set). Within the field of theoretical rationality, an agent is usually considered rational when one forms beliefs in an appropriate way, that is, when a particular relation holds between the agent’s beliefs and the reason for actually having those beliefs in accordance with decision theoretical axioms. An agent is usually considered practically rational when one performs actions that one believes constitute the most effective and efficient means of bringing one closer to achieving one’s goals. In this situation, rational action of choice is perceived as instrumental; actions are valued as effective (or ineffective) and efficient means to some end. The goals are taken for granted and not considered subject to rational assessment. In short, the goal exists when the analysis or evaluation of the rationality begins so the need to address actual goal-management is irrelevant.

Jollimore argues that the notion of ‘instrumental rationality’ seems so persuasive that justification is not required – most philosophers take it to be more or less self-evident that we have reasons to act as instrumental rationality requires. That is, once it is determined that a certain action is an effective and efficient means of satisfying an agent’s goals, one can automatically conclude that the agent has a reason to perform that action. There are, however, philosophers who argue against this, like Nozick who wonders why we should satisfy a certain desire. This is a strong argument against

16 Edvardsson Björnberg, “Rational Goal-Setting in Environmental Policy: Foundations and Applications,” p. 9. Further, the classic basic sources of rationality of belief are perception, memory, introspection, reasoning, and intuition.
17 If the agent’s preferences among her goals can be converted into a utility function, her rational action can be understood as the action that maximizes her utility.
20 “So let us ask why we should be instrumentally rational. Why should anyone pursue their desires or goals in the most efficient and effective way? Because then it is most likely that they will achieve their
rationality as an ideal or fundamental assumption when managing goals in a planning process. Of course, a goal should be rational in the sense that it should not be irrational but it cannot constitute the only criterion when setting, applying or evaluating a goal. This constitutes a reason for reflecting further on goal-management and what we denote as ‘goal-management’ has had previous philosophical investigation. For instance, figure 2 presents a framework (guideline) to decide when a goal is rational.21

According to many philosophers, one should not assess goals, unlike beliefs and actions, in terms of only rationality. Instead, one should perceive goals as non-rational. In other words, it makes no sense to say that one agent’s goal is more rational than goals or satisfy their desires, at the least cost (and so be able to achieve the greatest overall goal and desire satisfaction). But why should they achieve their goals and satisfy their desires? Because that is what they want to do. But why should they satisfy that desire? Is there any noncircular answer, any answer that does not beg the question of justifying instrumental rationality?” (Robert Nozick. The Nature of Rationality. (Princeton University Press, 1993), 134)

21 Edvardsson Björnberg, Rational Goal-Setting in Environmental Policy: Foundations and Applications; Edvardsson and Hansson “When is a Goal Rational?”. Note that they do not look at the content of goals in their framework, but rather the non-substantial properties (or mechanisms) of goals, or more precisely, what makes goals achievement-inducing. The framework is discussed later in this section.

22 The content of figure is further explained by Edvardsson and Hansson “When is a Goal Rational?”, p. 351.
another agent’s goal. Yet, Edvardsson Björnberg presents a first step toward a theory of rational goal-setting and tries to illustrate a theory applicable in evaluations of public policies, based on a theoretical framework for the study of rational goal-setting. One could also argue that setting a goal is motivated when the state of affairs is either: (i) in accordance with the agent’s (current and, assumedly, future) preferences; and/or (ii) morally obligatory. Also, goals consist of an empirical part, designating achievability or approachability, as well as a normative part, expressing values or preferences, or designating moral obligations.

Regardless of which theoretical framework (or scholar) one adheres to, the following should be recognized: setting an individual goal is different from setting a goal in a social decision-making process. A model of individual judgment regarding what one can know, what one can do or what one wants to achieve (as seen in figure 2) is not transferrable to how a group determines whether a state of affairs is achievable, or desirable, or not. Further, generating a view held in common by a community of actors can be performed in different ways. Indeed, epistemic authorities and expertise play a vital role when informing communities or policy makers of what is required to

---


24 Edvardsson Björnberg, *Rational Goal-Setting in Environmental Policy: Foundations and Applications,* p. 2. In a later article, Edvardsson Björnberg (Karin Edvardsson Björnberg. “Setting and revising goals” in *The Argumentative Turn in Policy Analysis,* (2016), pp. 171-188) argues that goals need to have a certain stability. In order to regulate action (in order to enrich the strictly instrumental concept of rationality) she uses Bratman’s (Michael E. Bratman, David J. Israel, and Martha E. Pollack. "Plans and resource-bounded practical reasoning." *Computational intelligence* 4, 3 (1988), pp. 349-355.) theory of intention and EdvPudardsson and Hansson’s (2005) theory of rational goal-setting. Two sets of revision-prompting considerations are identified: achievability- and desirability-related considerations. It is argued that changes in the agent’s beliefs about the goal’s achievability and/or desirability could give her a prima facie reason to reconsider the goal. However, whether there is sufficient reason—all things considered—to revise the goal hinges on additional factors. Three such factors are discussed: pragmatic, moral and symbolic factors.

