

Literary Friction: poetics at the operational level of war

Oliver Jones

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Abstract

This dissertation explores an intersection between literary studies and war studies, approaching literature as a critical medium that can enhance the conceptualization of war as an organizational process directed towards political and strategic ends. This work of scholarship argues that literature provides unique terms for examining war as a complex interpretive structure, and enumerates historical examples of literary practice as a medium for ideational and transformative activity in military domains. Through this lens, the dissertation explicates the literary aspects of the philosophy of BGen. (ret) Shimon Naveh as it is articulated in his writings on “Systemic Operational Design” (SOD) and operational art. It explores Naveh’s influence on professional military education (PME) in the Israel Defense Force and the legacy of his thinking through the writings of the “Naveh school”, which includes Dr. Ofra Graicer and BGen. (ret) Gal Hirsch, alongside a few others. It highlights how the Naveh school engaged with advanced literary and philosophical texts drawn from a broad corpus of modernist and postmodern literary and philosophical production, including TE Lawrence, John Boyd, Paul Virilio, Gilles Deleuze and Felix Guattari, Hayden White and Bernard Tschumi. By mapping some intellectual spaces where literature has been enlisted in sophisticating military knowledge and activity, this dissertation seeks to broaden the conceptual repertoire of military and security-focused scholarship, offering insights into the ways literary practice has been incorporated in the conceptualization of warfare and strategy in defence organizations and parallel fields of research which support defence organizations. Ultimately, this work seeks to understand the interplay between literary forms and the logics of warfare, pushing the boundaries of how literature is conceptualized within military-academic spaces, while challenging the terms on which war is conceptualized in humanities scholarship.

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Introduction: A program for studying literature on war's terms

This dissertation can be understood as a contribution to critical war studies. To use an imperfect martial metaphor, it constructs a bridgehead between two distinct domains, namely literary studies (or simply “English” as it is called in the Anglosphere) and war studies. War studies is a loosely structured discipline that draws from a variety of fields (including military history, security and strategic studies, sociology, economics, international relations, among others) that inform the design and conduct of war as the conscious activity of organized violence. For reasons that are thoroughly unpacked in the first chapter of this dissertation, English, as a humanities discipline, is normatively constructed as opposed to war studies’ constitutive subject, particularly where war is realized as an organizational imperative in service of the aims of national policy. This dissertation declines the construction of English as an antiwar discipline. It aims to productively unsettle the construction of literature as a field outside of war’s domains on the premise that, wittingly or not, literature provides unique terms for studying war as an interpretive structure that invests acts of organized violence with meanings that are not self-contained, and which are unstable and disputed, and which must be interpreted by human agents to realize their military and political significance (Simpson, 2018).

After the foundational work of Tarak Barkawi, critical war studies are premised on the assumption that the phenomenon of war, as both an event and a distinct ontology that transforms pretty much everything it casts its shadow over, calls for modes of inquiry that can endure war’s tendency to disperse its truth-making and meaning-making procedures into a variety of seemingly unconnected fields of knowledge production (Barkawi & Brighton, 2011). That dispersion of war’s creative-destructive energies unsettles the disciplinary containers that attempt to order war as a field of social and political responsibility, either by organizing capacities for

fighting or, paradoxically, disavowing them. By allowing war and its domains to provoke their own theoretical inquiries, particularly as they concern the subject of literature and the transformative, ideational capacities of literary practice, this dissertation aims to overcome some of the disciplinary limitations of studying war through literature by studying literature on war's terms.

By building a bridgehead from war studies into literary studies, this dissertation aims to open the discipline of English to questions of subject, practice, method, and inquiry that concern not only scholars of war studies, but also innovative practitioners, researchers and educators embedded in defense and security organizations. Taking its cue from the real-world literary practice of Dr. Shimon Naveh, a retired one-star general from the Israel Defense Forces (IDF), a former paratrooper commander, and a current instructor of the “general’s course” at the IDF’s staff college, this dissertation wagers that war studies’ conceptual repertoire would benefit from an extended exploration of “advanced” literary, critical, and philosophical texts which are usually understood as outside the scope of the disciplines which inform professional military education (PME). In its earliest iterations in what was called the Advanced Operational Command and Staff Course in the 1990s and early 2000s, Naveh’s practice, supported by research produced by a think-tank known as the Operational Theory and Research Institute (OTRI), struggled to gather critical momentum against enormous pushback from the institution within which Naveh agitated to implement his self-styled paradigmatic revolution in operational art. OTRI’s output remains controversial not only because of its unsanctioned (from the perspective of the humanities) enlistment of the writings of canonically edgy French theorists like Deleuze and Guattari, Foucault, Henri Lefebvre, Paul Virilio, and Jean Baudrillard in the service of sharpening martial capabilities, but likewise because of the storied resistance Naveh’s activism received within

the conservative institution he aimed to transform, and which heaped blame for the disaster of the second Lebanon War in the summer of 2006 on OTRI's limited influence within the IDF's officer corps. In his own telling, Naveh's project failed in the IDF, in part due to the resistance or indifference of the command echelons, in part due to the sheer opacity of the materials and references he called upon to encourage critical reflexivity in PME. This trouble followed him in his post-IDF engagement as a contractor with the US Army's School of Advanced Military Studies (SAMS), where he was influential in the development of the US Army's Design Methodology (ADM). And indeed, the florid, contentious and even polemical character of Naveh's writing continues to trouble the legacy and reception of System Operational Design (SOD), the Naveh school's evolving model of agile strategy for the practice of generalship, in defence and security circles outside Israel.

Despite this enduring controversy, OTRI's enthusiasm for critical sources and references from far afield of the conventional disciplines that inform PME suggests an aspirational example for constructing a bridgehead between these two seemingly inimical fields. Naveh's approach was styled as a kind of critical avant-garde of martial philosophy and practice that is unique in the history of contemporary war (although there are certainly analogues and precedents in other contexts, e.g., the multidisciplinary theories of former USAF Colonel John Boyd whose work partly informed the development of the US Army's doctrine of AirLand Battle in 1980s and 90s). As such, Naveh's efforts to radicalize the education of general officers constitute a rich "reflexive episode," to appeal to the methodological language suggested by a recent special of the *Journal of Military and Strategic Studies*, around which this dissertation constructs its inquiry into the literary arts of contemporary warfare, strategy, and operations (Beaulieu-B. & Dufort, 2017, p. 284). The English language writings, institutional artefacts, documented practices, and

real-world operations realized by proponents of what this dissertation calls the Naveh school, who include Dr. Ofra Graicer, the former Chief of the General Staff Aviv Kochavi, BGen. (retired) Gal Hirsh, and MGen. (retired) Gershon Hachon, are central touchstones of this work of scholarship, around which its exploration of literary and philosophical texts connected to the Naveh school, either by direct historical citation or critical analogue, are organized. The approach developed here attempts to capture some of the radical spirit of the Naveh school's engagement with literary experimentation in order to push the boundaries of what can be logically said about these kinds of leftfield approaches to martial knowledge and innovation. To unearth the reflexive character underlying the literary aspects of Naveh's work, this dissertation delves into the acutely poetic qualities of the Naveh school's thought and practice. This character of Naveh's output is challenging to reconcile with normative habits of military communication and training, and are often thus elided or dismissed in strategic and defence commentaries on the episode.

The advantage of studying these texts from the perspective of literary scholarship (which approaches them principally as textual artefacts, subject to textual analysis and interpretation) is that this approach can indulge lines of thought that are (for professionally comprehensible reasons) usually foreclosed to the disciplines which inform war studies, strategic studies, military history and PME. Studying these institutional artefacts as literary texts, subject to the functions and operations of poetics, rather than as works of military science or history working at the level of hermeneutics, opens them to readings and interpretations which do not necessarily have to conform to any single logical structure that determines their political meaning or relevance within the professional discourses of modern military administration (Gibson, 1986). This approach is in keeping with the spirit of the Naveh school, which sought to disrupt the normative

habits of sense-making, analysis, interpretation, and strategic judgement which conditioned the functionalist rationalizations of the command and planning apparatus, and which sought subversive and heretical means of mobilizing critical insights into the weirder phenomenon of postmodern, “post-heroic” warfare. This approach is likewise consistent with the aim of comprehending the ontology of war as an interpretive structure which is generative and transformative of the social order as much as it is mechanistically destructive of an adversary.

After James William Gibson’s excavation of the subjugated knowledge of the incredulous warrior in the writings of Vietnam veterans, this dissertation understands these texts (which this dissertation analyzes alongside more conventional prose-form literary texts that explore modern military strategy and operations) as expressions of a kind of knowledge insurrection against the official discourses of military science and administration. As such, it draws extensively from texts that do not conform to “the rules” for deciding who can be a serious thinker about war, nor observe the correct forms for expressing serious ideas about military thought and activity. Working with non-standard sources, this dissertation develops a series of critical meditations on the Naveh school’s writings, references, and influences that indulge figurative, speculative, informal, and occasionally even offensive language that is likely to be discomforting to a military or a war studies readership. These kinds of counter-languages carry complex meanings which official military discourses struggle to recognize or comprehend, but which nevertheless inform the ambiguous, ambivalent experiences of the bodies war mobilizes.

By doing so, this project attempts to surface critical insights developed from the Naveh’s school’s practice-driven engagement with theory that have not been fully articulated in the secondary literature on the OTRI episode. To a fault, Naveh’s practice did not blanch from naming awkward and unspoken tensions, nor shy away from peering into the blind spots of

martial knowledge, nor adulterate references to advanced concepts and ideas garnered from external disciplines. Nevertheless, the Naveh school engaged these literatures with the expressed intention of sophisticating the conceptual repertoire of the generalship in their practice of emergent strategy and operational command. Many of these critical insights have not been given a thorough scholarly presentation, in part due to the “nomadic” principles animating Naveh’s practice (which often sought to avoid committing ideas into writing for methodological reasons, i.e., for the simple reason that ideas quickly stiffen into templates for martial action once they’re put to paper in PME settings), in part due to the density and abstruseness of the Naveh school’s references from the perspective of the military-academic orthodoxy.

Because PME readerships tend towards extractive reading practices (i.e., “give us the conceptual goods in the plain language, speak directly to the value of the ideas on offer and exclude anything extraneous to those requirements”), the literary aspects of the Naveh’s writings are particularly fraught with issues of misreading and mistranslation that would seem to inhibit their scalability as a model for a language of command or strategic discourse. *In Pursuit of Military Excellence*, Naveh’s sole published monograph text, is singularly focused on the history of modern operational art with a few theoretical detours into the epistemology of science. However, Naveh’s other writings, several of which were produced for private consultancies and think tanks like Booz Allen Hamilton, indulge literary stylistics that test the patience of their intended readership. These texts often assume competencies which their intended readership has not apprenticed to, creating a significant barrier to accessibility. Which is to say that these texts can read as aloof from and even hostile to the communicative expectations and forms through which defence organizations legitimate knowledge claims. This is arguably a problem for a philosophy of generalship that aims to enhance the agility of military learning: if understanding a

text requires an advanced capacity for literary interpretation, this is liable to be a significant drag on the uptake of concepts in a PME setting. In that sense, the value of poetics as a means of testing, refining and validating subjective knowledge is a hard sell in a discipline like PME.

The Naveh school's productivity exemplifies a situated practice within a defence organization (arguably its own kind of knowledge system with particular structures of knowledge production and accountability) that engages with complex concepts and materials that often read as extraneous to a defense organization's particular epistemology and mandate for undertaking action (Tsoukas, 2005). In this way, the situated nature of Naveh's practice is comparable to what organization theorist Hardimos Tsoukas has called a "poetic praxeology" of knowledge in action. To prescribe a primary reading list to senior officers engaged in PME that includes Deleuze and Guattari, Paul Virilio, post-structuralist architect Bernard Tschumi or literary travel novelist Bruce Chatwin is to exhort those officers to engage with ideas that do not present in the form of settled, verified knowledge that can be generalized into generic models of knowledge and action. Rather, it is a deliberate move to initiate those officers, who themselves embody the authority of a defence organization and its attendant privileges to organizational knowledge, into an "enactivist epistemology" that can accommodate ontologies grounded in the assumption that the world is always in a process of becoming, and that flux and transformation are the world's fundamental processes (p. 5). By attempting to resituate the practice of operational command and strategy-making as one that cultivates the capacity for self-reflexivity and critical observation, Naveh's practice imagines the officer as an agent comparable to a poet who, under the influence of past genres and literary customs, imparts distinctive form to the raw materials of language in order to actualize nascent possibilities in the environment the officer aims to transform (p. 5). As a poetic praxeology, Naveh's practice

acknowledges the complicated motives of human action, makes room for the influence of the past and its transmutation into new forms in the present, understands the relatively opaque nature of human intentionality, allows for chance events, influences and feedback loops, and accepts the inescapability contextuality and temporality of all human action. (Tsoukas, 2005, p. 5)

If the effectiveness of a martial organization engaged in fighting is qualified by its capacity to take actions to surprise and to upend the expectations of an adversary (expectations which are often structured by existing forms and expressions of organizational knowledge and behaviour, which may also be productively disrupted), the advantage of an officer corps fluent in poetic reflexivity that allows for the articulation of new models of action should be obvious enough: poetic praxeology enables rapid situational adaptation and resilience in the radically competitive instability of modern armed conflict. Or so the Naveh school would have it.

However, the history of the Naveh school's reception in military circles suggests that the scaffolding of this kind of knowledge needs to be far more carefully qualified than Naveh's intensely literary stylistics and manner of pedagogical engagement credits (Kober, 2011; Vego, 2009). While the forms of reflexive knowledge production that Naveh favoured are innate to the contemporary humanities (and are often embraced in contemporary management and organization theory), they are not innate to military education and are not readily expressed in the disciplines which inform the profession of arms. The texts which this dissertation privileges because of their literary qualities arguably do not surpass this inherent tension. To lean on a handy literary allusion, Naveh's ventures into deep theory tend to traverse extensive rabbit holes, and the handful of English-language writings produced by the Naveh school remain intensively trying for their intended readership to the extent that they revel in paradox, irony, and subversion. These decadent literary sensibilities are not qualities of text which readily broker clear and unambiguous understandings on the part of the reader. Nevertheless, they evidence a particularly

zealous attempt to complicate the kinds of knowledge and subjectivities admissible within the parameters of PME and strategic literature, and to open the latter to novel human capacities for invention lacking obvious precedents in the institutional imaginary. This dissertation undertakes the work of surveying but a few of those rabbit holes so that they can be mapped and subject to more nuanced terms of analysis and critique than they have been afforded by the secondary literature thus far.

Which is to say, once again, that the Naveh school's output raises issues of translation between literary and martial epistemologies that are not easily reconciled. And where PME students and educators alike often chafe at the intuition for abstraction that characterizes much of the Naveh school's written output, literary scholars are likewise reticent to embrace the kinds of fixed authority and terms of reference which qualify the professional and martial competencies of modern defence organizations. A dissertation that attempts to bridge the apparent incommensurability of these disciplines calls for a method of inquiry that can endure the confounding mutability of war as a creative-destructive force, the generative essence of which is change, disruption and subversion of expectation. This method would also have to substantively contend with the knowledge that fighting (and the organizational disciplines required to cultivate, maintain and improve a defense organization's fighting ability) is a grounding condition of modern war's ontology, and that scholarship on war cannot easily exclude these elements without losing sight of central aspects of war's transformational nature.

Martial empiricism: a methodology for studying war's terms

As Barkawi and Brighton argue in "Powers of War" (2011), the construction of the humanities as a discipline that either has surpassed or will surpass the endemic character of war to modernity arguably instates a disciplinary exclusion that separates the instrumentalizing study

of war as fighting (e.g., military history, strategy, tactics) from the study of war as it impacts society. One significant consequence of this disciplinary exclusion is that it causes humanities disciplines which study war to look past the ways in which that disciplinary exclusion is compromised by war's innate tendency to "disrupt, undermine, and transform" the order of public reasons and the political identities that war itself defines (p. 140). War's chimeric, multiform constitution implicates fields of knowledge production that draw in a much vaster scope of epistemological concerns than questions of legitimation of military and state authority and the perfection of martial technique in the objective test of battle would seem to imply. This presents significant problems for the construction of literature as an antiwar discipline, which is a construction which this dissertation actively attempts to unsettle. To treat the subject of war as one which not only confounds literary scholars' tendency to oppose state expressions of organized violence, but one which necessitates methods that are consonant with war's tendency to disperse truth-making and meaning-making procedures into disciplines with no direct or obvious connection to the instrumentality of fighting is liable to challenge readers committed to the humanities' antiwar traditions. But the intention of centering war's instrumentalization of literature is to call attention to the ways in which war's unremitting global condition complicates the humanities' claims to persist in literary and knowledge production that escapes the orders of knowledge and legitimation which war instates, as both event and ontology.

War, in its ceaseless power of invention, remains "a stubborn affront to the better world we all purport to want" and in that affront it perplexes attempts to come to intellectual grips with it, to rationalize it, to tame it, to bring it to heel, or banish it (Bousquet et al., 2020, p. 100). Or if we prefer a literary formulation, "war endures," as the satanic Judge Holden sermonizes in Cormac McCarthy's *Blood Meridian* (1992, p. 248). It makes little difference what one thinks of

the rightness of war, according to the cruel terms of the Judge's discourse, because the nature of its contest "beggars all questions of right": the obdurate force of war and the realization of the absolute terms of its game stakes authority and justification in a way that relegates opinion and argument irrelevant to the terms of the contest and its outcome in the subjugation or annihilation of the defeated party (p. 250). But even the seemingly natural and adverse dualism of enmity in McCarthy's construction of war as cosmic game is not assured in war's apparent infinitude: war, in its roving cosmic itinerancy, seems just as liable to disrupt even this apparent certitude. Any number of positivist claims or normative truisms (e.g., "war is fighting", "war is cruelty", "war never changes"), concerning the nature or essence of war might be unsettled or subverted by war's ceaseless powers of invention and undoing. Public and political discourses over tactics and the aims of strategy, the values these discourses affirm or undermine, are just as liable to change the stakes of war's varied expressions. Because the experience of war is fractured and multiplied from the perspectives of the bodies that war mobilizes, and because many of those bodies apprehend the stakes of conflict in ways that do not neatly map to rationalizations of enmity, the perceptions of any numbers of actors as to questions of the rightness of means or aims can alter the course of war's unfolding (Simpson, 2018). Which is another way of saying that war's chimerical embodiment as a "true chameleon" that adapts itself to the unique circumstances of its expression, as it is described in Clausewitz's (2007, p. 30) metaphor (and despite Clausewitz's attempt to nevertheless conceptualize war as a comprehensible gestalt in spite of that metaphor's significant conceit), seems to confound every attempt to define it.

Barkawi and Brighton's argument for a renewed critical basis for war studies directs the focus of inquiry towards perplexing aspects of the phenomenon of war which confound normative interpretative frameworks in a variety of disciplinary traditions. The phenomenon of

war can be conceptualized through their lens as a generative force, both a maker and an unmaker of truths, that reworks the reality of social and political life in ways that are difficult to conceptualize and even harder to anticipate. However, by locating war's ontology in fighting the essay seems to prefigure its object in ways that are likely to be undone by war's mysterious potency, its mutative and elusive nature (Bousquet et al., 2020). Insofar as the power of war agitates, unsettles and dispels attempts to rationally comprehend and control it, the object of war is inherently elusive. In its transience, it resolutely resists any definitive understanding or conception of it. War's ontology is irreducible to fighting alone, and this presents a problem for Barkawi and Brighton's proposed critical methodology: the transmutative properties of war are just as likely to unsettle the surety that war is fighting. If "every attempt to conceptually shackle war is undone by the creative advance of its new modes, residence and intensities," then critical war studies would seem to call instead for a "strange, paradoxical and provisional ontology that is consonant with the confounding mutability of war" (p. 100). Foregrounding fighting as *singularly* definitive of that ontology is likely to overdetermine the object of war in ways that would inhibit critical inquiry into its generative capacities for the subjects it inhabits.

A recent issue of *Security Dialogue*, an influential journal in the field of critical security studies, argues for a methodology of martial empiricism to orient critical inquiry into war's generative properties. Where normative interpretive frameworks in the humanities and social sciences tend to hold war at arms' length for fear of complicity with its inner workings, the case for martial empiricism conjectures that the normative scholarly "reticence to encounter war on its own terms", that is, as a paradoxical form of life for the generation of death which produces its own structures of intelligibility, tends to foreclose the conceptualization and acquisition of "new knowledges and dispositions through which agency can be wrested from martial phenomenon"

(pp. 103-104). Cognisant of the disciplinary overdetermination of war as an object of study, rather than a subject in its own right, martial empiricism is conceived to allow war and its domains to pose and provoke their own unique theoretical inquiries in order to overcome these disciplinary limitations in conceptualizing war as a distinctive social phenomenon, ontological event and political rationality. Rather than beginning with a definitive conception of war that delimits where it begins and ends (or where scholarship into war can rightly proceed), martial empiricism begins in the middle, proceeding with only provisional and tentative assumptions necessary to orient an exploration of the “logistics, operations and embodiments that engender armed conflict as an unremitting condition of global life” (p. 101).

Not unlike Naveh’s poetic praxeology or Don DeLillo’s (2010) fictive poetics of “war as haiku” in *Point Omega*, “martial empiricism apprehends war as a process of becoming that is suspended between potentiality and actuality” (Bousquet et al., 2020, p. 104). Much like Naveh’s process-driven conception of strategy and operational art, martial empiricism is conceived as a means of examining the gathering of “intensities, relations and attributes that give rise to war’s givenness” (p. 104). Recognizing that war is not a singular object or phenomenon, martial empiricism understands that war can be apprehended as thing, process, event, and ecology of relations. In order to make sense of war’s recasting of its contingent elements, its generative multiplicity of differences, martial empiricism proceeds by an open-ended inquiry conceived to not only endure war’s generative chaos, but to conceptualize its radical dispersion in new structures of intelligibility that divide, transform and reconstitute political space and social order.

Put another way, war is a process of worlding that can be described in its own right. In order to make sense of the interfaces and exchanges that enact this worlding, martial empiricism poses its own unique set of question:

What are the various bodies, objects, ideas, practices and affects that assemble to constitute collective violence? How do they come together and cohere as conduits of lethal combat? What are the particular processes, operations and protocols by which the emergent capacity for war coalesces, unfolds and dissipates? (p. 103)

The advantage of this approach to the study of war is that it permits war to define itself by theorizing the “conditions of possibility for asking what war does and means,” rather than prefiguring those capacities as something that is essentially known in advance as its concerns the value propositions of another disciplinary tradition that conceives itself as existing at a remove from war’s domain (p. 105). Necessarily pluralist in its outlook, martial empiricism approaches the experience of war not in terms of founding principles or primary distinctions, but in terms of the entanglement of processes, relations, objects in which war inheres or disperses, and which are constitutive of war, and which require bespoke explication as they constitute war’s fields of experience (p. 104).

This dissertation undertakes a literary inquiry, in the spirit of martial empiricism, into war’s generative force as it is conceptualized within the avant-gardes of the Naveh school, and as Naveh’s concepts find contemporary expression in war’s domains. The literary discourse that develops from this inquiry does not prescribe, nor aim to prescribe, a theoretical approach or methodology for grounding resistance to war, nor does it aim to instate any prescriptive determination of what literature on, about, or in the implicit service of, war can or should do, at the level of aesthetics, to sustain the normative construction of literature or literary scholarship as a discipline that is invested in resisting or surpassing war. It takes war, as a phenomenon, as an ontology, as an ecology of relations in which the organization of violence is realized, in both potential and actuality, as constitutive of its terms of inquiry. By explicating both the potentiality and the actuality of the Naveh school’s conception of operational art and strategic practice through literary discourse, it aims to enhance understanding of the relationship between

emerging critical capacities for military thought and activity and the learning environments (e.g. the military-institutional domains of war, which include the battlespaces of multidomain operations, but also staff colleges and headquarters, and a variety of parallel spaces for military research and education) in which these unique capacities develop and find expression. It is a way of making sense of reflexive military inquiries and the aesthetics devices, practices and processes they entail as those aesthetics are engaged in both conceptualization of martial power and the exercise of military force. It aims to produce new critical terms for conceptualizing both the agencies and responsibilities of strategists, operators, combatants, policymakers and researchers who engage in these avant-garde practices. Many of those capacities, tied as they are to explicitly martial functions, are likely to trouble readers steeped in the humanities' antiwar doxa. Fair enough. There's plenty of trouble to go around. But, as this dissertation argues, those critical capacities are significant vectors of war's potential to be other than its worst excesses. If war, in the bottomless scope of its investigation into its own creative-destructive potential, might discover capabilities for undoing or surpassing itself, if not quite resolving into a utopia of nonviolence, then those capacities are worth exploring in their own right.

This investigation retraces transitions of military knowledge and practice in their ceaseless becoming. At the level of conceptualizing operations, this dissertation proceeds through a critical inventory of theories, narratives, doctrines, diagrams, and heuristics that orient the avant-gardes of 20th and 21st century military thought. By engaging these materials, it aims to spur insight into the interaction between military philosophy, literary studies, and aesthetic practice, and to prototype an adaptive methodology for critical investigation of the operational and strategic levels of war's elevated conceptual discourse. The objective is to account for the generative potential of these conceptual artifacts by engaging a fluid and provisional inquiry into

their terms, processes and operations as they concern the actualization of war in thought, plan, and deed.

Unsurprisingly, this is not a line of inquiry with any obvious pathway through the traditional literary scholarship. The problem this methodology presents to literary scholarship is that the discipline of English is usually constructed as one that studies written texts as examples of form and genre in light of their history of production and reception. The undertaking of a study of how the generative power of war inflects and incorporates literary practice therefore presents a challenge in terms of situating them within a singular, coherent corpus, or genre or formal tradition, which is usually how scholarship in English proceeds as a study of texts (e.g., of the novel, or the work of a particular author or collective, or by historicizing a particular literary field or practice). Stephen Kern's *Culture of Time and Space* (1983), a work which periodizes cultural transformations connected with modernism in their dispersion through a variety of sites and disciplines, suggests a workable approach for generalizing concepts drawn from distant disciplines like literature, physics, political science, military tactics, and psychology, to account for coinciding cultural developments in disparate fields of knowledge. As Kern tells it, such an approach necessitates a "radical gerrymandering" of genres and disciplines that breaks up any singularly coherent corpus of disciplinary knowledge (p. 7).

Kern's approach allowed for his recovery of the explicit connection between cubism and the French's army's innovations in camouflage during WW1. Kern noted that the historical record of modernist artistic production inferred a connection between cubism and the development of camouflage. Gertrude Stein's letters recount how Picasso, observing a convoy of camouflaged trucks through in Paris in 1915, remarked to Stein "yes, it is we who have made it, that is cubism" (p. 302). Kern's research, however, discovered that Lucien-Victor Guirand de

Scévola, a French artist in an artillery unit, conceived of camouflage as an explicitly cubist approach to military deception. It is unknown whether Picasso was aware of the connection. But as Guirand de Scévola describes his innovation, “in order to totally deform objects, I employed the means Cubists used to represent them – later this permitted me...to hire in my...section some painters who, because of their very special vision, had an aptitude for denaturing any kind of form whatsoever” (p. 303). By the end of the war, Guirand’s unit had mobilized thousands of camoufleurs, among them major painters of the era. As Kern tells it, Cubism denatured the representational logic of martial visibility. While British and German forces had already incorporated khaki and earth colours in their uniforms in advance of the war, the French had resisted this change. But the French innovations in camouflage eventually reordered the conventions of military organization by changing the terms in which the visibility and representation of military units were legitimated in the order of battle in order to adapt to the exigencies of modern conflict.

Adapting Kern’s radical gerrymandering, this inquiry into the operational arts of war proceeds by a two-fold process that reconstructs historical spaces in which avant-garde martial practices are conceived and exercised, and then works at conceptualizing the operations of avant-garde theory and practice within those spaces. This two-fold process involves unearthing reflexive episodes and elaborating on reflexive capacities as they are developed and expressed in and through military operations. In line with the research project proposed by Phillipe Beaulieu-Brossard and Phillipe Dufort (2017) in a recent volume of the *Journal of Military and Strategic Studies* devoted to the reflexive turn in military epistemology, the excavation of reflexive military histories is a means of drawing out the reordering of power-knowledge relations within military organizations and making their structures, abstractions and displacements apprehensible

to scholarship. For Beaulieu-Brossard and Dufort, revisionist histories that uncover narratives detailing “resistances, repressions and repeated resurgences of reflexive intellectual life in military circles” are indispensable to the reconstruction of “suppressed traditions of reflexivity in military affairs and strategic studies” (p. 284). However, where their methodology suggests an approach more along the lines of ethnography of military design’s communities of practice, the approach developed here approaches reflexive strategy as a field of literary production.

Constructing a cross-disciplinary archive of literature on war (and particularly on war’s generative potency as it finds expression in operations) that excavates compelling narratives to account for these kinds of intellectual episodes is an approach complementary to this research agenda. This dissertation undertakes that work by compiling and processing such an archive. Its corpus includes novels, both fiction and non-fiction, but also memoirs, design pamphlets and slide decks produced by defense contractors, a variety of written histories, both official and unofficial, literary and academic, of operations, campaigns, martial experiments and institutions.

There is an obvious tension here in that fictive narratives of historical events would appear to invent their narratives materials - and the subjective experiences that unfold in those materials - in ways which non-fiction does not. In other words, fiction fabricates subjective impressions, rather than objectivating them. This is not a hindrance to a meaningful conceptualization of strategy or operational art because of the way the Naveh school centralizes narrative production. As a quick gloss, the Naveh school centers the production of narratives as conceptual artefacts that enhance martial learning, both on the battlefield and in PME. These narrative artefacts can enhance reflexive practice of generalship because narrative production is a vital means of mapping both objective and subjective conditions of possibility nascent within the conflict system which an operation aims to transform (Naveh et al., 2009, pp. 76-77). As an

influential practitioner of military design and American acolyte of Naveh has observed (Zweibelson, 2018a), military design's conception of the purpose of narrative production is consistent with Hayden White's (1987) theory of *allegoresis* in historical narratives: allegoresis effects "displacement of the facts onto the ground of literary fictions or, what amounts to the same thing, the projection onto the facts of the plot structure of one or another of the genres of literary figuration" (p. 52). White means that the historicity of events described in any historical narrative creates new constellations of meaning by virtue of those events tropological figuration and emplotment: pulled together by narrative structures, they are grasped as symbolic unities unfolding in narrative time rather than as disconnected events that are grasped in their historical fidelity. Narrative's capacity for inscribing history, in this sense, is meaningful insofar as it incepts new conceptualizations of events and the contingencies, possibilities, and foreclosures that inhere within them. After White, narrative generates new meanings and, in doing so, "says something" that the historical record in its temporal disunity cannot. Fictive narratives of historical wars are a primary means of inventing those kinds of meanings and are therefore a substantive source for conceptualizing war's generative powers of transformation and undoing. Put in simpler terms, the study of narrative tropes and figures structuring the literary composition of histories of warfare, both fictive and historical, suggests both a means of testing the boundary between real and imaginary events these narratives claim to represent and of comprehending patterns of real-world significance implicated within their composition.

Insofar as operations are conceived by the Naveh school as a reflexive process and feedback mechanism of epistemological inquiry into war's domains, their ontological foundations and their conditions of possibility, operations constitute the primary subject of this analysis. However, this dissertation conceives of operations in a dual sense. The normative

English sense, which is perfectly useful for this project, implies military operations as mobilizations of force in support of strategic projects: they are an instrumental expression of war (often involving fighting directly, but not always) in pursuit of transformation of social and political space. These kinds of operations can be narrativized in terms of their mutative meaning-making facility, in line with the logic of poetic praxeology. No less relevant to this dissertation's explorations of the Naveh school's concept of operational art is the sense in which the "operations" of avant-garde works of art are conceived, after Marcel Duchamp's provocative experiments with the form and presentation of artistic works, as perceptual effects of denaturing practices which reconstitute the field in which the phenomenon of war is apprehended as a space of contingent possibility (Bishop & Phillips, 2010). Because avant-garde operations of this kind restructure the sense in which conflict and its systemic dimensions are apprehended as domains of action, they foreground the insistence of change, contingency and potential in ways that unsettle the terms in which the object of war is apprehended by military power, and in which the subject of military action is conceivable as a means of intervening in that order of objectivity. This latter sense of operations is arguably just as significant to Naveh's poetic praxeology as the prior. This avant-garde conception of operations is arguably central aspect of the Naveh school's practice, and one which military scholars and educators have trouble reconciling with the normative martial concept of operations. A list of the definitive qualities of this avant-garde conception of operations might include concepts and practices that *denature "given" institutional forms and models*, approaches that center *change, chance, contingent events and materials in the creative process*, practices that *unsettle categories like form/content and theory/practice*, and concepts that *privilege the principle of creative destruction*. Operations that evidence these qualities are granted a particular precedence in this dissertation.

The key idea, following the Naveh school's conception, is that operations are active inquiries into martial space and the systems which compose it, and that their expression enacts an unstable dialectic between the logic and form of martial activity. Like Duchamp's avant-garde operations, they aim to explore that space's emergent properties through deliberated movements that enable a commander to observe and rationalize the changing space as the (literal) operation unfolds in time, conditioning the system's intuition, agility and responsive in the process of that space's becoming (Graicer, 2015, p. 42). Operations in this subtler and more flexible sense would include real world abstractions like IDF paratroopers now-infamous directive to "walk through walls" during the Balata engagement of Operation *Defensive Shield* in 2002, or TE Lawrence's (1920) speculation that the Arab irregulars take the operational form of "vapour" during the revolt in the Hejaz desert in WW1. But it would also include literary abstractions like Richard Elster's "War as Haiku" in Don DeLillo's *Point Omega* (2010). By unearthing reflexive episodes and the dual sense of operations those episodes entail, this dissertation aims to enumerate the reflexive potential embodied in these kinds of operational artefacts and avant-garde operations these practices entail.

Sequence and arguments

This dissertation is organized around two approaches and is intended to be read two ways. The first of these approaches is more directly grounded in the methods and concerns of literary scholarship, and speaks to post 9/11 scholarship around the complicity between avant-garde techniques and the creative-destructive character of organized violence. This approach is articulated in the first chapter, which argues for an approach to literary scholarship that can endure the transformative power/knowledge relation of what Barkawi has termed "war/truth". That chapter develops around a critical analysis of Don DeLillo's post 9/11 fiction (particularly

the novella *Point Omega*), and the scholarship of the late Marie-Christine Leps (2015), from whose grad seminar on literary theory (alongside Susan Warwick's seminar on war novels after 9/11) the germ of this dissertation developed. It works to complicate Leps' and Peter Boxall's (2013) arguments about DeLillo's literary framing of the ethical poetics of contemporary avant-gardes by foregrounding war's generative capacity for transforming social orders, in which I argue both academic disciplinarity and creative-destructive aesthetic practices (like Naveh's) are already incorporated.¹ By foregrounding the ongoing, multiform incorporation of disciplines interested in speculative and creative production, this chapter attempts to unsettle the limitations of English as a discipline that normatively disavows knowledge of war as it concerns the instrumentality of either fighting or preparing for war. As a counter to literature's apparent inability to fully exteriorize war or stand apart from it, the DeLillo chapter argues for the need for new approaches to literary scholarship on war that aim to surpass some of the limitations identified by the chapter's critique of the ethical poetics of the avant-garde which came the prominence in scholarship on avant-garde poetics after the cold war, and particularly after 9/11. By centering war as a disciplinary concern for literary studies in its own right, this chapter argues for critical methods that can sustain inquiry into war's capacity for incorporating academic disciplinarity, the better to understand the implications of this incorporation as they concern capacities for realizing war and strategy, rather than literary production or scholarship.

