

# Warfare as design: Transgressive creativity and reductive operational planning

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[journals.sagepub.com/home/sdi](http://journals.sagepub.com/home/sdi)**Dan Öberg**

Swedish Defence University, Sweden

## Abstract

This article argues that the politics of contemporary Western warfare finds an important reference point in discourses on military design. In the 2010s, military design has become a trending topic in military discourses on command and planning methodology. Since Clausewitz, warfare has been considered a phenomenon characterized by a tension between creativity and linear planning, and the ideal commander as someone with the vision to overcome this. By mapping and analyzing tactical, operational, and strategic narratives and practices, the article illustrates how they emphasize a warfare based both on experimentation and artistry and on traditional operational planning. In so doing, military design relies on reductive military concepts to push the tension identified by Clausewitz towards its extreme end-point, idealizing creativity as an objective of warfare. The article ends by asking to what extent military design risks spilling over into other dimensions of social and political life. It concludes that in pushing creativity as part of war, military design builds on and justifies transgressive political practices with the risk of becoming a vital aspect of future governing.

## Keywords

Creativity, military design, military imaginaries, transgression, warfare, war studies

## Introduction

Imaginaries of design permeate the spaces we inhabit and affect social and political futures (Willis, 2013; Winhall, 2006). In Western military organizations, the concept of military design has been codified into doctrine and manuals and has generated intense discussion in military journals and other fora. For example, the military doctrines of the armed forces in the United States all deal with the topic.<sup>1</sup> As was noted in a report on military operations by The Hague Centre for Strategic Studies:

Many readers may be surprised to see the term design associated with military planning. When most people think about military planning, they typically think of military staffs huddled over a set of maps to come up with an optimal course of action for an operation. When they think of design they are much more likely to think of imaginative designers creating hip and cool designs for mobile phones, interior decorating

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### Corresponding author:

Dan Öberg, Swedish Defence University, Drottning Kristinas Väg 37, 11593 Stockholm, Sweden.

Email: [dan.oberg@fhs.se](mailto:dan.oberg@fhs.se)

or architecture. And yet these two at first sight totally different terms have grown closer to each other over the last few years, even to the extent that the US Army now has an official Army Design Methodology (De Spiegeleire et al., 2014: 14).

Historically, Western militaries have often been considered to stifle imaginative thinking in favor of discipline and order (Beaumont, 1994: 114–115). However, encouraged by the likes of US Secretary of Defense James Mattis, military design has particularly emphasized the value of creativity for waging war. As a result, it has become known as a challenge to predictable military thinking (Grome et al., 2012; Mattis, 2008, 2009; Naveh, 1997, 2007; Paparone, 2013). As such, military design connects to longstanding debates in military theory, and particularly to the work of Carl von Clausewitz, who is considered the first to have emphasized chance and creativity as essential characteristics of warfare (Gat, 2001: 146; Gray, 2013: 26–27).

As indicated, the discourse on military design is characterized by a tension between creativity and predictable thinking. As a result, it chimes well with debates on the essential features of design and with social imaginaries relating to the creative industries, both structured around a tension between predictable analytical planners and creative and novel thinkers (Dasgupta, 1996: 51–52; Davis and Scase, 2000: vii; Petroski 1994: 30; see also Taylor, 2004 for a discussion on social imaginaries). In this article, I trace the tension between creative and planning-oriented representations of warfare to understand how they substantiate, justify, and legitimate military imaginaries.<sup>2</sup>

As Martin Coward (2013: 98) explains, military imaginaries are:

a set of operative concepts and understandings that comprise the grid of intelligibility that is constitutive of a certain way of imagining ... warfighting. The military imaginary is ... both an explicit set of doctrines expounded by the military and political sources, as well as a set of assumptions that underpin these documents.

Articulated through doctrinal systems while emphasizing certain practices or truths over others, military imaginaries often serve to define and link social conceptions with the thought and practice of war. Military imaginaries are therefore important as they affect how global politics relate to the use of force and assign logic and legitimacy to the military in reinforcing or challenging security environments (Bigo, 2014: 215–217; Lawson, 2011: 39–42, 51; Pretorius, 2008).

This article argues that military design discourses help constitute a military imaginary characterized by reductive military concepts from operational planning while idealizing creativity as an objective of warfare. The article is structured as a three-step analysis that asks *how creativity and planning reinforce and shape warfare and military designers* and *what, if any, political implications warfare as design may have*. To study military design imaginaries, I examine planning documents, doctrines, guidelines, student manuals, and debates regarding contemporary Western warfare.<sup>3</sup> Western military imaginaries are often taken to include those of the United States, the United Kingdom, Israel, New Zealand, and Australia (Wool, 2015: 34; Zehfuss, 2018: 3). In this article, I particularly focus on the Israel Defense Forces (IDF) and the US military as representative of military design. I employ a reading of the material that traces how creativity and planning have been represented in military discourse to illustrate what kind of war military design helps to shape and authorize (Foucault, 2003: 10; Nordin, 2016: 27–30). I look to the representation of military design in military debates mainly for three reasons. The first of these is that because real military planning and conduct tend to be classified and/or impossible to access, the above-mentioned material provides an alternative that illustrates the constitutive discourses on which warfare is based. Second, military doctrine represents and ritualizes notions of ‘best practices’ of warfare and often includes examples from real planning and conduct (Angstrom and Widén, 2016; Jordan et al.,

2008: 241). Finally, such documents shed light on an ‘internalist account’ (Ghamari-Tabrizi, 2000: 169) or ‘insider’s code’ (Milliken and Sylvan, 1996: 322–323) that helps to ‘both describe and make the world’ (Ansorge, 2010: 362).