25 Baard, *Cautiously Utopian Goals. Philosophical analyzes of climate change objectives and sustainability targets,* 6. Baard uses the two dimensions (empirical/epistemic and normative) which are conjoined to create a taxonomy where proposed goals are analyzed and managed. A proposed goal might be both achievable, and agreed-upon as desirable, presenting no specific challenge to being implemented. However, some proposed goals might be either: (a) likely to be achievable, but not agreed-upon as normatively desirable or required, (b) unlikely to be achievable, but agreed-upon as desirable, or (c) neither likely to be achievable, nor agreed-upon as desirable. By placing proposed goals in such a taxonomy, different strategies can be applied for managing such a goal before implementation, on the assumption that a goal should be both sufficiently likely to be achievable or approachable and have its normative status agreed-upon.
achieve a specific state of affairs, and communities are more likely to adopt beliefs espoused by such actors whose authority they recognize.26

To conclude, we consider the theoretical work by the previously referenced philosophers as an appropriate theoretical starting point concerning goal-management within military operations planning. However, as we aim to ad, clarify and discuss the role of (parts of) decision theory and ethics, we will argue that an axiomatic perspective is appropriate when discussing goal-management within operations planning.

An axiomatic perspective on goal-management

Hansson and Edvardsson Björnberg argue that a rational goal should be action guiding as well as action motivating, and that a goal can be action-guiding “only when the agent knows what the goal is and to what extent her own actions lead her closer to fulfilling it.”27

First, Hansson and Edvardsson Björnberg imply that goals should adhere to precision and evaluability (the first lower box to the left in figure 2). However, they argue that precision is more fundamental and that evaluability depends on precision since evaluating goal-achievement requires that the content of the goal is precise. In other words, it is difficult to offer constructive examination, assessment and critique of imprecise goal statements. To achieve precision, one should adhere to the following three subaxioms: (i) temporality, (ii) directionality, and (iii) completitative. Hansson and Edvardsson Björnberg explain these three subaxioms by discussing an example concerning goal-statements about unemployment, which we paraphrase below.28

Goal-statement 1: The number of unemployed in country X should be substantially decreased.

This kind of goal-statement does not fulfill any of the three subaxioms presented for achieving a precise goal-statement. However, one could argue that statement 1 can be considered precise in the sense that it can be

27 Edvardsson and Hansson “When is a Goal Rational?” 351.
28 Edvardsson and Hansson “When is a Goal Rational?” 351-352.
unequivocally determined whether or not it has been achieved. Still, this can only be determined if the notion of what constitutes an unemployed person is sufficiently precise. If unemployment has decreased, then the goal has been achieved, otherwise not. To argue that statement 1 is precise would be to give it a very charitable interpretation. Instead the following would be required to make statement 1 precise in accordance with the three subaxioms.

Goal-statement 2: The number of unemployed in country X should be decreased to at most 3% of the working age population by the year 2020.

Statement 2 is considered precise as it fulfills all three subaxioms. By stating that the goal should be achieved by 2020, statement 2 fulfills temporality. By stating that the goal should be decreased to at most 3%, statement 2 fulfills directionality. By stating that the goal focuses only on the working age population, statement 2 fulfills the completive subaxiom.

Then, why are these three subaxioms important when conducting operations planning? To exemplify, let us look at the following statement: “Organization X will do action A in order to make Y a safer country”. What does “safer” imply and how should one evaluate “safer”?

Baard argues that goals concern how to implement moral demands in existing practice and decision-making, and points out that this raises questions regarding the relation between moral demands and existing practice. Even though Baard focuses on climate goals, and there may be different moral requirements (or requirements for morality) in operations planning concerning goal-management, military goals ultimately has its origins in politics. One example would be to state an End state like "Establish a Safe and Secure Environment in country Y", which is then analyzed in different specific categories within the military planning process (e.g. by PMESII). Nevertheless, as we will try to show by the example from military necessity in section 4, that is no guarantee that the actual goal(s) is ethical. In other words, a goal could be empirically achievable, but still require some action that is not morally permissible. This indicates that normative issues are a part of means-related assertions. Conversely,

---

29 Baard. Cautiously Utopian Goals. Philosophical analyzes of climate change objectives and sustainability targets, and he also states that “the influence that feasibility may have when defining reasonable moral demands, and the potentially aspirational purposes that demanding moral obligations, uncertain to be achieved, may have when developing means”, p. 6.
empirical constraints will arguably play a role in how reasonable a moral demand is and the reason for this kind of distinction serves an analytical purpose, which we discuss further in the next sub-section. In short, we consider the three subaxioms concerning precision - *directionality, temporality, and completitvite* - to be crucial to the discussion of an axiomatic perspective on goal-management.

Hansson and Edvardsson Björnberg also imply that goals should be approachable (the second lower box in the middle of figure 2), since a common accusation against goals concern whether they are ‘unrealistic’, or ‘utopian’. Utopian goals are no good, it is claimed, because they cannot be achieved.\(^{30}\) Baard argues that goals should be considered as ‘realistic’, ‘utopian’ and ‘cautiously utopian’ when analyzing whether goals are achievable.\(^{31}\) A realistic goal is one in which there is a substantial confidence that the goal is achievable or approachable by known means. In contrast, a utopian goal is one in which there is a very low degree of belief in its achievability. Cautiously utopian goals refers to instances where it might be possible to develop means adequate for achieving the goal, but which are more uncertain to be achievable or approachable than realistic goals. Ideally, empirical assertions regarding the achievability or unachievability of a goal (a state of affairs) can be assessed as true or false.\(^{32}\) However, we consider limiting goals to states of affairs that are known with certainty and to be achievable given current means as a shortcoming within military operations planning since there are very few, if any, states of affairs that we can have such epistemic confidence about. In a similar vein, being too constrained by knowledge regarding current means may exclude many progressive, but uncertain, military alternatives (courses of Action).