The remainder of the dissertation reconstructs the pivotal reflexive episode of the Naveh school's literary practices in the OTRI and post-OTRI years (roughly 1995-2009). It is divided

¹ Although this dissertation does not explore these histories in detail, there are numerous historical examples of this kind of military-academic incorporation in the 20th century. The symbiosis between the US's Office of Strategic Services and Yale in the inception of American studies suggests one prime example (2004a, 2004b). The inception of futurology as a field of interdisciplinary study in the 1960s, and futurology's contributions to the development of American nuclear strategy through the work of figures like Herman Kahn, suggests another.

into several shorter component essays that explore particular historical settings, strategic problems, and operational practices consonant with that episode. This reconstruction develops critical accounts of the incorporative dynamics between war and literary practice by studying the literary abstractions animating real-world military operations identified as significant by scholars and practitioners connected to the Naveh school. These essays explore interdisciplinary questions posed in the first chapter by developing revisionist narratives of the emergence of profound critical reflexes, informed by literary practice, in the design of strategy and command of military operations. These reconstructions speak more to questions of the practical conduct of war as the conceptualization of strategy and its realization in operations than to the ethical concerns of literary scholarship on violence (although they occasionally overlap). These essays do not develop a singular line of critique or interpretation so much as they investigate diachronic historical spaces in which instrumental conceptions of military power and knowledge engage reflexively with exogenous and exotic knowledges, disciplines and aesthetic practices that are often alien to PME and traditional strategic literature. I have chosen the OTRI episode for the simple reason that it is aesthetically compelling and involves rich exchanges between “far out” philosophy and institutional warfighting theory and practice. By tracing the interface between war, theory and avant-garde practices, these essays generate a revisionist history of military thought and philosophy as they concern the invention of novel aesthetic capacities for perception, cognition and action in the pursuit of martial efficacy.

These essays are intended as a resource to aid researchers in war, strategic, and literary studies in comprehending the more abstruse and esoteric aspects of the Naveh school’s engagement with literary and philosophical texts. These essays detail resonances between artefacts produced by Naveh and a handful of students of OTRI, particular academic and literary

sources singled out by Naveh's few scholarly publications, and the history of particular military operations. It serves as a critical annotation that retraces the Naveh school's engagement with advanced texts, prescribed in the historical syllabi of the Advanced Operational Command and Staff Course, and detailed in the footnotes of the handful of scholarly works Naveh produced during his post-IDF engagement with US military academies SAMS and JSOU. By way of reference to those texts, it reconstructs several intellectual exchanges which informed Naveh and OTRI's practices in the context of the Global War on Terror (GWOT) in the early 21st century. This component of the dissertation works through the implications of martial concepts which developed from Naveh's practice of deep readings of philosophical texts drawn from the disciplines of literary and continental theory, cybernetics, architecture, complexity theory and organization theory. Many of these ideas informed real-world military operations in Israel's security environment and the legacy of Naveh school continues to resonate in several Western armies. However, there is sparingly little scholarly writing on the "how" and "why" of this engagement, in part because of operational security, in part because the orienting philosophy of Naveh's practice is to prevent provisional approaches to emergent strategy from ossifying into fixed forms of doctrine. Because Naveh's strategic practice, SOD, concerns the operational level of war, which is by nature provisional, itinerant and defuse, it is innately difficult for non-military scholars (like myself) to observe, document and study. Classifications and norms of operational security complicate this kind of inquiry even further. The narrative structure of this section, which draws on the history of military operations both outside of Israel and within, and literary accounts of the same, is organized to overcome some of these limitations.

The Naveh school study is divided into three sections. The first of these is a single essay contextualizing the operational level of war in light of a brief history of contemporary warfare in

order to qualify the two enduring concepts that emerged from the Naveh school's research on operational theory and practice, which are most clearly articulated in Naveh's *Operational Art and the IDF* (2007): operational art (a term that, in the Naveh school's construction, diverges significantly from the standard Anglo-American understanding of the term) and Systemic Operational Design or SOD.

From there, section two develops a series of narrative essays that explore literary references which informed the Naveh school's practice of operational art during the second Intifada between 2000 and 2005, particularly in the context of Operation *Defensive Shield*. The purpose of these essays is to foreground ways in which poetic practices evidenced in the writings of Naveh and TE Lawrence enabled these martial practitioners to reconceive their own terms and concepts of strategy. Those practices enabled a reconceptualization of the aims, means and ends of military operations, and arguably attempted to instate strategic conditions which would allow for a broader emancipation of not only martial means in pursuit of the aims of national policy, but (especially in Lawrence's case) of the political agency of the subjects they aimed to empower. While both authors arguably failed in the latter respect, these episodes nevertheless highlight significant consequences of and limitations to the application of radical aesthetic practices conceived to emancipate military means or subjects.

Building a critical annotation of "Between the Striated and the Smooth" (Naveh, 2005), a short-form pseudo-fictive narrative account produced by Naveh that details the operational design phase informing the planning of counterterrorism operations in the Palestinian city of Nablus in the spring of 2002, these essays develop a thick description of the theoretical concepts and pragmatic terms informing the conduct of an infamous strategic raid on the Balata refugee camp. It enumerates critical terms and narrative tropes drawn from Naveh's textual references

(particularly TE Lawrence’s “Evolution of a Revolt” (1920) – a clear textual precedent for Naveh’s document – and the theoretical writings of Swiss postmodern architect Bernard Tschumi (1994a, 1994b), who attempted to mobilize transgressive spatial practices in the design of urban architecture) that Naveh attempted to leverage against the reigning professional orthodoxy of his own strategic culture. It ends by contextualizing this narrative, the strategic aims of the operation itself, and the innovations of Naveh’s practice in light of critical commentaries that have emerged on OTRI’s historical practice in the two decades since the episode.

The final section of this study of the Naveh school’s writings aims to clarify the more abstract “cosmological” underpinnings of SOD articulated in Naveh’s *Prolegomena* (2009), a dense, long-form philosophical text intended as primer on SOD produced for Booz Allen Hamilton in collaboration with SAMS instructors Timothy Challans and Jim Schneider. These essays trace the Naveh school’s bricolage approach, after ground-breaking organizational theorist Karl E Weick (1993), to sense-making, theory-making and operational inquiry animating SOD’s pragmatic philosophy of generalship, connecting it with the Naveh school’s oft-cited appropriation of the hypothesis of the war machine in Deleuze and Guattari’s *A Thousand Plateaus* (1997). It contextualizes the Naveh school’s resistance to operational planning by doctrinal template in light of military planning formats like the US Army’s Military Decision Making Protocol, which arguably enforces a linear rationalization of military strategy that obscures the transitivity of formative events in the operational environment. Contextualizing emerging military trends that foreground the formative influence of narratives within the battlespace, it unpacks SOD’s practice of the “storytelling function,” a theory of narrativity consistent with poetic praxeology that recognizes emergent processes as foundational for the development of coherent strategies to inform the conduct of operations. Contextualizing the

storytelling function as a kind of antithesis to what Antoine Bousquet (2009) has termed the “technoscientific rationalities” of the modern military administration, it develops an exegesis of the Naveh school’s concept of narrative agency as a vehicle for intervening in the interactions of complex military and operational systems. It closes by connecting the Naveh school’s emergent philosophy of operational theory and action to Roberto Unger’s (2001) theory of negative capability, which is an approach to social organization and institutional reform that attempts to constructively unsettle the formative spaces within which social institutions like state militaries cultivate rituals and processes of self-articulation and social production, and reproduce their institutional form and identity.

Limitations

To allow war to provoke its own theoretical inquiries is not to suggest that this dissertation is closed to questions of the ethics of the conduct of war. But it is to flag to readers that this approach takes the ontology of defense organizations, particularly where that ontology is embodied in the professional roles and duties of those who serve them, as its point of reference for grounding epistemological inquiry into warfare as an exercise of the state’s monopoly on violence. Insofar as it presumes the “thrownness” of the combatant, the civilian strategist, and even the general officer as a given condition that imparts meaning to their experience of war, it does not attempt to disqualify those positionings as illegitimate insofar as they willingly partake of the organized violence that is the *sine qua non* of modern defense organizations. That condition of thrownness is a grounding ontology that both conditions the terms of possibility for acting within these organizations and grounds the possibility of the freedom to choose, to devise, to invent approaches which reconstitute the ground of their experience and the meaning of the actions they undertake.

After Paul Virilio's commentary with Sylvère Lotringer in *Pure War* (2008), it is sensible for a humanities reader to distrust an approach that essentially embraces the war machine (however that machine is dispersed into sites seemingly beyond the reach of war-as-fighting) as a meaning-producing complex that decides conditions of possibility or knowability in advance of politics (p. 38). Traditions of critical theory often presume that the institutional and social infrastructures that perpetuate war predefine their ends in ways that prevent other political possibilities from being recognized or realized. In other words, those traditions often hold to a kind of doxa that presumes that to embrace these organizations and the systems that constitute them as primary sources of meaning is to depoliticize (and thereby perpetuate) the ideologies of militarism or imperialism. But insofar as theorizing or investigating war in terms of the ends pursued is, after Simone Weil, "the most defective method possible" for understanding the consequences implied by its exercise, the study of warfare and its techniques calls for an approach that apprehends the relations and dispositions these devices instate in their users (Chamayou, 2013, p. 15; quoting Weil, 1988). By working from within this space, rather than standing outside or apart from it, this dissertation aims to make legible political choices and functions that are usually not recognized as such by a discipline that has constructed military knowledge and know-how as beyond the pale of credibility or legitimacy, often unwittingly doubling down on the depoliticization of war as a technical art as it does so.

Despite the widening of the civil-military divide in recent decades, this dissertation recognizes that military service remains a legitimate and even celebrated expression of citizenship in the service of the national interest. This dissertation often troubles that formulation and is occasionally incredulous of the consistency of its corporatist expressions, but nevertheless takes it as a given condition that grants this work of scholarship's source materials' a particular

kind of credibility, in addition to imposing highly specific structures of accountability on those source materials' producers. To put it more directly, there are good and bad expressions of soldiery and military leadership, and the moral qualification of the differences between them can mean the difference between victory, survival and defeat for the organizations in which they realize their expression. However inclined the humanities are to look beyond practical questions of the metrics and the efficacy of military capabilities in the exigency of mobilizing penetrating critique, these remain pivotal questions of meaning and purpose from the perspective of PME. Accordingly, this dissertation gives these kinds of practical questions a priority which is uncommon in the humanities.

Readers steeped in the humanities may also be frustrated that this dissertation mostly reserves definitive judgement about the Israeli-Palestinian conflict, maintaining an ambiguity about the political morality of Israel's occupation of the Palestinian territories, focusing instead on strategic implications of Israel's security policies and military operations as they concern the survivability and efficacy of the IDF in its dispensation of its duties as a guarantor of Israel's security. This is a deliberate move that suspends ideological questions about the resolution of the Israeli-Palestinian conflict (to which this dissertation does not attempt to suggest answers) so that the weirder aspects of Naveh school's martial philosophy of emergence can be fully fleshed out for scholars, humanities or otherwise, to study in their epistemological implications as they concern the organization and conduct of war. Accordingly, this dissertation primarily works to make sense of the Naveh school's output as it concerns the sense-making activities military professionals exercise in interpreting and deciding strategy. These activities are surely connected to questions of the political, ethical and moral agency of the generalship and are interwoven into the *agencement* of the military subjects these martial activities involve. But this dissertation

mostly centers these questions as they concern responsibilities and capacities directly tied to the conduct of the profession of arms. Moral questions are not exclusive of military professions, but they are qualified in a particular way by those profession's structures of accountability, which foreground questions of service, survival and efficacy in ways that are often difficult to square with liberal and enlightenment ideals, and, indeed, human rights. Nevertheless, this dissertation is primarily concerned with questions of the first kind.

This is also to flag that this (essentially defence and security-positive) dissertation does not affect the work of decolonizing war, which, in war's statist expression, arguably reinscribes the underlying logic of imperialism which encircled and enclosed most of the globe in the 19th century, and reordered space according to a geopolitics of martial, economic, and cultural colonization. One doesn't need to squint to make out the terms of imperial conquest (if not the techniques) in the failed conquests of the Global War on Terror, which (at the level of rhetoric, at least) often sought to vanquish an absolute enemy lacking in respect for the rational terms of affiliation that orient the legitimate violence of Westphalian states (Mbembe, 2019, pp. 77-78). Revising from the vantage of early 2024, this tropology continues to trouble security discourses around the Israeli-Palestinian question and its broader geopolitical significance. But there are also disciplinary concerns that follow from the construction of war studies in the Western mold. As Barkawi put it in his article "Decolonising War" (2016), "the concept of war requires rescuing from Eurocentric limitation," proposing to study "Small War" as a way of unsettling the categories, periodizations, etc., that limit war studies to categories derived from Western experiences (p. 200). Studying the transformative capacities of war on literature and vice versa from the vantage of Barkawi's decolonization thesis would produce a radically different, cosmopolitan perspective on the transformative capacities of war that would surely exceed this

dissertation's comparatively narrow, statist construction. Nevertheless, such an approach is outside the scope of what this dissertation sets out to accomplish, which is to comprehend how avant-garde literary capacities orient the sense-making capabilities of Western armies.

At the level of bias, this dissertation was written by an Anglophone with no training or knowledge of Hebrew, which limits this work of scholarship to engagement with the Naveh school's English language output.² By centering written texts that were produced for English-speaking audiences, this dissertation redoubles the external perspective on SOD and OTRI that Israeli practitioners caution often leads a misapprehension of key ideas (the difficulty of translating the Hebrew word for "operations" being a choice example of this kind of misapprehension), and the projection of outside values and experiences over the Israeli experience of war. This dissertation was also written by a dual Irish Canadian citizen with no familial ties to Israel or Judaism, who would otherwise describe themselves as a proponent of a peace process leading to statehood for Palestinians. While this dissertation essentially affirms Israel's right to self-defence (which might include strategic options like offensive pre-emption), my own values and experiences colour my interpretation of these materials in ways that would likely chafe against the views held by the Naveh school's stalwarts (many of whom, it should be noted, have vacillated on the two-state/one-state problematic over the last three decades) (Hacohen, 2024; JSOU, 2020). While I have attempted to be as faithful as possible to their own language and designs, my commentaries on these literatures should not be taken as representative of their positions on these questions. The definitive practitioners' history of SOD and OTRI has

² It's also worth noting that this dissertation has not engaged substantively with Israeli literature, either in Hebrew or in translation. In the process this means that this dissertation does not address the tradition of what literary scholar Uri S Cohen (2019) has termed the "Security Style" in Israeli fiction in its formative decades.

yet to be written, and I don't profess to have done more than interpreted aspects of its traditions from the vantage of an outsider.

It's also worth noting that this dissertation was also written during a period of significant geopolitical upheaval. The Russian invasion of Ukraine in February of 2022 and the October 7th attacks on Israel and ensuing war in Gaza and Southern Lebanon transpired in the late stages of this dissertation's production. As such, these events are mostly left outside the scope of this work of scholarship, the central topic of which has been rendered largely historical by the course of global events over the last three years. These events are occasionally referenced in the body of the dissertation, but they are not given any expansive presentation or analysis, as they remain intensely live and emergent topics at the time of writing. Nevertheless, the conclusion of this dissertation addresses some of these events' implications for further study.

Martial cultures and value-based criticism

That organized approaches to war may be not only poorly conceived and implemented, but strategically counterproductive and even dishonestly conducted is an understated aspect of this work of scholarship. The Vietnam War was surely a terrible war which was often made worse by the American intervention, no matter the leadership's questionable assurances of the moral determination of the green machine's *esprit de corps*. It is challenging to view the failed nation-building effort in Afghanistan as any more worth the cost in lives and treasure, three years after the collapse of the ANA and the chaos of the evacuation mission. Even after the violent disruption of the post-Oslo status quo on Oct 7th and the rapid escalation that followed, the Israeli-Palestinian conflict appears just as intractable, caught up as it is in decades-long ethnic, regional and "great power" disputes, despite enduring pressure to observe laws of armed conflict and liberal norms of proportionality. All three conflicts highlight the inadequacy of the

assurances of political norms, good intentions and moral discipline to untangling the complex of social tensions that war binds and tightens.

Surely the values a defense organization upholds are a foundational aspect of its fighting ethos and ideally inform its conduct in the field, but likewise in the barracks and campuses, in the academies and the staff colleges, and in its military-civil relations. Discomforting question of what those values either mean or entail should be broached whenever a defense organization fails to uphold them. But likewise, whenever that organization's role in a violent world in tumult and flux comes into question in a way that seems to challenge those values or throw them into question (Barkawi, 2018). The ambiguity of that question of values is particularly heightened in the West, where the principles of "just war" no longer seem to inhere in the condition of post-heroic warfare or the prosecution of a largely secularized imperative of national security (the question of the secularism of Israel's national security policy being an arguable case). Doubly so in the enduring post-Vietnam condition of the all-volunteer force, with few Western armies following a conscription model, a significant consequence of which is that many citizens remain oblivious to mindsets and experiences embodied on the other side of the military-civil divide (Israel, again, being a notable exception). Force reconstitution efforts (particular in the post-covid labour environment) are likewise complicated by the changing demographics of Western societies, which have shifted cultural expectations around work, gender, diversity, inclusion and representation (this is a particularly pronounced organizational challenge in Canada, following the ongoing revelation of decades of sexual misconduct in the CAF and the proposed remedies of the Arbour Report). These are not historical shifts that it makes any particular sense to be wistful over. They are emergent conditions with profound implications for collective security that

demand reckoning with pivotal questions of meaning, purpose, identity, and even equity, that modern militaries have been slow to confront.

This dissertation can be understood as an attempt to impart critical tools that can aid defense practitioners to come to grips with those kinds of questions of values, but also to aid researchers in the humanities in coming to grips with the limitations of their own practices as they concern their own professed values concerning war, fighting, and the profession of arms. After the end of the Global War on Terror and the onset of what looks from the winter of 2024 to be a new era of intensified great power conflict and competition, the humanist values that the academy ostensibly advances, and that the profession of arms in the West ostensibly serves are once again troubled by the eternal return of the violence that the world has neither contained nor surpassed. War continues to impose terms that, as a test of the absolute, cannot be easily refused, wherever one stands. For the reader looking for critical tools to understand war's transformative capacities, or seeking critical ground to take a stand against it, I say: good hunting.

Chapter 1: Why study literature on war's terms?

How literature studies war's terms

Bill Gray, the reclusive novelist swept up in the terrorism intrigue driving Don DeLillo's *Mao II* (1991), infamously ponders a "curious knot that binds novelists and terrorists" (p. 44). Indulging a photographer assigned to capture his aging likeness for a photo-documentary project, Gray laments "years ago I used to think it was possible for a novelist to alter the inner life of the culture. Now bomb-makers and gunmen have taken that territory. They make raids on human consciousness. What writers used to do before we were all incorporated" (p. 44). In an effort to draw the writer back into relevance to the literary world, Gray's editor recruits him into a shadowy plot to free a minor Swiss poet taken hostage in Lebanon. Transiting from the studied rituals of his reclusion, the dangers of the intrigue around Gray escalate to mutually implicate the habits and eccentricities of the writer in those of terrorist insurgent. Bombs detonate at author events. Connected operatives and middlemen harry the fringes of gallery events, stalking cultural networks of aesthetes and literati for contacts and intelligence. Gray's discourse on the correlation between the decline of the revolutionary capacities of the artist and the rise of the age of terrorism evolves with the escalating threat:

for some time now I've had the feeling that novelists and terrorists are playing a zero-sum game...What terrorists gain, novelists lose. The degree to which they influence mass consciousness is the extent of our decline as shapers of sensibility and thought. The danger they represent equals our own failure to be dangerous...[Samuel] Beckett is the last writer to shape the way we think and see. After him, the major work involves midair explosions and crumbled buildings. (p. 157)

Gray hypothesizes a reciprocal dynamic between the ebb of the modernist shock of the new in the world of art and literature and the increasing efficacy of spectacular acts of violence to influence political affairs and, however perversely, impart new ways of seeing the world: as the

poetics of the avant-gardes are neutralized by their “incorporation” by commercial culture, only the aesthetics of terror seem to Gray to capable of disturbing habits of perception and remaking the world into something radically other than it already is.

DeLillo’s ethical poetics

However glib Gray’s pronouncements, the text of which predates 9/11 by a decade, read after two decades of an often-quixotic global war waged against multiplying networks of terrorist insurgency and affiliation, they arguably founded a micro-industry of literary criticism devoted to exploring the ethical implications of a blossoming relationship between political art and violence. DeLillo’s fiction became a touchstone of literary criticism that considers artistic production in light of the geopolitical shifts that transpired in the wake of 9/11, and the potential for poetic experimentation to condition ethical responses to the frightening novelty of unadulterated expressions of terror and violence. Peter Boxall (2013), for example, argues that Gray’s commentary identifies a fundamental cultural shift in the interrelation between countercultures and radical politics at the turn of millennium, and that DeLillo’s work inaugurates “a new and ethically challenging way of mapping the tensions between political radicalism, violent insurrection, literary innovation and the power and force of the global market” (p. 123). For Boxall, the tension between art and violence implied by Gray’s “curious knot” augurs a re-entrenchment of the political responsibility of the novel, after the orgy of play and levity characteristic of certain expressions of literary postmodernism, as a form for thinking a renewed ethical commitment to work through the implications of organized violence, terrorist or otherwise, and its binaries of enmity and alliance (p. 128). But insofar as this approach to fiction enacts a conversational exchange between the creative-destructive forces “knotted together” in Gray’s metaphor, and in the world-destroying spectacle of the terrorist event itself,

Boxall argues that it nevertheless remains caught up in the paradox of the avant-garde: the creative energies it knots together attempt to give or impose form on an unbounded excess by realizing a de-structuring impulse to destroy, deform, ruin or cast aside the received conventions of artistic production and representation in order to make them anew (p. 153). DeLillo's poetics, then, remain bound to a paradoxical logic of creative destruction that is likewise evinced in the act of terrorist violence, even as they attempt to make its destructivity intelligible in an ethical register.

Scholars writing on post 9/11 fiction have noted that the critical narrative that describes waning of the efficacy of "radical" poetics (which may or may not be credited as "a thing," depending on the perspective of the critic) coincides with a comparable incorporation by the creative modalities of defense and security organizations as they, too, process the implications of a cultural shift that displaces avant-garde sensibilities into the techniques of organized violence. Alongside *Mao II*, Marie-Christine Leps (2015) argues that DeLillo's post-9/11 work, including *Falling Man*, *The Body Artist*, *Cosmopolis* and *Point Omega*, develops an experimental poetics that impart agency to the reader to "not only...encounter and feel the totalizing forces of terror but also to produce and experience modes of resistance through the realization of virtual narrative associations among economic, political, aesthetic and ethical vectors" (p. 403). To this end, Leps expands Boxall's argument to illustrate how DeLillo's ethical poetics function as a literary strategy for displacing the power-knowledge relations that normalize practices of state-sanctioned violence as a set of strategies for confronting the late rise of global terrorism. For Leps, DeLillo's fictions work as textual apparatuses for charting the multidimensionality of "terror-time," her evocative term for the perceptual effect that DeLillo's textual aesthetics amplify in the reader and the significant aesthetic innovation of these works' poetics. Insofar as

they reorder the correlation between fields of knowledge and modes of knowing, models of normativity, and structures of subjectivity, Leps argues that these novels function as textual devices for anchoring and resituating the experience of a reading-interpreting subject in relation to an ongoing militarization of social, political and cultural life which tends to collapse distinctions between war and peace, friendly and adversary, combatant and non-combatant (pp. 402-403).

By charting the flows of these creative-destructive energies as they traverse the global *demos*, DeLillo's post 9/11 writing works to cultivate in the reader a pronounced sense of the disruption and disorientation of this perceptual warfare as it works over the inner life of political subjects at the level of cognition and sensate experience. Leps' mapping of DeLillo's terror-time indexes a variety of novel perceptual effects that implicate martial and extra-martial conflicts at the level subjectivity, where the experience of alternating and conflicted temporalities, speeds, and intensities of affect endemic to the networks of global capitalism actualizes a breakdown and reordering of the distinct spatiality of interiority and exteriority. The multiplication of war's increasingly virtual dimensions collapses distinct apprehension of here and there, then and now, enemy and friendly, presence and absence. These assemblages – the multiplicity of complementary effects, capacities, and agencies which DeLillo's aesthetics of terror-time draw out – are likewise worked over by a complex of interrelated strategies that condition the apprehensibility of an expanding gray zone of conflict and competition that reorganizes global relations on both a micro and macro scale. This process works over and destabilizes the ground of geopolitics as much as the conditions of artistic production and reception. As such, the invention and incorporation of transformative perceptual effects concerns the savvy defense practitioner, particularly where they are attuned to emergent theories of warfare like Network-

Centric Warfare (NCW) and multidomain operations, as they likewise concern the terrorist or the avant-garde writer.

NCW, C2 and “Power to the Edge”

In Leps’ read, this strategic-affective complex, which is a problem for aesthetics as much as it is an extension of the extra-political modalities of war, constitutes a domain of operability as much for the defense strategist and military operator as for the terrorist insurgent (and, I might add, for the incorporated novelist, their readers and critics). For Leps, these techno-social assemblages, which DeLillo’s fictions work to make apprehensible in an alternative register of ethical sense and meaning, arguably serve not only the aesthetics of terrorism but also its institutional antithesis in the operative logic of counterterrorism and counterinsurgency. The pliancy of the same perceptual vectors appropriated by the aesthetics of terrorism is implicitly assumed by the administrative rationalities undergirding the concept of NCW, for example, the adoption of which as a governing paradigm for the conduct of joint warfare roughly coincided with the onset of the GWOT and the trend towards countering asymmetrical threats from non-state actors as an abiding security focus of Western defense organizations (Bousquet, 2009, pp. 215-221). Complementary to the logic of terror-time, Leps argues that technicians, strategists, and operators engaged in the NCW paradigm incorporate sophisticated aesthetic techniques to square NCW’s representational logic - its information hierarchies and doctrinal precepts - with the world-making implications of their expression in military operations, be those active combat operations, or subtler non-kinetic expressions of military power like deterrence, cyber or info-ops.

Drawing out the multiplicity of terror-time in DeLillo’s post 9/11 novels through a Greimasian semiotic, Leps argues that DeLillo’s novels enact a counter-discourse to the military

state's emerging avant-garde tendencies, the development of which primes defense institutions for continuous revolution in their self-constitution. Leps speculates that, not unlike Gray's musings on the radical poetics of terror and the incorporation of the raiding tactics of the avant-gardes, the NCW paradigm conceives of the problematics of security, counterterrorism and "overseas contingency operations" in terms of value propositions and techniques for managing, if not cultivating, behavior and interiority (p. 403). Leps quotes from *Power to the Edge* (2003), a volume produced by David Alberts and Richard Hayes for the DoD's Command and Control Research Program shortly after 9/11, to frame this cultural shift: "Power to the edge involves a fundamental change in culture...Ultimately, this involves a redefinition of self and the relationship between self and other, and self and enterprise" (p. 403, quoting Alberts & Hayes.). Staking out the virtual itself as the frontier of NCW, the visionary language of "power to the edge" (hereafter abbreviated as P2, as a parallel of C2, a standard abbreviation of "command and control") subsumes the folds of sensate experience and cognition within the supercharged information apparatus made explicit in the DoD's guiding principle of full spectrum superiority. The conceptual scaffolding underlying large scale joint operations, which assumes not only mastery of geospatial domains of war (land, air, city, sea), but also the information sphere, the biosphere, and the electromagnetic spectrum, here expands its prerogative of domination to intervene in the mental worlds of subjects who are caught up in the pull of armed conflict on a variety of different levels, be they active combatants, elements of political leadership or neutral civilians on fringes of war's liminal combat environs (Joint Chiefs of Staff, 2017a, pp. VIII-15). Pushing full spectrum superiority to quite literally the furthest conceivable ends, P2, in Leps' read, assumes a martial prerogative to dominate virtuality, meaning, the very conditions of

possibility, thinkability and knowability, if not the actuality, of a conflict and its contested domains.

To be sure, this expansion of the concept of full spectrum superiority is, for Leps, a power-knowledge relation to be resisted, which DeLillo's poetics draw out as a domain of contemporary warfare to be contested by the literary arts. However, the principle of full spectrum superiority Leps invokes nevertheless persists in tension with P2 in ways that complicate this argument significantly. We can provisionally remap this tension as one pulled between the modern military tendency – following Carl von Clausewitz's seminal commentary on the art of strategy and operations in *On War* – towards extinguishing uncertainty through superiority of information and campaign planning and a new postmodern epistemics of warfare, strategy and military education. The latter, in which Westphalian-style defense organizations are increasingly interested, aims to expand the pragmatic sense of disruptive power-knowledge relations in defense organizations through play and paralogy (Paparone, 2017). After Jean-Francois Lyotard's *Postmodern Condition* (1984), legitimation by paralogy (a mode of reasoning through language play that contradicts logical rules and formulas) does not seek to universalize consensus or the terms of discourse in order to enhance performance and efficiency. Instead paralogy, which undermines the legitimacy of an overarching discourse or consensus (and the terms of responsibility it imposes) on pragmatic grounds, can be valuable insofar as it can capitalize on uncertainty and the creative possibilities of unsettling the prescribed order of things, the categorical conventions of seeing, thinking, knowing and doing endemic to military and strategic culture. In a significant sense, this tension defines a power/knowledge relation between war-making and truth-making which qualifies defense organizations' emerging discourses of virtuality.

The general outlines of this tension are sketched out here. Chris Hables Gray's (1997) (no relation) foundational sociological study of postmodern war argues that modern warfare is essentially an extension of three definitive trends that emerged in the early modern period. They are namely: the application of reason to war in the place of tradition, the evolution of administrative bureaucracies for managing war in times of war and relative peace, and systematic application of science and technology as a grounding epistemology for military know-how (p. 111). These trends arguably founded a "conventional" discourse of modern warfare that tends to understand the science of strategy in terms of a stable, self-consistent and unchanging set of guiding principles, and approaches inquiry into warfare in terms of discovery or invention of universal principles for its conduct (Dickson, 2004). Even where they recognize the limits of their own knowledge and efficacy (through metaphors like fog of war and friction, for example), the discourses of modern war nevertheless apprehend the world through generic terms and concepts that produce manageable impressions of a singularly coherent reality underlying events which can be observed, described, written up and communicated directly.

Modern warfare's conventional discourse assumes that the central role and task of the strategist is a work of truth-making, and therefore a kind of science. Human agents tasked with realizing strategy are accordingly equipped with institutional protocols and artefacts conceived to dispel reality's messy incoherence and incongruity. These perceptual apparatuses (which might include intelligence tools, planning and decision-making frameworks, doctrine for every conceivable application) enable strategists to draw out and impose a unified organizational vision over the seeming incoherence of events. That vision is capable of identifying discrete, problematic elements in order to neutralize their threat and bring them into yoke with political demands emanating from political leadership, both military and civilian. Reality, from the

traditional strategic vantage of modern warfare, is the relation between a set of objects “out there” in the world to be passively perceived by the subject of military knowledge who then intervenes, through a maximizing efficiency of organized violence, information, and logistics, to reorder them into harmony with a received political-strategic ideal. The undergirding logic of this modern view of warfare is encapsulated by the concept of command and control, or C2, and its various derivative jargons (C3 – Command, Control, Communications; C4 – plus computers; C4ISR – plus intelligence, surveillance, reconnaissance; etc.). C2 aims to harmonize authority over military decision-making with the defense organization’s understanding of itself, its essential tasks, the involved systems for transmission of information and orders, the reality it perceives and acts upon through phased operations to instate its own idealized conditions in a prescribed end-state. This scientific conception of military organization and hierarchy is clearly in tension with many of the heroic notions underlying martial concepts of leadership, which emphasize intuition, grit, initiative. But that tension does not prevent these principles from reinforcing each other in the pretensions of the martial imaginary.

The avant-garde counter-thesis to the traditional discourse of modern warfare, typified by the new postmodern epistemics of war, questions the coherence of that reality – itself a multiple, mutable and contested substance invariably subject to interpretation – and works to devise divergent terms and concepts through which reality may be apprehended, modelled, constructed and deconstructed. Rather than defining a continuum of generic meaning upon which the military apparatus converges in the manner of C2, it works to redefine the pragmatic sense of what a given conflict means systemically, strategically, and operationally to the organization charged with intervening in it, and to which that organization is inextricably tied at the systemic and observational level. Postmodern warfare, in the mode of P2, tends to engage in reflexive learning

that questions the relevance of inherited concepts for managing and applying force in a given conflict system. Instead, it devises provisional inquiries into the multiple systemic constitution of a given conflict to ensure the tasking of warfighting is meaningfully attuned to the reality it aims to transform. This latter mode of military knowledge production privileges creative discourse and sense-making activities that unsettle the conceptual grounding of traditional military knowledge, and often takes the endogenous relations of the defense organization itself as the primary locus of meaningful transformation, rather than the physical reality of the battlespace (Graicer, 2017b). To paraphrase the pedagogical mantra of Ofra Graicer, a key practitioner from the Naveh school of the new virtual arts of war, “in order to disrupt the world, one must first disrupt themselves” (p. 32). To this end, the postmodern epistemics of war, in the mode of P2, tend to be agnostic of authority over military knowledge production (Martin, 2015). Of course, this postmodern approach is nevertheless appended to the modern, western way of war, and its counter-discourse is only meaningful in relation to it. As Christopher Gray puts it in his landmark (if now somewhat dated) study, “the old and conservative discourse of war has become wildly experimental and it has institutionalized innovation to an amazing degree” (p. 170). But insofar as the epistemics of military postmodernism (or, in the academic parlance of the latter school of thought, military epistemology) conceives of the premises on which the technoscientific paradigms of NCW and full spectrum superiority are founded as a power-knowledge relation to be contested, if not resisted, they invite closer attention to the avant-garde techniques and concepts they bring to bear on military power/knowledge relations. To this end, DeLillo provides us with a rich example that begs a careful and precise explication.