The article begins by presenting an overview of the tension between creativity and planning in historical military thought. It argues that, from Clausewitz onwards, conceptions of military creativity shifted from viewing it as the application of scientific principles in battle to understanding it as a means for the commander to manage the uncertainties of war. It concludes that historical and contemporary Western military imaginaries oscillate between ideas of creativity and operational analysis and planning. The second part examines the role of military design discourses by focusing on how design is represented as a tactical, operational, and strategic practice in the IDF and the US military. It shows that military design discourses rely on reductive military concepts while idealizing creativity as an objective of warfare. The final section enquires into the possible impact that military design, understood as an imaginary of creativity and reductive planning-oriented concepts, might have for the politics of war. Recent Western wars in Afghanistan and Iraq have had severe consequences for targeted populations – for example, in the way they have normalized exceptional practices of what to target and how. Arguably, military design reinforces this trend. In a world where governing often takes place through depicting social worlds as chaotic in order to render them ready for intervention, military design participates in creating an imaginary that risks justifying future wars as transgressive design projects.

## **Creativity and operational planning in Western military imaginaries**

### *Clausewitz and the chasms between planning and executing warfare*

As noted in the introduction, military design rests on a tension between creativity and operational planning that has a long history in warfare. Below, I trace the history of that tension by reading Carl von Clausewitz’s (1976) *On War* as part of a discursive shift that serves as a reference point for understanding warfare. In military writings prior to Clausewitz, one finds the tension between creativity and operational planning in the writings of neoclassical thinkers such as Maurice de Saxe, Turpin de Crisse, and Paul de Maizeroy, who argued that although there are scientific principles in war, these need to be operationalized by the genius of the commander. It is found as well in British military writer Henri Lloyd’s claim that war is both science and art and that the latter is reserved for the creative genius. We also find it in Prussian Adam von Bülow’s insistence that in war there is always a part that goes beyond rules and requires creative application (Gat, 2001: 33–44, 72–91). Even Antoine de Jomini, one of the thinkers most associated with idealizing warfare as conforming to rigid scientific principles, emphasized the need for a ‘sublime’ aspect of war that comprised its art. However, to Jomini and the neoclassicals, influenced by the Enlightenment, ‘genius’ in war mainly implied acting according to set rules, and not going beyond them (Gat, 2001: 114, 130).

It is in German post-Enlightenment military thinking, and particularly in Clausewitz’s writings, that we find the idea of warfare ramified by ‘the essence of man as an active, creative and imaginary unity’ and as related to ‘free, creative genius’ (Gat, 2001: 146, 177).<sup>4</sup> Clausewitz is commonly considered the first thinker to view war as a complex part of man’s social existence where the military commander embodies chance and creativity (Clausewitz, 1976: 85–89, 149; Gray, 2013: 26–27). Arguably, with *On War*, military thought extends from a view of the commander as applying scientific rules to battle, to seeing tact and military genius as means for the commander to navigate complexity in war (Clausewitz, 1976: 136, 578; Gat, 2001: 269). Clausewitz depicts the need to

manage the ‘great chasms between *planning and execution*’ through both creativity and operational objectives and details (Clausewitz, 1976: 118, emphasis in original).<sup>5</sup> In particular, his emphasis on war as an instrument of policy highlights the need to include operational and strategic planning into the art of war (Clausewitz, 1976: 577–580, 606, 617–619). Even so, despite including the need for planning, one distinctive feature of Clausewitz’s thought is the way it emphasizes that ‘campaign strategy always has a powerful creative element’ (Smith, 2005: 188). According to *On War*, sound strategic planning is based in its entirety on tactical success, indicating that the chasms between planning and executing warfare may be overcome by the creative genius that wages war (Clausewitz, 1976: 386).<sup>6</sup>

Arguably, the dichotomy between creativity and planning underlies Western military imaginaries after Clausewitz. In the USA, early military thinkers helped in shaping a military imaginary centering on fortifications and engineering, characterized by geometry, calculations, and scientific principles to quantify and predict warfare. Nonetheless, American thinking on war also emphasized creativity, and Clausewitz has been widely read in the US military since World War I (Beaumont, 1994: 117; Bogle, 2002: 65–67; Weigley, 1973: 82–88, 210–211). What has become known as operational research affords us an illustrative example of the context in which military design has been incorporated into military thinking in the USA. Gaining in importance during the 1930s in Britain, this concept gradually evolved into a discourse dominated by natural and cybernetic sciences. Operations research used simulations to ‘fabricate future history’ through deductions from gaming exercises. The end result was a military imaginary centering on a simplified universe based on computerized models (Beaumont, 1994: 117; Ghamari-Tabrizi, 2000: 195, 198–199).

The Vietnam War serves as an example of how operational research tried to fill the chasms between planning and execution as the pendulum swung far from the Clausewitzian emphasis on creativity, towards rigid operational planning. To this end, it was employed in targeting exercises and bombing campaigns and helped to create a *modus operandi* based on quantitative data often focused on body counts (such as the assumed number of kills needed to ‘win’). As a result, US soldiers were sent on unnecessary missions and units were awarded points and promotions depending on kill ratios (Connable, 2012: 95–152; for a more in-depth discussion of operations research in the Vietnam War, see Bousquet, 2009: 154–160). In short, the statistical imperative for dead bodies became an episteme that helped to enable a war of Othering (Milliken and Sylvan, 1996). US military history is indicative of how imaginaries on warfare may be described as oscillating between valuing creativity and conformity, where the latter has often, but not always, been valued more highly than the former (see Hattendorf, 2002: 11; Johnson-Freese, 2013: 35). We now turn to examine in greater detail how warfare is articulated in relation to creativity and planning through military design. As we do so, it is important to remember that Western military discourse is by no means unitary. Rather, it is traversed by logics depending on service branches as well as on power structures and debates within them. However, as the next subsection will show, much like in the historical context, creativity and planning work as common denominators that help to shape and form conceptions of warfare.