Laudan gives another perspective as he distinguishes between three forms of utopian goals, arguing that goals can be ‘demonstrably utopian’, ‘semantically utopian’,


\(^{31}\) Baard. *Cautiously Utopian Goals. Philosophical analyzes of climate change objectives and sustainability targets*, p. 10.

\(^{32}\) It might be known through previous experiences or expertise how to achieve the intended state of affairs, or rather what the appropriate degree of belief in the proposed actions’ adequacy for achieving the intended state of affairs should be. Baard suggests that there are different ways of understanding such a proposition. For instance, how likely is it that the set of actions that are presumably required will suffice? Moreover, if some specific means are thought to be required but do not currently exist, how does one assess whether their potential for development?
A goal is, according to Laudan, demonstrably utopian when it cannot possibly be achieved, if we take logic or the laws of nature into account. A goal is semantically utopian if we cannot precisely characterize it in a concise and clear way. Vague or ambiguous goals are therefore utopian. Vague indicates that there is not sufficient detail in, for example, the term “safer”. Ambiguous goals usually contain ambiguous terms, which can refer to different things, like “press”. Finally, he considers a goal as being epistemically utopian when we are unable to specify a criterion for determining when it is achieved, even though we may be able to give a perfectly clear definition of the goal. We consider Laudan’s definition of this last category as interesting because it allows for two different types of utopian goals: (i.) goals that are known to be both impossible to fully achieve and to approach, and (ii.) goals that are known to be impossible to fully achieve, but known to be approachable. The goal “create a safer environment” would not be utopian in the second sense because there are some acts that we may perform which will in fact increase social safety. The goal of improved social safety is an approachable goal. However, given our understanding of human nature it could be characterized as impossible to fully achieve, and therefore be utopian in the first sense.

So what does this imply for goal-management within military operations planning? Goals are more or less attainable and we believe that is important to stress when discussing what can or cannot be done in relation to different views on ‘utopianism’ of goals. Therefore, an approachable goal requires a set of criteria. Hansson and Edvardsson Björnberg argue in favor of closeness, certainty and cost. Closeness relates to how close to the actual set goal one can come. Certainty relates to the knowledge of future events, in other words the degree of certainty concerning knowledge about the possibility to achieve the goal. Cost does not necessarily focus on the economic costs. Instead, one should think of costs in a wider sense implying the necessity of addressing cost/benefit analysis when conducting goal-management. These three criteria may seem commonsensical, but that is deceiving since they are easy to state but much more difficult to adhere to in practical analysis within military operations analysis. However, they are crucial to address in order to manage utopianism of goals as well as vagueness and ambiguity concerning formulation of goals.

---

To conclude, beyond *temporality*, *directionality*, and *completitiveness* concerning precision, we consider the three axioms *closeness*, *certainty* and *cost* concerning approachability to be crucial for discussing an axiomatic perspective on goal-management.

**An ethical perspective on goal-management**

Aside from being achievable, goals should also be desirable in some sense. It seems intuitively sound that one should not set and pursue unethical goals. Imagine something as horrific as the holocaust, which one might consider a rational goal according to the framework presented in figure 2. However, this seems morally repugnant. Hansson and Edvardsson Björnberg do not argue that rationality is the only standard by which to evaluate goals but, as Nozick argues, it is always important to evaluate what we desire.\(^{34}\) So how do we determine whether a goal is ethical? Is it not sufficient to follow the law? That may not necessarily be the case. We argue that the importance of ethics requires clarification, since the description of the motivating force (the third lower box to the right in figure 2) is more mechanical rather than desirability in this sense. Instead, desire-ability concerns what is *reasonable* about ethical or value-related assertions (such as “due to ethical reasons A, B, and C, you should achieve or approach X”). Therefore the transparency and coherence of such an ethical analysis can improve, if one reflects on normative moral theories as they can provide guidance when trying to resolve conflicts or dilemmas. It should at least be transparent when one is setting goals based on one theory rather than another. The argument for a more explicit focus on moral theories within operations planning is to avoid moral atrocities, but also to avoid imprecision in goal-management when using moral terms which are open to interpretation. For instance, what do we mean with “safer”, or “just”? There are also moral issues regarding the choice of means implemented to reach a specific state of affairs. That is, a state of affairs might be desired and empirically possible to achieve, but require implementing certain means with questionable moral status.\(^{35}\) Therefore we


\(^{35}\) This will be discussed further in section 4.
continue by briefly introducing and discussing three different normative moral theories: Utilitarianism, Deontology (Kantianism) and Virtue ethics.

The core of utilitarianism is calculation and aggregation of utility (or well-being in some sense). Utility is aggregated and the action that one is morally obligated to perform is the one where the consequences lead to the largest amount of utility - a ‘maximizing’ conception of right action.\textsuperscript{36} This is the right-making criterion in utilitarianism: “An action A is obligatory if and only if A has a higher utility than any other alternative action that the agent could perform instead. An action A is wrong if and only if A has less utility than some other alternative that the agent could perform instead.”\textsuperscript{37}

Utilitarianism is often connected with proverbs like "the end justifies the means". What is necessary can, if utilitarianism were to be interpreted in its purest form, implicate almost anything, something that is prevented by International humanitarian law (IHL). With utilitarianism there is a clear risk of leading to kriegsraison – and if pushed too far, suspension of IHL.\textsuperscript{38} Yet when asking whether it is, in a certain situation, really necessary to kill so many, and in a certain manner, a utilitarian may say yes if the total sum of utility is greater than if they are not killed.\textsuperscript{39} Utilitarianism may have intuitive appeal, but the right-making criterion can be difficult to apply. How much and what should be taken into account?