How war studies literature’s terms

The DeLillo fiction most interested in the virtual poetics of strategy is *Point Omega* (2010). The novella tracks the inception of an aborted film project between a freelance filmmaker, Jim Finley, and Richard Elster, a fictional humanities scholar and “defense intellectual” who was consulted by the Pentagon as a conceptual architect, of sorts, for the 2003 invasion of Iraq. Spooling out abstruse tangents of vitalist theory on the convergent singularity of time, space, matter, and (of course) violence from Elster’s vacation home in a remote expanse of the Sonoran Desert, Finley and Elster plot the loose threads of a lengthy, unscripted monologue which Elster will eventually unravel on camera, uncut, in front of a blank wall in a studio loft in Brooklyn. As a scholar whose post 9/11 writings aim to “unsettle critics” of the war on terror as much as its administrators, Elster’s exchange with Finley functions as a liminal text for screening the kinds of poetic devices, effects and conceits germinating within the art of war’s turn towards operationalizing avant-garde sensibilities (p. 34). Presenting a kind of mirrored inversion of Bill Gray’s discourse on incorporation, Elster theorizes his involvement in the war in terms that trouble the idea that poetics are capable of a counter-discourse to P2 that is itself beyond incorporation by the new conceptual arts of warfare.

Clearly envisioning something like P2 in an enhanced poetic register, Elster conceptualizes the operational challenges of the invasion and the strategic challenges of a major military power not in terms of material superiority of force, technology, intelligence, information or logistics, but in conceptual terms of emergent temporality, futurity and the virtual (i.e., virtual in the vitalist sense of an ideal containing the potential for actualization). Elster articulates this vision in dialogue with Finley by speculating on the tension between the dominant spatial logic of military planning as it is rationalized by civilian strategists or a general staff and the provisional orientation towards virtuality and the future which is his own poetic ideal of war:

War creates closed worlds and not only for those in combat but for the plotters, the strategists. Except their war is acronyms, projections, contingencies, methodologies.... They become paralyzed by the systems at their disposal. Their war is abstract. They think they're sending an army into a place on a map.... There were times when no map existed to match the reality we were trying to create. (p. 28)

For Elster, the contingency of the events of war are irreducible to the doctrinal principles of warfare as they are understood by military planners and strategists. Where the modern military state standardizes planning and communication in the mode of C2 by instituting doctrine to define concepts and formalize procedures, Elster speculates that its formal protocols regress into a totalizing systemic logic that inhibits the realization of strategic potential. Moreover, the military state's attempts to marshal the unfolding of the events of war by mapping them under a singular uniform order of meaning and signification paralyzes the ability of strategists to comprehend that potential or respond to it in a way that can capitalize on its emergent properties. Examples of this kind of professional literature abound in defence organizations, which prescribe fixed definition of key verbs and tasks, correct usages of visual nomenclature, representational guidance for mapping campaign events, etc. (see chapter on the US Army's Military Decision Making Protocol). Insofar as the analytic fixations of military planners obscure the transitive unfolding of wartime events – their innate tendency to unsettle not only normative expectations, but what is known about war's domains and the terms in which they are knowable – strategists' attempts to close the gap between observable reality and its representation through fastidious regimens of information, planning, and command and control is, for Elster, counterproductive of the open disposition towards futurity which efficacious strategists and operators must learn to cultivate in their being to meaningfully engage in strategy.

Elster dissents from the generic conception of reality implicit to traditional formats of military planning and, in so doing, he likewise dissents from many of the aesthetic assumptions

underlying the logic of full spectrum superiority, which seeks to control as many variables of conflict as conceivable, either through spatial maneuver and occupation, or through technological mediation. Contra the technoscientific conceits animating conventional strategic thought and modern military culture, Elster qualifies the countercultural sensibilities of the defense intellectual in terms that come close to that of a conceptual artist:

[Reality] is something we do with every eyeblink. Human perception is a saga of created reality. But we [at the Pentagon] were devising entities beyond the agreed-upon limits of recognition and interpretation... We tried to create new realities overnight, careful sets of words that resembled advertising slogans in memorability and repeatability. These were words that would yield pictures eventually and then become three-dimensional. (p. 29)

Restating strategy in terms of a creative aesthetic process, rather than optimising conditions for a mechanistically destructive one, Elster's commentary decenters the belief, second nature to modern military planning, in a mappable objective reality over which the strategist and the operator deliberate, survey and plot as extensively as conceivable in order to vanquish the risks and uncertainties that beset military decision-making as it is dispersed along the chain of command. By mapping an uncertain reality in exacting detail, conventional planning (doctrine for operational planning abounds, but the US Army's Military Decision Making Protocol, detailed extensively in this dissertation's second case study, is exemplary) models decision-making as an idealization of space and time that prescribes an inventory of appropriate templates for organization and action (Naveh et al., 2009, pp. 82-87). The output of this routinized planning effort is an operable framework for a phased military operation, the means of which assume not only domination of the battlespace through supremacy of destructive technique, but management of variables which threaten the stability of the idealized terms in which the battlespace is knowable and actionable. Supplanting this idealization of a cause-and-effect order of operations is Elster's generative concept of reality's incipient becoming, the fruition of which

is realized through a careful logic of composition, rather than a causal concept of action. The idea that reality emerges through the continuous, transitive *poiesis* of events, that reality is something we “do” in the duration between the blinking of our eyes, defines the new virtuality of war in terms that exceed the logic of a mechanistic universe orienting conventional military strategy.

“War as Haiku”: poetics for operational art

Elster conceives of the principles of warfare in terms comparable to the thesis Paul Virilio develops in *War and Cinema* (1989). Like Virilio, Elster is captivated by the hypothesis that “the history of battle is primarily the history of radically changing fields of perception” (p. 10). Viewed from this perspective, “war consists not so much in scoring territorial, economic or other material victories as in appropriating the ‘immateriality’ of perceptual fields” (p. 10). Leveraging the idea that warfare’s virtuality is realized through the appropriation, incorporation, and extension of changing fields of perception, Elster’s work as a defense intellectual seeks poetic language for realizing the potential of idealization and a poetic form for rendering that potential actionable: by devising a new perceptual apparatus to aid the conception and exercise of strategy, his work aims to impart the means for bringing an alternative strategic reality into being.

For Elster, the role of the defense intellectual is defined by their capacity to impart novel terms for taking in the significance of the events of war and conceiving modes of sense-making which can mediate and intervene in their unfolding. His role at the Pentagon was, in his words, “to give them words and meanings. Words they hadn’t used, new ways of thinking and seeing” (p. 29). Like many of the real-world defense intellectuals whose ideas are taken up in this dissertation, Elster’s work plies language’s capacity for what seminal design theorist Donald Schön (1963) terms metaphoric displacement (i.e., making one thing conceivable, and thus

actionable, in terms of another) (Bousquet, 2009, pp. 25-27). But Elster pushes the poetic properties of language much further than Schön's helpful but comparatively limited conception of metaphoric displacement implies. Elster ties the poetic function of metaphoric displacement to considerations of poetic form in order to mobilize the displacing effect of verbal metaphor and multiply its capacity for abstraction of war's creative-destructive potency. Elster's metaphor for the compositional logic of operational *poiesis* is the haiku:

I wanted a war in three lines. This was not a matter of force levels or logistics. What I wanted was a set of ideas linked to transient things. This is the soul of haiku. Bare everything to plain sight. See what's there. Things in war are transient. See what's there and then be prepared to watch it disappear (p. 29).

This dialogue elevates haiku as a structure for perceiving events of war in their transitivity and connects strategy's *phronesis* with the constellated power of words, their heightened multiplicity when arranged through formal poetic compositions. For Elster, haiku is as much a poetic form as it is a structuring process for distilling the contingency of events constitutive of particular moments to their essence, of making their historicity apprehensible in a register of thought that appreciates their unique and singular ephemerality and potential. In spite of the herculean energy defense organizations expend on perpetuating warfare as a highly structured spatiotemporal order of operations in the mode of C2, the phenomenon of war remains, for Elster, principally defined by this transitivity, which is drawn out by haiku's power to bring things into perceptual clarity, to bare them to sight, if only to see them blink (or be stricken) out of existence.

It would be tempting to frame the motif of "disappearance" here as a mere euphemism for the act of destruction by targeted force, whereby the reconnaissance of baring transient things to sight is a covering metaphor for the observational function of targeting that enables precision strikes and fires, or of some other predatory function of what Bousquet (2018) calls "the martial gaze". Elster's abstracted language retains a spooky resonance that surely invites this

interpretation: its remoteness from warfare's irreducible instrumentalization of violence is a palpable effect of the text and Elster seems to savour its unsettling coldness. But the abstraction of "disappearance" in the farther-out discourses of contemporary warfare nevertheless implies a strong connection between Elster's metaphor and a number of significant conceptual shifts underlying emerging theories and practices of strategy-making and related expressions of military-organizational sense-making. The plasticity of that language complicates attempts to pin down the meaning of Elster's commentary viz the technicity of organized violence and the virtual arts of war. Insofar as Elster's invocation of haiku abstracts strategy as a de-structuring composition of space and time (arguably another articulation of Boxall's paradox of the avant-garde), the language of disappearance implies physical destruction, yes, but also impermanence, ephemerality, imperceptibility, concealment, a lethal play of presence and absence. As such the language of disappearance presents, after Bousquet, as something like a dialectical counterforce of the martial gaze, which seeks to subvert, undercut or negate advances in war's technical arts and new sources of combat power. This conceptual parallax is arguably an intentional effect of the novel's ethical study of the poetic germination of the virtual arts of war. Elster's dialogue draws out their avant-garde tendency while nevertheless marking the violence that is innate to the craft of war, and which warfighting's disinterested technical discourses are typically remote from.

However, the implicit connection between the perceptual effect of Elster's poetics and war's irreducible relationship with organized violence nevertheless requires a precise explication that attempts to pin down how the perceptual effects of War as Haiku are conceived to enhance strategic thought and practice, which neither Elster's discourse nor Leps' analysis of it makes explicit. Like Bill Gray's glib commentary on the aesthetics of terrorism, Elster's statement

presents as a kind of incomplete datum that begs explication. The language is highly suggestive and poetically resonant, but both DeLillo and his critics' commentaries only toy with their suggestive implications. By foregrounding the tension and complementarity between avant-garde poetic and martial techniques, Elster's haiku metaphor invites a minor flight of abductive reasoning to draw out the latent premises that make the relevance of his poetic abstractions to the power/knowledge relations of contemporary military strategy more apparent.

War as Haiku is a poetic device conceived to attune strategy to war's increasingly virtual³ domains. The principal metaphoric displacement that the inference of haiku effects is to make the finite contingency of war itself, its fluctuations of transient intensity, conceivable through figures which implicate the perceiver in a divergent register of temporality to that of the operational timetable idealized by military planning in the mode of C2. Like haiku, strategy implies, for Elster, a composing of a particular time and space that is itself subject to a process of decomposition and undoing: a moment is fleetingly present, and disappears. Insofar as that device aims to foreground the contingency of elements constitutive of the reality of a conflict environment, War as Haiku can be understood as a perceptual device that aids the conception and practice of strategy in terms comparable to the concept termed "operational art" by the Naveh school of warfighting theory (Graicer, 2015, p. 14).

Drawing from Naveh and Ofra Graicer's doctoral research on operations theory (which is explicated in thorough detail in the subsequent chapter), the Naveh school understands operational art as an approach to realizing strategy that mediates between the operator's

³ By virtual I do not mean that these domains are merely synthetic or simulated in the sense of "virtual reality", but rather that they are virtual in the vitalist sense of an idealization that assumes reality but is not actual, and that is only actualized through the creativity of difference and divergence (e.g., Marcel Proust's famous line that memory is "real without being actual, ideal without being abstract") (Deleuze, 1991, pp. 96-97).

cognition of reality – their perception of a conflict and comprehension of the multiplicity of systems in which the conflict is embedded – and the provision of modes of action – operations – conceived to transform the conflict system by actualizing unrealized potential. Rejecting the traditional military conception of reality that idealizes a singular model of the world that inheres universally, operational art as conceived by the Naveh school recognizes that reality cannot be conceived independently of the actions that are constitutive of it. To this end, operational art conceives operations as a means for the realization of a kind of autopoietic process, and “regards reality as a whole [as] a regulated and continuous process that stems purely from the interaction of the factors in play” (Graicer, 2015, p. 24). From the perspective of the operational artist,

order is not perceived as deriving from an applicable model but is contained within the course of reality. The logic of *process* replaces the logic of *model* inasmuch as one does not set a goal to direct one’s action but, rather, allows one’s self to be ‘carried along’ by the propensity of things. Instead of imposing ourselves on the situation, we try to reveal the *potential* inherent in it, to detect the factors that determine which *configuration* is most favourable to the task at hand. (p. 24, author’s italics)

We can gloss the difference between operational art as conceived by the Naveh school (which, to be sure, diverges significantly from conventional definitions of the term) and conventional military planning in the mode of C2 like so: operational planning idealizes a predetermined objective or set of objectives and prescribes an appropriate course of phased actions to instate those objectives or make them reality. The Naveh school’s approach to operational art, in contrast, requires an articulation of strategy that recognizes that the transformative potential of a conflict emerges from that conflict’s unique contingency, and that the strategist’s interests are best served by a logic of inquiry that aims at discovering points of leverage from the emergence of those systemic conditions. To affect that inquiry, the strategist must devise an operation that probes and tests by provisional actions, aiming to produce complementary effects in the conflict system in order to identify and advance strategic objectives. A strategist engaged in this kind of

practice assumes that the reality of a given conflict is a multifaceted, multiplicitous and intensively contested structure of thought and idealization that must be actively constructed by the inquiries of the operator. In this way, operational art is distinct from the organizational logic of C2 (even where the strategist is suborned to it), which (ideally) proceeds according to a predetermined, programmatic logic of action that is conceived to instate an ideal relationship or state of being that is essentially a received strategic ideal.

Reality, from the perspective of the Naveh school, is produced by constituent factors and elements that are only meaningful as they are apprehensible in their contingency. War as Haiku proffers a perceptual structure for a practice of strategy that cultivates appreciation for this incipient process, one which is expressly conceived to be ontologically relevant to strategists and operators who must contend - logically, creatively, epistemologically - with the destructive forces that war sets loose and configure themselves to respond to them constructively. As an avant-garde technique that aims to enhance the capacities of these actors for reflection on their situation and the contingent processes and events constitutive of it, Elster frames War as Haiku as an alternative or “othering” of the logic of modern warfare that functions as a device for critical reflection on the constituent elements that inhere in a given conflict, and which make that conflict strategically significant and apprehensible to the martial gaze. In this capacity, War as Haiku embodies a conceptual challenge to the logic of direct strategy implicit to most forms and expressions of C2.

Indirect strategy and the relativization of military decision

As a means of anchoring this digression into the avant-garde poetics of contemporary strategy, we can map the two poles of a critical dialogue between institutional military knowledge and its “other” to the conceptual tension between terrestrial and indirect warfare

Virilio develops in *Speed and Politics* (2006), a central reference in the earliest days of the Naveh school, but one which arguably misapprehends some of the key characteristics of continental warfare and maritime strategy. *Speed and Politics* speculates that as the nature of warfare transforms with the decline of inter-state war and the rise of asymmetrical and non-state threats to states and conventional armies, the modern military state's tendency to dominate space through traditional military principles like mass appears increasingly irrelevant to systemic structures, elements and expressions of contemporary strategies for armed conflict and, increasingly, competition below the threshold of war. This tendency often becomes a liability for military powers that dogmatically adhere to these principles as a governing logic for force generation and employment.

In Virilio's gloss, the martial tendency towards domination of visible space emerges in tension with nimble, highly mobile operational forms that can capitalize on imperceptibility or the impression of it. Traditional models of military organization generally privilege the principle of physical domination through binaries of visibility. As a primary example of these principles, the effect of what traditional military thought terms "fighting mass" or simply "mass" in the spatial distribution of military formations is understood to multiply the effectiveness of military formations in ways that produce outsized effects relative to their quantitative properties. Consequently, the principle of mass fosters an abiding tactical focus on controlling and contesting decisive geographical points, either by entrenched defenses or mobile attacks.

Mass can be understood as a punctuation of space by concentrations of manpower and firepower in formation. Massed firepower allows a smaller defending force to defend a position against greater numbers, for example, by exacting painful attrition from the attacking force who must contend with fields of concentrated fire arrayed to deny a favourable approach. By digging

in, the smaller force trades mobility for concentration of destructive power and advantages of cover, concealment and fortification which multiplies their advantage over their attacker who must contest an entrenched position on the defenders' terms. Conversely, effective maneuver in the terrestrial model enables a mobile attacker to gain a positional advantage that exposes weaknesses and vulnerabilities of the adversary's designed defenses, compromising the opposing force's mass by forcing them out of their ideal positioning. The effects of massed firepower in a concentrated mobile attack allow the attacker to choose the decisive point of battle to the disadvantage of the defending force who must conform to the logic of the attack rather than impose the logic of their intended defense.

Traditional military thought tends to favour decisive military encounters in the terrestrial model whereby the effects of massed fire and manpower produce clear winners and losers, palpable victories that are meaningful insofar as they take vital components of the adversary system off the field by destruction, injury or capture. These principles reinforce an abiding military culture in the Western world that privileges a heroic ideal of decisive military action, favouring the maximization of destructive power in a stereotyped moral calculus of risk and daring (Graicer, 2015, p. 39). The essential idea is that warfare in the terrestrial model necessitates taking a position, holding it, or contesting it through the concentration of firepower and extension of lines of support. Moreover, the terrestrial model generally assumes that these principles are universal of armed conflict: battle's strategic dimensions are static and unchanging, applying to every expression of it regardless of the battle's historical configuration.

Writing in the late 1970s, Virilio speculates that the models of terrestrial warfare have become increasingly secondary to emerging expressions of indirect warfare that work by imposing a reckoning presence that nevertheless rebuffs and eludes direct encounters, operating

according to principles of dispersion and speed rather than mass. Virilio traces a flawed genealogy of the latter to the ascendancy of the British naval fleet in the Napoleonic era. As Virilio tells it, applying the concept of the “fleet in being” as a misnomer that nevertheless identifies significant characteristic of seapower and maritime strategy, the emerging centrality of new forms of state and military power which exploited the unique spatial characteristics of ocean navigation in the 19th century engendered a powerful advantage to forces which were organized to strike by stealth or surprise from nearly anywhere on the glaxis of the open sea. In Virilio’s gloss, the primacy of the “fleet in being” eventually displaced the centers of imperial power, rendering the terrestrial dominance of a continental army irrelevant, or at least secondary, to the emerging imperial order: the logistics of projecting military power in maritime space, even in the abstract, became the determinative dimension of strategy in the contest for supremacy between imperial powers⁴. The rapid development of these tendencies over the ensuing century gave rise to new modulations of state power that could exploit technologies of speed, stealth and disappearance (i.e., air power and space power) that encompassed the entirety of the world in a vast “global zone of insecurity” (p. 62).

In Virilio’s telling, the British naval fleet in the Napoleonic era is emblematic of this strategy. However, the historical reality is that the concept of the fleet in being assumed that the displaced presence of a naval force afforded strategists of materially weaker naval powers a significant advantage in area deniability in the contest for maritime power and influence, where

⁴ Virilio’s confusion of the terminology of “fleet in being” seems to stem from a footnote in *Speed and Politics*, which (rightly) attributes the concept to Arthur Herbert, 1st Earl of Torrington. For Virilio, the term meant “the end of the naval apparatus and of war waged at short distances; the number and firepower of the vessels in the front line became secondary” (p. 171). These developments, enabled by technologies like rifled barrels and moving turrets, arguably didn’t come to pass for over a century after Lord Torrington’s death.

the Royal Navy in Britain's imperial heyday was essentially without a peer rival.⁵ Regardless of this apparent misnomer, the key idea that animates Virilio's speculation is that the fleet's existence, rather than its commanding physical presence, imposes itself as a force to be reckoned with by virtue of its spatiotemporal displacement: the fleet imposes its strategy by virtue of its disappearance rather than its occupation of space, and must be conceptualized in those terms if it is to be apprehended strategically (p. 64). While these aspects of strategy have arguably been understood by naval strategists for over a century⁶, the significance of Virilio's concept of the value of strategic displacement is that it recognizes that the incorporation of new dimensions of the space and time of conflict, coinciding with the principle of unhindered and even imperceptible movement rather than mass, engenders new dimensions of strategy that are antithetical to the terrestrial ideal of direct confrontation and decisive battle.

In this way, Virilio's concept of the "fleet in being" appears to more closely resemble aspects of the theory of indirect strategy developed in the interwar years by Basil Liddell Hart (1991). Liddell Hart observes in *Strategy*, his comprehensive study of the history of war from the classical period through WW2, that the invention of atomic weapons, for example, necessitated that the practice of military strategy rise above principles for the application of brute force. In the nuclear age, states must instead find intelligent and unexpected means of deterring and rebuffing direct encounters between opposed force, which could be suicidal for both nuclear and non-

⁵ For a modern example of the fleet of being, consider the role of the Italian Navy in the Mediterranean during WW2, which more accurately resembles the concept than the Royal Navy during the Napoleonic wars (Caravaggio, 2006). After a series of inconclusive battles with British warships, the *Regia Marina* was mostly recalled to port in 1940, where, by reserving its power and revoking most of its direct presence on the Mediterranean, it could hamper the Royal Navy's designs on Malta and inhibit its ability to support the ground campaign in North Africa. British efforts to reach the island, for example, would have to contend with the reality that Italian warships could quickly sortie from Taranto against the fleet, and British forces remained tied up in the Mediterranean a further three years, inhibiting their ability to support operations in the Indian and Pacific oceans.

⁶ See Julian Corbett's *Some Principles of Maritime Strategy* (2018).

nuclear powers (pp. xviii-xix). It is this kind of displacement of martial and extra-martial activity into conceptual play and subversion of expectation, enabled by new technologies, that Virilio's language is targeting.

For Virilio, these alternate dimensions of warfare come to predominate as the relative speed of motor, ballistic and cybernetic technologies collapse time and distance, impressing functional instantaneity in the strategic disposition of a broad variety of military systems. As a ready to hand example, one might consider how an armed unmanned aerial vehicle or drone allows a team of operators to study a target at an incredible remove and strike them with deadly precision at a moment of their choosing without engaging in combat in any conventional sense. In the drone's earliest applications during the GWOT, the target was ideally unaware that they were under observation and the drone operators were only rarely personally subject to the hazard of combat. To be sure, the hazards of drone warfare increased precipitously after the Second Nagorno-Karabakh War in 2020 and, of course, during the ongoing battle for Ukraine. But in the context of the vast technological asymmetry of the GWOT, the drone target is perceived in a prosthetic dimension of which they themselves are unaware and have no obvious means of accessing or dissimulating, and the operators who decide the target's fate are disincarnated on the field of "battle" (Noys, 2015). At a moment of their choosing, the drone operators simply watch the target disappear through their own initiative, ideally having never risked visibility themselves. In this way, the drone (theoretically) solved the age-old problem of combatting guerilla forces by "depriving the enemy of an enemy" (Chamayou, 2013, p. 62). The armed drone, in this sense, manifested elements of Virilio's displacement principle of indirect strategy by imposing a lethal reckoning that could not be directly confronted by means of terrestrial warfare. While the hazards of drone warfare have been significantly complicated by the

resurgence of conventional and hybrid wars (as is presently the case in Ukraine), short range air defence technologies have yet to catch up to the threat and the same logic of surprise and imperceptibility still arguably applies for the drone operator dispatching hand grenades on entrenched troops from jury-rigged commercial UAVs.

Insofar as the logic of battlespace domination by aerial prosthesis that was contingent to the GWOT essentially reproduces the logic of full spectrum superiority, it is arguably inadequate to describing P2's alterity and cannot be identified as an expression of it. As the UAF's recent adaptation to drone warfare implies, the emergence of alternate dimensions of conflict is not simply an effect of technological superiority and it would be a misreading of the concept to assume that it only applies to the advantage of a materially superior military force. The global zone of insecurity engendered by the spatial displacement of military power cuts both ways in that effective strategies for operating in this zone are increasingly antithetical to the ideal forms and models of conventional military decision. A guerilla insurgent engaged in urban warfare, for example, operates according to a principle of disappearance that allows them to slip away into the social milieu from which they draw their basis of support. Logistical technologies like computer networks and cellphones enhance these groups' capacities for organization and coordination, allowing them to close distance and time in ways that enable them to challenge vastly larger forces due to the disparity between their own menacingly low profile and the conspicuous logistical immensity of the latter. They, too, operate according to a logic of disappearance that frustrates and subverts the superior force's ingrained tendency towards decisive military encounters. The ubiquity of the guerilla insurgent imposes constraints on the greater force that negates its considerable advantages in firepower and logistics. In turn, the martial gaze of the superior the force develops means of identifying and tracking these

organizations by their digital and visual footprints, extracting patterns of life that distinguish insurgent movement and habituation from vast seas of commercial data and geospatial intelligence (satellite imagery, cell phone data, etc.).

In its earliest applications, the UAV functioned as a means of tracking these kinds of insurgent threats, compelling their visibility by discerning their organizational patterns in both the physical and informational domain, and subjecting them to the destructive supremacy of airpower. But application of those destructive capabilities was often counterproductive of the kind of transformation of social and cultural space that counterinsurgency operations aim to instate. Its exercise in targeted strikes, seemingly from nowhere, generates strong perceptions of disparity of force that diminish the moral credibility of the attacker whose strategy more likely than not depended on support or acquiescence of the population subject to the disproportionate exercise of asymmetrical airpower. Insofar as it produced a distinct and volatile sense of insecurity among the population whose perceptions concerning the legitimacy of political and cultural authority matters, the power to decisively kill an insurgent or a terrorist by remote at the moment of the attackers' choosing remains a tactic that tends to be counterproductive of the kind of social transformation which counterinsurgency aims to effect, which limits its strategic value as a vector for managing conflict, let alone effecting conditions for victory. To be sure, this is a conception of strategy that is limited to a specific historical context that has arguably lapsed. The symbolic efficacy of drone warfare may indeed serve vastly different informational purposes in other contexts, as the embrace of footage of drone strikes and UAV footage of successful ambushes on Russian forces in Ukrainian influence operations demonstrates.

From the perspective of operational art, the technical ability to strike a point on a map at a moment of ones' choosing, to deliver steel on target with a high degree of precision, if not

accuracy, does not meaningfully attune an operator or strategist to the social reality they aim to transform. Though I'm generalizing here, this line of thinking is arguably a logical extension of the principle of full spectrum superiority, and suggests something of its inadequacy to conceptualizing the systemic dimensions of conflict in the social domain. The bind implied by the incommensurability of technically sophisticated military means with complex strategic aims defines the challenge of operational art under conditions of full spectrum superiority, where advanced military capabilities are often at odds with the aims of martial strategies that can engender continuity and stability from the chaos of war. The reality of conflict exclusively defined by tactical modes of action and sophisticated weapons delivery platforms for its realization profoundly limits the scope of strategic possibility and arguably inhibits meaningful strategic deliberation. These kinds of advanced weapons systems and capabilities have an obvious value from a strategic perspective in that they enable certain kinds of actions that exceed the capabilities of their adversaries, imposing a certain logic of decision that is inescapable from the perspective of the rival force. But the certainty of that value is, from the perspective of indirect strategy, just as likely to be a limitation and strategic liability: it prescribes particularly definitive models of decision and action where deliberated inquiry into the propensity of the systemic dimensions of a conflict is more likely to be strategically prudent and efficacious.

Strategy as martial philosophy of difference

However its practice manifests the displacement principle, the essence of operational art in the exercise of indirect strategy is that it actively perplexes the desire for direct, decisive confrontation in the clash of arms, turning that desire against itself by denying the adversary a stable conceptual grounding. The reality of the conflict in which they are involved may be imperceptible to an actor who cannot conceptualize, let alone operationalize, a mode of action

that is appropriate to it. This is especially true of conflicts which primarily concern the social and cultural influence over direct military-political effects, as contemporary conflicts below the threshold of war are increasingly likely to do. In this sense, Virilio's language of the "global zone of insecurity" identifies a situation in which the assurance of the superiority of force is subverted and unsettled by dimensions of strategy of which its subject cannot always meaningfully conceive. These dimensions may be technological, but they may also be cultural and narrative, and in that sense, virtual (see footnote 1). As the virtual dimensions which impinge upon the realization of strategy multiply, the assurances afforded by material superiority do not provide a reliable basis of knowledge for the conception and practice of strategy. By this virtue, the predominance of the displacement principle and the relativization of strategic space it entails engenders an alternative strategic ideal to that of the terrestrial warfare that is nonetheless conjoined to it as a kind of counter thesis (see chapter on TE Lawrence's "Evolution of a Revolt", which emphasizes the productivity of the metaphor of seapower for the raiding tactics of Arab forces during the Arab revolt, i.e., "he who commands the sea is at great liberty, and may take as much or as little of the war as he will", after Francis Bacon) (Lawrence, 2020, p. 14).

From the vantage of the end of the 20th century, it often appeared that military strategy had evolved to a point where armed conflict between major powers was functionally deterred, and that Western interests were best served by approaches to warfare that played out through modest and oblique means that painstakingly avoided risks of casualties and escalations. Whatever the verity of this outlook (which was arguably undone by the tremendous scope of the American-led wars in Iraq and Afghanistan, to say nothing of the ongoing industrial-scale battle for Ukraine), it engendered an aversive public perception that led Romanian-American strategic theorist Edward Luttwak (2009), writing in 1995, to lament that "there are no threatening great

powers on the current world scene, only a handful of quiescent rogue states, and many lesser wars and internal disorders that cannot arouse the nation, for none of them directly threatens the United States or its compelling interest” (p. 119). As Luttwak saw it, the development of modern weapons and precision targeting presented an opportunity for US forces to emulate the model of the so-called “cabinet wars” of the 18th century, painstakingly avoiding casualties and through modest, mostly bloodless armed interventions that could patiently and partially realize security priorities. In this way, Luttwak sought to “inject unheroic realism into military planning to overcome excessive timidity in military practice”, and called this concept of warfare “post heroic”, which assumed both a secular imperative of waging war and the largely uncontested supremacy of Western military power (p. 124).

Whatever we think of Luttwak’s concept, the palpable sense of a lack of threat or serious adversary in the period was no doubt compounded by the enclosure of the surface of the globe in expansive command and control arrangements that all but assured the supremacy of US air and seapower. The extension of globe-encompassing high-signature military networks (carrier battle groups, for example, or US joint forces command theatres, e.g. CENTCOM, AFRICOM, SOUTHCOM, etc., which enclosed the globe into seven distinct Unified Combatant Commands and a further four support commands) engendered a paradoxical strategic situation in which warfare no longer appeared to be principally realized, in Virilio’s read, through “direct confrontation and bloodshed, but rather from the unequal properties of bodies” (p. 62). Expansive military networks like the Global Command and Control System, and the Joint Worldwide Intelligence Communication System (sensitive content on the latter of which become the subject of both the infamous WikiLeaks and Airman Jack Texiera’s leaks of DoD analyses of Ukraine’s strategy and force posture over a Discord server in early 2023) established tremendous

data and information sharing networks to enable intelligence analyses from a constant global surveillance network. While the universality of this condition has been complicated by recent events like the Russian invasion of Ukraine, which precipitated the largest ground war in Europe since WW2 with an intensive attritional dimension, even still both the Ukrainian and Russian strategies are very much dependent on influence operations that work on the cognitive perceptions of foreign audiences. The terms suggested by this information paradigm remain evocative and compelling as they concern strategy for indirect warfare.

Adapting itself to a global zone of insecurity in which the dimensions of reality which impinge upon conflict continuously multiply and evolve, Virilio posts that an efficacious strategist of indirect warfare learns to cultivate “the art of movement of unseen bodies” and works to subvert the traditional understanding of warfare as the domination of visible space (p. 62). The key point is that, wherever the relativization of space takes hold in the strategic domain, it tends to significantly complicate concepts of spatiality and temporality implicated in strategic thought by implicating multiple and conflicted cultural projections of meaning and processes of interpretation. In these conflicted spaces, the principal measure of military value becomes difference, rather than destructive efficacy (Graicer, 2015, p. 37). The efficacy of operational and strategic thought in this mode “is measured by its ability to change, transform and keep on moving,” as Graicer abstracts (p. 37). Accordingly, both state militaries and non-state actors learn to practice strategy in terms of discovery and invention of means for subverting their adversaries’ comprehension of the spaces in which military operations unfold. In this light, transient elements of conflict that escape the comprehension of traditional military knowledge are increasingly likely to be influential in determining a strategy’s evolution and mediation in operations. On the one hand, transience is an irreducible condition of the flow of the events of

war: war is defined by its transient processes and their capacity to cast seemingly settled spaces and institutions into motion and disorder. On the other, transience is the ideal condition of conflict: operational art aims to make the logic of transience apprehensible to the strategist and actionable to the operator as a complex of systemic effects that can be plied in order to draw the conflict system towards a more desirable configuration of strategic interests and relations.

An explication of some theoretical precedents for the practice of indirect strategy would be helpful for clarifying the elusive premises of Elster's opaque discourse on the transient logic of disappearance in the exercise of strategy. Graicer's dissertation on the cultural dimensions of operational art develops an explication of a theory for operational maneuver that attends precedents for indirect strategy in Soviet and Chinese military philosophy. Drawing from French sinologist Francois Jullien's (2004a, 2004b) writings on Chinese strategy in *Treatise on Efficacy* and *Detour and Access*, Graicer argues that terrestrial models are increasingly irrelevant to asymmetrical and post-heroic conflicts insofar as they are incapable of meaningfully accounting for cultural asymmetry between traditional state militaries and conflict actors who aim to subvert the prior's sensibilities. In these kinds of conflicts, of which the ensnaring of coalition forces following the 2003 invasion of Iraq or ISAF's escalation of the war in Afghanistan during the Obama administration would be exemplary, the strategic tendency towards decisive confrontation in battle likely to lock a military force into an untenable strategic commitment that saps resources and diminishes initiative. In these kinds of conflicts, the desire for a direct and decisive battlefield encounter often appears bereft of strategy entirely. It is often difficult to even chart or comprehend what winning might look like in such a conflict, because grand resolution through applied force is unattainable.