### *Military design and the chaos of war*

In recent history, the military organization most associated with design terminology is the IDF under the influence of retired General Shimon Naveh. To early ‘military designers’ like Naveh, the most important quality required of commanders was creative thinking. He viewed the US military as traditionally caught in linear and sequential thinking, something that became increasingly challenged during the 1980s as the US Army gradually became more interested in creative thinking

(Beaumont, 1994: 132n1; Naveh, 1997: 251). One article from 1986 in the *Military Review* argued that the future effectiveness of the US Army ‘may depend on its ability to harness creative thinking’; and, moreover, that doing so ‘involves the identification of dynamically creative soldiers, the development of commonly held deductive creative skills and the fostering of a command climate encouraging creative process’ (Maginnis, 1986: 12). The increase in interest can be understood partly as a response to the rigid operational planning practiced in conflicts like the Vietnam War (as described above) and partly as due to the rise in the importance of creativity as a social phenomenon. At the end of the 1980s, the creative industries took the lead in emphasizing the need for organizational structures that valued ‘creativity’, ‘innovation’, and ‘risk’ over ‘conformity’ (Gareth Morgan cited in Davis and Scase, 2000: 8). The key logics underlying military imaginaries of design – creativity and planning – can therefore be understood as articulated in relation to the ‘broader processes of change’ involving global economies and markets (Davis and Scase, 2000: vi). However, as Beaumont (1994: 114) notes in relation to Western military thinking, ‘even though both orthodoxy and creativity have each yielded successes and failures in battle, the image of military professionals, from generals and admirals to NCOs, being hostile to novelty and insight is nearly universal’.

From the 1990s onward in the United States and elsewhere, creativity gradually became represented as a necessary part of military education and thinking (Higbee, 2010: 3; Johnson-Freese, 2013: 9; Kennedy and Neilson, 2002: x–xii; see also Watson, 2007: 132, 150 for learning objectives at military schools). It was also represented as part of military strategic thinking, as when defense planners invoked the need for creativity in organizational routines (Christiansson, 2017: 9). Below, I examine representations of military design in tactical, operational, and strategic military discourses as part of the construction of an imaginary of ‘legitimate’ and ‘preferable’ warfare. In this context, it is important to note that military design seeks to redefine ideas of creativity and push them beyond the scope posited in Clausewitz. Many of Naveh’s later lectures and interviews, as well as Israeli operations building on his thinking, aim to substantiate warfare as design by emphasizing a more fluid and dynamic view of creativity. This view underlines the need to go beyond doctrine, military theory, and planning manuals, in order to think warfare in a more unrestricted fashion (Naveh, 2007; Weizman, 2005, 2006). The attempt to push the boundary of creativity is also evident in US discourse. Military design began to move from the fringes of US military discourse from around 2006, when core ideas of design were linked to counterinsurgency warfare and employed in training (De Spiegeleire et al., 2014: 24–28). As was noted by one leading authority on military design, US officers have since ‘taken it straight from the classroom to the battlefields in Iraq and Afghanistan’ (De Spiegeleire et al., 2014: 28).

In understanding the perceived need for military design, we need to locate this as part of a wider context where warfare has become increasingly centered on non-linear science and chaos theory. ‘The practice of warfare’, writes Antoine Bousquet (2008: 918), ‘can ... be understood as the attempt to impose order over chaos, to exert control where it most threatens to elude and to find predictability in the midst of uncertainty’. The insistence guiding much military planning, that warfare is best understood as a linear and causal endeavor with neatly determined end-states, has been supplanted with a view that propagates disorder as a necessary condition for war. Bousquet makes the compelling argument that non-linear science has permeated literature on warfare and made unpredictability a discursive asset internalized by the military. The goal is to wage war by becoming decentralized, open, and adaptable: operating at the edge of chaos (Bousquet, 2009: 186, 194–205). Military design discourse draws explicitly on this chaotic episteme (Paparone, 2013: 194–195). As US Secretary of Defense James ‘Mad Dog’ Mattis (infamous for the comment ‘it’s fun to shoot some people’) emphasized, there is a perceived need for the US military to cultivate an ‘art of war’ as opposed to a thinking that is overly prescriptive, relies on too much knowledge of the enemy, and discounts ‘passions’, ‘unpredictability’, and ‘imagination’ (Mattis, 2008). Echoing the argument that there is

an overreliance on linear-type methods and the call for a more creative warfare, writers on military design have argued that today's US soldier/officer often resembles someone working at an assembly line. In so doing, they particularly emphasize that war needs to be seen in relation to ideas of creativity and chaos (Martin, 2011: 4; Paparone, 2010b: 2–4).<sup>7</sup>