Deontology (Kantianism) focuses on duty and the ‘nature’ of the act as such and uses the categorical imperative as a right-making criterion. Some types of actions are prohibited (or obligatory) irrespective of their consequences.\textsuperscript{40} Proponents of

\textsuperscript{36} One of the key sentences in On War is "war is nothing but a continuation of political intercourse, with a mixture of other means". Consequently, Clausewitzian military necessity - kriegsraison - will justify any military expedient measure, including a contravention of otherwise defined laws of armed conflict. Another view is given by Mark Timmons. Moral Theory – An Introduction. UK Oxford: Rowman and Littlefield Publishers, 2002. Utilitarianism is also universalist and impartialist. All individuals who are affected by the action are relevant (Timmons. Moral Theory – An Introduction, 104), but you have to assign the same value to all people, that is, you cannot be partial towards family or friends.

\textsuperscript{37} Timmons, Moral Theory, p. 104.

\textsuperscript{38} There is a balance between utilitarianism and Kantianism, or a more absolute outlook, in IHL.

\textsuperscript{39} For example, to decide what constitutes excess is in some sense easy with utilitarianism. If the total sum of utility is maximized, action x is not excessive, but actually obligatory to perform. That it is difficult to apply (to calculate expected utility) the utilitarian right-making criterion is another matter.

Deontology may use the defense from unforeseen consequences and double effect, according to which it is morally indefensible to intend to harm an innocent person, but morally defensible to perform actions with good intended consequences, where harm is a foreseen but unintended consequence. For instance, in the waging of a just war civilian casualties might be permitted, but it is always forbidden to target civilians.\textsuperscript{41} One criticism against Kant is the rigidity, lacking intuitive appeal, and that duties arrived at by the categorical imperative may lead to conflicting duties.

Virtue ethics is a character-based theory, implying that it focuses on the character of the moral agent, rather than criteria for right action, like utilitarianism and deontology. The standard suggested right-making criterion is the one from Hursthouse:

An action is right if and only if it is what a virtuous person (VP) (characteristically, i.e. acting in character) would do in the circumstances.\textsuperscript{42}

The problem with this has to do with indeterminacy. How do we know what a VP would do? What criteria defines a VP? There is need for “practical” intelligence, or phronesis – a greek term for practical wisdom. Virtue ethics may function as a safeguard if a utilitarian or Kantian interpretation would result in unwanted or even repugnant decisions, and although it may be difficult to derive a determinate answer from virtue ethics, it may be a suitable theory in conducting a practice (military duties) where experience is valued. As war is sometimes seen as more art than science, it may also be suitable to discuss whether a goal is “reasonable.”

To conclude, explicating moral issues can help determine whether a goal is desirable when reflecting on whether the formulation of a goal is reasonable. To use these three theories, and see if one or two is used inconsistently can help make goal-management more precise and morally justifiable (and possible even improve evaluability). One practical way to do this would be to discuss a suggested goal and its ethical implications with these different theories in mind, and compare the result. If so, the ethical aspects would be transparent and explicit. Hence, military practitioners conducting goal-management should ask themselves: According to which moral theory is the formulation of the military goal(s) reasonable?

\textsuperscript{41}But also note that the prohibition to kill is innocent human beings.

One could question whether military practitioners are suitable or authorized to decide if military goals are ethical especially as there are different kinds of goals when planning military operations on different levels like strategic, operational or tactical goals. As an example, strategic goals are often set by civilian leadership, at least in democracies, which implies that military practitioners actually only works to achieve goals set by others by pursuing limited military goals. However, we would counter argue such a view based on the following issues. First of all, we believe that the ethical implications of ones goal’s, and thereby one’s actions, should not be conflated with organizational levels or authorization. The reason for this is that it can lead to a failure to accept responsibility for one’s actions by arguing that one was just following orders. In other words, military practitioners should always aim at stating ethically justifiable goals, regardless of which organizational level they work or focus on. To exemplify, to state goals that are not violating the Geneva conventions description of, for example, how to respect the rights and protections of non-combatants during war should be considered an important act in itself when planning military operations. Second, military practitioners are actually supposed to support the civilian leadership when developing the End-state (the main goal) of a NATO operation by offering advice to the Military Committee (MC) on what military response options (MRO) to conduct. One part of a MRO describes what would be suitable goals as well as an estimation of the size and nature of the required forces and so on. To demonstrate, the military commander is supposed to support MC decision-making by offering advice on how to finalize “the desired end state and further developing the strategic, political and military response strategy for the Alliance to deal with the crisis at hand.” This indicates that there are normative as well as descriptive reasons for why military practitioners should reflect on moral theory when formulation goals. However, whether this practice is an empirical question outside the scope of this paper, yet an important question that further strengthen the need of debating the topic presented in this paper.