For Graicer, military operations in conflicts where the strategist's rivals are subversive, multiform, invisible entities are better served by a flexible martial disposition that favours indirection over military decision. Instead, a practitioner of operational art engaged in strategizing for this kind of conflict inquires into the reality constitutive of the conflict through tentative, provisional actions conceived to test the conditions of the conflict system, rather than resolve them decisively according to a predetermined martial ideal. Operational art in this model assumes that the meaning or significance of a conflict is not known by operators in advance of the encounter, and that its unique and emergent constitution defines its strategic significance. Staking a definitive position in a conflict, the strategic significance and novelty of which has not been rigorously theorized or investigated, is essentially a prescription for strategic failure. To this end, operational art favours indirect approaches to warfare that appreciate that "strategy is about anticipating the unfolding of events and thus being better able to dominate your adversary's position for having not taken a position yourself" (p. 60). Quoting *Detour and Access*, she describes the logic of indirect strategy in terms of its elusive signification:

by keeping critical signification purely suggestive and inchoate, it prolongs its virtuality, thereby preserving its offensive capacity as long as possible...[t]he adversary is pressured with something that is not localized in time and space, as in the frontal attack, but prolonged and diffused – all encompassing and invasive. (p. 60)

The essential idea is that deferring definitive positioning allows one to control the positioning of the enemy holistically, compelling them to reveal their strategic intent while reserving one's own. By intuiting strategy on a virtual level rather than a concrete and immediate one, the indirect strategist works on the critical potential implied by a situation and configures themselves to precipitate an advantageous transformation of the battlespace without necessarily having forced a decisive confrontation in which the operator must reveal themselves or commit their forces. Deferring a decisive encounter, the indirect strategist attends constitutive aspects of the

adversary's disposition, testing them to discover means of turning the contingencies of their rival's situation against them. Instead of rushing into a definitive plan in the model of a phased timeline for terrestrial operations, the indirect strategist looks for trouble, cracks and points of crisis in the model of maneuver warfare. Intuiting friction, the strategist exploits these fissures of meaning to conceptualize a "strategic configuration" and a set of objective conditions which can ply the situation for their own purposes (p. 61, quoting *Treatise on Efficacy*).

In Graicer's exegesis, military operations that work by indirect strategy are about attuning perceptions to the favourable contingency of events and making those contingencies work to transform the objective conditions driving conflict. For Graicer, "these shifts in the unveiling of an operation are complementary rather than independent of each other and cannot be clearly divided into phases as in the [American] way of war" since it is up to the operator to discover strategic potential in the contingent elements of conflict and initiate a process to let that potential come about (p. 62). By allowing themselves to be carried along by the situation and adapting themselves to it, the strategist positions themselves to take advantage of the propensity of events, rather than directing events towards a decisive resolution on predefined terms. After Jullien, this approach to strategy "rules out any idea of predetermining the course of events in accordance with a more or less definitive plan worked out in advance as an ideal to be realized" (p. 62, quoting *Treatise on Efficacy*). In this light, Richard Elster's suspect incitement that a strategist must learn to watch the transient things in war disappear, and to develop an aesthetic disposition capable of recognizing the strategic potential in war's transience, reads more like an avant-garde poetics for a practice of indirect strategy than an incitement to simply observe the material processes of destruction that devast the battlefield in abstraction. This is arguably the level of meaning at which Elster's discourse on War as Haiku is elusively pitched, even if the textual

latency of that language intentionally plies a variety of troubling interpretations that throw the ethics of that discourse into a sinister relief.

The lost dimension

The multiple implication of the language of disappearance in Elster's discourse no doubt implicates the violence that is irreducible of armed conflict. That language implies the termination of enduring structures and social entities, their dismantling, capitulation, collapse, and ruin. But Elster's metaphor also imparts an alternate register of meaning to that of the traditional martial ideal of tactical destruction that grants this transience more profound conceptual significance in the mechanics of war than that implied by the mere fact of physical destruction. For Elster, as for Graicer, the conceptual work of operational art concerns the fathoming of a conceptual vista which Virilio termed the "lost dimension": the relativization of space by the acceleration of technology and representation produces a situation in which the experience of space is measured not by fixed or static reference points but by its relative intensity, its ceaseless motion and change (Graicer, 2015, p. 249; Virilio, 1991, pp. 102-104). As the abstraction of intensity becomes definitive of the experience of place and time, the observer-subject is left with nothing

but momentary representations, whose sequences constantly accelerate to the point at which we lose our grasp of any solid reference or marker [...] The point is a point of reference or geometric projectivity only to the extent that it is a gap or lack, an absence of dimension, a black hole [...] Thus, the point is that the lost dimension allows us to recuperate ourselves: that bug, that microprocessor of our mathematical and aesthetic representation and our temporal and spatial configuration. (Virilio, 1991, quoted in Graicer, 2015, p. 249)

After Graicer's explication, the strategist's encounter with the lost dimension facilitates

"hybridization of distinctive perspectives or dimensions into *littorals*" or "operational continuums": the ability to conceptualize strategy and operations in terms of an interface or with

these lost or missing dimensions, with the gaps and discontinuities in seemingly homogenized spaces, is necessary to not only making meaningful sense of conflict, but of conceiving efficacious operations that can engage transformational structures, emergent logics and forms, as they inflect the spaces in which the becoming of armed conflict plays out (p. 65). Conceptualized in terms of discovering “lost dimensions”, the Naveh school’s model of operational art necessitates an attention to cultural projections as a lever for conceptualizing asymmetry in operational space and time.

To follow through on the abductive premise that set this conceptual digression on indirect strategy into motion, Elster’s metaphor aims at mobilizing a poetic sensibility that, by foregrounding the lost dimension, can subvert the martial gaze. This subversion is theorized as a spur to quicken strategic thought and intelligence. War as Haiku is arguably a device for interfacing with this other dimensional register: by foregrounding the lost dimension, Elster’s poetics aims to change the object of war, which is no longer conceptualized as simply destruction or incapacitation of the enemy, but transformation of the space in which a variety of conflict actors not only materially exist, but in which their cultural projections inhere; where their ideas, projects and commitments are invested and impart meaning to the transformation of space which war sets into motion. War as Haiku seeks a capacity for mediating the variability of conflict to heighten and enhance the perceptibility of its differing intensities for the actors who contest a conflict environment. That environment is beset by the violent transitivity that war exacerbates, but those differences are obscured by the dominant paradigms of classical and modern warfare, which tend to repress them at the level of thought, if not experience. Conceptualizing operational art as a poetic interface for engaging war’s disruption of time and place, rather than an idealized formal expression of mechanistic forces, aims to cultivate an alternative understanding of war’s

operative logic in the martial apparatus. Operational art, as it is conceptualized by proponents of the Naveh school, actively contests both the transitivity of events and the representational certitudes which cease to inhere within a conflict environment by virtue of their decomposition and de-structuring by the creative-destructive force of war itself. This creative power of war is a function of war's generative capacity to incept both a distinct ontology (a mode of being and embodiment that is bracketed from the pacific social order) and historicity (the contingent, concrete phenomena of armed conflict unique to a particular time and place), both of which are endemic to war's capacity for making and exacting meaning, if not truth, from the social reality it transforms (Barkawi & Brighton, 2011).

Elster's metaphor proposes a poetic device for strategic thought and a representational medium that is conceptually generative in that it can compose the continuities and discontinuities of the events of war into an enhanced register of temporal significance, of operational meaning and purpose, for those who actively foment or are otherwise pulled in by war's innate powers of undoing. The device heightens the potency of war as both a suspension and de-structuring of the homogenous sense of time and place, and as a process for thinking of strategy's virtuality and the world's potential to be shaped otherwise, through the mediation of armed force. In other words, War as Haiku implies a compositional structure that attunes perception to appreciate temporal flows of forces that can be shaped and directed through operations, rather than an objective order of physicality to be dominated through a causality of subject-object relations. As such, Elster's work as a defense intellectual, beyond merely seeking new words and concepts, seeks a compositional modality that can interface with the generative forces of war. War, in this view, is a creative force that can be directed to supplant the extent social-political order by constructively engaging the disruption of certitudes which the event of war entails. While this concept clearly

entails implications that seem to escape Elster's intention, the inference of haiku nevertheless prototypes a perceptual form tailored for conceptualizing the significance of chance and change in war's unfolding, and for abstracting these ephemeral intensities in terms of pragmatic relevance to the actors who are ontologically bound to war's destructive energies in one way or another. In advancing the metaphor, Elster offers strategy new terms to marshal the contingency of these events, which are constituted by chance as much as they are inflected by programmatic sequences and structures, into convergence with war's ostensibly rational ends as an extension of policy, after Clausewitz, and a suspension of the pacific social-political order, deferring to a martial order of objectivity and legitimation in the test of arms. In this capacity, Elster's metaphor troubles the idea that literature can sustain a project of resistance that is beyond incorporation by war's chimerical designs. Perhaps unsurprisingly, this is less of a problem for the study of war than it is for the study of literature.

What is incommensurate between the study of war and the study of literature?

Quite sensibly, Leps expresses ethical qualms about the elusiveness of Elster's abstracted poetic idealism. No doubt Elster's nihilistic evasion of critical signification in his indulgence of the suggestive and inchoate, which dismisses lying about the existential threat posed by the Baathist regime in Iraq as a necessary and defensible act ("there is no lie in preparation for war that cannot be defended"), implicates grave moral questions about the influence of these kinds of conceptual abstractions and their consequences in the lives of those who the exercise of force enlists, endangers, and extinguishes (DeLillo, 2010, p. 28). However, insofar as Elster (and to a lesser degree, Finley) is essentially disinterested in reckoning with those moral implications (and arguably crafts a deliberated meta-rhetoric that evades that reckoning), Leps argues that the reader is summoned to do so in their place. Where these characters "stop short of discerning their

responsibility for the art in their lives,” the text’s foregrounding of techniques for producing “visual states of mind” (“heat, space, distance, stillness” – the kinds of ephemeral sensations which haiku and its imagist successors distill as poetic effects) nonetheless draws the reader into engagement with elements of art that far exceed the depth and scope of the “usual assumptions” about artistic forms and aesthetic practices (p. 419, quoting DeLillo, 2010, p. 7; p. 19). Assessed on the disciplinary terms of literary scholarship, an ethical framing of the novel’s discourse on the poetics of P2 that works through Boxall’s terms of engagement would seem to call for a reinvigoration of sense-making activity to come to grips with the real-world implications of Elster’s avant-garde philosophy of virtual war. In Leps’ prescription, this sense-making activity should aim at developing novel capacities for resisting the military-cultural avant-garde’s battle for perceptual domination of the inner life of the mind.

By “anatomizing the vectors” of P2 in defense organizations like the Pentagon, or in cultural institutions tied to art and literature, Leps argues that DeLillo’s late fiction invites the reader to “disengage from normal identities and everyday behaviours,” rethink their “position in (and position on) peace and war” and “seek stillness,” that is, cultivate an ethical disposition and moral agency that can resist mobilization by war’s expansive capacities for virtualization (p. 423). The novel’s plot is arguably leading the reader in this direction. Jessica, Elster’s daughter, disappears in the novel’s latter half, likely murdered by an anonymous assailant who, in the novel’s temporally-displaced prologue, encourages Finley to think past his assumptions about art while standing before the MoMA video installation for Douglas Gordon’s *24-Hour Psycho* a few days prior to 9/11. Suspended in the light of this temporal displacement, the painful disruption of Jessica’s disappearance casts Elster’s discourse on strategy, violence and the transience of things in moral relief. As Leps puts it, “she was a transient thing that they were not prepared to see

disappear,” and Elster is undone by the fact of her disappearance (p. 418). The ethical inference effected by the metaphoric displacement of this current of the novel’s plot is that strategy, realized as poetic abstraction of the violence that is materially realized through destructive technique, inflicts painful absences that do not register in the language of Elster’s demiurge. In Leps’ read, the significance of those absences should be made legible by investigation into the power/knowledge relations which war exacts through rituals, ambitions, and quiet refusals, particularly as they are enacted “from below” the multiplying networks of global war. Superpositional diagrams of the abstract power of war, imposed by organized tyrannies above, are surely a necessary element for making sense of this kind of inquiry, but should not be taken as determinative of its subjects’ realization of those power/knowledge relations. Their dispersion across a variety of sites and functions is the condition in which their subjectification is apprehensible: if full spectrum superiority is a diagrammatic abstraction of sovereign military power in the age of NCW, Elster’s poetic rumination on P2 is a vector of that power’s subjectification. This interpretation of the novel’s discourse on P2 is entirely consistent with Boxall’s paradoxical thesis on DeLillo’s post 9/11 fiction: it re-entrenches the purpose of the novel as a medium fostering ethical responsibility for the aesthetics of violence and its dispersal in a variety of multiform avant-garde techniques and strategies, even as it explicates the paradox of the avant-garde that knots radical art and violence together.

But whatever the novel’s designs on the reader’s ethical capacities, Elster’s discourse on the transitive *phronesis* of strategy centers salient questions about the nature of postmodern war, the conceptual and material operations of contemporary warfare and strategy, and the ethics of knowledge of and about all three that Boxall’s incitement to ethical poetics little answers. *Point Omega*’s fictive digression on the aesthetics of indirect strategy develops an uncanny conceptual

framework for understanding the ways in which the real-world phenomenological abstractions of military strategy and operations are implicated in the ontologies of actors who are themselves engaged in and by war at the level of conceiving and implementing military operations (i.e. operators), or the policy-making apparatus that initiates them (i.e. military and civilian strategists), or the ongoing research and education that enhances the generative sense-making and world-making capacities of both (i.e. “defense intellectuals,” of which the author of this dissertation should likely count himself among). In defining these capacities as they concern the ethical responsibilities of artists and their audience, rather than the capacities of defense practitioners who are actively engaged in the evolution of P2 in its institutional settings (many of whom have advanced training in the methods and discourses of the humanities), the novel arguably overlooks its target.

Point Omega’s incomplete digression on the aesthetics of operational *poiesis* and the role of the defense intellectual in potentiating it rehearses a dynamic of incorporation whereby a poetics of subversion that is expressly conceived to disrupt the certitudes and representational tendencies of the military state and make them alien to themselves is effectively conscripted into war’s service precisely for its discursive capacity to unsettle the power-knowledge relations that define contemporary security problematics. In the real world where this kind of research takes place to support defence and security organizations, as in DeLillo’s fiction, the mechanics of this incorporation are likewise conceived to work on power “from below,” even where they serve the advancement of strategic policy or enhance operational efficacy by configuring their discursive function within new diagrams of martial power and knowledge. P2s capacity for resistance is precisely its value from a military perspective, and the operative aesthetics of the Naveh school of operational art arguably aims at empowering a kind of subjugated knowledge. Those poetics

arguably require a precise explication as they concern the subject of war, and not the subject of literature in its disciplinarity, if its effects are to be meaningfully conceived as a vector of war's subjectification.

By emphasizing the ethical capacities of the reader or the literary critic and predestining the capacities of the defense intellectual as a kind of half-witting retainer of the mythical evil of war which incorporates even the artist, the novel points, perhaps unwittingly, towards a significant limitation of conventional literary criticism as an approach for making sense of the virtual arts of war that the novel speculates on, and the capacities and responsibilities of those who engage those arts at the level of practice and inquiry. The ethical capacities of this latter category are arguably more significant than those of the student or scholar of literature to the study of war as a creative-destructive force that is both constitutive and transformative of the social order and inscriptive of the body politic: they are a primary locus for the power of war's realization and the conduit of subjectification through which war, as an order of objectivity from which very little of humanity escapes, engenders its grim discourse of truth.

Transformation of the social order and re-inscription on the body politic of which war is a definitive and constituent element is arguably the ideal effect of the perceptual appropriation of the lost dimension which Elster's poetics aims to operationalize. Transformation is the objective, in the dual sense of being both the political goal or end that strategic deliberation in this mode idealizes and the concrete historicity, the "fact" or condition of truth that the exercise of strategy in military operations works to materialize in the world as a decisive break in the contingent ordering of political and social relations. The capacity to effect this transformation, in this dual sense of the objective, is that which is determinative of war's success or failure. Force, the expression of organized violence, is the principal means of setting this transformation into

motion, to be sure. There can arguably be no war, no strategy without it. But the effect of that transformation cannot be reduced to it. The unbounded, creative excess that unsettles the coherence of political and social order by reworking its contingent elements is the point of the aesthetic disruption which Elster's work hopes to mobilize, and the appropriation of new perceptual fields is not a secondary operational effect that merely serves to legitimize the destructive machinations of force and sovereign power. For Elster, that reordering of perception is War as Haiku's intended effect insofar as that disruption redefines both the means and the ends of the exercise of military force: by looking well beyond the usual assumptions about art and its role, War as Haiku attempts to mediate between objective systemic conditions, political will or subjectivity at the level of strategic intent, and their synthesis and mediation in operations. Like Bill Gray's musings on the aesthetics of the terrorist event, the surfeit of sense and meaning is the point of conceptualizing warfare in terms of aesthetic forms, effects, and processes, not merely the destruction of human lives and materiel.

While the phrase is the central hinge on which the novel's meditation on avant-garde poetics pivots, *Point Omega*'s ominous instruction to "see beyond the usual assumptions" about art and its proper role arguably directs attention to the formative function of culture and aesthetics in the domain of warfare and warfighting. Insofar as transformation of objective social, economic and political conditions is the ultimate objective of strategy, theory and poetics (themselves variable cultural projections and devices for conceiving and implementing this transformation) then appear, in the Foucauldian tradition's subversion of Clausewitz, as war's "other" means (Deleuze & Guattari, 1997; Foucault, 2003). What is arguably needed, then, to comprehend the operability of avant-garde cultural production in war's domain rather than the arts' – in other words, to comprehend the arts' capacities for mediating the transformational force

of war – is an approach for studying war’s “other” means that speaks directly to the order of knowledge production and legitimation that war itself necessitates, and which is usually held at a disciplinary remove from the study of literature proper (i.e., the disciplinary study of literature is not typically conceptualized as a means of intuiting strategic potential in the martial sense).

Duchamp’s operations

The operational level of war is understood by the dominant paradigms of modern warfighting as the mediation between tactical ways and means and strategic ends in service of winning the limited objectives of a campaign (Joint Chiefs of Staff, 2017a). This limited construction aligns with the doctrinally sanctioned definition of operational art for the conduct of joint warfare, which is defined in US military doctrine as the administrative function that mediates between strategy and tactics. Operational art, as conceived by the Naveh school, defines the operational level of war on very different terms. Operational art conceives of operations in a more flexible and suggestive sense that emphasizes their creative capacity to transform objective reality and (the systems constitutive of it) by cultivating alternate perceptions of those systems that can reconceive their conditions of possibility. Pushing the conceptual boundaries of operational art in the mode of P2, War as Haiku attempts to mediate strategy in a way that is not only transformative of the social and political meaning of the ontological event of war for those who conceive and carry out those operations, but is transformative of the power/knowledge relations embodied in the exercise of strategy of which these ontologies are integral components. In this sense, operational art is a practice of epistemological inquiry that concerns strategists’ reflexive knowledge of themselves in both their interior and exterior relations as they are formally embodied in military organizations. By reflexive, I mean, after the language developed in a recent special issue of the *Journal of Military and Strategic Studies*

devoted to military epistemology, that practitioners of operational art approach the institutional knowledge of defense organizations as a relational and contingent object that can itself be objectivized and reconceived (Beaulieu-B. & Dufort, 2017b). Following Pierre Bourdieu's (1992) conception of reflexive sociology, this mode of objectivization would not only mark the critical gaze but act upon it recursively to reconceive the relation between the observer and the object. Applied as a means of theorizing operational art and the reflexive capacities it aspires to, this would entail a sustained engagement with the ways in which operational art reconceives military efficacy and its pragmatics in terms of alterity, radical humanism, deconstruction, autopoiesis, or virtually any exogenous theory of knowledge, its structuring and emancipation, to traditional military organization that would seem to unsettle the rationalist habituation of western military thought towards the objective.

Elster's discourse on operational art describes a poetic device, a kind of aesthetic technology, conceived to foster creative capacities for self-criticism and self-knowledge as they are embodied by actors embedded in and around defense organizations. As I have suggested, extending Leps' arguments about NCW, the discovery of endogenous capacities for pragmatic self-knowledge and self-criticism is a privileged pursuit of P2 insofar as the development of these capacities are aims of the operations of power/knowledge, embodied and expressed from below the abstractions of martial power and authority. In the exercise of operational art as conceived by the Naveh school, operations, the work of mediating a strategic ideal into a cohesive logic of action, are a reflexive process of synthesizing these expressions into a cohesive systemic logic that can transform systemic relations through action: operations are an epistemological interface between the defense organization's ontological knowledge as the know-how of tactics, logistics and command, and investigation into the systemic space of

conflict, the institutional terms and concepts ready at hand for comprehending its logic. However, the parallel domain of strategic research and pedagogy in which Elster's work is conscripted is removed by several degrees from explicit questions of tactics or military logistics. This displacement of strategic thought and activity into parallel domains is consistent with a pattern of institutionalization of strategy in the West which increasingly involves whole of government efforts to ensure stability and secure national and multilateral interests, often through competition, rather than conflict, and activities below the threshold of war like lawfare, trade policy, espionage and counterespionage, international development, etc. In these abstracted domains of strategy, the concept of operations requires a more specialized explication to make its full resonance apprehensible as it concerns the literary arts and their mobilization by the powers of war.

Elster's poetics conceive of operations in a sense comparable to the sense in which proto-Dadaist Marcel Duchamp conceptualized the operations of "readymades," following the conceptual approaches of Ryan Bishop and John Phillips in their monograph study *Modernist Avant-Garde Aesthetics and Contemporary Military Technology* (2010): unsettling the conception of a coherent work of art embodied in an object-form, the meaning of which is regulated in advance by formal conventions governing its production and reception, for Duchamp an operation "does not leave untouched the sphere that attempts to regulate it" (p. 5). The famous example, which is often presented as a foundational gesture of avant-garde modernism, is Duchamp's 1917 work *Fountain*, which aimed to present a mass-produced urinal with "R. Mutt" signed in paint on the rim, at an exhibition of the Society of Independent Artists. *Fountain* was, as Duchamp tells it, suppressed by the exhibition. But we may understand its ideal effect as an "operation" that, by the act of decision to present it as a work of art, unsettles the

idea of art as the production of works, or the representation of objects or feelings contained in the work, distinguished by the exercise of judgement concerning aesthetic taste (Duchamp, 1973). Duchamp's handful of readymades (for he purposely restricted his application of the technique so as not to blunt its effect) include *Trébuchet* (or simply *Trap*), which staged a coatrack nailed to the floor at the entrance of a gallery in way intended to invite an accident. In his papers, Duchamp proposed another unrealized readymade operation that involved repurposing a Rembrandt as an ironing board. Other "operational" techniques developed by Duchamp include the chance operations like those evident in *3 Standard Stoppages*, which involved dropping measured meter-long sections of string onto wooden pallets and fixing them into place, using them to produce rulers based on the collapsed and misshapen string to subvert the standard metric of the meter. War as Haiku is arguably a progenitor of a comparable concept of operations.

Abducting Duchamp's operational practice, by way of Bishop and Phillips, to unsettle literary convention, where the literary form of a novel or poem is essentially settled in advance in a way that prefigures a reading-interpreting subject's encounter with it as an object, War as Haiku experiments with an expansion of the scope of art and warfare that, through abstract mediation of strategy, engages destructively "with an environment that has regulated what an artwork should be (or what an artist should do and make)" (p. 5). As a device to inform the exercise of operational art, it is conceived to reconstitute the field of experience in which war is apprehended as a space of possibility, and which seeks new terms and capacities for the transformation of that space. But where Bishop and Phillips emphasize the avant-garde operations of military technologies (particularly in sighting and targeting systems) in terms of those systems' aim of (once more with feeling) closing the gap between representation and its object in order "to

mobilise it, to control it...reducing hazards of chance absolutely rather than fostering their inevitable insistence” in the manner of C2, Elster’s discourse is an implicit critique of those representational tendencies (p. 5).

It aims to foreground the insistence of the contingent in the domains of war in order to unsettle the rationalist objectivity of traditional military strategy: comparable to Duchamp’s chance operations, Elster’s hypothetical device for cultivating perceptions of warfare’s lost dimensions insists on appreciation for the unruly potential in contingency, chance and ambiguity to restructure the terms through which military operations are conceivable and actionable. War as Haiku aims at opening the gap between representation and its object, so that contingency intrudes as transformative potential rather than an operational risk to be mitigated. War as Haiku, then, functions as a literary means of objectivizing the objectivizing martial gaze which works over the battlespace to determine its generic meaning viz. the martial apparatus that exercises strategic judgement. Its aesthetic operation aims at transforming the terms through which the events of war are apprehensible as aesthetic phenomenon, the conditions of their production, representation, and reception. Its operation seems to cut both ways, working over both the sphere of the arts as a discipline for the study and practice of aesthetic forms and the sphere of war as the formalized expression of force in pursuit of a predefined transformation of the political order. To grasp the significance of this operation as it concerns the capacities of the subjects it engages seems to call for a critical approach which is neither wholly of the arts nor of the instrumentality of war in their traditional disciplinary conception.

War or society: disciplinarity and the ontology of war

By foregrounding the contingent elements of conflict and effecting means of disrupting their generic representation, War as Haiku indirectly calls into question the significance of

conventional literary inquiry into the aesthetics of war and violence. Where conventional literary criticism generally proceeds through analysis of self-contained works governed by settled formal conventions that condition and even prefigure those works' purpose and function (in addition to secondary literatures that qualify and corroborate knowledge of their production and reception) it tends to foreclose lines of inquiry into aesthetic practices that exceed those formal conventions and spill over their disciplinary containers. The study of war through literature, generalized in the terms of an aesthetic encounter with a text that cultivates a reader's capacities for ethically responding to the violence war exacts, is likely to look past the ways in which the metabolic appetites of war, in themselves looking beyond the usual assumptions about art and its proper disciplinary role and function, incorporates poetics or literary aesthetics in its own designs. If the exercise of operational art can be a poetic practice, which I am very much arguing that it can, then its exercise calls into question the relevance of the construction of literature as a phenomenon that is self-contained within the study of literature proper, and that simply concerns the capacity of a reader or a critic to respond to it as a means of making sense of their responsibility for that practice. Insofar as Elster's discourse stages the incorporation of poetics by operational abstraction, Elster's insights into aesthetics challenge many of the assumptions that would divide the study of literature from the study of war. His challenge arguably necessitates an approach to the study of war and literature that questions the coherence of this disciplinary division and its effect on the subject it aims to critically examine.

Barkawi and Brighton's influential essay "Powers of War: Fighting, Knowledge and Critique" (2010), which advocates for a critically-enhanced epistemology of war studies, lends us helpful theoretical terms for grounding an expanded study of the aesthetics of operational art. "Powers of War" attends the ways in which the subject of war is divided by the disciplinarity of

the humanities and the social sciences, and the effect of this division on the constitution of the field of war studies and scholarship on war in other disciplines. Their argument about the disciplinarity of war studies is that war, as a distinct social ontology, and wars, as contingent historical events, centers the phenomenon of fighting (which Clausewitz called *Schlacht*, translating roughly as “battle,” and implying a “test of arms” through “kinetic exchange”) in such a way that the ontology of war cannot exclude it (p. 135). For this reason, fighting “resists disinterested analysis, while tending to instrumentalize knowledge about war” (p. 135). The study of strategy and warfighting compels instrumental knowledge of war insofar as the contingent historical reality of fighting or its immanent possibility necessarily “entails the problem of how to survive and prevail” for the soldiers, strategists and political leadership who undertake it (p. 135). For those who embody war in act and deed, war’s real historical contingency compels an instrumentalized conception of it “such that knowledge about war is never fully exterior to *an order that war itself creates*” (p. 135, authors’ italics). This ontological status of fighting as the irreducible condition of war is both an enabling and a limiting condition of inquiry in war studies insofar as the foregrounding of fighting, and warfighting as its administration, instates a decisive divide in inquiry into war that poses a dichotomy between “war *or* society”: inquiry into war proceeds as either the study of fighting (strategy or military history, for example), exclusively, or as the study of its impact on society, exclusively (p. 135).

It follows that fighting is arguably that which is most definitive of war. War’s ontology necessitates an instrumental conception of it that is realized in the test of arms, whether it escalates to kinetic exchange or simply implicates its possibility in a way that necessitates the cultivation of strategic and operational competencies to deter it (hence the appreciable fixation within defense organizations on enhancing and maintaining capabilities). Nevertheless, the

ontology of war is irreducible to fighting alone. Drawing on Emmanuel Levinas's captivated meditations on war in his preface to *Totality and Infinity* (1979), which marvels at war's "permanent possibility," Barkawi and Brighton argue that the politics of war cannot be rationally comprehended without an understanding of the way in which war instates an absolute order of objectivity that reworks the reality of social and political existence in pursuit of strategic projects, usually to the paradoxical end of establishing a "putatively superior peace" in its idealistic statist expression (p. 136).

Levinas describes the ontological event of war through the metaphor of an order of objectivity that is only revealed under the pall of war's shadow:

In advance [war's] shadow falls over the actions of men [...] The ontological event that takes form in this black light is a casting into movement of beings hitherto anchored in their identity, a mobilization of absolutes, by an objective order from which there is no escape. The trial by force is the test of the real. But violence does not consist so much in injuring and annihilating persons as in interrupting their continuity, making them play roles in which they no longer recognize themselves [...] It establishes an order from which no one can keep his distance; nothing henceforth is exterior. (p. 21)

Explicating Levinas's rumination on war's permanent possibility, Barkawi and Brighton posit that war "casts into movement" elements of society that are not themselves tied in any obvious way to the order of battle or the legitimation of its authority. Fighting instates this transformation, but the inception of its event "draws in and disrupts wider certitudes and coordinates of human life" which "shape and accelerate the transitory and mutable in human affairs" (p. 136). In this way, war in its absolute expression is, for Levinas, both destructive and generative of truth and meaning for every political subject it touches. These subjects are both bearers and manifestations of the social meanings that are made and unmade by the disruption of certitudes which war, as fighting or kinetic exchange, instates. This transformation of social and political certitudes is in fact the objective of war, both its absolute and its ideal, and strategy is

“the science of its management” (p. 136). As Barkawi and Brighton see it, Levinas’s observation of what is absolute of war reinvests the significance of fighting by positioning it as a founding coordinate for the transformation of social and political life:

As the basic element of the ontology of war...fighting presents itself as a duality. First, it drives the intellectual instrumentality of truth about – and in – war, through its historicity and immediacy. But, second, it also exceeds the terms of that immediacy. This “excess” is the capacity of organized violence to be more than kinetic exchange, to be constitutive, generative, to “cast into motion” subjects who are then alienated from themselves and come to know themselves and the world in new ways...This excess, lying beyond the compelling, immanent socio-political logics of combatants, is at the core of the ontology of war. It is both that which gives war its status as an ontological event for politics and society and a problematizing framework from which a critical approach [to the study of war] might begin. (p. 136)

The importance of this insight for the study of war as an ontological event, is that war, “in its generative power of remaking...exceeds reduction to its destructive consequences alone” (p. 137). This insight, to be sure, undoes the conventional framing of war as an extension of policy that suspends the political (in which war is constructed as transgression of a defined, normative political order, i.e., policy’s other means) in that it implicates forms of knowledge production and their structuring of power/knowledge relations that would seem to exceed war’s instrumentality, alongside the rise and fall of various paradigms of warfighting, as subjects of war’s truth-making (i.e., war’s “other” means). These knowledge activities then become primary sites for war’s realization as a generative, meaning-making process: their “interior, political-strategic” instrumentality assumes a direct relationship with war’s “wider excess,” which casts the social and political order into motion (pp. 137-138). Once again, insofar as politics is mobilized by the abstracted of power of war, politics becomes an extension of war through other means.

Expanding Barkawi and Brighton’s insight to account for the division of “war or society” in the disciplines of the literary arts, we can provisionally state the problem this presents for the study of war through literature like so: the linkage between the legitimation of power and the

production of authoritative knowledge of war is a recurrent element of politics insofar as it is an irreducible condition for anyone who seeks to “produce knowledge about war in the context of an order of public reasons” (p. 140). Such knowledge is never exterior to the order which war itself creates. Counterintuitively, this situation applies to academic disciplines that normatively disavow any connection to this linkage viz. the instrumental order of knowledge which war produces and legitimates. Due to war’s innate tendency to “disrupt, undermine, and transform” the order of public reasons and the political identities that war itself defines, the conditions of that knowledge production, upon which the power/knowledge relation of what Barkawi and Brighton term “War/Truth” hinges, are always vulnerable to the transmutative contingency of war’s ontology (p. 140). To this end, war’s chimeric, multiform constitution implicates fields of knowledge production that draw in a much vaster scope of epistemological concerns than questions of legitimation of military and state authority and the perfection of martial technique in the objective test of battle would seem to imply. War/Truth, in their formulation, “disseminates and disperses knowledges and effects into divergent fields and sites, often apparently unrelated to the conduct of war and state power” (p. 140). The generative effect of this dispersal of war’s creative-destructive energy is to implicate these fields as primary sites for War/Truth’s realization. War’s innate tendency to instrumentalize knowledge (where it concerns warfighting, surely, but just as surely where it concerns fields of study – like poetics, say – far removed from any recognized field of battle) seeks novel terms for knowing the world and, by knowing it, remaking it. I contend that literature provides them, wittingly or not, for the simple reason that war takes notes: insights and understandings gleaned from disciplines that are conventionally understood as distinct from and therefore outside or even opposed to the study of war as it concerns fighting, the organization of violence, and the profession of arms serve to enhance not

only the understanding of the world but, increasingly, the capacities for self-knowledge and reflexivity of those who embody the profession, or who support its practitioners through research and education.

Without a substantive account of the incorporative dynamics of the generative, productive exchange between warfare and aesthetics, literary critiques of War/Truth as a power/knowledge relation limit their relevance to questions settled in advance by the telos of its own discipline as a study of literature. The disciplinary construction of war as simply a cause of human suffering, “antithetical to the liberal order,” arguably leads scholars to misidentify that “which belongs to an order of war as belonging to that of an order of peace” (pp. 141-142). After Levinas, war’s shadow touches nearly every aspect of social life whether we are cognizant of it or not. So much so, in fact, that a sustained analytic focus on war is difficult to maintain without falling back onto the war/society distinction and the disciplinary investments that legitimate and sustain it. But excluding the study of the conduct of war as the exclusive domain of coercive state institutions or limiting questions concerning its conduct to pacific humanities-sanctioned topics like ethics or legality, essentially reinscribes the legitimization of knowledge of and about war as the exclusive purview of those who possess the instrumental competency demanded of its exercise, the ultimate test of which is efficacy in the test of arms. To reinscribe this exclusion by disavowing the subject of war is to double down on the paradox of War/Truth.