## The ideal military designer: Tactics, operations, and strategy

As will become evident, the ideal military designer is characterized by a spirit of free thinking, creativity, and artistry. He or she is taken to display unique vision, to embrace chaos, and to look for root causes of military problems without being locked into rigid and linear thinking. For military design, contemporary warfare needs soldiers who picture warfare as 'a creative activity which draws freely on terminology and a variety of theories unique to an individual problem situation' (Banach and Ryan, 2009: 108). As one officer commenting on military design put it, 'design is about creating rather than an endless cycle of learning' (US Army School of Advanced Military Studies [US Army SAMS], 2010: 217). However, as military design entails different practical and epistemological viewpoints, it would be a mistake to think that there is only one, unitary military design imaginary (Grome et al., 2012: 77). This is evident in how, according to US military doctrine, military design is also taken to be 'the conception and construction of the framework that underpins a campaign or major operation plan and its subsequent execution' (US Department of Defense, 2010: 175). At the same time, military design discourse, irrespective of whether it is about tactical practice, operational planning, or strategic design, represents warfare as being ideally about creativity. Opinions differ on how to accomplish this and on the issue of how much creativity can be unleashed, but not on the value of creativity as such for waging war. The call, also echoed in written dialogues by US officers with extensive experience from Iraq and Afghanistan, is for an imaginary that is fluid enough for soldiers to move ahead of military hierarchy and break free from its stifling cultural paradigms (Paparone, 2013: 178–179). Or, as stated in the *Planner's Handbook for Operational Design*, 'operational design is a journey of discovery, not a destination' (US Department of Defense, 2011a: II-1). We now turn to explore the way design imaginaries are formed through representation in order to better understand the underlying assumptions and limits that the journey of military design entails.

### *Design as a tactical practice*

One prime example of design as a tactical practice is what Eyal Weizman (2006: 17) has named the 'logic of design by destruction'. In the IDF's operations in Nablus, this became a tactic where soldiers refused to understand space conventionally and instead moved horizontally and vertically through walls, ceilings, and floors, short-circuiting and rethinking architectural syntax (Weizman, 2005: 53). Tactical practice has been described in this particular case as follows:

Soldiers assemble behind a wall. Using explosives or a large hammer, they break a hole large enough to pass through. Their charge through the wall is sometimes preceded by stun grenades or a few random shots into what is most often a private living room occupied by unsuspecting civilians. When the soldiers have passed through the party wall, the occupants are assembled and locked inside one of the rooms, where they are made to remain – sometimes for several days – until the operation is concluded, often without water, toilet, food, or medicine. (Weizman, 2005: 57)

One leading Israeli officer later proclaimed enthusiastically that during the Nablus operation the IDF 'took this micro-tactical practice ... and turned it into a method, and thanks to this method ...

were able to interpret the whole space differently!’ (Weizman, 2006: 9). The military designer is, first and foremost, considered to perform warfare as an art form in chaotic and complex circumstances. The pressure to be innovative creates the need for ‘adaptive’ and ‘on-the-spot, creative improvisations’ (Paparone, 2010b: 4). Echoing the IDF’s enthusiasm for creative thinking, it has been argued that the US Army ‘must realize that design is an attitude. It is a mindset. It is the creative, inquisitive nature of an individual and a team’ that occurs ‘through experimentation’ (US Army SAMS, 2010: 158). The military design team needs to consist of designers oriented towards praxis and the artful creation and disposal of knowledge (Paparone and Topic, 2010: 9). Grant Martin elaborates:

What this means in military-speak is that in a complex environment, a battalion commander, for example, goes ahead and assumes he knows very little about this environment and goes about tasking, empowering, and supporting ... subordinate units to *go about the environment conducting experiments*. This could simply be gathering information, it could be acting ‘on the system’ and then observing the system’s response, or it could be something else. The main function of higher headquarters would be to develop processes that would encourage a variety of action and figuring out how to gather feedback in order to choose the most promising ‘experiments’. Those processes would have to very quickly channel resources into supporting ... successful ‘experiments.’ (Martin, 2011: 4, emphasis added; see also Paparone, 2013: 178)

As has been noted, tacit knowledge often precedes and enacts particular practices (Adler and Pouliot, 2011: 7). In design discourse, this can be illustrated tactically through the example of a battalion arriving in an area beset by insurgents. The battalion goes about ‘acting creatively’ in its surroundings and eventually pools its resources into one course of action. Information on how this is done is sent to headquarters to function as a suggestion for future operations as a portfolio of experiments (Martin, 2011: 4). The idea that military design needs to be based on experimental tactical design chimes well with James Mattis’s (2008) insistence that in warfare ‘concepts and experimentation are intended to be innovative and must be pushed to the extreme’. A military designer would not only need to have the will to conduct experiments, but would also need to support the most promising experiments as far as possible. The discourse describing design is neutral and depoliticized: the battalion ‘arrives’, the area is ‘beset by insurgents’, experiments ‘are conducted’, and so forth. Yet, as the previous example from Nablus illustrated, when operationalized such experiments may involve extremely violent ethico-political consequences.

To achieve the kind of environment where a battalion can act creatively on its surroundings, there is a need for an organizational culture that rewards, encourages, and promotes ‘calculated risk-takers and innovators’ (Martin, 2011: 5, 6). This designs warfare as a methodology for ‘creative’ (Banach and Ryan, 2009: 108) operational artists with ‘vision’ (Banach and Ryan, 2009: 110–111; Zweibelson, 2011a: 6, 8) and a way of thinking that allows for anticipating ‘the future’ (Zweibelson, 2001a: 11). Much as in design theory more generally, the military designer sees him- or herself as someone who suggests how the world might be (Banach and Ryan, 2009: 105; see also the discussion on framing in Banach and Ryan, 2009: 107). To be in charge of such a process, one has to encourage and accept ‘creative deviance ... open to aesthetic-, get-a-feel-for ... learning’ (Paparone, 2010a: 3). Imperatives to suggest how the world might be, or to create the future, may indicate a possible shift from an imaginary relying on tactical missions to counter chaos, towards warfare becoming part of an experimental vision of the world (see US Department of Defense, 2011a: V-9). Historically, the German *Auftragstaktik* during World War II was also characterized by pushing the question of how to wage war down to tactical levels (Frieser, 2005: 156). Military design copies this, but the call for creativity is not simply aimed at realizing objectives at lower levels in the command structure. Rather, it idealizes a fluid ‘swarm intelligence’ (Paparone, 2013:

182) that dissolves levels. While, as this article has previously illustrated, creativity is an integral part of military history and education and often stands in opposition to conformity and military discipline, warfare as design strives to insert creativity as an episteme in military imaginaries on war. Hence, the main difference between past military thinking and the emergent tactical imaginary on military design is the way in which the latter emphasizes creativity as an objective of warfare.