_A deliberative perspective on goal-management?_

---

43 NATO. *AJP* 5, 1-19. We are grateful for the anonymous reviewer(s) for emphasising that this is an important question to clarify, i.e. that the different organizational levels and different kinds of military goals should not be conflated with stating morally justifiable goals.
Military Commanders often find themselves in decision situations requiring quick, or “snap”, decisions with varying values at stake. These decisions can be strategic, that is whether or how to conduct a military intervention, or tactical, e.g. to attack a dug-in defender or send for re-enforcement. Regardless of the decision situation, military decision making often suffers from time and information constraints. Hence, even in the context of operations planning, rapid decision-making is often a prerequisite for military commands. These constraints presents a methodological challenge for military decision-making (deliberation) on goal-management, which relates to research on human cognition and different academic debates within social science. To exemplify, military decision-making based on previously stated goals should rely on social science concepts and extensive research when planning and conducting operations, instead of anecdote, rumor or opinion.44.

As making decisions means to make choices, implying thinking/reasoning about the choices, a “good” decision is to make the best possible choice enabling us to reach our goals/objectives in the best possible way. However, identifying how to actually work to achieve the best possible decision becomes a question of methodology, since one has to choose a method among a set of methods. To exemplify, one challenge consists of how to ‘frame’ the decision problem, which is important since one’s understanding of the problem will influence one’s goal-statements and hence one’s choice of actions. However, this is a debatable topic and one could argue that “framing seemingly drives a wedge between actual behavior, it has been used as a justification for policies intervening in behavior. Nevertheless, many questions remain.” 45 This emphasizes why military practitioners should reflect on how to choose an appropriate decision strategy when identifying and choosing which goal(s) to focus on. Standard (classical) decision theory focuses mainly on identifying the most appropriate (rational) action for achieving certain outcomes fulfilling one’s goal(s). Yet, the goal in itself is often taken for granted, often based on the application of some normative decision theory (e.g. the Subjective Expected Utility theory) adhering to the principle of maximizing expected utility. However, the descriptive decision theories, developed based on

---


experimental results, e.g. Prospect theory, Dual process theory, or Heuristics, offer a strategy which is more suitable for a commander, given the usual time and information constraints related to military decision-making. We exemplify a possible cognitive representation of a decision problem that relates to ‘framing’ and goal-management, by the following description of two decision situations concerning formulation of goals. Assume that a commander is planning to disarm illegally armed groups (to conduct DIAG) during an operation and the staff presents the following two goal-options, which constitutes a fictive example based on previous research.46

Goal-option 1: A Commander is planning to conduct a high-risk operation to reach an important goal, with an expected loss of 600 own soldiers according to estimation unless risk mitigating actions in taken. The military staff requires advice on the new goal for the risk mitigation when developing the CoA and they ask the Commander: Should we develop a CoA (A) with the goal of saving 200 lives for sure, or a CoA (B) with the goal of saving 600 lives with a one-third (0.33) chance?

Which goal should the Commander set?

Goal-option 2: The planning situation is the same as in goal-option 1, however, the military staff asks the Commander: Should we develop a CoA (C) with a goal that allows a certain loss of 400 lives, or a CoA (D) with a goal stating that there is a two-thirds (0.67) chance that 600 will die?

Which goal should the Commander set?

The two different goal-options above describe the so-called ‘framing effect’. Some scholars and their experimental results show that decision-makers’ preferences between the sure option and the more risky (gamble) operation change depending on which description of the goal-management one is offered, yet the expected outcome of the different CoA’s is the same.

To conclude, explicating issues related to the deliberative perspective can help determine whether a goal suffers from confusing or misleading cognitive

46 This example is inspired by the discussion and example presented within Guo et al (2017). “Thinking fast increases framing effects in risky decision making” and only focuses on exemplifying the framing effect in a possible military context.
representations, regarding framing for instance. Because of that, military practitioners are required to engage with different kinds of normative and descriptive theories related to decision-making. One practical way to do this would be to discuss all suggested goals with this perspective on deliberative decision-making in mind and evaluate the result. This would help to make eventual cognitive representation transparent and explicit. Therefore, military practitioners conducting goal-management should ask themselves: Is the goal(s) formulated in a way that address confusing or misleading cognitive representations?

A guideline on goal-management: two examples

Based on the discussion in the previous section, we suggest the following guideline for conducting goal-management within operations planning, see again figure 1. This guideline, or planning tool, can support goal-management during operations planning as it offers practical guidance on criteria influencing how to set, apply and evaluate military goals, regardless of organizational planning level (strategic/operational/tactical). To exemplify, we discuss the application of our guideline with two examples in the up-coming subsections.

Example 1: Operational advice and military strategic objectives

This guideline supports military goal-management by discussing a specific part of NATO’s military operations planning, as described the AJP 5 as well as in the COPD, denoted ‘Operational Advice on Military Response Options (MRO)’. Operational advice is the name of a specific part of the planning process where military practitioners aim to answer the following question: “Will the achievement of the [Military Strategic Objectives] MSO(s) establish the conditions required of the military instrument in contribution to the achievement of the desired NATO end state?”47 Then, how does NATO describe an end state and is the end state supposed to be achievement-inducing?