As I have suggested, following Leps’ cogent critique of DeLillo’s aesthetics, the imbrication of Boxall’s curious knot in Richard Elster’s discourse on strategy and operational art arguably points towards a pervasive and subversive military-cultural transformation. Insofar as Westphalian militaries are also bound up in the torque of DeLillo’s curious knot, they have developed their own endogenous counter-discourse to the technophilia of full spectrum

superiority. This counter-discourse develops its own unique practices, precepts, concepts and representational techniques in ways that take on many of the pretensions of avant-garde literary production and critique. Through paralogy, language play and sense-making, it cleverly invents and discovers means of subverting the objective official sense of warfare, as the instrumentality of fighting, imparted by warfare's dominant paradigms. Resist it though one might, through ethical poetic experiments or otherwise, warfare's irreducible instrumentality, much like the poetic avant-gardes of decades past, seeks to cultivate a logic of creative destruction capable of resisting or breaking free of its own ideal models and forms. The conceptualization of this paradox of warfare is not, in fact, particularly new, and has been understood since at least as far back as Clausewitz, whose canonical work of military philosophy elucidates the art of warfare in terms of a self-perpetuating dynamic that, in the formulation of Francois Jullien (2004b), seeks to "betray its ideal concept" (p. 11; Graicer, 2017a, p. 26). The inference is that the paradox of the avant-garde is implicitly assumed by even the most canonically conservative philosophies of modern warfare. And while the instrumental study of warfare develops novel expressions of tension between knowledge and uncertainty, the power/knowledge relations they augur are a fundament of military authority and competence: the dialectics of logic and form are arguably a driving, generative force of conceptual abstraction that qualifies modern warfighting ability in the trial of the objective, if not the test of arms (Osinga, 2006).

Which is to say that war, whether it is realized through direct manifestations of organized physical violence or through the production of cognitive effects and theoretical abstractions that are directed, endogenously, at encouraging reflexivity, produces forms and structures of intelligibility that beg careful explication in their ontological foundations as they concern the epistemology of war, which is generative of its own specific kinds of truth and meaning and its

own unique and particular orders of legitimation. A sustained engagement with the poetics of operational art, or of the pedagogical approaches which support its evolution and refinement through PME, should contend substantively with the terms and concepts which engender this avant-garde knowledge as they define its organizational ontology. Simply because those concepts serve to enhance the instrumentality of warfare and warfighting, the know-how that qualifies the profession of arms and its practitioners, does not prefigure in advance their significance as they concern the subject of literature. The construction of the study of literature as the antithesis of the study of warfare as knowledge of fighting is a contingent and provisional grounding that should be productively unsettled.

DeLillo's fiction describes emerging capacities for making and carrying out war that implicate literary practices and devices in ways that, indeed, move far beyond the usual assumptions about the proper forms and functions of the arts. The dematerializing boundaries between contemporary art and organized violence spurs a creative impulse in the art of war and strategy that potentiates the military's emerging avant-garde capacities for poetic abstraction: the arts, sometimes unwittingly, sometimes knowingly, cede novel sense-making capacities to military institutions that require precise explication in their conception and exercise. In this light, Elster's discourse points towards ontological questions concerning the combatant's and the strategist's changing conditions of ability and responsibility in relation to war's new conceptual arts that are not disinterested in the same way that the question of a reader's or the artist's ability to constellate an ethical response to the material violence from which they are removed is disinterested. Seeking stillness to rethink one's position in (and on) war and peace is arguably an ideal effect of the exercise of War as Haiku, which aims to empower those who embody war's creative-destructive energies: it aims at something like a deconstruction of their ideal

comprehension of the essence of war the better to reinvent and renew their sense of its objectivity. Which is to argue that the terms Elster generates warrant critical attention in their primacy as they concern the subject of the new conceptual arts of war, rather than as a secondary concern of literary study in its normative disciplinary construction.

Extending Barkawi's thesis, the ontological problematic that Boxall's imperative assumes as the enabling condition of inquiry into literature (paraphrased: what kinds of aesthetic practices can cultivate ethical responsibility for the avant-garde techniques of violence?) reveals a profound limitation, in this sense. Boxall's approach foregrounds questions about the order of scholarly reasons for how and why one might inquire into the linkage that ties the work of organized violence and the work of aesthetics. This is, of course, a necessary condition enabling that inquiry, as it is an enabling condition of most scholarly disciplines in the humanities and social sciences. But insofar as the ontology of war is essentially undertheorized by literary critique and scholarship, the subject of war is not usually afforded the same capacity for reflexivity: whatever the novel's ethical designs, Elster's discourse attempts to describe what war is, as an ontology, as a phenomenology, for those who are cast into motion by war's transformational powers of unmaking. But his terms are marked as significant by the novel's ethical discourse only insofar as they concern his inability as an artist and an intellectual to respond ethically to the order of war in which he himself is already incorporated. The novel's construction of Elster's responsibility points to a limitation that is an enabling condition of not only his work (which depends on an abstraction of material violence, of war as interpretive strategy), but also the limitations of the ethical poetics of the literary work in which his discourse is fictionalized.

In this limited capacity, Boxall's ethical imperative isn't likely to reveal much about the capacities of conflict actors – be they combatants, policymakers, or defense intellectuals like Elster – who are engaged in and by the poetic abstractions of operational art because it effectively brackets those ontologies along the lines of war or society. These capacities only take on their full significance insofar as they are tied to the roles they serve and functions they fulfill in defense and security organizations, which are themselves *subject to* and *sites for* the realization of war's instrumentality. From the perspective of literary critique, it should be enough to note that Elster's discourse serves the instrumentality of war by enhancing combat strategies to grasp their significance. But that observation alone little clarifies the significance of the terms that he imparts as they would apply *in situ*, i.e., as they foster and augment martial efficacy in defense organizations. For disciplinary reasons, war and the technical arts of warfighting are constructed as a separate order of being and knowledge from that of the proper subject of the arts who reflects on war's anatomy from a disengaged position, either outside or seeking an outside of war's domain. In this limiting disciplinary construction of the relationship between war and the arts, war is mostly taken for granted insofar as it is known in advance as something to be refused or resisted if it cannot be abolished from the social order, and which is only approachable as an object of study insofar as it addresses the disciplinary concerns of "some other scholarly conversation," namely the social responsibility of the artists who "responds" to war, rather than the arts' operative functions within it (Barkawi & Brighton, 2011, p. 128).

Cultivating the reader's reflective sense of responsibility for the function of poetics in the avant-garde techniques of contemporary warfare by decoupling themselves from the forces of war is arguably an insufficient response to theorizing the abstractions of avant-garde martial practice for subjects who are inextricably bound to the always-already collapsed and involuting

domains of war and peace because that reflective exercise works to contain the knowledge produced by that engagement within the container of the study of literature, where it arguably concerns the study of war, in which poetics and literary production are already incorporated. The notion that war is something one contemplates in a literary conference or a gallery that is constructed as separate from war's domain, and can therefore be held apart or disengaged from war itself as a means of elevating its study within the arts, *a la* Susan Sontag's *Regarding the Pain of Others* (2003), arguably reinforces a particular disciplinary fragmentation and decentering of the study of war that tends to inhibit and even repress understanding of war as a distinct phenomenon that produces its own forms of knowledge, structures of knowing, and by extension, measures and expressions of truth. This decentering of war as a subject arguably blinds scholarship to effects of these kinds of poetic abstraction on users who are incorporated by war, and the consequences of that incorporation for not only actors who are engaged in and by the operations of warfare, but for the transformation of social and political order in which war is also inextricably imbricated, and which war, as an ontological event, makes and unmakes.

Certain conflict actors or agents of war (particularly those in the generalship, who are the kind of political subjects most likely to be actively engaged in the exercise of operational art) can surely abstract a superpositional vantage over war as it is carried out by a variety of subordinate actors who are either enlisted or conscripted, but either way bound to it. But this kind of top-down distribution of authority, in the pattern of C2, is arguably what the poetics of operational art, in the mode of P2, are working to productively unsettle and reconfigure by engaging creative and open-ended discourse around subjugated knowledges of war, if not the warriors. Moreover, most conflict actors – be they combatants, operators, or strategists – are imbricated in networks of global powers of war that do not easily afford them the luxury of decoupling or disengaging to

refuse it. Their incorporation is an irreducible condition of their ontology, as subjects of the power of war, and that incorporation by War/Truth's creative-destructive powers of unmaking makes their activity within it sensible, apprehensible, and meaningful. Their incorporation defines the sense in which they know of war, and in which they speak of it. The mechanics of that incorporation, and the implications of incorporation for its subjects, require careful explication if the capacities and agencies of the political subjects they incorporate are to be meaningfully conceived. The remainder of this dissertation works to unpack how those poetics work on political subjects of military organizations, particularly at the operational and strategic levels.

Chapter 2: The Naveh School – OTRI, operational art and Systemic Operational Design

The previous chapter described emerging capacities for abstraction in Western defense organizations in the paralogical model of Jean-Francois Lyotard's version of organizational postmodernism. To better understand their effects on the subjects who inhabit them, this dissertation proposed a literary framework for analyzing these capacities and connected tendencies in defense organizations that is neither wholly of the arts nor of the instrumentality of war in their conventional disciplinarity. The course of study laid out proposed to follow these tendencies where they reveal themselves in both real-world military operations and avant-garde aesthetic "operations," after the terminology of Marcel Duchamp, the latter of which are conceived to reconstitute the field of experience in which war and warfare are apprehended as a mode of action and deliberation, and transform the conditions in which the events of war are apprehended as phenomenon. Where these avant-garde tendencies gain enough institutional traction to develop into coherent practices in defense organizations, they tend to foster creative discourse and sense-making activities that work to unsettle the official objectivities of modern military thought and open defense practitioners to insights drawn from "outside" fields well beyond the scope of conventional military science and philosophy. As I have argued in the mode of organizational postmodernism, these capacities leverage a reciprocating dynamic between conceptual transgression and institutional pragmatics in order to support innovation in defense organizations and mobilize its generative capacities in pursuit of their strategic projects and security mandates.

The dual conception of operations which this dissertation proposes as a theoretical framework is a means of bridging between two seemingly antithetical spheres of organizational praxis: the chaotic and often bloody world of military operations, which demand highly

structured repertoires of organizational knowledge and martial behaviour to enhance efficiency and manage the deadly risks of military action, and the abstruse, contentious, transgressive world of avant-garde art and aesthetics, which aims to dismantle, deform and supplant established forms and institutional legacies which make particular aesthetic phenomenon intelligible in order to engender new frameworks of intelligibility and action. As I argued in the previous chapter, this is an approach that is consistent with Francois Jullien's argument that the essence of warfare is to betray its ideal models. Poetics, the study of how literary texts and forms elicit certain affects from their audience, is the literary function around which this dissertation attempts to construct such a bridge. However, because the proprieties of literary genre and periodization are quite remote from the concerns of military philosophy and organizational culture, this dissertation departs from a focused and sustained study of literature in its generic construction (although it occasionally draws from traditions of literary scholarship) and engages something more like a cross-disciplinary cultural study of literary avant-gardes in military philosophy and practice. "Operational art," after the Naveh school's scholarship on operations theory, is the term of military philosophy which this investigation revisions to make poetics apprehensible as a subject of military knowledge.

What is operational art?

The Naveh school's conception of operational art arguably reflects the most explicit and extensive engagement with martial philosophy as an avant-garde aesthetic practice in the recent history of warfare and warfighting. Developing from Shimon Naveh's doctoral research on operations theory and his collaboration with a variety of like-minded officers and civilian contractors engaged under the IDF's Operational Theory Research Institute's (OTRI) think tank consultancy in the late 1990s and early 2000s, the Naveh school's conception of operational art

was proposed as an encompassing philosophy of strategic generalship for joint warfare in the IDF. Although a few key practitioners from the Naveh school (including Naveh himself) continue to have a significant influence on PME in the IDF staff college, and while OTRI was influential in the development of the IDF's 2006 Operational Concept, operational art as theorized by the Naveh school was never formally adopted as IDF doctrine (Libel, 2010).

Though many Western defense organizations embrace conventional definitions of operational art, the Naveh school's concept of operational art remains something of an outlier, not only because of its divergence from more conventional Anglo-American definitions of the concept and its privileging of Russian influences, but because of its pedagogical tendency to de-emphasize classical military philosophy in favour of outsider disciplines and postmodern abstraction (Kober, 2011).

Naveh himself is a seasoned paratrooper, a retired one-star general and a doctor of philosophy who graduated from King's College's war studies program in the early 1990s. Working alongside Ofra Graicer (who also continues to practice) and a handful of engaged one-star generals and civilian contractors, Naveh was the powerhouse of the now defunct OTRI, a think tank that styled itself as a "cultural *agent provocateur*" in the IDF's general officer corps, prosecuting for the adoption of operational art as a revolutionary paradigm of warfighting for 21st century conflicts (Naveh, 2007, pp. 1-2). Naveh's enduring contribution to military philosophy is the evolving pedagogy of Systemic Operational Design or SOD, which was conceived as a robust critical alternative to conventional planning and military information hierarchies, and which continues to evolve through applied practice in the IDF. The extended case studies that follow develop a narrative of the weirder aspects of Naveh's practice that explores literary

aspects of the two key conceptual practices underpinning the Naveh school's legacy: operational art and SOD.

The essence of Naveh's rendition of the theory of operational art is that, much like Richard Elster's poetic meditations on the conceptual myopia of traditional military planning, it privileges a logic of open-ended systemic processes over a teleology of institutional models. The Naveh school conceptualizes operations as evolving, autopoietic expressions of knowledge in action, rather than means for realizing a pre-decided end-state through applied knowledge of pre-existing forms of warfare (Naveh & Graicer, 2017). Conventionally understood, operations are the means by which the abstracted aims and defined objectives of military strategy are translated into a coherent, unified program of tactical actions orchestrated to instate those objectives as a material reality, ideally satisfying the aims of national policy (Naveh, 1997). An expansive contemporary definition of operations would also acknowledge shaping operations, logistical support, administrative tasks, and communicative actions that enable the coordination and sustainment of those actions to cohere within a unified effort. As such, operations are postulated as a distinct organizational level of war that bridges between strategy and tactics.

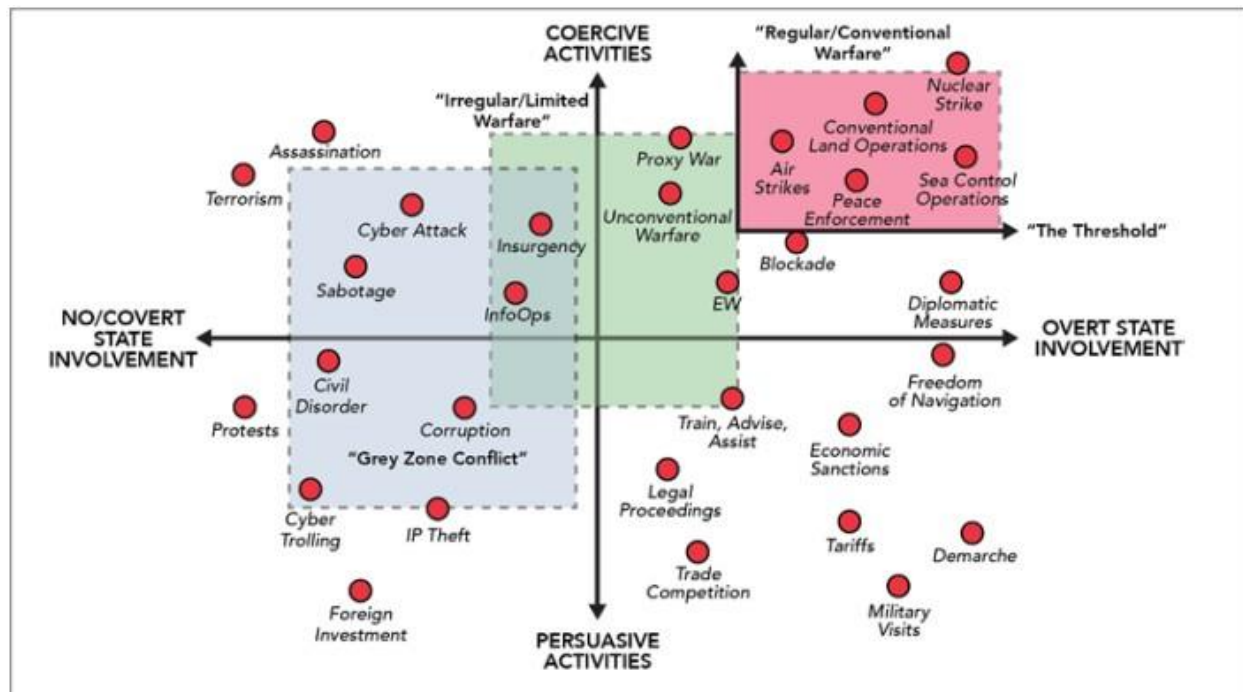
Once a limited concept to describe the organization of battlefield maneuvers, the nature and scope of operations have deepened and complexified over the last two centuries in ways which have surpassed this limited definition. The increasing organizational sophistication of war's technical and logistical means has deepened the continuum of operations so that the front and the rear may span across enormous distances of space and time, forming discontinuous wholes separated by sea, air, and space (cyber or otherwise), or collapse entirely, forming overlapping microcosms of conflict, competition and even cooperation in compact, socially complex domains like cities, suburbs, and rural villages and hamlets. With the expansion of

operational space and time, the singular domain of the terrestrial battlefield with its clear binaries of enmity and distributions of contested territory is replaced by the multiplicity of the “battlespace,” a hybrid space that bridges the material and the immaterial, civilian and military life, through which military action passes (Croser, 2011). As operations become the principal form of martial administration, and as fighting itself becomes but one expression of that activity, “battle” increasingly comes to resemble a series of complex and dynamic interactions between elements of both belligerent and passive systems where the destructive outcomes of particular tactical engagements matter less than the synergistic relations between divergent actions connected by a singular and coherent logic or plan (Naveh, 1997, pp. 10-11). For Naveh, operational art is a practice for making sense of these complex interrelations, the better to mould their interactions to strategic advantage.

Naveh’s early scholarship emphasizes that the burgeoning complexity and diversification of the means of battle combined with the deepening of operational space and time produces a general situation in which the proportional superiority and destructive power of a force’s fighting mass matters less to the overall effort than the organization of that force as a maneuvering system that can induce systemic shock in the adversary system and disrupt the unity of their operations. Deepening operational complexity even further, military operations in what are known as “low-intensity conflicts” or LICs often fall short of the threshold of outright war (Catignani, 2008). Where defense organizations are engaged in these kinds of conflicts, operations are likely to involve civil outreach, narrative building, and support tasks that occur simultaneously with fighting engagements in order to shape the perceptions of a variety of actors, be they passive, active, or belligerent. These kinds of consciousness-shaping operations often involve competition between rival forces, including conventional, irregular, or even neutral

forces like criminal gangs and enterprises, rather than outright belligerence. This is to say that since the end of the Cold War, the epistemology of armed conflict has complexified even further, displacing the traditional framing of the spectrum of conflict which situates armed conflict along a binary continuum of escalation ranging from peace to inter-state war.

Figure 1
The matrix of conflict



Note. From *Pan Domain Force Employment Concept* (p. 36), by Department of National Defense, 2020, Canada. Public domain.

Consider the matrix of competition, which is an alternative conceptualization of the diversity of modern conflict that broadens the linear modelling of the traditional spectrum of conflict (see fig. 1). It expands to include a range of activities short of the threshold of war such as so-called “grey” conflicts which nevertheless concern state security and strategy, including lawfare, cyber attacks, and intellectual property theft. In order to generate a cognitive model of the complexity of contemporary conflict and the kinds of decisions these complex security problems impose on commanders and strategists, it becomes increasingly necessary to

understand systemic processes, temporal and spatial logics, tensions and even paradoxes which condition both the battlespace and “theater” of war as a space of actionability, and to develop working theories of these conditions and relations. While *In Pursuit of Military Excellence*, Naveh’s intensely detailed scholarly history of operational theory, does not address LICs or grey conflicts, these types of conflict more closely align with the nature of Israel’s security environment after 1980 (Operation *Swords of Iron* notwithstanding) than the type of interstate wars that defined its formative years (Kober, 2010, pp. 178-180). As such, they more closely resemble the kind of martial-conceptual space into which OTRI’s practices sought to intervene.

At the level of practice, Naveh’s conception of operational art concerns the capacity of the generalship (i.e., the general officers and staff of what is usually a Westphalian-style defense organization) to mediate a pragmatic logic of operations that can exploit the systemic complexity of the conflict environment which is their medium of warfare. The general is an operator of systems embodied in people, rather than a commander of operations themselves, which requires a curiosity contrarian to that of a fighter who must engage the field mechanically (Naveh & Graicer, 2017). As armed conflicts tend to be open and emergent, they evolve in ways that are difficult for highly structured military organizations to anticipate and adapt to. In order to adapt to emergent conditions of warfare for which there is little institutional precedent for comprehending, let alone acting upon in a coherent way, the Naveh school’s philosophy of generalship (to which the author of this dissertation has made a very minor contribution through co-authorship of the recent article cited here) assumes that the command apparatus must cultivate an active and open disposition towards knowledge that exceeds the military-institutional grasp (Graicer et al., 2022). For Naveh, the encounter with this excess or “outside” defines the essence of generalship: the Naveh school recognizes that the reality of war and the art of warfare are not

defined by fixed and unchanging essences or predictable dynamics but rather by the accumulation of events that must be apprehended in their unique and contingent relationality, of which strategists and operators have limited means of comprehending without developing an emergent practice of critical inquiry. To this end, the Naveh school's conception of operational art can be understood as a philosophy of generalship which fosters the abstraction and critical interrogation of military thinking and its epistemological limitations over the conformance of ready-made institutional models for warfare (i.e., formal doctrine) to apparent exigencies of the theatre of war.

Naveh's conception of operational art presumes that the irreducible systemic complexity of conflict and strategic competition generates emergent potential that is relational insofar as it is uniquely situated and ephemeral. Drawing from a Russian tradition of generalship explicated in the interwar writings of Mikhail Tukhachevsky and the Soviet concept of deep operations, this potential must be made apprehensible by an active practice of pragmatic inquiry into operational friction⁷ (Naveh, 2007). A contemplative disposition and curiosity towards chaos and disorder are essential characteristics of generalship in this mode: intuiting comprehensible patterns from threatening events for which there is no ready-to-hand model for comprehending, the general (or the field-grade officers graced with the general's liberty) inquires into conflict spaces where the pushback of events is unanticipated. When the organization's comprehension of events fails to account for the unfolding realities of war, the general devises provisional means of

⁷ In contradistinction to the presumption of bounded, linear space he ascribes to Western paradigms of warfighting, Naveh argues that Russian military culture tends to understand space in terms of its dynamic qualities. From that perspective, space is continuously redefined by relative movements of contextual elements. The corollary of this is a command outlook that tends to perceive disorder in the command apparatus as its natural condition. Dima Adamsky's (2010) study of military innovation cultures in Russia, America and Israel likewise observes a propensity in Russian military culture to perceive the chaos and disorder of war in terms of natural conditions or phenomenon. The common thread is that Russian operational theory tends to view the chaos and disorder of martial activity as a constitutive, necessary, and productive condition of war.

understanding the significance of the disorder, strategically, and exploiting the propensity for chaos, operationally. This mode of inquiry aims to attune strategic cognition (i.e., political concept, design and intent) to the changing conditions from which that friction pushes back (i.e., the chaotic milieu of conflict, competition, violence and threat from which the strategist aims to bring forth favourable conditions aligned with the demands of national policy).

By provisional investigation of friction and the tensions that condition it, a general engaged in a practice of operational art aims at intuiting a logic of action that can finesse the unique spatial dispositions and temporal rhythms that condition the battlespace as a variegated space of actionability for friendly forces, rivals, and adversaries. To instate a robust critical culture of martial learning through action, an effective practice of generalship necessitates command systems configure themselves, at interconnected levels of perception, conception and action, to the emergent character of the systemic milieu in which they operate (Graicer et al., 2022). Naveh's concept of generalship, which necessitates a practice of operational art, therefore calls for the cultivation of active military learning systems in order to tighten the linkage between conceptual research and inquiry, operational praxis, and education of the higher levels of command (Naveh, 2007).

What is Systemic Operational Design?

Naveh's philosophy assumes that the continuous evolution of operational and strategic space necessitates that the command system transform itself into a dynamic learning system. Under the general's leadership, the organization undertakes a conscious effort to productively unsettle its uncritical assumptions about itself, its operative modes and models, and its strategic context. To actualize this transformation within a learning system, a defense organization must be able to invent its own critical language to explain novel events and emergent phenomenon in a

register that preserves their uniqueness and ephemerality (Adamsky, 2010). Systemic Operational Design or SOD is the self-directed pedagogy of generalship OTRI conceived for developing this language as an evolutionary discourse of command. Where OTRI's efforts to foster operational art aimed to provide a philosophical basis for a practice of generalship that could synergize disconnected and even conflicted levels and echelons of a defense organization into a coherent program for organizational action, SOD is the pedagogical tool for actualizing its critical discourse on command through emergent inquiry.

SOD is an evolving, self-actualized pedagogy of generalship that emphasizes active inquiry and critique of both the cultural complexity of warfare (and its expression in doctrine, strategy, operations, and instances of battle like maneuvers) and war's complex materiality in emergent processes of systemic transformation and becoming. Where the introduction of operational art in the IDF in the 1990s aimed to provide a comprehensive philosophy of generalship for the institutional evolution of command, force application and force transformation, SOD was conceived as a self-directed process for mediating the science of complexity and systems thinking, philosophies of designed space, and the critical edge of postmodern incredulity into an adaptive cognitive framework for strategic thought and decision making. In practice, SOD aims to attune military communication and decision-making to the inextricable maze of conceptual tensions and paradoxes that condition the actionability of unconventional forms of conflict and warfare, which tend to lack obvious precedents in the institutional imaginary embodied in that organization's doctrine.

Foregrounding the "thrown" and contingent elements of a given strategic context and drawing out the multiple systemic implications of which the defense practitioner and their organization are active components, SOD aims to develop a critical framework for the

exploration of emergent relations of martial force, warfare, culture, and spatiality in particular operational contexts. Elaborating this critical framework enables a practitioner to better position their organization for strategic advantage and enhance the relevance of operations to the evolving spaces of war which they aim to transform. The essential idea is that attuning the perceptions of command to puzzling, troubling, enigmatic, and even uncanny elements of conflict is the fundament of developing a critical sense of the evolving systemic relations of conflict in which the operator-strategist is engaged as an observer-participant. Attuning perception to this kind of friction aims to redefine the conditions of possibility apprehensible to operators and strategists. By defining those conditions of possibility on their own terms, they can implement a relevant, communicable logic of action that can exploit their relative novelty.

In other words, SOD presumes that the reality of the conflict system is something that the systemic inquiry must actively construct in order to transform. As such, it engages a kind of cosmology of armed conflict and operational friction that seeks deep significance in observed trends and emergent tendencies as they concern time, space, change, and the contingency of events (Weick, 1993b). And to the extent that cultural constructions of the reality of war structure the conflict system's conditions of thinkability and knowability, OTRI's pedagogical experiments assumed that culture is an elementary component of a conflict system's systemic constitution: the ontology of military culture is the ground of experience and contextual knowledge which SOD's epistemology works over and transforms through active sense-making. Accordingly, SOD purposefully engages a deconstruction of the cultural in war and warfare. Its process of discursive inquiry explores the stories, beliefs, traditions, rituals, myths, and metaphors that condition, influence, frustrate, and subvert the conduct of war, in both the friendly and the

adversary, or, in military parlance, in the blue force and the red, and more profoundly, in the conflicted ambivalences and rivalries that proliferate from the tensions between them.

Narrativity and operational revolution

As I detailed Ofra Graicer's recapitulation of the theory in the introduction, the revised concept of operational art which orients the Naveh school's praxis essentially proposes that the relativization of operational space by structural pressures of martial, political, and technological asymmetry necessitates new forms of inquiry that can conceptualize that space's innate alterity. Critical appreciation for that space's irreducible tendency towards difference is a lever for an investigator to make meaning of disruptive, non-conforming, emergent patterns of conflict. The Naveh school's praxis cultivates critical attention in the command apparatus to cultural projections as levers for abstracting and conceptualizing asymmetry, discontinuity, and becoming in the operational spaces by which the *phronesis* of military power-knowledge realizes itself. One of SOD's principal means of augmenting this critical discourse is the production of narratives. This practice clearly aligns SOD with what Norwegian military academic Anders Sookermany identifies as a military-institutional shift towards epistemic decentering, wherein the shared framework for strategic decision making and the cultivation of organizational values is sought within an ambivalent multiplicity of cultural and narrative frames for grasping complex and ambiguous dimension of armed conflict that exceed the normative scope of modern military thought (Sookermany, 2013; Zweibelson, 2020). SOD's attempt at inflecting the cultural turn into a practicable philosophy of operational art is arguably the most deliberate and thoroughgoing example of this phenomenon in the recent history of military philosophy.

Historically, SOD sought deep theoretical precedents to qualify the narrative approach. Echoing Hayden White's theory of narrativity, Naveh specifies that the production of narratives

allows for the projection of a strategic “plot” that can account for friction in terms of its transformative potential (Naveh, 2007, p. 22; Zweibelson, 2018). Narrative functions as key process for actualizing that plot’s virtuality and serves as a reference for conceptualizing a conflict’s evolution in time. Likewise, SOD emphasizes narrative production as a process which aims to surface and critique a variety of competing and conflicted ideations of space, their historicity, ontologies and embodiments, and make them apprehensible in terms of their temporality: their assumption of precedent, regularity and consistency in the observation of historical trends and in the cultural myths that reinforce them; their mediation of the present as the locus of decisive actualization for a variety of competing actors and organizations; their projection of futurity from actuality, and the potential of the virtual to be other than what already is ((Naveh et al., 2009, pp.75-78; Naveh & Graicer, 2017; see footnote 6).

The ensuing chapters’ extended exploration of the Naveh school’s historical practice aims to explicate OTRI’s weird detour through an alternative corpus for martial science and military philosophy. It develops two narrative trajectories which undertake a critical expansion on OTRI’s engagement with cultural narratives of war and warfare and the theoretical precepts Naveh’s practice mobilized: the first focused on specifics of Naveh’s practice as inflected in operations during the post-Oslo period (particularly during the Second Palestinian Intifada between 2000 and 2005). The second focuses on the evolution of Naveh’s theory as it developed into an externalizable philosophy through engagement in contexts outside of Israel (particularly through the US Army’s School of Advanced Military Studies, SOCOM’s Joint Special Operations University, and the Pentagon’s Office of Net Assessment).

The essays that make up these case studies aim to enumerate a variety of narratives and cultural projections drawn from the Israeli professional experience of warfare after the inception

of the Oslo accords and their gradual collapse as a pivotal framework for the peace process in the 2000s, abruptly ending just prior to the IDF's disastrous war in Lebanon in 2006. The institutional reckoning with that event coincided with the dismantling of OTRI and a figurative burning of the books by order of the IDF's then Chief of the General Staff Dan Halutz (Graicer, 2017b, p. 26). Taking Naveh's writings on operational art and military design as primary texts, these essays aim to articulate how Naveh's avant-garde literary practice animated both his spirited interrogation of generic conceptions of warfare in the IDF and his more thoroughly developed theory of operational revolution, the latter of which continues to inflect the legacy of SOD as it iterates through a revitalized practice in the IDF's staff college. Coinciding with the institutional turn towards unconventional warfare, LICs, and grey conflicts as an abiding security focus of defense organizations in the Western world, following the so-called Revolution in Military Affairs in the 1990s and the onset of the GWOT after 9/11, Naveh's writings develop a colourful and contentious revisionist history of the evolution of asymmetrical warfare at the turn of the millennium, speculating on its radical implications for the transformation of military thought and praxis. These writings are presented as elementary texts articulating the conceptual insights of the key real-world reflexive episode around which this literary study of military operations revolves.

In its earlier incarnations, OTRI's teachings attempted to mobilize an acerbic critique of the institutionalization of mechanized warfare and the professional complacencies which came to underlie it in the institutional imaginary. Naveh isolates that institutional framework as a particular set of theoretical principles and assumptions or "models" of the world orientating martial thought, organization and behaviour, both in the IDF and beyond, and sought to deconstruct the singular ordering of the world they seemed to presume. Making sense of this

critique necessarily entails description of a variety of expressions of military operations and doctrine, both within and beyond Israel, and philosophical and historical precedents for the same. But the primary interest of these case studies is in the exotic (at least, from the perspective of military education and philosophy) philosophies of aesthetics, narrativity, architecture, and cybernetics which informed OTRI's conceptual digressions, and how those philosophies were deployed as a means of critiquing conventional military institutions and organizational practices. These references are enumerated in the extant literature on SOD and the Naveh School's practice, but – aside from the now infamous appropriation of Deleuze and Guattari – OTRI's forays into far-out theory and literature are rarely explored in any exacting detail in either humanities or military scholarship.

What this extended case study attempts to reconstruct is how OTRI's engagement with these sources mediated a particular critical outlook on command and the Western way of war, and how that mediation inflected the design and implementation of certain military operations in practice. Working backwards and forwards in time from Naveh's productive tenure as a mentoring figure in OTRI, it aims to develop a revisionist narrative of significant shifts in the martial conceptualization of science, narrativity and spatiality that catalyzed Naveh's transgression of the cognitive strictures of his own organizational culture. By traversing this alternative genealogy of the art and science of warfighting, these essays develop an expanded study of some of the historical, philosophical and literary references which informed OTRI's practice, and of their operational implications in contexts both inside and outside of Israel's strategic environment. These sources are documented on the historical syllabi of the Advanced Operational Command and Staff Course (AOCSC), OTRI's core mechanism for cultivation of its pedagogy among the IDF's aspirant general officers during its heyday. But aside from Eyal

Weizman's critical work on the architecture of the Israeli occupation, there is sparingly little academic research or commentary that connects OTRI's contentious discipline of "profound reading" to the theoretical and practical insights into warfare, warfighting, operational art and PME which developed from Naveh's pedagogy.

Operational art and practice

The first narrative in this case study, developed over four short essays, begins with Naveh's literary account of the design rationale for the now infamous raid on the Balata refugee camp in the West Bank city of Nablus as a prelude to Operation *Defensive Shield* in the spring of 2002, arguably the first real-world military operation to which SOD's iterative process of discursive framing was formally applied. This account is articulated, post facto, in "Between the Striated and the Smooth" (2006), a conceptually dense, short-form literary documentation of the design process that explicates the critical language OTRI's student-practitioners developed to inform their own spatial practices of urban warfare in advance of *Defensive Shield*. Naveh's narrative account of this process specifies a set of avant-garde martial practices that were crafted to develop a critical rationale for counterterrorism operations during the second intifada. That account outlines a highly developed literary-critical rationalization of martial practice that begs deciphering, footnoting and translation.