### *Design as an operational and strategic practice*

The official documents on military design not only discuss the need for creativity but also emphasize its role in planning and redesigning conduct. Here, operational art is considered to encompass design, as ‘operational design extends operational art’s vision with a creative process’ (US Department of Defense, 2011b: II-4). The urge is to ‘keep it simple’ without getting caught in linear thinking (Grome et al., 2012: 7–8, 27). However, operational design still relies on a terminology that draws on concepts associated with traditional planning methods. This further illustrates the tension between unleashing creativity and sticking to more or less accepted notions based on linear military planning. Or, put simply, although military design allegedly needs a soldier that draws freely on terminology, the vocabulary is less novel. While the operational planner ready to design is necessarily a person with ‘an open mind’, ‘comfortable with ambiguity’, and ‘possessing creative and innovative thinking skills’ (Grome et al., 2012: 18), he or she also reproduces certain military concepts (such as center of gravity, lines of operation, and decisive points) often associated with linear and orthodox military thinking (US Department of Defense, 2011b: II-5). There are therefore ‘givens’ in design discourse – for example the categories of air, land, maritime, and info/cyber dimensions, or the notion of the operational environment.<sup>8</sup> Consequently military design discourse reduces the globe in all its multiplicity to dimensions that roughly correspond to the main branches of most military organizations and to a world primed for war and ready for redesign. In this respect, military design also needs to be read in relation to Clausewitz’s (1976: 619) insistence that military planning is an inherently *reductive* enterprise.

When military design conceptualizes management of the operational environment as changing an observed system into a desired system, it takes a page out of Herbert Simon’s definition of creative design as ‘an activity that seeks to change existing situations into preferred ones’ (see Willis, 2013: 1 for quotation, and US Department of Defense, 2011a: II-4, II-7, IV-1 for its military enactment). Design imaginaries reduce the ‘system’ to a series of ‘functional relationships’ between ‘tangible elements that can be “targeted” for action’ (US Department of Defense, 2011a: IV-4; see also Eikmeier, 2013: 109). The designer is confronted with a ‘problem area’ where relationships have become ‘undesirable’. On analysis of this, he or she will map up the current system to redesign it into a ‘desired’ future ‘system’ (US Army SAMS, 2010: 180) and subsequently ‘determine’ the nature of the local relationships in the operational environment. In particular, it is considered important to focus on the potentials to ‘shape’ actors and events and to ‘explore tensions’ within ‘the system’. Based on the potentials to ‘affect’ the environment, the designer constructs a vision of how to ‘move’ towards the ‘desired system’ (US Army SAMS, 2010: 181) by visualizing an operational environment ‘in terms of constantly interacting systems, which are complex, adaptive and in flux’ (US Department of Defense, 2011a: I-4). The violence and contestation involved are left unaddressed. Finally, the discourses emphasize the ability to form teams that grasp creative thinking and accept it as an underpinning philosophy. As Banach and Ryan (2009: 113) argue:

The art of design requires exercising indirect influence in addition to control to persuade other actors of the mutual benefits of implementing the design concept. This is easier to achieve if all stakeholders are part of the design team from the outset. This way they can build trust and leverage their different perspectives.

Discourses on design emphasize the importance of including a local and/or civilian participant in teams designing operations. This conscious attempt to branch out indicates an aim to synchronize, organize, and integrate others into the worldview of the design team (Grome et al., 2012: 20; US Army SAMS, 2010: 220–221). But it also opens up other social environments to the impact of the design and vice versa.

Strategically, the reflective and creative visualization of a battlespace ready for intervention is articulated as several courses of action. These are represented as a portfolio of options leading to a concept of operations that underpin the execution of warfare (US Department of Defense, 2011c: I-5). This concept captures the effort to ‘apply the many dimensions of military power simultaneously across the depth, breadth, and height of the operational area’ so as to design military space and time (US Department of Defense, 2011b: V-35, V-38). In order to push creativity beyond the Clausewitzian notion that it is merely one means to wage war, military design draws on and appropriates post-structuralist thinking, in particular the thought of Deleuze and Guattari. The overlap between Deleuze and Guattari’s thought and military design is evident in the way concepts like smooth and striated space have been operationalized as part of tactical maneuvers and in the way radical literature is inserted into military education (see, among others, De Spiegeleire, 2014: 24n77; Naveh, 2007; Paparone, 2013: 16–22; US Army SAMS, 2010: 80, 95; Zweibelson, 2011b: 8).<sup>9</sup>

The appropriation and introduction of continental philosophy has enabled military design discourse to conceive of creativity in space and time as a feature of the way individual soldiers redesign the battlespace. As Shimon Naveh explained in an interview: ‘Several of the concepts in *A Thousand Plateaus* [by Deleuze and Guattari] became instrumental for us.... In the IDF we now use the term “to smoothen out space” when we want to refer to an operation in a space as if it had no borders ... in such a manner that borders do not affect us’ (Weizman, 2006: 11). In short, continental philosophy is introduced to *transgress* boundaries. While most military officers in the USA would be unacquainted with Deleuze and Guattari’s work, it is still curious that imaginaries of design find a common denominator in their claim that the task of philosophers is to have the necessary relationships, sensibilities, skills, and powers of a *creator* (Deleuze and Guattari, 1994: 5; US Army SAMS, 2010: 63–65).<sup>10</sup> As noted, an ontology emphasizing becoming, immanence, and molecularity easily lends itself to appropriation by that which it purports to criticize (see Baudrillard, 1987: 31–48). By emancipating creativity, continental philosophy is reified as part of a vision of perpetual redesign taken up and reinforced by military discourses that strive to exceed the battlefield and the staff room so as to ‘infiltrate and transform other social imaginaries’ (Taylor, 2004: 28).