The desired NATO end state and the corresponding strategic objectives will establish the ends for potential [military] response options; the

47 NATO. COPD, 4-24.
achievement of these ends would use the different means and ways available to the Alliance in cooperation with other national and international actors within a comprehensive approach to create the necessary strategic effects.\textsuperscript{48}

If the North Atlantic Council (NAC) cannot provide a desired NATO end state and MSO(s), then the military component within NATO will “propose a possible desired NATO end state and strategic [Military] objectives based on the analysis of the system and the problem definition”.\textsuperscript{49} In short, military practitioners are supposed to propose or at least review stated goals/objectives concerning the military operation as they state an Operational advice as part of operations planning. To exemplify, the operational-level staff should review the end state and the military goals as they support JFC’s (Joint Force Commander) in creating the Operational advice. In other words, the “JFC and his staff compile their conclusions, from the assessments, evaluation and comparison of the different options [MROs] as to their adequacy, merits and potential for operational success.”\textsuperscript{50} That way the AJP 5 describes a set of doctrinal principles when conducting operations planning and one of them is denoted Definition of objectives:

Combined joint operations should be directed towards clearly defined and commonly understood objectives that contribute toward achieving the desired end state. The mission and objectives should be defined with absolute clarity before operations begin.\textsuperscript{51}

Therefore, all plans must contribute to achieving the approved overall objective (the end state) set by the NAC and should also adhere to other principles like Coherence, Efficient use of resources and Flexibility and adaptability.\textsuperscript{52} In other words, “[t]he planning

\textsuperscript{48} NATO, COPD, pp. 3-31.

\textsuperscript{49} NATO, COPD, pp. 3-32.

\textsuperscript{50} NATO, AJP 5, pp. 3-11.

\textsuperscript{51} NATO, AJP 5, pp. 1-2.

\textsuperscript{52} NATO doctrine offers the following description of these criteria. “Coherence: Every NATO plan must positively contribute towards the accomplishment of the North Atlantic Council (NAC) approved overall objectives for addressing the crisis”. “Efficient use of resources: Planners should achieve a balance between tasks and resources. Decision makers [the JFC] should be made aware of the risk of not adequately resourcing an operation prior to approval of a strategic OPLAN [Operations plan].” “Flexibility and Adaptability: Operations planning should be flexible enough to adjust to evolving political guidance, civil and military advice needed to facilitate collaborative planning and adapt to political requirements during a crisis” (NATO, AJP 5, 1-5;1-6).
process is iterative and should also allow Allies and staff to periodically review and assess the mission and amend or redraw plans when necessary to move towards the desired end state". Then, how should the military practitioners identify, analyze and review e.g. an end state or a MSO? Both the AJP 5 and the COPD stress the importance of what we denote as goal-management, yet the practical guidance offered for working with goal-management is minimal. To exemplify:

The JFC considers the nature of the force, the [operational] objectives within its grasp, the nature of the risks inherent in pursuing these objectives with the given force, and their possible mitigation. [The JFC should apply] creative and innovative thought to find broad solutions to achieve objectives, the desired end state and solutions that might be termed operational ideas. Based on the mission analysis the JFC and his staff share a clear understanding of the operational conditions that must be established and sustained, as well as the actors and systems that must change.54

The Commander, to ensure that the military ends, means (forces likely to be available) and ways are balanced and those strategic preconditions for success, including the contributions of non-military efforts, have been addressed, may ask key questions to the JHQ staff.55

Obviously, one requires engaging with strategy (ends-means-ways). However, the following questions are stated within NATO’s doctrine, as examples of those key questions related to goal-management:

53 NATO. AJP 5, 1-6.
54 NATO. AJP 5, 2-5, 2-13, 3-21.
55 NATO. COPD, 2-24.
Table 1: Examples of key questions when conducting Operational advice, as stated in NATO doctrine.\textsuperscript{56}

First, the questions in table 1 are only examples of key questions as stated within the doctrine; however, we now compare these questions with our findings concerning goal-management as a way of identifying gaps concerning our four previously stated key questions:

Figure 3: An analysis of key questions when conducting Operational advice in comparison with our guideline.

\textsuperscript{56} NATO. COPD, 4-24.
Giving the COPD a charitable interpretation, one could argue that the six key questions within the COPD encompasses our questions b2) and c1), as seen in figure 3. Yet, the AJP 5 and the COPD do not state the reason for why one should answer these questions, as well as their theoretical background, which implies a requirement for methodological clarifications. Further, our questions a1) and b1) is not addressed at all, implying that vagueness and ambiguity could present itself within formulations of goals/objectives when planning military operations.

It also seems inappropriate to identify the ends without addressing the means and ways, implying the importance of understanding and scrutinizing the end state. To exemplify, the end state of almost all military peacekeeping operations conducted by the UN, NATO and EU formulates the end state as creating a “safe and secure environment (SASE).” However, how does such a sentence adhere to the perspectives on goal-management and the identified criteria stated within this paper? An obvious reply would be that the end state is a political objective written in a way that offer political as well as military flexibility. Yet, is that a valid argument in favor of poor goal-management? If the “raison d’état” for conducting international military peace operations is to create SASE in a country or region, then there are many countries in the EU and around the globe where the UN, NATO and EU should conduct military operations.57 In other words, the conduct of strategy might require a certain flexibility when formulating goals; however, can they ever be achievement-inducing when operations planning seems to suffer from these kinds of methodological challenges related to goal-management? More specifically, are goal-statements concerning the development of economy, security and governance to be considered as goals in their own right or means to achieving other goals?