Situating the Balata raid in the context of the IDF's post-Oslo strategic environment, the first essay clarifies Naveh's conception of the disjunction between the legacy of modern, industrial warfare (a legacy deeply entrenched in Israel's military culture after the Six-Day War and the Yom Kippur War) and the kinds of irresolute, socially complex LICs which came to predominate Israel's security environment after the first intifada (1987-1993). Naveh argues the emergence of this latter category of armed conflict challenges the orthodoxy of the prior in ways

that call for the development of novel practices of intelligence synthesis that can model the social complexity of the battlespace. The subsequent essays in this case study develop an exegesis of the literary references informing that intelligence practice by expanding on “Between the Striated and the Smooth” and a handful of footnotes detailing OTRI’s literary influences in *Operational Art and the IDF*, a critical narrative reflection produced by Naveh for the Pentagon’s Office of Net Assessment after his retirement in 2005. Digging into Naveh’s references, these essays explicate the literary aspects of Naveh’s *practice* in support of the design of counterterrorism operations, which Naveh developed in collaboration with staff and commanding officers of the IDF’s 35th paratroopers, including the recently retired Chief of the General Staff Aviv Kochavi.

Modelling this approach as a literary practice, it develops an analogue of Naveh’s literary practice from TE Lawrence’s writings on the Arab Revolt of 1916-1918. Naveh identifies Lawrence’s writings as a precedent for a literary practice of strategy that is attuned to sociocultural dimensions of warfare in a novel strategic context. Lawrence’s “Evolution of a Revolt” develops a critical revisioning of the dominant strategic paradigm of his own military culture (embodied in the “cult of the offensive” that inflected much of the fighting on the Western Front in Europe during WW1) that could leverage emergent characteristics of the Bedouin insurgency against the Ottoman Empire’s occupation of the Arab Peninsula into a coherent theory of victory for the revolt that advanced allied campaign aims. While the canonization of Lawrence’s writings in military circles reproduces many of the epistemological features of Orientalism, after Edward Said, the value of these writings from a military perspective is less their prescriptive terms for counterinsurgency practice than their modelling of an “antinomian” practice of generalship, grounded in the creative capacity to “design meaning” for unconventional military operations. The corrosive irony which characterizes Lawrence’s

writing, a hallmark of literary modernism, is therefore a valuable critical technique which enables Lawrence's writing to confront the limitations of imperial models of warfare, and Naveh's own writings arguably mobilize something of the same antinomian spirit.

Taking Lawrence's modernist aesthetic of spatial practice for insurgent operations as a superlative literary example of generalship for operational art, the next essays explicate how the IDF's spatial practices leveraged a violent "deconstruction" of the urban battlespace that attempted to construct an alternative locus of meaning and actionability for the expression of military force. These essays explicate how the aesthetic discourse developed in "Between the Striated and the Smooth" models an active and continuous process that works over the multiple materials and meanings that constitute the battlespace at level of sensation and cognition, constructing the urban battlespace as an artistic medium for the realization of practice (Croser, 2011, pp. 119-221). Informed by the avant-garde writings of Swiss architect Bernard Tschumi (1994a; 1994b) (perhaps most well-known for his collaborations with Derrida in the design of the *Parc de la Villette* in Paris) and situationists like Guy Debord (1958) on transgressive spatial practice, IDF paratroopers leveraged an abstract theory of "inverse geometry," embodied in the now infamous tactic of "walking through walls," in an attempt to subvert their adversary's cognition of the battlespace by transgressing the implied functions of the urban architecture of Balata. The intended effect of this was the active construction of an alternative "real," realized through a set of defined martial practices, through which paratroopers could define operational space in a way that prevented their adversary's dissimulation and deny the defensive advantages of the urban terrain. By engaging a kind of counter-rhetoric of architecture by defying designed space's formal strictures of movement and inhabitation, the commanders and staff officers of the 35th Paratroopers generated an alternative syntax of the urban environment. This syntax or

counter-rhetoric of space was realized through transgressive movements that permitted the maneuvering paratroopers to define that space on their terms and thereby dominate their adversaries.

The final essay in this case study confronts the critical legacy of this episode in humanities scholarship. While the realization of OTRI's practice in Operation *Defensive Shield* has been extensively criticized in Eyal Weizman's (2006, 2007b, 2007a, 2021) writing on the architecture of the Israeli occupation, which is valuable for foregrounding the experiences of the Palestinian civilians who inhabited the battlespace, that scholarship mostly fails to situate the strategic implications and operational consequences of these practices. This means that it largely misses the significance of these practices as they concern the functions and needs of a defense organization, which are ostensibly the object of Weizman's criticisms. Where Weizman frames OTRI's practice in light of an entirely new way of war with far-reaching implications within the IDF and Western armies engaged in the GWOT (which in some ways mimics Naveh's own framing of the paradigm-shifting scope of his practice), the realization of that practice involved provisional approaches tailored, in the habit of what Philippe Beaulieu-Brossard (2020) calls a "craft approach" to operational theory-making, to highly specific security problems that are not easily generalized to other contexts. In this light, it is arguably more accurate to frame OTRI's practice as one which is actively engaged in a process of negotiating the parameters of organized violence in a context which calls into question the norms and ethics of the exercise of martial force, after Anna Geis's (2021) rendition of the theory of the "(de)legitimation of violence". That negotiation is nevertheless conditioned by particular assumptions that are innate to Israel's strategic outlook and national security culture that can and should be productively unsettled.

In this sense, it is also worth questioning, after Weizman, whether the practice of “inverse geometry” through creative destruction is a tenable approach for realizing the conditions for enduring security in Israel’s strategic orbit. Operation *Defensive Shield* was arguably successful insofar as the operation induced a sharp decline in casualties from suicide attacks and provided a foothold for intelligence gathering to support the disruption of terrorist operations against Israeli civilian targets in the years immediately following the mobilization. The operational practices evidenced in “Between the Striated and the Smooth” were conceived to move a particularly fraught and emergent crisis of national security towards a more stable and predictable set of relations, and thereby provide a kind of lever for improving Israel’s strategic advantage viz. its adversaries, ideally the better to resume a peace process with the Palestinians. While that resumption has clearly not come to pass, Naveh has been explicit that the creative destruction of Palestinian spaces is unlikely to induce the conditions for enduring security, and SOD has generally shied away from tactical problems and even kinetic operations in its post-OTRI iterations, emphasizing a philosophy of self-disruption for strategic generalship over the kind of combative logics evidenced at the height of OTRI’s practice. These latter practices suggest a more applicable framework for martial pedagogy to Western armies outside of Israel, whose experiences with operational friction are less fraught by the kind of existential narratives of national security contingent to Israel’s strategic environment.

SOD’s legacies in theory and practice

The essays contained in this second case study concern the elaboration of SOD as an evolving *theory* of military learning and a methodology for pragmatic inquiry into operational friction. These essays engage with the Naveh school’s references as they inform a counter-discourse of military science, one which is arguably an extension of the craft approach detailed

in the final essay of the previous study. Where SOD's architects engage with concepts drawn from disciplines well outside of military science and organizational theory to understand emergent phenomenon in the strategic environment, they do so in the manner of bricolage: they do not transact with these heterogeneous artefacts and materials in order to enhance the philosophical traditions in which they are embedded so much as they enable practitioners to devise innovative applications (Weick, 1993a). In this sense, SOD's bricolage approach to theory-making is better served by a generalist approach than one that attempts to refine philosophical expertise and theoretical consistency. These concepts are valuable insofar as they are relevant to an operational or strategic problematics, rather than faithful to an idealist teleology of theory and practice. The narrative of SOD's engagement with theories of science and narrativity developed in these essays is therefore less interested in their fidelity to an idealist tradition and more directly concerned with the applicability (or non-applicability) of concepts to certain operational and organizational contexts.

Explicating OTRI's engagement with Deleuze and Guattari (1997), the first essay reconceives Naveh's appropriation of the hypothesis of the War Machine in order to explicate how the concept of nomad science provides a conceptual orientation for the disruptive epistemology embodied in the practice of SOD (and SOD's successors in the now-global military design movement, many of whom have in fact disavowed the exoticism of IDF's earliest forays into design). It then turns towards an explication of more conventional institutional doctrines for operational planning and deliberation, describing the conceptual foundations of the mission-command concept underlying conventional models of combined-arms and maneuver warfare which were central to the development of Israel's core military competencies, but which are arguably inadequate to conceptualizing the kinds of paradoxical and seemingly intractable LICs

and security crises that predominated Israel's experience of warfare in the first two decades of the 21st century. From there it turns to an explication of theoretical rudiments of SOD's praxis, which posits what I term operational *poiesis* as the principle driving martial learning in action, and advances the production of narrative as a key practice for conceptualization of emergent strategy and implementation of the same. Expanding on Naveh's theory of narrativity, it develops an exegesis of OTRI's exploration of cybernetics and narrativity in order to explicate the postmodern critique of the technoscientific paradigms of motorized and information warfare implicit to Naveh's philosophy of operational revolution, to which Naveh opposes narrativity as a means of breaking with the implicit teleologies of the mechanistic martial worldview. Finally, it ends with another critical reflection that reframes the political stakes of the Naveh school's legacy in terms of their capacity for imparting what Roberto Unger (2001) has called "negative capability," repurposing John Keats famous literary concept, to military practitioners. After Barkawi's criticisms of SOD, it suggests that the value of military design is its capacity to reformulate the values which underpin the military profession in our present state of global political upheaval.

Study One - “Formalizing the subversive”: intelligence, strategy, and aesthetics of space

In spring of 2002, at the height of the second Intifada, a group of intellectually adventurous staff officers engaged by Naveh’s pedagogy proposed a novel synthesis of military strategy and poststructuralist theory. In sponsorship of the planning activities of the 35th Paratrooper Brigade in their preparation for a strategic raid in advance of a major offensive that would come to be known as Operation *Defensive Shield*, Naveh turned to *A Thousand Plateaus* (1997) with the intention of leveraging Deleuze and Guattari’s incisive critique of the binarity of Western science and philosophy. Appropriating the metaphor of the nomadic war machine as an abductive hypothesis, the abstract concept for the raid aimed at leveraging an acid critique of the IDF’s own institutional military culture and its doctrinal preference for the mechanized offensive, a potent and enduring legacy of Israel’s formative wars, but a martial competency mismatched to the urban counterterrorism fight which Israeli forces found themselves engaged. Naveh envisioned nothing short of a paradigmatic break with the industrial model of mechanized warfare that informed the IDF’s organizational templates and appropriated Deleuze’s and Guattari’s hypothesis of the war machine as a critical cipher to be mobilized against the IDF’s reigning professional orthodoxy. Inviting a kind of professional ignominy by attacking the IDF’s core competencies and rebuffing its historical prestige in modern warfare, Naveh and a cohort of sympathetic staff of officers improvised a subversive theory of small-unit maneuver that could exploit the novelty of the emerging security crisis and enhance the relevance of the IDF’s operational concepts to the labyrinthine socio-cultural milieu of war in which Israel’s security environment appeared increasingly ensnared.

At the level of general strategy, the raid aimed to prototype an unconventional solution for the pre-emption of escalating suicide attacks on Israeli civilian targets. The officers

recognized that the realization of this objective as a strategic reality precipitated a crisis for the IDF's institutional understanding of warfare, which was reinforced by the legacy of the IDF's prestige in mechanized combined-arms warfare. In his written account of the planning phase of the engagement, "Between the Striated and the Smooth" (2006), Naveh charges that the preference for the mechanized offensive (a preference reinforced by the IDF's victory in the Six-Day War of 1967 and the turnaround from near catastrophe in the October War of 1973) has entrenched into an untenable consensus around the aims, ways and means of large-scale urban combat operations. The overlay of civilian life and irregular soldiery that characterizes the urban battlespace in the Palestinian territories made this entrenched military-cultural outlook particularly dangerous and counterproductive. The lack of substantive visual and human intelligence on the movements, emplacements and force configurations of their rivals, who exploit the ambiguity between combatant and non-combatant afforded by an irregular force structure and disappear into the urban milieu from which they draw support, deprived the attacking force of targets and orienting objectives. In the urban battlespace, the principle of effecting mass through projection of a lumbering military presence as on conventional battlefield appears liable to regress into dangerous and excessive street fighting that increases in difficulty with the density of the terrain. The near impossibility of separating civilians from legitimate targets ran the risk of escalation into an indiscriminate slaughter. In other words, the IDF's organizational models for the conduct of warfare retained no apparent means of affecting a disruption of urban terrorist operations without risking military and humanitarian disaster, squandering political credibility and military initiative, creating the potential for deadly, self-defeating strategic outcomes.

Naveh's account describes how the attendant officers are nevertheless captivated by the transformative potential of the situation. The problem set compels the officers to confront the most threatening, treacherous and paradoxical aspects of the emergent conflict, which presents a valuable opportunity for evolution of the paratroopers' knowledge of themselves and the IDF's security environment. To capitalize on this undeveloped potential, Naveh agitates for holistic investigation of the urban battlespace. That inquiry aims to keep pace with the evolving social complexities underlying the emergence of the new threats. A veteran of the paratrooper school of command and a relative outsider to the armoured corps which had come dominate the IDF's institutional culture after its precedential victory in the Six-Day War, Naveh recognizes that warfighting in urban spaces presents physical, moral and conceptual challenges that require not only the improvisation of new tactics, but the cultivation of novel methods for the conceptualization of operational space and time. To this end, Naveh aims to leverage the emerging threat to foster a divergent praxis of operational art that can grasp new and unconventional spaces of war in terms of the flow of forces, energies, and temporalities that structure, condition and transform them.

Naveh's working prototype is the rhizomic maneuver, an abstracted heuristic conceived for organizing unit-level tactics in the pattern of swarm warfare. Forbidding recourse to conventional military patterns (columns, lines) and encouraging the improvisation of nonstandard modes of transit through the walled city, the counterintuitive logic of the maneuver is expressly tailored to subvert the cognition of a resilient adversary with an irregular force structure, one highly adept at subverting the practical and moral conventions of Western warfare. As a cognitive model for maneuvering in a non-contiguous urban battlespace, rhizomic maneuver serves to prime tacticians to conceive and apply complex compositions of movement

and fire on the fly, smoothing the striation of the Palestinian's prepared defences through a mobile occupation of space that abstracts mass effects by a continuous movement of nebulous force and energy. By eschewing the trappings of static, linear presence, the emerging concept aims to make it impossible for the defending Fatah force to discern or anticipate the direction, form or intention of the maneuver.

The conceptual abstraction of the maneuver form is remarkable in its insurgent appreciation of the subtleties of the Palestinian fighters' operational logic: their strategic assessment of the advantages of urban terrain, their defensive anticipation of IDF tactics, their ideological orientation and political aims, even unconscious effects of the patterning of their operational form. The figurative logic of the nonlinear maneuver is coded in cryptic neologisms: generalizing a pattern of "inverse geometry," paratroopers drill to disperse as "gas" (echoing TE Lawrence's metaphor for the offensive pattern of the Arab insurgency in WW1), evading the defensive provisions characteristic of an urban battlefield (barricades, chokepoints, mined passages) by "mouseholing" under and around them, maneuvering in "autarkic fractal units" to capitalize on the obscuring optics of the built-up terrain, disappearing into the architectural milieu which informs the spatial logic of the PLA's defenses. In short order, rhizomic maneuver imparts a war machine to the 35th Paratroopers that transforms their self-concept and language of self-articulation, imparting an assortment of exotic conceptual tools for transgressing the boundaries of designed space in order to smooth the striation of Palestinian resistance in Balata, economizing complex deployments of lethal force to deterritorialize the enemy's cognition of the battlespace, disorient their situational awareness and devastate their combative resolve.

"Between the Striated and the Smooth"

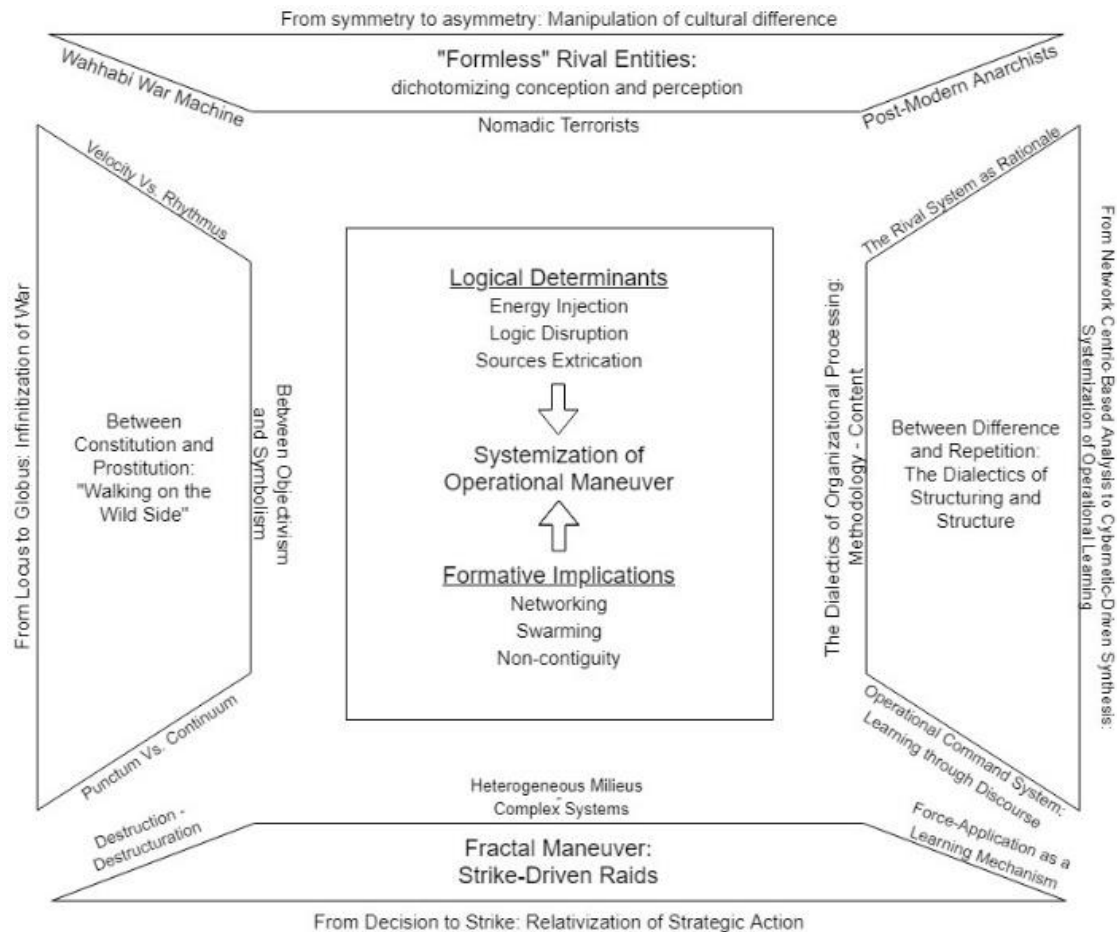
In the aftermath of Operation *Defensive Shield*, Naveh produced a colourful, conceptually-dense present-tense narrative dialogue of the design brief which catalyzed the planning phase of the raid. Titled in a style that could be lifted from a graduate seminar in accelerationist theory, “Between the Striated and the Smooth: urban enclaves and fractal maneuvers” is a short prose work merging elements of architectural and systems theory, philosophical dialogue, and densely theoretical non-fiction prose. Naveh, then a reservist and a part time instructor at Tel Aviv University, presented the text as a panel paper at a humanities conference on exceptionalist sovereignties at the Autonomous University of Barcelona in 2005 and the paper circulated in various critical design publications in the years that followed. While the document appears an article of ephemera in comparison to Naveh’s book-length, citation-heavy post-OTRI writings for Booz Allen Hamilton and the Pentagon’s Office of Net Assessment, it represents his most thoroughgoing engagement with postmodern theory among the English-language documents from OTRI’s heyday in circulation. The text functions as a kind of critical antidote to jargon-intensive doctrinal literature, dramatizing the prelude to the operation as an egalitarian dialogue between staff officers grappling with the problems implied by their impending mission, which is conceived as a critical engagement that aims to test an operational concept that can transform the deteriorating strategic situation in the West Bank.

Mediating principles of cybernetics and systems theory in the incredulous manner of institutional postmodernism, the piece performs a kind of crash-course autoethnography of OTRI’s operational theory and practice circa 2002. “Between the Striated and the Smooth” (2005) abstracts the operational concept for the raid in terms of a “deconstruction” of the military-cultural mythologies inflecting the operational space which the paratroopers aim to transform and develops a narrative schematic of the evolving operational concept. It likewise

diagrams the oppositional logics of the involved systems and the tensions between them, the developing operational discourse in the command echelons engaged in the design process, and the dialogic interaction between endogenous and exogenous forms of knowledge in the command discourse (see fig. 2). In addition to consolidating a unifying symbology for conceptualizing OTRI's engagement with Deleuze and Guattari, it models a practice of reflexive inquiry into the tensions and paradoxes that prime the conditions of asymmetrical warfare in Israeli's security environment circa the early 2000s.

Figure 2

Systemic oppositions informing the design approach to IDF counterterrorism operations



Note. Adapted from *Hollow Land* (p. 199), by E. Weizman, 2007, Verso. Copyright 2007 by Eyal Weizman.

Despite the text's brevity, the dialogic form of the inquiry aspires to actualizing a sweeping narrative arc, one bending towards not only a paradigmatic revolution *viz.* new models of martial learning and comprehension, but realizing a strategic ecology within which to understand themselves and their experiences of war, their institutional mandate, and their evolving relationship with their rivals:

Unlike our idealistic tradition that perceived war in binary terms, this campaign is going to be a very long one, and will end, in the far future, in a kind of new equilibrium rather than in decisive results. If we do not change our current discourse on intelligence, we are bound to fail. Our rivals, or enemies as they are being referred to, are not just ontological objects for action. Operationally speaking, they are a logical medium for systemic deliberation, and unless we construct them as conceptual artifacts, we deprive ourselves of the basic conditions for designing our own logic. (Naveh, 2005)

This open-ended narrative construction of the strategic “plot” that the operation aims to set into motion frames the challenge of the impending operation as one which exceeds questions of economizing use of force towards realizing a limited political objective. That challenge is framed as it concerns the epistemology of military intelligence and its generative capacity for transforming not only the exogenous relations of the conflict system, but the endogenous systemic relations of the military organization itself. Unsettling a grand narrative of security through decisive military action and the seizure of territory, the document aspires to “operationalize uncertainty” (I am here referencing a phrase drawn from Caroline Croser’s (2011) research on the spatiality of the urban battlespace during the American occupation of Iraq), by embracing the messy, disordered materiality of the spatial medium of urban warfare in a multiplicity of embodiments and constructing a deliberative logic of action adaptable to that morphology.

The scenario the document describes imputes the movement of a hostile Palestinian force into the Balata refugee camp, a built-up urban space home to thousands of civilians, cut through

with a clustered maze of narrow alleys. The text's recapitulation of the intelligence brief suggests that a company-sized force of irregulars (between 80 and 200 fighters) drawn from various armed factions have decamped from central Nablus for the dense cover of the maze to establish a logistical base for terrorist operations, principally in the form of suicide bombings against civilian targets inside Israel and settlements in the West Bank. The staff's chief of intelligence, identified as S2 according to the convention of the continental staff system, lays out the initial story, painting a dismal intelligence picture of the situation that the impending operation aims to transform: the insurgents' precise whereabouts, command organization and operational form are unknown and must be actively drawn out into visibility in a manner that the defending force will not readily give up. The complexity of the strategic "plot" which the operation aims to unravel is even more densely knotted. The move to decamp from Nablus to Balata suggests a kind of feint undertaken to test the IDF's nerve. Having mined and booby-trapped every conceivable approach, the defending fighters have figuratively circled the wagons, establishing a "*laager*" that imposes a particular logic of decision on the attacker: either attempt to breach the stronghold and risk a high level of casualties or ignore the consolidation of a hostile force and cede the irregulars their status as untouchables, beyond the operational reach of the IDF security apparatus.

Put another way, the defending force holds a cognitive advantage in that the strategic imperative that IDF combatants fight their way through a populated urban space anticipates a repertoire of tactical actions that are fraught with the potential for self-defeating outcomes. The irregulars' move to Balata aims to impose a particular set of choices on their adversaries that anticipates both their adversaries' cognitive framework for comprehending the situation and the conventions of warfare that inform their apprehension of it as a comprehensible security

problematic. The complex of tensions constraining combat operations in an urban space implies profound risks, for both the Palestinian civilians who become the deadly game's "ultimate victim," as the text puts it, and for the paratroopers tasked with fighting the engagement (Naveh, 2005). Naveh nevertheless positions the risks of the engagement in terms of their creative potential, arguing that the tensions between these overlapping, counter-effective risks and the lack of a practicable operational model for managing them presents unexplored opportunities for sense-making to grasp the emergent relations of the security environment. To develop this potential to their own advantage, the attendant staff propose a uniquely tailored operational concept that can be generalized as a series of spatial heuristics for the application of force contrary to the spatial logic underpinning much of the extant Israeli way of warfare circa 2002.

The text's dramatization of the evolving discourse on operations posits the need to actively conceptualize the complexity of the situation with which the impending operation must contend. To this end, the document proposes a fundamental transformation of the discourse of intelligence itself. Despite the disparity between force structures, the rival Palestinian force possesses a knowledge of its adversary that recognizes and exploits deep-seated systemic reflexes underpinning the latter's habitual inclinations in warfare. The officers wager that this uncritical reflex affords the Palestinian fighters a cognitive advantage that eludes the cognition of the lumbering IDF military apparatus, which defaults to rationalizations of the battlespace that fail to conceptualize the historical and socio-cultural complexity structuring it as a condition of its intelligibility. To instate a coherent program of action that can exploit those conditions requires the officers make a critical break with the historical and cultural forces which condition the IDF's own self-concept.

The present-tense narrative of “Between the Striated and the Smooth” anticipates the broader strategic context of what would become Operation *Defensive Shield*. *Defensive Shield* was a major military mobilization in the spring of 2002 which aimed to disrupt active terrorist operations following a brutal period of the second intifada, known as “Black March,” in which 239 Palestinians and 133 Israelis were killed in escalating exchanges of transactional violence, and likewise to isolate hostile elements of the Palestinian Authority from its base of support in the civilian population (Bergman, 2016). In this emergent context, the IDF’s post-Oslo strategy of “leveraging” the Palestinian Authority into operating as “an addressable state apparatus” capable of assuming responsibility for interstate security had broken down and that inflection of the escalating crisis required a new strategy for disrupting terrorist organizations, systemically, while maintaining conditions that would permit for the resumption of diplomatic accords and security cooperation with the PA, which presumed the continuity of Palestinian sovereignty and civil infrastructure in accordance with a two-state roadmap (Ganor, 2021; Hirsch, 2016).

A strategically relevant operation would have to disrupt or destroy terrorist infrastructure while isolating aggressing elements of the Palestinian security apparatus, which had begun to factionalize into splinter groups engaged in active terrorist operations, from their bases of civil support. To instate both strategic aims, operations would have to take concrete steps to minimize the vulnerability of the Palestinian civilians whose lives and livelihoods were themselves at stake, held hostage by the competing strategic rationales of both the IDF and the Palestinian irregulars. Israeli policy assumed (as it by and large continues to assume) that maintaining international legitimacy viz. liberal conventions of armed warfare and the minimization of civilian casualties remained the *sine qua non* of their exercise of military force, absent which Israel’s political leadership was likely to find itself increasingly politically isolated and outside

the international consensus. Exploiting this strategic disposition, the Palestinian fighters, lacking the technology, manpower and political legitimacy afforded to the dominant military power, had learned to manipulate this sensitivity in order to cultivate perceptions of the illegitimate use of force as political leverage, and likewise in support of their own recruitment efforts. A raid, undertaken in Balata in February of 2002, was conceived as a test case for uncovering a pattern of operations that could ply these systemic tensions into a workable strategy for disruption of terrorist operations. By testing a novel theory of operational maneuver, the raid aimed to discover a workable operational approach which could capitalize on the ways in which urban spatiality, the overlapping of civilian and martial space, and the discontinuous geographies of the occupation, structured and conditioned this unique post-Oslo security problematic.

As a means of initiating a transformative conceptual discourse in the officer corps, “Between the Striated and the Smooth” narrativizes the operational concept for the raid as a deliberate break with a grand narrative of national security and the inbuilt strategic assumptions upon which that narrative hinges. Naveh hypothesizes that the need to develop an operational form that can grasp the paradoxical implications of the labyrinthine socio-cultural composition of the urban battlespace necessitates a paradigmatic break with the three defining meta-trends of the IDF’s military-institutional state apparatus, namely: “*mechanization of warfare, idealization of destruction, and addiction to technology; subjection of maneuver to Euclidean logic, geometrization of space and time, and idealization of mass; autocratization of command, banalization of learning, and dogmatization of performance*” (Naveh, 2005, Naveh's italics). After naming the epistemological stakes of the impending raid, the document runs with an abductive hypothesis: these entrenched institutional legacies, which are continuous with a deep-seated tendency towards technoscientific rationalism orienting two centuries of industrial warfare

in the West, impart a common-sense problematic of warfare. That common-sense problematic perpetuates the institution's structural irrelevance to the systemic complexes of war and competition in which Israel circa 2002 finds itself ensnared and in lack of cognitive models for apprehending, strategically, let alone acting upon in a coherent way. The essence of Naveh's hypothesis is that the IDF's extant strategic doctrine favours the armoured offensive as its ideal model of transformative action, a seductive and enduring mythology of the IDF's legacy military system. In Naveh's gloss, this legacy is reinforced by the persistence of seductive institutional myths that are deeply entrenched in the security consensus orienting Israel's strategic thought and martial behaviour. These myths function as projections of meaning and historicity that obscure the strategic significance of emerging trends in warfare and obstruct the development of relevant operational modes and patterns that can finesse those emergent conditions.

Tanks for the memories: strategic space and the legacy of 1967

Historically, Israel's strategic policy, embodied in an informal doctrine, came to favour the armored offensive in order to counteract the quantitative overmatch of neighboring Arab armies and negate the lack of defensive depth particular to Israel's pre-1967 geography. Excepting the 18-year engagement in Lebanon from 1982-2000 and the IDF's history of *sui generis* special operations like the Entebbe raid in Uganda and the strike on Iraq's Osirak reactor complex, Israel's formative wars in the mid 20th century were principally conventional conflicts. A series of decisive wars in 1948, 1956 and 1967 entrenched a national security consensus favouring a strong deterrence embodied in an informal strategic doctrine of offensive operations conceived to rapidly shift the fight into enemy territory (Ben-Horin & Posen, 1981). This consensus, which tilted towards offensive pre-emption, arguably developed around an instrumental understanding of the constraints imposed by Israel's geography and demographics,

coupled with a cultural disposition towards perceiving the strategic problems of national defense in existential terms (Adamsky, 2010). The geography of Israel's pre-1967 borders provided Israel with negligible defensive depth in the event of an invasion by a coalition of Syrian, Jordanian and Egyptian forces. This diminished the credibility of Israel's conventional deterrent, which could be wiped out by coordinated strikes within the opening minutes of a war. Airfields and critical civil and industrial hubs wedged between the West Bank and the Mediterranean were within range of surface missiles on the Eastern side of the Jordan River Valley and both Tel Aviv and Jerusalem were within artillery range of the 1949 armistice Green Line (Horowitz, 1993). Israel's comparatively small population afforded Israel a fraction of the manpower of its Arab adversaries, which underscored a sensitivity to casualties: the population could neither afford nor absorb lengthy attrition. Israel's strategic solution required the maintenance of a proportionally massive, highly trained reserve force that could be mobilized at perilously short notice across the breadth of Israel's defensive frontiers. In its early years, Israel's small population base also imposed economic constraints on Israel's ability to acquire modern arsenals which put it at a technological disadvantage against the better-armed Egyptian and Syrian forces, who, by the 1960s, were able to field state of the art Soviet weaponry in significant numbers.

These factors combined to constrain Israel's defensive options: the thin margin of security, both spatially and numerically, meant that even a minor Israeli defeat would have catastrophic implications for national security. Accordingly, the IDF's order of battle was organized to effect rapid territorial gains which would enhance strategic depth and deter an enemy coalition from escalation, which could be ruinous for the quantitatively inferior Israeli forces. Informed by the ad hoc tactical learning imposed by the formative experiences of the Sinai campaign and the Six-Day war, the views of Israeli defense intellectuals coalesced around

an unwritten doctrinal preference for decisive battlefield encounters which leveraged the organizational superiority of Israeli armour through aggressive maneuvers conceived to disrupt their adversary's defensive operations and exploit the breakdown to rapidly seize territory (Horowitz, 1993; Naveh, 1995, 2007).

But whatever the historical value of this informal doctrine for addressing Israel's formative defense challenges, it was increasingly irrelevant to a security situation wherein Israel maintained stable bilateral relations with both Jordan and Egypt, and where Syria was diplomatically isolated and defensively neutered by the technical superiority of Israeli forces, which nevertheless maintained an overwhelming deterrent in Israel's undeclared nuclear arsenal. In the context of the end of the cold war and the downsizing tendency in most Western armies that followed it, the danger of direct conflict with a neighboring army appeared an increasingly marginal contingency. Whether or not this was in fact the case in Israel's security sphere, the learned disposition towards maximizing the destructive effects of combined arms and leveraging the seizure of enemy territory as a means of asserting political pressure on a state adversary to capitulate was not analogous to the low-intensity conflict which the IDF was charged with transforming in the spring of 2002. This inclination was particularly entrenched in the worldview of then-Prime Minister Ariel Sharon, a former general officer in the IDF's tank corps, celebrated in military histories for his command of successful maneuvers against Egyptian forces in 1967 and 1973, whose success in the practice of offensive deterrence defined his military career (Ganor, 2021). Accordingly, Naveh charges that the IDF's strategic outlook had ossified into an entrenched set of doctrinal assumptions about offensive warfare and its strategic value, perpetuating a mythology that idealized particular models of warfare necessitated by a deterrent

strategy. In short, the absence of a relevant strategic model for military organization and force employment for LICs had induced in institutional crisis within the IDF.

Not unlike TE Lawrence's revelations on offensive strategy for Arab insurgency, Naveh's deceptively naïve solution to this crisis of self-knowledge is to simply tell a different story that grapples with the mismatch between the legacy system and the emergent security context. By changing the discourse on intelligence and constructing an alternative narrative that can account for novel martial phenomenon, Naveh aimed to impart a compelling means of making strategic sense of novel systemic conditions in the emerging security situation. In "Between the Striated and the Smooth," narrative production functions as a means of enhancing and externalizing operational and strategic deliberation, encapsulating a novel professional-literary practice that encourages conceptual digressions into the figurative, the abstract and the intangible into a comprehensible aesthetics of action. In so doing, it suggests a profound transformation in the military discourse of intelligence.