In summary, although military design emphasizes understanding, it seems as if strictly speaking it ‘is not a methodology towards understanding. It is a philosophy associated with embracing the unpredictability of tasks yet to be accomplished’ (Paparone, 2010b: 7). It is necessarily creative, as ‘the purpose ... in design is not to mirror reality as accurately as possible, but rather to have a reflective conversation with the situation’ (US Department of Defense, 2011a: IV-10). But it is also reductive, as the designer still needs to stick to a terminology that is anchored in discourses on military planning. Even so, a military designer is not evaluated on the basis of how well she or he plans, coordinates, or conducts military operations, but increasingly on how well she or he integrates creative and experimental thinking tactically, operationally, and strategically. The designer is called upon to redesign warfare and designate local truths through the improvisations of the design process. If war is to be conceived as the laboratory of the future, as Paul Virilio has argued (Armitage, 2001: 72), it is no wonder that the military designer imaginary resembles an operational laboratory characterized by the tension between creativity and planning. In response to the previously posed question about the characteristics of our future ideal military designer, we now have an answer. It is a creative soldier ready to push concepts and experiments to the extreme and wage war as a reductive micro-engagement with the world. The ideal military designer does not simply wage war

at the edge of chaos but heeds Nietzsche's insight that *to create one should aspire to become chaos*: making the uncertainty of war into an artistic medium to redesign future worlds.<sup>11</sup>

## Military design and global politics

Is military design giving rise to a new military imaginary? And, if so, what might the political consequences be? Arguably, it is as part of war's power to make and unmake (Barkawi and Brighton, 2011) that we might situate the political impact of military design discourse. I end this article by arguing that military design strives to be constituted as an episteme of creativity in US warfare. The extent of its impact implies the further normalization and justification of war as a transgressive practice.

### *A new military design imaginary?*

Practices of security design such as biometrics or border walls have led to new ways of relating to security and insecurity. Cynthia Weber and Mark Lacy argue that security design is conceived of both as a depoliticizing imperative that reproduces imaginary social orders and as an appeal for creativity and invention in a particular environment. In this respect, it offers an important prism through which to address the constitutive aspects of governing and control (Lacy and Weber, 2011: 1026; Weber, 2010: 9). Is military design giving rise to a new military imaginary with similar consequences? On the one hand, it may be argued that military design has not had a comprehensive impact on war. Taken as a whole, it constitutes a microcosm with a somewhat limited scope. However, as Charles Taylor (2004: 24) has noted, theories represented by a few 'significant' individuals may well come to infiltrate other imaginaries. The call for design is being put forward through military education and debates, and it is reinforced by high-ranking politicians and leading theorists on war, while also being coded through military doctrines and manuals. As stated previously, design has also been put to the test by Israel in the West Bank and by the USA in Afghanistan and Iraq, albeit with consequences that are difficult to verify.

As discussed previously, up to the era of Clausewitz, creativity was mainly thought of as a means of applying scientific rules to battle. With *On War* and the thinking that followed, Western approaches started to reflect the view of war as interlinked with complexity and creativity and embodied by the military genius. The more systemic and reductive aspects of military design as part of operational planning echo these views. But, more than this, military design tells us of an orchestrated attempt to push creativity as far as possible, by disseminating it in the military organization and into every single soldier on the field. This is evident in the way military designers conceive of war as a journey of martial discovery and emancipation that is characterized by experimentation, artistic improvisation, risk-taking, innovation, the soldier's imagination, and the use of continental philosophy. Taken to its extreme, design as a tactical, operational, and strategic practice is not limited to understanding, moderation, and attempts to uphold order. Needless to say, if employed comprehensively as 'design by destruction' or 'experimental acts', the emphasis on creativity affects not only how war is fought but also its context.

The recent change of the US Army's vision for warfare to what has become known as Multi-Domain Battle (MDB) serves to illustrate how theories on military design have influenced contemporary military imaginaries. According to MDB, cross-domain military maneuvers should be conducted to comprehensively integrate warfare into a single seamless offensive. It counts on the idea that soldiers need to operate independently in small units with minimal support to force open windows of opportunity with whatever they have at hand (Freedberg, 2016). What is interesting in this respect is that the way in which MDB is articulated is strikingly similar to design discourse.

This is evident in general arguments like ‘MDB is fueled by creativity’ or ‘requires creative thinking’ (Bott et al., 2017; Vergun, 2017), and in specific requirements such as ‘MDB demands creativity, experimentation, and feedback from today’s tactical and operational leaders [so as to] enable people to solve challenging problems in novel ways’ (Bott et al., 2017). Consequently, MDB is warfare facilitated by creative thinking, aiming to ‘empower junior leaders to plunge ahead when they see an opportunity’ (Freedberg, 2016). As such, MDB rests on the presupposition that each soldier needs to be a creative modular component. It is only natural that US discourse imagines this as a new version of *Auftragstaktik* that empowers soldiers to improvise and take initiative in the absence of certainty (Thomas et al., 2017). While there might be a number of reasons as to why the US Army invokes a futuristic version of *Auftragstaktik* as an ideal for waging war (see Bousquet, 2009: 222), one plausible answer is that military design has gained traction and works to normalize and promote creativity as an integral part of Western military imaginaries.