Goal-management can also influence another important part of operations planning, namely assessment of the operation, since assessment focus on the stated objectives. Further, one cannot overstate the importance of assessing the causal relation between formulating goals and assessing the progress towards those goals over time. Poorly formulated goals implies poor assessment during and after the operation, given that one assesses the formulated goals and if not, why state goals in the first place? One could argue that peacebuilding missions should focus on involving local political and

economic priorities as well as specific groups in the society when formulating the goals at the beginning of the whole operations planning. There is an ongoing academic debate concerning different paradigms for assessing military operations and one of these paradigms focus on an emancipatory perspective when developing military goals, rather than focusing on ‘SASE’ for example or ‘security force assistance’ as a way of creating societies that offer greater redundancy and balance within critical societal capabilities.\textsuperscript{58}

To conclude, the identified methodological challenges concerning goal-management is inherent within the description of contemporary operations planning, which can negatively influence decision-making within operations planning as well as the ability to assess military operations. Therefore, there is a practical gain of offering a philosophical perspective and developing a guideline concerning goal-management within operations planning.

\textit{Example 2: Appreciation of Rules of Engagement and Legal requirements}

An important part of military operations planning, especially within international peacekeeping operations like NATO’s operation in Afghanistan, concern the use of military armed force and when required the use of violence as self-defense. A part of the planning process focuses on defining and understanding the Rules of Engagement (RoE) that is applicable within the operation, which NATO defines as:

Directives to military forces (including individuals) that define the circumstances, conditions, degree, and manner in which force, or actions which might be construed as provocative, may be applied.\textsuperscript{59}

The JOPG conducting the Operational Advice on the MRO’s from SHAPE applies two important heuristics: \textit{Appreciate Rules of Engagement Requirements} and


\textsuperscript{59} NATO. COPD, L-5.
Appreciate Legal Requirements. This part of operations planning focuses on identifying specific ROE requirements based on operational aspects as well as provide advice on the use of force, both concerning lethal and non-lethal measures, for each MRO. The JOPG also reviews other legal requirements like the necessary additional agreements required for handing over suspected criminals, handling and prosecution of suspected pirates, drug traffickers or human traffickers with the host and/or third nations. Let us assume the following MSO:

The number of suspected criminals involved in illegal arms trade in country Y is decreased to at most 5% of the working age population by the year 2020. [Fictive example]

Now, assume that goal-management focuses on the desire-ability of this goal by reflecting on whether it is reasonable in terms of the amount of military force to apply to reach this goal, in other words, how should one understand and apply e.g. military necessity when reflecting on this goal?

Military necessity is a central legal concept in IHL and is sometimes invoked to justify far-ranging deviations from the LOAC, since it can be used as part of the legal justification for attacks on legitimate military targets that have, for instance, bad consequences for civilians. It is a tricky concept in the sense that it can constitute even dangerous restrictions for those who fight. The problem is that the greater the military advantage one is anticipating, the larger the amount of collateral damage – often civilian – can be justified or considered necessary. It has been argued that some uses, like in Afghanistan, Iraq and Guantanamo, would be inconsistent with the doctrine of military necessity as it is accepted in the LAOC. While winning a war or battle may be

---

60 NATO. COPD, pp. 4-48.
61 According to Horton (See Scott Horton, “Kriegsraison or military necessity? The Bush administration’s wilhelmine attitude towards the conduct of war”, Fordham international law journal 30 (2006): pp. 576-588.) The Bush administration has had a rather wilhelmine attitude towards the conduct of war. Bush wrote that the US Armed Forces shall treat detainees humanely and, to the extent appropriate with the principles of Geneva. But in essence, Horton claims that we have learned that the phrases “as a matter of policy”; “humanely”; “to the extent... consistent with military necessity”; and “consistent with the principles of Geneva” each acted as a dramatic limitation on or reversal of prior policy. (Horton “Kriegsraison”, p. 576.)
63 Horton “Kriegsraison,” p. 578.
a legitimate consideration in LAOC it must be put alongside other considerations of IHL.

When it comes to normative moral theories, there is and has been a struggle between utilitarianism and deontology/Kantianism regarding military necessity. Military necessity can be understood in two ways: a more utilitarian "anything goes" version, namely kriegsraison, represented by Clausewitz – for an example, see Bismarck’s quote ("What leader would ever allow his country to be destroyed for the sake of international law?") – and the more Kantian “restrictive” version which is prevalent today, with Lieber’s conceptual framework inspired by Kant, which requires a testing of means of war against utilitarian and humanitarian concerns.64

There is, in this field, a presumption that certain actions are unlawful – that it would not be possible to prohibit them in absolute terms but that they would be unlawful unless justified by “imperative military necessity.” However, qualifications like “absolutely necessary” or “for reasons of imperative military necessity” puts a significant burden of proof on those invoking the exception – particularly by Commanders who do not feel bound by law with respect to the Geneva Conventions.65 To be more specific, how much collateral damage would be acceptable to achieve this goal concerning illegal arms trade? We argue that the matter of reasonable adherence to military necessity should be discussed when setting the goal and not be assessed after the fact, in other words, as one conducts the military operation.

Some scholars, like Schmitt, argues that ‘kriegsraison’ is incompatible with the adherence to IHL in the modern world. He does, however, admit that the historical underpinnings of military necessity as justification for divergence from IHL in terms of the absolute protection of civilians and civilian objects is present in the entire body of

64 The term military necessity came into use in U.S. military parlance in the 19th century during the American civil war, and presumably appeared in legal text for the first time in General Orders No. 100, the “Lieber Code” (“Code”) written by the German-American legal and political scholar Franz Lieber, and promulgated by President Lincoln 1863. This is, according to Horton, the seminal document of international humanitarian law.