Naveh's hypothesis, which the attendant staff develop into a working theory over the course of the brief narrative, speculates that urban combat operations imply a paradoxical mismatch between the structuring of Israel's conventional forces and the new security environment in which they are compelled to operate. The document positions recognition of this paradox as a productive condition of systemic intelligibility that must be meaningfully abstracted and synthesized by the operational concept. Naveh's hypothesis is that the physical bulk of conventional force structures (e.g., columns, lines of support) emanates an unmaskable visual signature in a battlespace where the observability of an opposing force of irregular combatants, lacking uniforms and melding into the background of civilian life, is minimal and fleeting. Conventional force structures in the mould of 20th century mechanized warfare presume a

stereotyped adversary with comparable unit organization and capabilities which are negated through the multiplying effects of combined arms tactics. In contrast, irregular warfare in an urban environment tends to favour provisional and ad-hoc composition of forces that can capitalize on the asymmetry between vastly dissimilar force structures (Hirsch, 2003). The advantages in sighting, firepower and mobility particular to mechanized forces are stunted by the angularity of the built-up terrain, which constrains the mobility of armoured vehicles, frustrates the logistics of supply, and provides concealment for ambushes, anti-tank and anti-personnel traps. In addition, the high profile of urban warfare takes on an informational dimension which is amplified in the age of mass media. “High signature” applications of military force like artillery, armour and airpower produce collateral destruction of the urban environment and the people who live in it, granting the deserved impression of a violent disruption of normal life (p. 61). The profusion of media images of this kind of carnage diminishes the moral credibility of the attacking force, which in the Israeli context hinges on its observation of norms of proportionality that are irreparably compromised by wanton destruction of civilian spaces. In other words, urban warfare lends itself to a kind of spectacular conversion of the modes and effects of fighting into patterns of visibility that allows a lighter, informally structured force to capitalize on the disproportion of conventional armies to the built environment that they are attempting to dominate.

As Gal Hirsch (2003), a key architect of *Defensive Shield*, and a student of Naveh, put it in an article on swarm warfare and the evolution of “low signature” operations, conventional units and force structures impose themselves like figurative dinosaurs on the urban landscape: moving by narrow city streets, they are “blind, cumbersome and vulnerable” (p. 61). Moving like prehistoric behemoths, they cannot conceal their form from an enemy whose operational mould

flits like a swarm of hornets, de-structuring the idealized forms of the prior by provoking overreaction and exploiting their immobility. In order to conceive and implement cognitive operational models that are responsive to the distinct organizational character of irregular forces and their capacities for de-structuring and subversion of Western models of warfare, operational artists must be able to conceptualize, in starkly critical terms, the continuous evolution of the conflict system and the tensions between diametrically opposed styles of martial engagement.

The difficulty in obtaining both visual and human intelligence in an urban battlespace makes the primary tasks of a high-tech fighting force (conceived by Hirsch as “translating intelligence into attackable targets”; a complex and multifaceted organizational process in any conflict) a demanding operational challenge (p. 61). Accordingly, operators and strategists must embrace alternative practices of intelligence to engender an intelligibility of the battlespace that can anticipate and keep pace with its evolution. In an emergent operational-strategic context like the Second Intifada, Naveh argues that operational art must engage in experimental learning in order to develop a critical vocabulary that enhances the strategic discourse of intelligence, and both its communicability and actionability in support of operations (Naveh, 2007, pp. 28-29). The key to mapping emergent trends in warfare and developing relevant concepts and language is experimental operational practice that intentionally departs from its received organizational templates and frames of reference, looking to references outside the boundaries of the institutional paradigm to understanding the changing relations of the conflict system, develop cognitive models of decision relevant to those transformations, and define them on favourable strategic terms (p. 28). This is a challenge which calls for an expansion of the terms of reference in order to enhance the aesthetics of intelligence for the strategist and the operator. Naveh himself sought those references in literature.

Chapter 3: “Suppose we were an influence”: TE Lawrence’s literary discourse on intelligence

Naveh observes that the turn towards abstract mediation of intelligence in support of experimental operations is most obviously preceded in the writings of TE Lawrence, a canonical figure of modernist war writing and a key strategist of the Arab Revolt of 1916-1918. Lawrence himself only rose to the rank of lieutenant colonel in the British Army. But his role as a staff liaison between Arab leadership and the allied Egyptian Expeditionary Force (EEF), enabled him to assume an informal position of strategic generalship within an irregular force of Bedouin fighters motivated, under the leadership of Faisal, a founder of the Jordanian Hashemite dynasty, by the ideal of an independent Arab nation to resist Ottoman occupation of the Arabian Peninsula. Naveh identifies Lawrence’s “Evolution of a Revolt” as a singular literary example of a process of operational learning attuned to the emergent potential of warfare in a novel strategic context (Naveh, 2007, p. 29). A documentation of Lawrence’s critical reflections on insurgency strategy composed for military audiences, the brief text articulates a strategic concept for desert operations, lacking obvious precedents in the institutional imaginary, that was able to exploit the emergent conditions generated by the early successes of the revolt in the Hejaz desert during WW1 in order to hasten the defeat of Ottoman forces in the Middle Eastern theatre. While Naveh’s commentaries on Lawrence are limited to a handful of footnotes in his post-OTRI writings, Lawrence’s military writings nevertheless suggest a clear analogue for Naveh’s literary-critical discourse on emergent strategy and provide an illustrative reference for grasping what Naveh’s alternative discourse on intelligence aims to achieve, militarily, by engaging a critical aesthetic practice. As such, it suggests a kind of a precedential analogue for “Between the Striated and the Smooth”.

The cult of the offensive

“Evolution of a Revolt” (1920) abridges the narrative of Lawrence’s explicit deliberations on strategy detailed in chapter 33 (the “epiphany at Wadi Eis”) of his memoirs of the Arabian campaign, *Seven Pillars of Wisdom* (2008), and distills the pointed criticism Lawrence levels at his own martial culture and military education into a comprehensible theory of victory for the Arab insurgency. Lawrence positions his argument as a refutation of a school of offensive warfare he identifies with Ferdinand Foch, the Supreme Allied Commander of forces in Europe in the final months of WW1, who had overseen a number of costly offensives on the Western Front. Foch had popularized Clausewitz during his command of the *École supérieure de guerre* in the first decade of the 20th century, and his example serves as a kind of critical foil for Lawrence’s discourse, which argues the case for a paradigm shift in strategy in the Arabian Peninsula that capitalizes on the cognitive divergence between Western and Eastern martial cultures.

Lawrence presents Foch’s theory of the offensive as a conceptual whipping boy for the strategic logic that animated the bloody and agonizing stalemate of fighting on Europe’s Western Front. He charges that the paradigm of “absolute” warfare realized in the major offensives of the war had ossified into strategic dogmas which allied officers generally assumed in their provisioning of plans and tactics, but which corrupted the variegated, dialectical apprehension of warfare which Lawrence admired in Clausewitz (p. 195). Lawrence summarizes like so:

[Foch] called his modern war “absolute”. In it two nations professing incompatible philosophies set out to try them in light of force. A struggle of two immaterial principles could only end when supporters of one had no more means of resistance. An opinion can be argued with: a conviction is best shot. The logical end of a war of creeds is the final destruction of one. (1920, p. 6)

In Lawrence’s critical gloss, Foch’s theory of the offensive depends on tenuous assumptions about the fundamentals of modern war that couldn’t logically apply to the Arab Revolt. The

theory of absolute war, which to Lawrence appeared to cloud the allies' understanding of the strategic conditions in the Arabian Peninsula, conceived of strategy through the terms imposed by a war of annihilation, the realization of which ultimately appealed to an absolute test of wills in which one party made their victory by decisively vanquishing the other. The means of victory was direct confrontation, usually realized in a destructive conflagration of men, materiel, and munitions. As Lawrence saw it, Foch's influence had entrenched in such a way that the theory of offensive power directed at an enemy's center of gravity (itself a contextually dependent model of combat that shouldn't be universalized) had come to define the aim of war itself, its ways, ends, and means, as destruction of the enemy by "one process battle" (p. 5).

Foch's dictum that "the ethic of modern war is to seek for the enemy's army, his center of power, and destroy it in battle" appeared to Lawrence as an uncritical obsession (p. 3). Lawrence is unequivocal in his assessment of this philosophy in *Seven Pillars*: Foch's emphasis on annihilation of the adversary was "idiotic," regressing into a ritual that he derisively terms "murder war" (2008, pp. 195-196). The war of annihilation, in which the offensive became the processual engine of the grim slaughter characteristic of much of the fighting on the Western Front, appeared to Lawrence not as a universal condition that defined the ultimate object of war but simply as one type of warfare among many, as Clausewitz himself had conceived of it (Faulkner, 2016).

Lawrence observes that the strategy of absolute war, paradigmatic of post Napoleonic interstate warfare which persisted as a framing reference in European staff colleges into the 20th century, was only germane to a war in which mass mobilization depended on the principle of *levée en masse* (as Foch himself had argued) (2008, p. 196). It was not descriptive of the logical underpinnings of a relevant strategy for a proxy war involving irregular forces. Nor was it

descriptive of the conditions motivating Britain's professional standing army, which had muddled into a global war with uncertain aims and "blundered till the march of events took control," as the EEP seemed to be doing in support of the uprising in the Hejaz desert (p. 196).

That the Arab Revolt had broken out and made considerable headway in unseating the Ottoman army from several key cities in the peninsula instead suggested to Lawrence the emergence of a successful practice of insurgent warfare that, in a scarcely concealed orientalist formulation, required both a coherent theory and set of practices to exploit in order to bring it into strategic alignment with imperial war aims (Faulkner, 2016). The apparent disjunction between the modern European ideal of absolute war and the socio-cultural context that made the Arab insurgency viable suggested to Lawrence the need for a novel strategy emphasizing the unique social characteristics of irregular warfare that could capitalize on the emergent potential of the latter context rather than simply templating the latter to the ideal modes and forms of the prior.

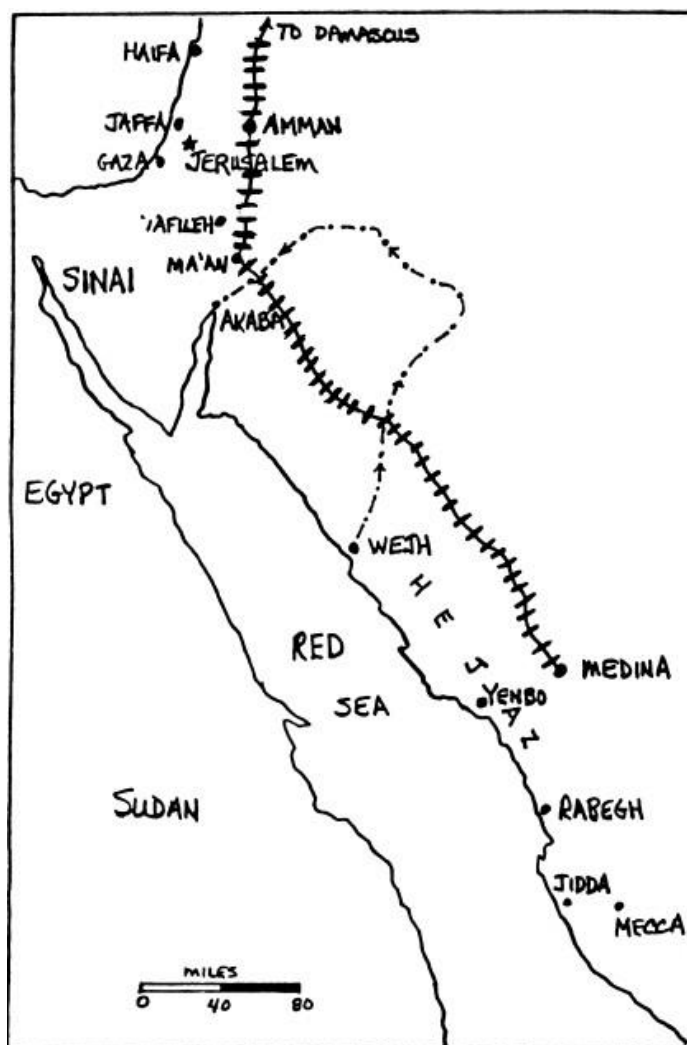
"We might be a vapour, blowing where we listed"

Following the surrender of the Ottoman garrison in Mecca to Faisal's father in June of 1916, the EEP's military advisors intended to leverage Faisal's fighters to resolve the siege of Medina, a key city in the Hejaz containing some of the holiest sites in Islam (see fig. 3). A sizeable Ottoman force had entrenched in a defensive position outside the city, protected by long range artillery, and supplied by the Hejaz railway which connected Medina to Damascus and the greater Ottoman empire to the north (Lawrence, 2008). The allied advisors saw the offensive potential of the well-equipped Medina garrison as a threat to their naval seat in the port of Rabegh on the Red Sea and sought to establish a defensive front to the south that could repel an imminent Turkish advance on Mecca (English, 1987). By engaging Ottoman forces in the Hejaz

and obstructing their anticipated advance south, their offensive potential would be diverted from Palestine, Sinai and the Levant, areas of vital strategic importance to the allied war effort which sought to foment the collapse of the Ottoman Empire, one of the Central Powers. To organize an effective defense, EEP advisors paradigmatically understood that the Arab forces would need to be reorganized as a regular army and, by entrainment into a modern order of battle under allied command, disciplined into holding that line against an eventual Turkish assault on Mecca that would presumably advance by means of a conventional ground offensive.

Figure 3

Key cities and railway infrastructure in the Middle Eastern theatre of WWI



Note. From *Military Affairs* (p. 7), by J. A. English, 1987. Copyright 1987 by J. A. English.

Lawrence, an archaeologist relatively unschooled in command but accustomed to Arab society, well-travelled in the Levant and Palestine and sympathetic to Arab nationalism (and therefore arguably a well-positioned intelligence officer and subject matter expert), saw the strategic potential of the uprising was grounded in emergent sociocultural conditions that were innate to the revolt's social and geographical context. Primed by a conception of Arab nationalism that bore little relationship to the liberal ideal of citizen-soldiers upon which European models of interstate warfare depended, the sociopolitical context of the insurgency meant that the doctrinaire assumptions held by the allied officers steeped in the cult of the offensive were unlikely to be efficacious in organizing the Arab forces. Lawrence recognized that the composition of the majority of the Arab forces was ill-suited to a direct engagement of the enemy by means of either attack or defense of a line, an entrenchment, or a single decisive point. The unorganized Arab army mostly consisted of raiding parties divided by tribal politics that wedded particular fighters, loyal to particular sheiks and sharifs, to familiar, well-defined territories upon which they depended for livelihood (Faulkner, 2016).

The Arab fighters' conviction to fight and shed blood was therefore individuated in a way that either a standing or conscript army was not. The fighting dispositions of the Arab irregulars were habituated to raiding tactics (skirmishes, night fighting and long-range sniping) rather than intensive combined arms battles involving artillery and large-scale troop charges into concentrated fires, as had become the standard model of the offensive in Europe. Nor were the irregulars organized under any singular hierarchy that could exercise a unity of command to coordinate such an action. As Lawrence conceived it, the ethic of modern battle, which depended on "discipline, obedience and sacrifice" and the machine-like uniformity of soldiers fighting on a line was an alien disposition to a Bedouin martial culture in which raids were the principal form

of engagement, where the standing of leadership was intensely personal, and where no death in battle was anonymous (pp. 212-213). The conception of a massed offensive upon which a battle of annihilation in the Hejaz would depend was an abstraction of strategy that bore little relevance or resemblance to the Arab fighters successfully engaged against the Turkish occupation of the Hejaz. The irregulars would neither endure protracted engagements involving sustained artillery fire nor tolerate the profusion of casualties such a confrontation would entail.

“Evolution of a Revolt” argues that the key to developing a viable operational strategy from the disparity of force structures was an intelligence practice that digressed from a singular focus on known variables or “algebraics” like fixed geographies, manpower, capabilities, logistics and materiel, focusing as much if not more on “bionomics” (i.e. the ecology of warfare, the relation of a fighting system to its environment) and “diathetics” (i.e. the psychological elements driving the conflict like morale and politics) (pp. 8-12). Lawrence saw that these latter two elements were of paramount significance in a war in which the material advantages of manpower and weaponry were decisively on the side of enemy. To win, the insurgency needed to maintain and enhance cognitive advantage in the realm of bionomics and diathetics in order to exploit emergent conditions that presented themselves in the battlespace. Accordingly, “Evolution of a Revolt” articulates an emergent practice of operational art that sought to understand the conflict environment, the social forces and relations that structure it, and the agents of war that transit it, in a richly figurative language that grasps the battlespace as a distinctive medium for war. That medium is made apprehensible by a distinct aesthetic sensibility realized through a set of defined spatial practices.

Though Lawrence never describes his leadership explicitly as generalship in either text (and the narration of *Seven Pillars* downplays its author’s influence over the course of the

revolt's events, positioning Lawrence as less a leader than an observer-participant and a witting sponsor), Lawrence's literary capacity for mediating emergent conditions of the conflict into a comprehensible theory of victory exemplifies an aesthetics of intelligence that aligns neatly with the Naveh school's conception of operational art. By rendering the conflict environment and the agents that structure it in a novel conceptual language, Lawrence translated an alternative conceptualization of battlespace into a tangible mental model for offensive operations. In this sense, Lawrence's critical account of the insurgent strategy is exemplary of a creative practice of generalship that attunes strategic practice to operational friction.

In a deliberate break with the "algebraic" formulations of offensive warfare that seemed to Lawrence to dominate his own military culture, Lawrence looks to "immaterial" factors to explain the unique strategic conditions of the Arab Revolt in order to qualify its instrumental role in the Ottoman defeat. In the process he inverts the assumptions underpinning the dominant strategic mindset of his own martial culture, making a kind of critical-literary art of their subversion. The document argues that the unique character of the Arab irregulars, mirroring the desert society from which the revolt had sprung, was the product of the distinctive social and cultural reality which conditioned the fighters as capable agents of war in their own domain. These emergent conditions suggested to Lawrence a critical strategic potential in their divergence from the concepts of terrestrial warfare which informed European strategy, to which the Ottoman army, informed by modern standards of German technique and the direct advice of German officers, defaulted, and which they anticipated in their defensive provisioning of Medina and the Hejaz railway (Faulkner, 2016). In other words, the material and conceptual disparity between the two opposing forces lent the Arab irregulars a cognitive advantage that could be exploited, offensively. The irregulars perceived the battlespace in entirely different terms than the

European military advisors on both sides who were leveraging the conflict to their own ends. This meant that they fought on entirely different terms, and the disparity between terms was itself productive for generating an alternative strategy. Subverting Foch's doctrine of the offensive and imparting to it "a negative, twisted side for cheapness' sake," "Evolution of a Revolt" declares "our war would be a war of detachment: we were to contain the enemy by threat of a vast silent desert" (p. 10). This philosophy of detachment (rather than aggressively seeking contact) complemented the reality that the Arab irregulars were in most respects materially weaker than their entrenched and fortified adversaries. In the process, Lawrence inverts Foch's assumptions about the necessity of attacking centers of gravity, emphasizing indirect attacks on the enemy's trains of materiel, rather than their armies and seats of power. Accordingly, the irregulars would be organized as raiding parties and would be well-provisioned for this singular activity.

Lawrence qualifies this emergent potential in terms of a kind of martial orientalism that is both deeply reverent and intellectually curious about the Bedouin martial culture, situating the offensive potential in the Bedouin fighters' embodiment of a distinct ontology of space attuned to the social and spatial ecologies of the desert. It is this disposition which suggests to Lawrence the conceptual and material bases for an indirect insurgent strategy, and he develops a series of suggestive metaphors for realizing this operational concept as a spatial practice. Lawrence's concept captures the asymmetrical, self-sufficient character of irregular desert warfare in a richly figurative prose:

Suppose we were an influence [...], an idea, a thing invulnerable, intangible, without front or back, drifting about like a gas? Armies were like plants, immobile as a whole, firm rooted, nourished by long stems to the head. We might be a vapour, blowing where we listed. Our kingdom lay in each man's mind, and we wanted nothing material to live on, so perhaps we offered nothing material to the killing. (p. 8)

Compared with the initiative and liberty of the Bedouin war machine, a conventional soldier, “owning only what he sat on, and subjugating only what, by order, he could poke his rifle at,” was essentially helpless to conceive their own logic of events (2008, p. 197). In order to make this ontology tangible as an operational concept, Lawrence characterizes the raiding strategy through the metaphor of naval warfare. That metaphor provides Lawrence’s strategic concept for the revolt:

In character these operations were more like naval warfare than ordinary land operations, in their ubiquity, their independence of bases and communications, their lack of ground features, of strategic areas, of fixed directions, of fixed points. ‘He who commands the sea is at great liberty and may take as much or as little of the war as he will’: he who commands the desert is equally fortunate. Camel raiding-parties, self-contained as ships, could cruise without danger along any part of the enemy’s land-frontier, just out of sight of his posts along the edge of cultivation, and tap or raid into his lines where it seemed fittest or easiest or most profitable with a sure retreat always behind them. (p. 14)

The critical shift in the logic of the strategy is couched in a series of metaphors that displace the lexicon of terrestrial warfare and the attendant strategic mindset that the dominant offensive paradigm implies, using naval metaphors that engender an alternative conceptualization of the battlespace and its potential as an operational medium. This metaphoric displacement, enhanced by both direct experience of fighting as the insurgency intensified and a well-situated knowledge of the ground gained by traversing it, enabled both the fighters and Lawrence himself to become adepts at the art of “wedding unknown land to known in a mental map,” echoing the language of the 18th century French general and military cartographer Pierre-Joseph Bourcet (p. 15).

Perceptually armed with an embodied intuition of the harsh geography of the Hejaz, rather than a remote geometric abstraction of it, the Bedouin irregulars were able to leverage a distinct cognitive advantage within the battlespace that enabled them to seize and hold the initiative against the Turkish occupation.

The sacking of the city of Wejh in January of 1917 positioned the Arab raiders within striking distance of the Hejaz railway, which stretched out the Ottoman flank for hundreds of miles to the north, demanding an intensive concentration of Ottoman resources in order to sustain their logistics and communications and maintain their position in Medina (see fig. 3). The necessity of concentrating the Ottoman defense of the railway ceded initiative to the raiders who could select targets of opportunity presenting minimal risk of protracted engagement, striking only to disappear into hostile ground that forbid pursuit. Operating by a principle of disappearance rather than amassing a static and imposing battlefield presence, the Arab fighters would improvise patterns of attack that prevented Ottoman forces from bringing their forces to bear against them in a sustained or decisive manner. The idea was to use “the smallest force, in the quickest time, at the farthest place” (p. 15). The tactics were, by Lawrence’s account, always “tip and run, not pushes, but strokes. We never tried to maintain or improve an advantage, but to move off and strike somewhere else” (p. 15). Since winning, strategically, meant simply outlasting the Ottoman forces’ resolve (and thereby exhausting their commitment to hold space in the terrestrial model), and since the irregulars were in most respect lacking the material advantages of the Ottoman regulars, the corollary of this strategy was “perfect intelligence” of the battlespace in order to eliminate operational risk, rather than simply mitigating it by hedging for contingencies (p. 10). Improvised around targets of opportunity, the raids could continue indefinitely without any intensive training or provisioning of heavy weapons or complicated logistics. This allowed for an accelerated tempo of operations that merely had to burden the Ottoman force’s capacity for repair and resupply. These raiding operations’ aim was not to destroy the railway, but simply to maximize the difficulty of its defense, amplifying the enemy’s sense of discomfort and futility in maintaining it (p. 12).

Narratively, chapter 33 frames Lawrence's strategic epiphany as one which emerges from reflexive critical practice, rather than one realized through a chain of daring feats. Lawrence describes his developing appreciation of the insurgent strategy (which was already playing out in the field by the point of his recognition and appreciation of it) as one realized in contemplation while convalescing from a bout of dysentery: comparing his recent experiences with the Bedouin in theatre with his informal schooling in military philosophy, Lawrence simply recognized the Bedouin's cognitive advantages in morale and geographical intelligence could advance the allies' broader war aims in a strategic context which the latter party lacked an epistemological framework to develop into a coherent strategy, let alone a strategy that could bridge operational and political aims. Lawrence is effusive in *Seven Pillars* that he did not create the advantageous conditions. His principal efficacy as a strategist is arguably condensing a communicable narrative of those events in a critical language that was (at least provisionally) amenable to the strategic aims of the allied imperial powers. The principal effect of his strategizing was to make those socio-cultural conditions apprehensible to the allied leadership as a distinct spatial aesthetic. The military aspect of his writings can be understood as an attempt to construct a conceptual bridgehead between these two seemingly inimical spheres of warfare in a martial context which was fixated on the reigning paradigm of interstate warfare.

This reflexive shift in strategic perspective likewise altered Lawrence's understanding of the political implications of the operation. This conceptual reorientation introduced a tension with the allies' conception of the strategy in the Arabian Peninsula that would eventually disappoint the political goal of Arab independence. Lawrence recognized that the EEP's strategic conception of the Arab Revolt as a convenient political movement that functioned to simply make the Arab provinces ungovernable while British forces engaged Turkish forces elsewhere

fell short of the revolt's offensive potential (Oxnevad, 2020). "Evolution of a Revolt" develops an attendant rationale for offensive operations that foregrounds the unique military characteristics of the Arab irregular as a kind of conceptual spearhead of armed struggle, embracing the explicitly political dimension of the Arab Revolt in a way that put Lawrence's strategic designs at odds with the allies' imperial interests in the region. In stark contrast to the entrenched Ottoman garrison in Medina and its fortifications along the railway, "the [Sharifian] army was in permanent flux," rising only as war passed through its territories, settling again once those winds calmed (Faulkner, 2016, p. 214). To Lawrence, the conditions of Arab mobilization appeared more like an inconstant peace than a state of absolute war, and could carry on indefinitely, nourished as they were by the independent initiative of the raiders (2008, p. 194-195). Structuring Faisal's force as a regular army, as the Sharif of Mecca had begun to do with his own contingent of fighters, would squander the offensive potential of the Arab fighters, who by fact of their diffusion had already comfortably occupied the wealth of the contested territory. Not only would it squander that potential, but it would diminish the morale and initiative that had made the revolt successful in its own domain and relegate the irregular fighter's cognitive advantage within the battlespace into irrelevance. Reconceiving the strategy in terms of irregular desert warfare sustained by the morale of an organic, emergent Arab independence movement, Lawrence saw that the war in the Hejaz was already won, and that best strategy was for the Bedouin to simply carry on as if it were so: "We were in occupation of 99 percent of the Hejaz. The Turks were welcome to the other fraction till peace or doomsday showed them the futility of clinging to our windowpane" (1920, p. 6).

While the immediate strategic consequence of these operations was to protract the war to frustrate Ottoman initiative, Lawrence understood that a key political consequence of operations'

success was to establish a power center in the mobilized Arab tribes that could fill the void of political legitimacy opened by the collapse of the Ottoman empire (Oxnevad, 2020). As evidenced by his own guidance to lower and mid-level EEP commanders in “27 Articles,” Lawrence came to understand that the Arab Revolt was not simply an insurgency but a proxy war with a hostile imperial power, the ultimate political aim of which was state creation within the commonwealth by and for the mobilized Arab fighters (Oxnevad, 2020, p. 4-10). This shift in Lawrence’s strategic conception of the revolt arguably exceeded the allies’ comprehension of its strategic significance and set both his politics and the politics of the revolt on a trajectory that would culminate in the revolt’s eventual betrayal by British and French contingents of the Paris peace conference. As Lawrence saw it, mobilization itself was arguably a key political aim of the campaign and his prolonged engagement fighting beside the irregulars can be read as an attempt to instate that mobilization as a political end in and of itself: “A province would be won when we had taught the civilians in it to die for our ideal of freedom. The presence of the enemy was secondary” (2008, p. 202). In this way, Lawrence’s involvement was arguably also an attempt to bridge operations, the political aims of the revolt and the allies’ broader strategy: it was a means of dismantling Ottoman control while establishing a polity in the Arab world that could survive its collapse. The Arabian campaign was a strategic success, but Lawrence saw that it was nevertheless a political failure on account of the intransigence of the imperial powers who had promised and reneged on Arab independence, and whose interests Lawrence inarguably served as an imperial agent in the service of the British empire. The sense of betrayal engendered in Lawrence by this reversal is a hallmark of the novel, which enacts a profound subversion of the triumphalism of an imperial narrative. While the overt sense of betrayal that colours *Seven Pillars* is not evident at any level of the narration of “Evolution of Revolt,” which concerns itself

entirely with articulating an operational narrative supported by an accessible, pointed and pragmatic critique of the conceits of the cult of the offensive, that narrative, the telling of which is tinged with a deep and reflexive sense of irony, nevertheless retains formal features which leverage a comparably schismatic effect to that of the narration of *Seven Pillars*.

The limits of designed meaning

Some lingering questions about the nature of Lawrence's appropriation of the mindset of the Arab insurgent trouble aspects of Lawrence's literary narrative of the revolt (as they would arguably seem to trouble both Lawrence's canonization in counterinsurgency literature and Naveh's own literary practices of operational art during the Second Intifada). Put directly, Edward Said frames *Seven Pillars of Wisdom* as an archetypical work of modernist orientalism that reproduces an epistemological system that extends and reinforces imperial ideology. Said argues that the novel's historical fantasy works to reconcile Lawrence's static, holistic "vision" of the Orient as a "schematic and efficient" lexigraphy of timeless native types (like the Bedouin fighters' intuition of the spatial ecology of the desert, for example) with "narrative" in which the volatility of historical events and the agency they impart introduce a "diachrony" in Lawrence's telling of events (Said, 2003, pp. 239-240). The interruption of Lawrence's "vision" by monumental history unsettles the essentialist tropes of the Orient in a way that clears space for the Orient to enter "militant modern life" through the guidance of Lawrence, the intervening imperial agent (p. 240). By introducing narrative friction through interventions of consciousness, perspective and points of view opposing the expert's vision of the essential nature of the Orient, Said argues *Seven Pillars* enlists the Orient as "urgent actuality," imposing on it a historical responsibility that aligns the Orient with Western values, ideals and political aims, which Lawrence, the white expert, identifies and experiences on its behalf (pp. 238-243). Said's reading

is consistent with the novel's troubled imperial discourse, aspects of which are redoubled in Lawrence's reprisal of its salient martial themes for military audiences in "Evolution of a Revolt" (particularly where Lawrence speaks of England's bumbling and haphazard strategy in the Middle Eastern theatre, for example, which merely occasions upon the Orient in order to resolve the catastrophic imbroglio of the imperial conflict between the allies and the central powers). As Said reads it, the effect of Lawrence's historical writing is to produce a dialectic of modern knowledge production about the Orient that shifts from simply "understanding" the Orient in its inexplicable essence towards compelling the Orient into action by embracing a will-to-power that aligns the timeless and essential types of the Orient with Western projects, enlisting and mobilizing the expert's knowledge to overcome the Orient's complex and recalcitrant politics (p. 238). This displacement of Lawrence's experience and expertise as an intelligence officer, a particular kind of imperial agent, engaged in administration of Arab affairs on their behalf, suggests that his practice of generalship, however novel in mediation of operational art, retains a deep-seated paternalism that adapts the Orientalist outlook to the exigencies of the war theatre as they are understood by imperial ideology.

Lawrence's displacement of his identity as an imperial agent is a kind of subversion of his role. That subversion is coloured by a reflexivity and ironic awareness of the limitations of his own epistemological framework for military action that is arguably a formal feature of the imperial modernist literary paradigm his writing reflects. Alongside Joseph Conrad's *Lord Jim* and *Heart of Darkness*, *Seven Pillars* is taken to be exemplary, in Said's formulation, of the genre of the great imperial narrative: blending elements of autobiography, history and confessional fiction into a literary structure that articulates the writer's process of self-discovery in a way that disclaims strict historical objectivity, Lawrence's introduction describes the work as

an attempt at rationalizing that which appeared to him natural and inevitable in the campaign, and of locating himself in relation to its events in a site of “mock primacy” (Brandabur & Athamneh, 2000; Said, 1994). As Lawrence himself puts it in his introduction to *Seven Pillars*, “in these pages the history is not of the Arab Revolt, but of me in it” (p. 22). In this sense, we may understand that the novel is a work of imaginative literature (even if it remains a work of autobiographical nonfiction) that synthesizes a particular narrative account of the history of the Arab Revolt from a partial and involved set of experiences of its key events, embellished by a well-positioned and deeply self-conscious imperial agent. In other words, *Seven Pillars* emphasizes the creative act of narrative production which imparts meaning to the events he recounts.

The meaning that Lawrence ascribes to his narration merely qualifies that which appeared to him inevitable in the emergence of the Arab Revolt by making it apprehensible as a subject of historical knowledge. As Said reads it, Lawrence’s novel “designs meaning” for the Arab Revolt to the extent that Lawrence conflates his experience and identity with its pivotal events (2003, p. 242). For Said, the effect of this is that Lawrence’s narrative voice in *Seven Pillars* stands in for the entire history of the revolt in a displacement that incorporates those pivotal events. Lawrence’s account assumes the character of the authoritative and definitive telling of it, from the perspective of the Occidental reader *because of* that account’s intentional displacement of the narrator’s identity. That Lawrence’s narration in *Seven Pillars* confesses his tragic and deepening impression of himself as an inferior to his Arab counterparts on account of his conflicted role as an imperial agent does not diminish Said’s criticism of the novel’s Orientalism, but is in fact a key to Said’s (1994) argument in “A Note on Modernism” about the novel’s function as an epistemological artefact of imperial ideology: the self-referentiality and corrosive irony that

pervades Lawrence's narrative, themselves formal hallmarks of modernist literary production, are arguably representational techniques that respond to effects of external pressures on the formerly triumphant imperium (p. 188). Much like Conrad's *Heart of Darkness*, the novel's dislocation and displacements of identity (again, formal hallmarks of the modernist novel) are, in Said's critique, consequences of the imperium's direct encounter with the "contending native" and the fact of other empires outside the European sphere (pp. 188-189). As Said puts it in "A Note on Modernism," "once imperialism...had become the settled norm in political ideas about Europe's world-wide destiny, then, ironically, the allure of its opponents, the intransigence of its subjugated classes, the resistance to its irresistible sway became clarified and heightened" (p. 187).

Seven Pillars can therefore be understood, after Said, as a particular expression of imperial culture that incorporates this tension as a formal effect of the novel, replete with a set of Orientalist literary conceits that make this tension apprehensible to the reader. Which is to say that it is the text's aesthetic refinement of a modernist technique for incorporating resistance at the margins of empire which enables its critical function: the text assumes and reproduces the salient literary techniques of the modernist imperial narrative, revelling in the pervasive sense of irony that unsettles the assurances of the imperium, to the extent that it arguably substitutes artistic technique and aesthetic practice for direct imperial domination (pp. 189-190). As Said argues is the case in canonical novels of English modernism like Conrad's, a consequence of this substitution is that, in Lawrence's writing, the spatiality of imperialism is realized as and through a set of aesthetic techniques, rather than as fact of the functional imperial domination of geography. This is arguably comparable to the sense in which Naveh's aesthetics of operational

art functioned in the context of the second intifada, even if it doesn't explicitly map to the British epistemology of imperialism.