### *Transgressive wars*

It would be a mistake to think of military representations of the battlefield as apolitical or neutral. Military discourses often represent territory through functional logics and with ideas of ‘complexity’ and ‘contingency’, while constructing certain areas as ungovernable and ripe for violent intervention. Similarly, portraying the world as creative chaos is not a neutral description but a way of setting a stage that renders the military into a manager and caretaker (Ansorge, 2010: 366, 374; Belcher, 2015: 120–121). Western wars both historical and recent have favored the idea of transformation of societies by targeting populations. As noted, this idea has enabled Western powers to ‘foster the creation ... of social spaces’ through imperial sovereignty (Behnke, 2004: 294) so as to constitute distinct modes of governance (Owens, 2011: 139). Transformation and targeting often takes place through strategic communications or information operations in which ‘target populations’ or ‘target societies’ are depoliticized as they are transformed into ‘objects’ whose existence is open to manipulation and change (Behnke, 2014: 28–38; Holmqvist, 2013: 647). Such warfare aims to change societies, cultures, and populations through development, economic aid, and good governance (Dillon and Reid, 2000: 118–119; Duffield, 2010: 58). Military design discourses chime well with the spatial and temporal practices of such warfare, based on the political vision that in war ‘there is no more outside, only an inside in the making’ (Behnke, 2004: 312). Consider the use of knowledge of local cultural customs as part of military intelligence, conscious attempts to co-opt women through social programs, or the violent targeting of patterns of the everyday (see Evans, 2011; Khalili, 2011; Öberg, 2016).

As noted, states may achieve order not merely by establishing value systems but also by providing space for the exercise of transgression (Reid, 2006: 70). Vivianne Jabri (2016: 209) has claimed that the recent Western wars in Afghanistan and Iraq have had severe constitutive consequences as regards transgressive juridical and political acts, both for the targeted populations and for the international community. Much in the same manner, military design builds on transgression by promoting a type of warfare that ‘breaks the rules that were in force yesterday [and] opens the door into what lies beyond the limits usually observed’ (Bataille, 1982: 66, 67). The use of concepts from philosophy to ‘smoothen’ areas of operation, conceptually and practically, into a space lacking borders and limits further indicates this. The argument that global politics is characterized by transgressive practices is helpful if we are to understand the way in which ideas of extreme creativity and military reductionism risk becoming a specific account of warfare as spatiotemporal creation (see Walker, 2004: 243). Moreover, representing warfare as a systematic unleashing of creativity risks the idealization of violent transgression as a feature of global politics.

Military design indicates a potential radicalization of governing as it promises to violently redesign the world where it is enacted. Military design thereby connects to other broader imaginaries on creativity, such as the creative industry. The ideal here is arguably entrepreneurs with extreme ambitions, such as Elon Musk, whose transgressive space travels are now sponsored by the US military (Bachman, 2017). However, military design discourses also echo more ominous voices, such as Italian futurist Filippo Tommaso Marinetti's claim that 'true geniuses of war ... broke all past traditions, revolutionizing the present, anticipating the future', and that in such war 'there is room for everybody. Archaeology to scholars, the present and the limits of the future, to men of action' (Marinetti cited in Gat, 2001: 576). As ideas of transgression are sutured into global politics through warfare based on an episteme of extreme creativity and reductive planning, there is always a risk that the question of how to wage war is already answered by military doctrines, planning documents, routines, and debates. In this manner, military design might function like a 'suspension of moral prohibitions' by telling both the soldier and the statesman applying force: because you can be, you must be, creative (see Žižek, 2009: 505). In so doing, it fails to address how military design justifies and normalizes warfare as an attempt to transgress the boundaries as usually observed. Moreover, the seemingly artful and imaginative ideas of creativity obscure the normalization of the reductive aspects of military design discourse, along with its ethical and political consequences.

## Conclusion

This article has asked how military design – a trending topic that has become an important aspect of military debates – shapes war. In Western military thinking, prior to Clausewitz's *On War*, creativity was mainly thought of as a means of applying scientific rules to battle. With Clausewitz, creativity became considered an essential characteristic of warfare. Subsequently, Western military thought largely oscillated between creative thinking and operational planning. By analyzing discourses on military design, this article has argued that they push the notion of creativity from being a characteristic of warfare to being an objective thereof. In the West in general, and the United States in particular, military imaginaries of design are articulated in relation to warfare as an administrative, linear, 'by the book' practice, often illustrated by quantitative data focused on body counts. In a time when the global battlefield has gradually become conceived of as complex and chaotic, military design in its most extreme form offers a transgressive version of creativity as the basis for warfare. According to the discourse, the military designer is creative and adaptive and works well in an experimental environment filled with unpredictable tasks.

Military design draws on continental philosophy, idealizing the role of novel thinking and traditional military concepts in order to control and model a milieu into a constantly 'becoming' design space. Ideally, the shaping of such space is achieved by an experimental praxis instigating tactical actions. Moreover, the chaos invoked and generated can be seen as one way of setting the stage for global interventions. Drawing on design theory, military operations reinforces the view that warfare is about redesigning existing situations into preferred ones, in turn making the military a potential manager and caretaker and pushing the limits of war's unmaking capabilities. However, military design discourse still works within the remits of concepts from traditional operational and strategic planning. Consequently, it does not dissolve the tension in military thinking between linear operational planning and creativity. Rather, military design puts to use reductive military concepts and more or less linear aspects of operational planning along with radicalized views of creativity widely distributed in military organizations. In so doing, it works as a slogan for entrepreneurial thinking based on novelty, uniqueness, and improvisation. In the light of the critique of a type of warfare heavily influenced by body counts, linear thinking, and bureaucratic models (such as the US war in Vietnam), more creativity might seem like a good thing. However, in this

article I have highlighted the more ominous dimension of a redefinition of creativity in warfare. Accordingly, there are a number of reasons why military design should give pause for thought.