65 Or, perhaps more surprisingly, by the legislation enacted by the US Congress to implement them - including the Uniform Code of Military Justice (“UCMJ”), the War Crimes Act, the Anti-Torture Act, and similar statutes. Policy was viewed as entirely a matter of Executive Branch discretion. Hence, “policy” may be held out to the public, but ignored whenever it suits the Executive. (Horton, “Kriegsraison”, p. 577). Horton argues that “Humanely”, as used by president Bush, implied only a responsibility to provide food, medical attention, and a sanitary place to sleep.
IHL and that IHL actually is a balance between military necessity and humanity.\textsuperscript{66} As one commander put it: “The doctrine [of Kriegsraison] practically is that if a belligerent deems it necessary for the success of its military operations to violate a rule of international law, the violation is permissible”\textsuperscript{66}. As the belligerent is to be the sole judge of the necessity, the doctrine is really that a belligerent may violate the law or repudiate it or ignore it whenever that is deemed to be for its military advantage.\textsuperscript{68}

To conclude, we argue that many, if not all, formulations of military end states and MSO(s) require to be reflected upon in terms of whether they are reasonable. An appropriate way of doing such a reflection is to engage with normative moral theories when reviewing value-related statements and preferences concerning the desire-ability of a goal. This is not sufficiently addressed within NATO’s contemporary doctrine (the AJP 5) and planning framework (the COPD), hence one of the reasons for applying our guideline when conducting goal-management within military operations planning.

\textbf{Conclusions}

This paper explains and answers the question below by discussing and reviewing research concerning goal-management, in other words how to set, apply and evaluate goals when conducting operations planning.

\textsuperscript{66} The idea that military necessity can justify deviations from international law has its roots in a German doctrine called \textit{Kriegsraison geht von Kriegsmanier} – “necessity in war overrules the manner of warfare” (Schmitt “Military Necessity”, 796). This concept of military necessity did not gain much acceptance because of the risks to the legal order, that is, the clear risk to “usurp the place of the laws altogether” and there were suggestions that kriegsraison had to be abandoned since there would otherwise be an end of international law (Schmitt “Military Necessity”, 797).

\textsuperscript{67} Horton, “Kriegsraison”, 578.

\textsuperscript{68} Historical examples of kriegsraison are, for instance, during WW1 when German troops swept across neutral Belgium on their way to the French front – permitted by kriegsraison according to the Germans, but in the eyes of the western powers showed German contempt for the basic norms of LOAC. During WW2, Germans used kriegsraison again to justify a number of doubtful practices like focusing on merchant shipping, civilian populations, \textit{hors de combat} detainees. But this time the Allies brought criminal prosecutions, with the result that kriegsraison figured directly in trials at Nuremberg and Tokyo. Examples of cases were United States vs. List (The so called Hostage Case) and United States vs. Altstoetter (The Justice Case). The former was about the devastation of the Norwegian Finmark in 1944, in which kriegsraison was sustained on some points and rejected on others (Horton, “Kriegsraison”, 588). In both cases, the Tribunal adopted a very skeptical attitude towards kriegsraison and insisted on strong evidence to sustain it.
In what way could a review of previous philosophical thoughts on goal-management, decision theory and ethics improve contemporary military operations planning concerning goal-management?

The question has been explained by discussing an axiomatic, ethical and deliberative perspective on goal-management, which has been used to develop a guideline (a planning tool) for how to conduct goal-management when conducting operations planning.

We first argue that previous theoretical work by Hansson and Edvardsson Björnberg (2005) and Baard (2016) presents a theoretical starting point concerning goal-management within military operations planning, yet to be more specific, we argue that (parts of) decision theory and ethics implicate the requirement of discussing and applying three perspectives when conducting goal-management within operations planning, namely an axiomatic, an ethical and a deliberative.

When discussing an axiomatic perspective on goal-management we focus on precision and approachability, hence have we discussed the six axioms: directionality, temporality, and completitative concerning precision and closeness, certainty and cost concerning approachability.

Continuing with the ethical perspective, we argue that explicating moral issues can help determine whether a goal is desirable when reflecting on whether the formulation of a goal is reasonable. Hence, military practitioners conducting goal-management should ask themselves: According to which moral theory is the formulation of the goal(s) reasonable?

Finally the deliberative perspective, which can help determine whether a goal suffers from confusing or misleading cognitive representations, like framing. Hence, military practitioners conducting goal-management should ask themselves: Is the goal(s) formulated in a way that address confusing or misleading cognitive representations?

Our conclusions are summarized as four questions, which constitutes a guideline (planning tool) for conducting goal-management within operations planning, as described in figure 1, which shows the practical benefits of applying a philosophical view on the conduct of operations planning.
To be more specific, we discuss our guideline with two examples: *Operational Advice on Military Response Options* and *Rules of Engagement*. As such, we argue that many, if not all, formulations of military end states, MSO(s) and RoE require reflection in terms of whether they are reasonable. An appropriate way of doing such a reflection is to engage with normative decision- and moral theories concerning the conduct of goal-management. This is not sufficiently addressed within NATO’s contemporary doctrine (the AJP 5) and planning framework (the COPD), hence one of the reasons for applying our planning tool when conducting goal-management within operations planning. Therefore, we conclude that the application of decision theory and ethics, i.e. important parts of philosophy, can contribute to the development of operations planning by focusing on three perspectives: an axiomatic, an ethical and a deliberative perspective.