To begin, the emphasis on creativity obscures the way design discourse also depoliticizes and dehumanizes other imaginaries through Kafkaesque military terms like ‘operational environments’, ‘undesirable systems’, or ‘targetable nodes’. Design discourse combines an appeal for creativity with military ordering, and in so doing conceives of the world as a place ready for violent intervention. But military design fails to address how organized, one-sided creativity is dangerous, particularly for those affected by war. Moreover, military design feeds into a discourse on war as a generative and destructive force. As noted, the view that war is generative is both an appreciation of war’s powers and a normative statement that, if acted upon, challenges international moral and legal restraint (Barkawi and Brighton, 2011; Bartelson, 2016; Nordin and Öberg, 2015).<sup>12</sup> In particular, it implies the transfer of responsibility from the politicians that initiate war to the individual soldiers who are sent out to fight. Military design is expressed in a self-assured and confident manner that downplays local or national worlds with its sense of culture, morality, or law, or simply conceives of them as the means for a violent journey towards a ‘desired’ system. In global politics, the military comes to political leaders with suggestions on how to ‘deter, dominate and if need be, destroy the enemy’ (Der Derian, 2015: 22). But, as this article has tried to illustrate, to post-truth politicians and others, a military design imaginary is a promise not only to destroy but also to redesign through warfare, as well as an assurance that the military can lead the way in doing so. However, the future consequences war as design may have for social and political life remain unaddressed.

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### Notes

1. The discourse on military design identified in this article contains official and unofficial sources and is based on US and NATO documents. It draws from, among others, Joint Publication 3-0 *Joint Operations* (US Department of Defense, 2011b); Joint Publication 5-0 *Joint Operations Planning* (US Department of Defense, 2011c); debates in *Military Review* and *Small Wars Journal* regarding military creativity and design; handbooks intended to train ‘military designers’, such as US Army SAMS (2010), *Army Design Methodology* (Grome et al., 2012), and the *Planner’s Handbook for Operational Design* (US Department of Defense, 2011a); and academic monographies of military science (Naveh, 1997; Paparone, 2013).
2. For a critique of the argument that design thinking is best characterized as either analytical or creative, see Snodgrass and Coyne (2006: 71–82).
3. See note 1 above.
4. For Clausewitz, the term ‘genius’ is taken to indicate ‘originality and creativity raised to the highest power’ (Paret, 1992: 113).
5. It is worth noting that Clausewitz had intended to write a chapter on military campaign planning for *On War*, but his death put a premature end to this; see Clausewitz (1976: 625).
6. See the introduction to the chapter ‘War Plans’, which ends with a discussion on *coup-d’oeil* as ‘the essence of good generalship’ and a discussion on the need for genius to evaluate and assess the context

in which war is fought (Clausewitz, 1976: 578, 586). See also Smith (2005: 159, 166–167) for a further discussion of strategy as a creative activity in Clausewitz.

7. Military design posits itself as an attempt to ‘act to creatively deviate from known-knowns’ as opposed to a linear ‘I know authoritatively what we must do’ approach (Paparone, 2010a: 3). This is a simplification that fails to address the consequences of linking creativity to military conduct. However, the argument here should not be taken to mean that administrative ‘assembly line’-type warfare is in any way preferable to (or less preferable than) warfare as design. For a further discussion of the ethical and political aspects of the bureaucratization of warfare, see Chamayou (2015).
8. The ‘operational environment’ is a reductive military concept used to de- and recode the space of war. It consists of ‘the composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decisions of the commander’ (US Department of Defense, 2011c: xx).
9. Consider the argument by one military designer that the US Army needs to focus the way it teaches warfare on everything ‘from Gharajedaghi’s systems and iterative thinking, Jullien’s propensity and potential, Bar Yam’s competition and cooperation, and White’s discourse and narrative’ (US Army SAMS, 2010: 144). It is worth noting that the insistence that military creativity has an important reference point in philosophy rests on a reading where its political and ethical implications are erased and ignored in favor of ideas of military function (see Weizman, 2006: 15).
10. Deleuze and Guattari (1994: 34) would not call the products of military design ‘concepts’, as they reserve that notion for philosophy. Although military design and continental philosophy differ widely, the point here is that the former draws upon and appropriates the episteme of the latter.
11. Nietzsche (2006: 9) famously wrote with regard to the *Übermensch* in the Preface to *Thus Spoke Zarathustra*: ‘I say to you: one must still have chaos in oneself in order to give birth to a dancing star.’
12. As one example, consider that the commander of the IDF operations using ‘design by destruction’ on the West Bank, Aviv Kohavi, has been advised not to travel to Europe on account of the risk that he might be indicted for war crimes as a result of the operation; see <https://www.ynetnews.com/articles/0,7340,L-3221339,00.html>. See also Gregoire Chamayou (2015: 56–59, 130–134) on the relationship between international law and a deepened and extended battlefield.

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Dan Öberg is Associate Professor of War Studies at the Swedish Defence University in Stockholm. His current research is focused on the role of military exercises as part of imaginaries on war and warfare. His recent publications include research articles in *Cambridge Review of International Affairs*, *Journal of Narrative Politics*, and *Critical Military Studies*. Email: dan.oberg@fhs.se.