The same is arguable true of "Evolution of a Revolt," which is a notable iteration of the imperial narrative insofar as the short-form essay distills the reflexive, self-creating process articulated by the narration of the novel down to a critical annotation of the evolution of Lawrence's own strategic thought in a subversive, ironic divergence from the referential framework his own military culture and education. The short-form narration of this critical process, realized (as in the novel) through a spatialized literary aesthetic that consciously constructs an antithesis between Eastern and Western ways of war, serves as an instructive example for a military readership that positions Lawrence's efficacy as a strategist in terms of a creative capacity to "design meaning," to name and describe, in astute and critical terms, patterns and tendencies in the conflict environment that are not readily understood or appreciated by the reigning (imperial) strategic paradigm, the latter of which Lawrence incredulously rebukes. This is to say that while Lawrence's writings contain considerable insights into both strategy-making and his own innovative practice of generalship, they remain ideological products of a material process of imperial knowledge production whereby the resistance encountered at the limits of military power feeds back into a knowledge-power relation that enhances its efficacy.

That Lawrence's writings were canonized in counterinsurgency discourses after WW2 (and in redux during the lengthy occupations following the invasion of Iraq and Afghanistan during the GWOT, particularly in an appendix to the US Army's counterinsurgency field manual FM 3-24) suggests that Lawrence's entry into the canon of military writings validates at least some of the fundamental charges of Said's criticism. Lawrence's writings are often received and transmitted in Western military circles as a kind of gospel of small warfighting to the extent that

an appendix in FM 3-24 lists his “commandment form” advice for “handling” the Bedouin to novice British officers in the Middle Eastern theatre in “27 Articles” as a model for adapting cultural knowledge and anthropology to contemporary counterinsurgency practices (US Army, 2009, D-1). The inclusion of Lawrence’s military writings in doctrine arguably reinforces a martial epistemology of empire (if not imperialism) insofar as that writing stands in, unannotated, as an authoritative, proven historical account of the practical value of the Orientalist’s expert insight in a conflict between a materially superior Western military against a non-state or para-state adversary beyond the pale of Western legitimacy and political rationality. This is arguably not the level of meaning at which Lawrence’s “27 Articles” was pitched, as Oxnevad has argued (pp. 4-9). But it is the effect of their citation. Likewise, where Lawrence’s writings are cited as a direct inspiration for General David Petraeus’s provisionally successful surge strategy in Iraq in 2007, they are glossed into the military canon as an instructive account of a tempered, culturally sophisticated, localized practice of imperial power, the political function of which is to mould the social politics of the Orient into resemblance with a Western political ideal in the model of a stable, liberal polity. Lawrence’s writings are in a sense inseparable from this legacy: they are inarguably historical artefacts of European military imperialism in the Middle East, and that legacy is essentially reinscribed by his canonization.

But to take Lawrence’s military writings as an inscription of the imperial tenets of counterinsurgency warfare is to overdetermine their significance in variety of martial practices that exceed this limited epistemological scope. It misses, for example, Lawrence’s influence on the generalship of insurgency practitioners like Vo Nguyen Giap, the North Vietnamese defense minister and commander of PAVN for the majority of the Vietnam war, who likewise took Lawrence’s writings as a kind of “gospel” of insurgent warfare, applying their lessons to military

ends entirely opposed to Western imperialism (p. 2). This is to say that while Lawrence's strategic practice has often been taken, wittingly or unwittingly, by Western military intellectuals as confirmation of an essentially Orientalist proposition about the adaptability of military-imperial power in the Middle East and Central Asia, the letter of Lawrence's writings implies a plasticity of strategic thought that makes his insights into strategy amenable to readings and practices that contest many of the imperial military state's presumptions about itself and the inevitability of its martial prowess.

Lawrence's military writing, in other words, develops insights into emergent strategy and the sociocultural dimensions of armed conflict that implicitly confront the limitations of imperial models of strategy and mobilization and explicitly contest their validity as a framing reference for the conduct of warfare in settings that exceed the idealized martial contexts which those models presume. The value of those texts, from the perspective of a contemporary military readership, is less their validity as a prescriptive for dominating errant colonies in revolt against the historical inevitability of the imperium than it is a compelling and instructive example of an "antinomian" practice of warfare realized through creative synthesis of contextual elements of a given conflict system (1920, p. 10). It is this modernist ambivalence about imperialism and imperial knowledge production which enables the critical function of Lawrence's military writings like "Evolution of a Revolt". The capacity to "design meaning" for the campaign hinges on a creative licence to depart from the governing assumptions of legacy military education and philosophy by developing techniques and narratives that can model the disjunction and friction encountered in the conflict environment into a coherent program for a favourable transformation. This is the value of that document from the perspective of a military readership encountering that text in the context of studying operational art and military design. To take it as confirmation of

the superiority of Western ways of war is to miss much of the point that Lawrence was attempting to make to the military readership of “Evolution of a Revolt”.

At the same time, the sense of disillusionment and betrayal that is the hallmark of *Seven Pillars*’ narration (and which is entirely suppressed in “Evolution of a Revolt”) arguably stems from a recognition of the irreconcilability of limited imperial war aims in the Hejaz and long-term strategies of imperial power: where provisional alliances and partnerships between unlikely causes are common enough in war, the idea that operational art or strategic genius (even in the rare cases where they find expression in unique formal aesthetics such as Lawrence’s) encapsulates their fundamental antagonisms in ways that can surpass their innate difference is often a specious one. From the perspective of the British war aims, the value of a Red Sea port that ensured secure access to the Suez Canal exceeded the significance of the political aspirations of Arab nationalism for a future of the Arabs’ own making. The prior was obviously connected to immediate questions of the allied power’s survival, where the latter seemed to amount to little more than a vague promissory note in the martial imaginary of EEP (one which was underwritten by Lawrence’s strategic narrative) that was readily discarded when politics as usual between the imperial powers resumed after the conclusion of the war.

One wouldn’t need to search far for contemporary analogies. The cooperation between the Combined Joint Task Force and Syrian Democratic Forces produced any number of strange kinships during the years of the heaviest fighting in the war against ISIL. Kurdish anarchist militias affiliated with the PKK, for example, were supported by US, Canadian and British special forces who transferred weapon systems and coordinated tactical aviation in support of offensive operations in Syria and Iraq. These operations, the risks of which were mostly assumed by Kurdish irregulars, had a tremendous impact in undermining ISIL’s presence in the region, to

the benefit of both the SDF and the allied coalition. Western assurances of protection against Turkey's reprisals were then arguably betrayed by the US's withdrawal from northern Syria in October of 2019, which abandoned SDF-held territory to an imminent Turkish ground offensive. Resist it though they might through the exercise of loyal opposition and critical advice, there are limits to what the soldiery or officership in an expeditionary force normatively constrained by civil-military relations can actually do to protect foreign irregulars from this kind of exploitation. Strategic priorities from outside the theatre of war will continue to impose conditions and qualifications that officers cannot refuse, suborned as they are as functionaries within an organization that is legitimated and authorized by the state apparatus they serve. That this undercurrent of Lawrence's narration of the experience is elided by "Evolution of a Revolt" seems to affirm Said's essential point about the Lawrence's unwitting reinscription of an imperialist epistemology. Naveh himself does not address it in his own writing, but it's arguably a tension in Lawrence's output that illustrates the deeper contradictions that frustrate the political idealizations animating the liberal arts of war.

What Lawrence's canonization as an institutional model for military practitioners tends to elide is the explicitly, intentionally fictive structure of self-referentiality that frames the significance of Lawrence's novel, a narrative conceit that, by leveraging a bitter and sardonic of appreciation for the ironies of imperial power and politics, enables the work to function more as a modernist work of art than an objective history of the Arab Revolt (Brandabur & Athamneh, 2000). As I've suggested, this elision points to a question of genre that illuminates aspects of Naveh's literary practice by way of direct reference to Lawrence (as it likewise complicates the singularity of Said's criticism of Lawrence's writings on the Arab Revolt). That creative act is arguably animated by a modernist literary conceit unique to his rendition of the imperial

narrative. It is this creative act which aligns Lawrence's abstract mediation of intelligence with Naveh's conception of generalship, as it is likewise arguably a function of modernist cultural production. It is Lawrence's capacity for self-disruption that enables his reflection on the limitations of his own military paradigm, and "Evolution of a Revolt," alongside *Seven Pillars of Wisdom*, develops an expansive literary-critical narrative of this process that highlights its generative capacities. This is to say that Lawrence's capacity to "design meaning" (i.e., to channel creative synthesis of intelligence into a set of spatialized military-aesthetic practices) encapsulates the conceptual eclecticism which Naveh admires in Lawrence's writing.

In both "Evolution" and chapter 33, Lawrence eschews presumptions of a universal law that might apply in every case (a presumption that appeared to Lawrence to underlie Foch's cult of the offensive) in favour of the development of pragmatic, contextually bound rules and heuristics to guide operations in a domain of armed conflict that is not formally templated by extant military education, doctrine or training. As Naveh describes it, the value of operational experimentation of this order is its capacity to lift the scope of operational and strategic cognition beyond the immediate horizon and liberate operators and strategists from the narrow imperatives imposed by the campaign as it is presently understood (Naveh, 2007, p. 28). For the tactically focused, action-oriented mindset of most modern militaries, "that which is not templated is either unintelligible or non-existent," and military organizations struggle to think beyond these kinds of templates for action (p. 28). Lawrence's narration in chapter 33 observes a comparable primacy of action at play in the campaign, a governing logic which his own reflections on strategy attempt to surpass through reflexive critique: "At my first landing in Hejaz there had been a crying need for action, and we had done what seemed to instinct best, not probing into the why, nor formulating what we really wanted at the end of it all" (2008, p. 193). In this sense, the

conceptual focus of the military aspect of Lawrence's writings is the development of a critical appreciation of irony and paradox, and a mindset of self-disruption that develops, through abstract mediation of emergent trends in the battlespace, pragmatic terms that are expressly adapted to move beyond the accepted, normative terms of reference for the conduct of warfare. The literary structure of "Evolution of a Revolt," which does not resemble an objective history of the revolt so much as it develops an operational narrative that foregrounds a cogent and pragmatic critique of an aesthetic sensibility imparted by a Western, imperial model of terrestrial warfare, is arguably a means of making Lawrence's reflexive critical insights into the pragmatics of irregular warfighting accessible, in a critical narrative form, to a military readership steeped in the martial orthodoxy he is attempting to surpass. What is significant about that literary format, from the perspective of military knowledge, is its capacity to distill Lawrence's insights into irregular warfare. However, these insights only emerge through representational techniques that are particular to the idiosyncrasies of Lawrence's writing.

Both chapter 33 and "Evolution of a Revolt" articulate the creative synthesis that defines Lawrence's practice of generalship, realized through a set of astute critical reflections on intelligence, operations and strategy, as an effect of a modernist literary-critical aesthetic. Though Lawrence himself only rose to the rank of lieutenant colonel, his role as the staff liaison for the EEP put him in a unique position to engage in active strategy-making for the Arab campaign ("As I have shown, I was as much command of the campaign as I pleased, and was untrained") in a way that gave him liberty to depart from the received terms of reference of his own martial culture (p. 193). While he did not command the Arab irregulars in the sense that command is normatively understood as a function of military discipline, it is arguably this

creative synthesis of strategy that encapsulates the essence of generalship in the mode of the operational artist that Naveh describes.

Naveh argues that it is the capacity for *designing* patterns of language and space that enables a strategist and an operator to effectively model the conflict system and develop an operational concept that can exploit its emergent tendencies in support of a coherent strategy, and he identifies “Evolution of a Revolt” as a singularly compelling literary documentation of this process in a military setting (Naveh, 2007, p. 29). In this capacity the text is remarkable in its operationalization of literary techniques towards not only the articulation of strategic ends but towards the advancement of military epistemology. “Evolution of Revolt” therefore performs a remarkable feat of military knowledge production insofar as the shortened narrative form condenses these literary effects to serve an articulation of strategic principles that is expressly conceived to be externalized and disseminated. Naveh’s turn towards a literary-critical synthesis of intelligence in the context of the second intifada develops a comparable literary aesthetic practice, emphasizing the creative spatiality of military power-knowledge. However, Naveh goes much further than Lawrence in taking an avant-garde mindset as a guiding principle for developing operational practice.

Chapter 4: Alternative reals: enclaves, swarms and the spatial imaginary of military urbanism

Where Lawrence describes irregular desert warfare, which implies a significantly different ordering of operational space and time from the intensely compressed social milieu of the urban battlespace, the figurative abstraction of the open desert from which the raiding party may spring forth at any moment, only to strike and disappear, nevertheless suggests a set of potent conceptual metaphors for martial engagement in a battlespace where the disparity between vastly dissimilar force structures can be plied as a critical strategic advantage. Naveh's own literary practice models a comparable dialectic of military knowledge in the context of Israel's security environment at the onset of the 21st century. Indeed, several of the key figurative concepts of "Evolution of a Revolt" recur in "Between the Striated and the Smooth," and the Naveh school's conceptual language for swarm warfare reiterates elements of Lawrence's metaphors for the Arab irregulars' raiding strategy. Both Lawrence and Naveh rationalize patterns of martial self-organization capable of denying the enemy a target and evading contact through metaphors like the gaseous intangibility of raiding formations. Gal Hirsch (2003) likewise regards the immobility of conventional, logistically intensive ground formations like the column as a liability for militaries engaged in urban terrain which give lighter irregular forces advantages in concealment and cover. And like Lawrence, Naveh constructs a conceptual antithesis between Western (e.g., sedentary-statist) and Eastern (e.g., nomadic-anarchist) ways of war and admires the cognitive advantage which he attributes to the latter's capacity for subverting the idealized operational forms and models of the former, particularly where the former is patterned in the legacy of modern industrial warfare and the cult of the offensive ("Between the Striated and the Smooth").

However, Naveh's discourse on operational aesthetics goes much further in contesting the epistemological bases for strategic thought and action than Lawrence's. Instead of adapting a novel model of operations that leverages the alterity of the martial culture which it aims to mobilize against the prevailing martial orthodoxy, Naveh mobilizes a particularly zealous critique of the legacy of industrial warfare that leverages insights drawn from academic disciplines like poststructuralism, cybernetics, and architectural theory, in order to revolutionize martial thought and behavior. Instead of developing a modernist aesthetics of spatial practice that embraces the alterity of the Arab irregular as an ironizing counterpoint to conventional military philosophy, Naveh presumes that spatialized aesthetics are themselves an operative condition of battlespace intelligibility: urban warfare is subject to an evolutionary dynamic between the abstract capacities of the "war machine" and "state apparatus" described in Deleuze and Guattari's "Treatise on Nomadology" (1997), which posits a continuous interplay between structuring and unstructuring vectors of perception, cognition and action as a motivating agency underlying the development of martial and extra-martial knowledge-power relations (see subsequent chapter on military science and nomadology). The ability to conceptualize this interplay as a complex, non-deterministic network of changeable configurations imparts a critical military advantage to a fighting force enmeshed in an inchoate, fractured multiplicity (Croser, 2011). Naveh's concept of the relationship between intelligence and operations underlies a bespoke philosophy of generalship that mobilizes metaphors, abstract principles, diagrams, heuristics, and other conceptual artefacts to inform martial practices attuned to that multiplicity. In short, the intelligibility of the battlespace as both a mutable and contingent "thing" that can be constructed, contested, reframed, etc., engenders new terms of actionability to be realized through experimental practice and operationalization. The generation of novel terms of reference

is a vital means of maintaining a critical cognitive edge that enables a military force to stay ahead of their adversary, to anticipate and adapt in a quicker timing and rhythm (Osinga, 2006).

As with Lawrence's writings, "Between the Striated and the Smooth" appeals to references outside the military canon in order to model the emergent properties of the conflict system in ways that are not templated by military orthodoxy. And, in even more explicit terms than Lawrence's, it leverages a schismatic and disruptive appreciation for irony and subversion. The document reflects a process of synthesizing these references in a way that aims to disrupt the normative sense of military knowledge in order to renew the paratroopers' cognitive advantage in a novel context for operations. But it differs from Lawrence's modernist approach to operational deliberation significantly. "Evolution of a Revolt" articulated operations in terms of a spatial aesthetic that could incorporate resistance encountered on the margins of imperial space into a coherent martial strategy for advancing allied war aims, replete with a compelling rationale for logistics and the use of military resources (i.e., a conventional practice of operational art, in the American model). "Between the Striated and the Smooth" articulates an aesthetics of spatial practice that assumes that the ontology of space itself, and its multiple construction as a locus of meaning and action by conflicting epistemologies, is an inescapable and defining element of armed conflict, particularly pronounced under conditions of postmodernity, that can be exploited by a rigorous and flexible practice of operational art after the conception of the Naveh school. For Naveh, as it is for SOD (see the subsequent chapter, "Everything Flows," on SOD as pedagogy), it is this multiple construction of operational space which generates the conditions for a revolution in martial behaviour. As the document frames it, the urban battlespace is potent with vectors for exploring these emergent martial relations.

Naveh's discourse speculates that the paratroopers' Fatah-aligned "rivals," composed of irregular fighters drawn from an assortment of Palestinian militias and paramilitaries, have internalized this dynamic as a cognitive advantage over the IDF's lumbering military apparatus. Drawing explicitly from the language of Deleuze and Guattari, "Between the Striated and the Smooth" hypothesizes that the capacity to perceive an emergent ordering of the city is a decisive factor in maintaining cognitive advantage: Naveh understands urban warfare as a dialogic interplay of martial behaviours realized within an expansive complex of affects, relations and territories unique to the city and its contingent elements. Dialogic interpretation of spatial relations and temporal rhythms defines the aims, means and stakes of urban warfare: a continuous and iterative conceptual dialogue with the urban battlespace, engaged through probing operational actions, enables operators to rethink the relation between action and space in a way that allows for the emergence of new strategic and operational potential. For Naveh's practice circa 2002, to see the battlespace in a new way through operational experimentation is to hold a critical advantage over those who cannot. Devising operational experiments that leverage competing perceptions of the battlespace is itself a lever for disrupting the adversary's capacity to organize and assert its own designs within the conflict environment. To sharpen the critical terms of this dialogue, enhance their relevance to the space it aims to transform, and maintain the advantage, it is necessary that a military force engage in active and continuous disruption and reframing of its self-conception and modes of action and self-articulation.

The feral city

Naveh's characterization of the urban battlespace aligns with a particular outlook on the future of urban warfare that had begun to emerge in the Western defense establishment in the early 2000s. The evocative (and, frankly, chillingly imperious) term "feral city," coined in

Richard Norton's article (2003) for the *Naval War College Review*, anticipates the emergence of a particular kind of urban geography endemic to failing and failed states, presenting a particular set of security challenges (Sullivan & Elkus, 2019a). Characterized by enclaved neighborhoods that provide a fertile ecosystem for criminal organizations, militias, and paramilitaries, the feral city "represents a giant challenge to state power":

It is an emergent process, driven by a hive-mind intelligence that is the sum of a deviant social ecosystem composed of diffuse, bickering, but interacting factions that form a hidden social order. Each "feral city" or "failed neighbourhood" can serve as a pivot point in a giant network that is fast becoming a postmodern criminal empire that grows like a cancer within the interior space of the state. This is not an empire that has a unified base – it is the sum of a mass of economic, political, legal and cultural processes that interact to form networks of power distributed within each individual citizen (p. 43).

Nablus, a city of under 200 000 people with a developed commercial center that has been under military occupation for the better part of two decades, does not entirely conform to Norton's description of the feral city. However, the clustered and mazelike alleys of the Balata neighborhood, a refugee camp settled in the immediate years after the War of Independence and the coinciding displacement of Palestinians, are a site of frequent gun battles between competing Palestinian factions and the Palestinian Authority in the 21st century. The neighborhood's 21st century history of sporadic violence and paramilitary competition neatly aligns with Norton's characterization of the feral city. Naveh likewise characterizes the notorious Balata neighborhood in language which resonates with the terminology. The idea of a transient, self-arising, geographically enclosed insurgent territory, characterized by conditions of strategic invulnerability, empowered by a complex network of information sharing that enables an informal collective of nomad-warriors to instate a no-man's land beyond the reach of the state, clearly parallels Naveh's characterization of the operational environment in Balata (pp. 43-44). It likewise echoes the speculative language of American anarcho-mystic Hakim Bey's *Temporary*

Autonomous Zone or “T.A.Z.”, a common reference on OTRI syllabi: the ability of these informal “criminal” and insurgent groups to disappear in the cityscape, becoming inscrutable to the intruding state power that seeks to reassert its hegemony, is determinative of those insurgent groups’ ability to project invulnerability and amass prestige and legitimacy (Bey, 2009). The capacity of insurgents to manipulate the city to affect this disappearance is determinative of their ability to project power and sustain themselves, on a provisional basis, in a space that is defined by the dynamics of intense competition between hostile powers either beholden to or contesting the limits of empire (Sullivan & Elkus, 2019a). And while the terminology of the “feral city” is anticipative rather than actual (i.e., Norton sees the feral city as an emergent phenomenon not entirely realized at the time he was writing), it nevertheless qualifies a particular mindset in Western defense intellectuals concerning low-intensity conflicts and threats to security around the onset of the GWOT, one curiously inflected by an engagement with anarchist and post-Marxist literary theorists like Bey and Michael Hardt and Antonio Negri (2001). This outlook takes the view that the non-linear, discontinuous character of urban operational environments are conditioned by paradoxes and ironies which inhibit decisive resolution, encouraging operational approaches that seek to transform the conflict system through provisional, probing actions, rather than seeking to instate an absolute condition of domination in the model of a conventional battlefield (Zweibelson, 2016, 2020).

Dinosaurs and hornets

Writing a brief article on operational “moulds” for asymmetrical conflict for the Royal United Services Institute shortly after Operation *Defensive Shield*, Hirsch (2003) speculates that the ability of an irregular force to create spectacular effects in the conflict environment defines its strategic efficacy in a conflict with a conventional military, in which irregulars are unlikely to

prevail by fighting in the style of a conventional army. In a security context where low-intensity conflict with irregular soldiers, paramilitaries and other informal armed networks is the most prevalent expression of armed conflict (often falling short of the threshold of war), Hirsch argues that it is paramount for a conventional state to organize itself as a “dual force”: in addition to the classical model of a state military, a modern army must develop expertise in fighting adversaries capable of subverting the idealized models and patterns of a conventional military organization (p. 60). An irregular force occupying an urban enclave that cannot be held in any enduring sense by an occupying force is an apt example of this kind of security threat, which had come to the fore with the onset of the GWOT in the early 2000s, and the subsequent invasion and occupation of Iraq by the American-led coalition. For a fighting force to be effective in this kind of battlespace, Hirsch argues that commanders and staff must engage in a rigorous conceptualization of operational forms and patterns that aim to shatter the normative templates of a conventional force model.

By its own account, “Between the Striated and the Smooth” aims to rethink the IDF’s discourse on intelligence. It models a practice of operational inquiry that departs from established planning conventions, conceiving of an operation less as a plan or program for bridging between tactical and strategic levels of warfighting than a structure for experimentation that bridges between concept and action (Zweibelson, 2020). For Naveh, the term “operational” refers instead to a process of working out a concept, either through a sketch or an illustration or a plan, much in the same sense that Duchamp’s avant-garde operations seem to imply (p. 200). This revisioning of military language introduces a tension that can easily lapse into antagonism of military audiences, but this effect is for Naveh arguably a feature of operational design and not a fault. “Between the Striated and the Smooth” reconceptualizes intelligence analysis in terms of

its critical potential for what one of the involved practitioners terms “formalizing the subversive,” that is, for mobilizing critical cognition of the complexity of the battlespace into a coherent set of organizational models that work on the paradoxes that condition the urban battlespace as a field of actionability (Hirsch, 2003; Naveh, 2005). By modelling an alternative intelligence discourse, the document invites a constructive departure from formal conventions for evaluation of intelligence (and the deliberations on certainty and risk those conventions presume) in favour of creative abstraction of the systemic multiplicities of the battlespace. Instead of simply enumerating extant knowledge and provisioning decision support frameworks and timetables for producing conventional military intelligence products (as is a standard doctrinal practice for operational planning in Western militaries), this process of abstraction aims at critical investigation of systemic conditions unique to the battlespace (see subsequent chapters “To deviate from doctrine” and “Everything Flows”).

By exploring unique localized conditions and developing a conceptual language tailored to their nuance and subtlety, this process aims to map multiple frameworks of systemic intelligibility that engender that space as a domain of conflict and competition in order to generate of a set of operational practices that can transform the space to strategic advantage (Graicer et al., 2022). This is the sense in which Naveh’s aesthetic practice “designs meaning” for the battlespace and the operators who contest it: by operationalizing concepts. “Between the Striated and the Smooth” is an illustration of this process in practice, in which the participants develop a framework for understanding emergent complexity in a particular setting (in this case, the Balata enclave of Nablus) and propose “conceptual and aesthetic artifacts” that enable participants to conceive their own logic of action that conforms to their own observations on that

space and the systemic relations that compose it as a domain of actionability (Zweibelson, 2020, p. 214).

The document positions the operational commander, Col. Aviv Kochavi (lately retired, although he held the position of the IDF's Chief of the General Staff between 2018 and 2023), as a principal mediator of the inquiry. Kochavi's dialogue articulates the synthesis of the operational inquiry into an intelligible program of action. His creative framing of the problem outlines the conceptual references for the ensuing operation by rationalizing tensions between the idealized "myths" of the legacy system, the technical rationalizations underpinning extant doctrine, and the practical aims and cultural investments of the rivaling systems as they interact and evolve within the political-strategic context of the second intifada. Segueing from the S2's commentary on the defensive "*laager*" which the Fatah fighters have established in Balata, Kochavi's dialogue begins to define the plot of the evolving operational narrative, which the attendant staff begins to critique, expand and complexify. That plot hinges on a revaluation of the IDF's own self-conception: the pivotal idea is that the mythology of the IDF's military state apparatus is a critical systemic vulnerability which the Palestinian fighter's war machine intends to subvert to devastating effect.

This mythology is the legacy of foundational myths of the IDF's martial culture, entrenched in the idealization of the mechanized offensive to the detriment of dismounted infantry who, acting as a vital forward component within a combined arms maneuver system, act as a defensive screen and a targeting relay for heavier armoured units (Naveh, 2007, pp. 72-73). Armour, and the tank specifically, is a pivotal instrument of shock and breakthrough in a conventional combined arms fight, and these idealized effects are embodied in both the IDF's models of combined arms warfare and the tactical formations (columns, lines of support, linear

conceptions of mass and maneuver) conceived to realize it (p. 72). But in an urban fight, it is infantry who must project these forms by the continuous occupation of visible space, extended through a labyrinthine passage through streets, alleys, windows and rooftops that expose them to multidirectional traps of fire and concealment. Aspiring to unlearn the formative spatial concepts of the armored offensive and the dependencies they engender in the organization of an offensive fighting force, the document reframes these idealizations of space, attempting to grasp the Palestinian fighter's operational logic holistically by identifying patterns that impute the logical reasons for their decision to encamp in Balata. In doing so, it improvises a creative interpretation of the adversary's operational rationale that identifies tensions between values, goals and idealized models between the rivalling military systems.

Having named the involved actors and given them back stories which might explain their motivations, the staff officers begin to schematize those actors' interstitial tensions to account for competing strategic objectives and their potential for frustration and subversion of their adversaries' designs. Effectively ripping the brief, the S2's commentary catalyzes the ensuing discourse on their rivals (or "rival as rationale," as the design discourse is described in the earliest iterations of SOD's pedagogy) through the abstraction of systemic asymmetries of the urban battlespace. In so doing, the discourse emphasizes the multiple constructions of the battlespace as a contested site and locus of martial activity, operational cognition, and psychic investment, constituted by a dense agglomeration of overlaid materials and meanings interpreted by a variety of competing and cooperating actors. The dialogue foregrounds the battlespace's creative potential as kind of spatiotemporal canvas for an emergent operational practice.

Kochavi describes how the urban sphere provides the militants "with a natural base for operations against conventional forces [:] it is a natural hideout; an unlimited logistical base [...]"

a medium for disappearance” (Naveh, 2005). He speculates that the urban environment is itself a medium of spatial refraction which amplifies critical vulnerabilities in the patterns of the attacking force and obscures those of the defending (Weizman, 2007a, p. 212). The central metaphor embedded in the idea that urban spatiality is an aesthetic medium for “disappearance” has a number of suggestive implications: it conveys the sense of an immersive material or substance (in the sense of a laboratory or artistic medium), an imagistic function tied to scopic technologies of modern weaponry and surveillance (in the sense of a communicative ordering of visibility and invisibility, appearance and disappearance), and an interchange between forces that act on a distant or removed object (a locus for the action of military force). In other words, the metaphor of the city as a medium for fighting presumes a kind of creative play or exchange between appearance and disappearance that is a logical determinant of expressions of martial force and organization in urban warfare. This conscious selection of metaphor has significant implications for conceptualizing the operational challenges of the ensuing raid.

Like Hirsh’s reflections on swarm warfare, the S2 grasps that their adversaries intend to fracture generic military forms “by channeling a military force into the multi-dimensional trap of the streets,” dangerously confounding the intelligibility of the battlespace from the perspective of the attacking force (Hirsch, 2003, p. 61). However, the S2’s discourse on the subversion of idealized spatial forms imparts a model for the impending raid that enables operators to conceptualize their rival’s operational form in systemic terms in order to understand and exploit its vulnerabilities. Excavating unexamined assumptions embedded in their rivals’ implicit strategy (which is reflected in their provision of spatial defenses), Kochavi details the relation between meaning and form which the operation aims to realize, sketching the logic of the

maneuver which the paratroopers under his command will actualize to counter-subvert their rival's cognition of the battlespace:

They, the insurgents, wrongly tend to misperceive their tactical (individual or team level of action) inconspicuousness (disappearance) for operational (system or organizational level of functioning) imperceptibility (absence). Their transition to Balata is about fighting, and fighting is about physical, as well as conceptual cohesion. Moreover, this transition from a state of divergence – disappearance through non-contiguous deployment within a big town or city – to a state of convergence implies both a reframing of the relations between mass and space, and a re-examination of the tension between disappearance and fighting. (Naveh, 2005)

From this conceptual overture, Kochavi abstracts an operational pattern that enables the operators to actively “de-structure” their adversaries’ cognition:

Once they attach themselves to an enclave, tactically we may not see them until we engage them in a mechanical sense. Yet, operationally, unconsciously, they converge with the overall form (layout) of the enclave [...] since the boundaries of the enclave reflect their operational form, we can design a complex pattern of maneuver (fractal) that will disguise our form from them, impose chaotic conditions on their cognitive process, and deconstruct or de-structure their operational form. In other words, striate what they discern as smooth. (Naveh, 2005)

The intended effect of Kochavi's operational discourse is to impart to his staff and subordinates a set of observational tools for spatial awareness (and, perhaps unsurprisingly for an ostensibly avant-garde aesthetic practice, deliberate confusion in the adversary) that exceeds the traditional martial focus on consolidating presence through the concentration of mass. Instead, the creative emphasis of the developing maneuver is to define a set of spatial practices that can exploit the fragmentation of multiple spatial and temporal orientations in the battlespace. By cultivating an alternative cognition of the battlespace and complementary modes of transiting it, and by leveraging that cognition to engender a mobile inhabitation of space that the adversary can neither anticipate nor adapt to, the operators learn to construct and inhabit an alternative real, one that emerges through a “complicated and non-deterministic interaction of matter and meaning,” in martial practice (Croser, 2011, p. 67).

An alternative real

The operators' discourse aims at generating a set of artefacts, a selection of adaptable cognitive tools that enable the operators to conceptualize and identify unique operational patterns in the battlespace. The discourse on operations is a means of developing a heuristics of spatial practice complementary to these patterns: by inventing their own language to describe the transformation of the battlespace as it is shaped by expressions of martial force, they aim to discover means for maximizing their impacts as disruptors of the cohesion of their adversary's operational form and amplifiers of the operational cohesion of their own. Conceptualizing the battlespace as a shifting agglomeration of perceptions, interpretations, and actions which can be actively constructed by the terms imposed by the operators' inquiry, the ideal effect of this spatialization of martial practice is to "compel the enemy to assume a form, to have an image" (Hirsch, 2003, p. 62). Much like Richard Elster's aesthetics of disappearance in *Point Omega*, this is not simply a question of compelling a target's visibility as a brute fact for the sighting mechanism of a weapon system (although this is surely one important dimension of its multiple implications). Rather, it is a question of drawing them into an order of intelligibility of the battlespace (and thereby submitting them to effects of combat tactics, which are not orderings in and of themselves) whereby contingent, localized conditions that are mutable, ephemeral and emergent are recomposed to "hang together" in the perceptions of the attacking force, realizing a condition of operational intelligibility (cognition) in the attacking system that becomes a locus of meaning and actionability for martial practice (Croser, 2011, pp. 60-67). In other words, the "real" of the battlespace emerges as something that is produced within a dense array of material assemblages and that production is a condenser or diffuser of agencies (pp. 50-55). By rethinking the relationship between urban space and fighting as one that is determined by emergent

relations, conditioned by the mutability of meaning and materiality, the design discourse aims to leverage alternative interpretations of space that can be known and inhabited in a practicable cognitive sense by the self-organizing military force tasked with transforming it. Violence, in the conceptual terms developed by the operational discourse, is not simply a thing made fact by the destructive production of absence or (less opaquely) the catastrophic dismemberment of the opposing force through fire and attrition, but an active and continuous process that works over materials and meanings at the level of cognition and sensation. Like a work of avant-garde composition, it is an act that attains to creative destruction, replete with a spatial vocabulary tailored to incorporate meanings, materials and inhuman agencies made apprehensible by a deliberate spatialized aesthetic practice (pp. 53-56).

Reconceived as an intentional effect of spatial practice, violence becomes a “force imbued with transformative political potential,” as Caroline Croser qualifies the US Army’s 1st Cavalry’s disposition towards virtuality, openness, and irresolution in the exercise of organized violence in Baghdad in the early years of the GWOT (p. 55, quoting Geoffrey Whitehall). This generative, actionable sense of an “alternative real,” which the staff actively constructs as an orienting concept or model for the operation, imparts martial agency to the combatants through a discrete set of spatiotemporal practices that define the space in which they act in a provisional and contingent fashion. This agency emerges “through practice in a way that denies the singularity of the real, or its supposed ahistorical qualities, and implies the existence of multiple reals responding to multiple temporalities” (p. 59).

The ideal effect of this abstraction is to impart to operators a logic of space that remains unintelligible to an adversary and enables them to operate at a level of reality that the enemy does not. Ideally, the latter become immobilized by their incomprehension, rendered incapable of

putting up a coherent response to an operational pattern they cannot intuit, discern or rationalize as anything other than a de-structuring and all-encompassing chaos. In this sense, to compel the adversary to “assume an image” in the medium of urban warfare implies trapping them in a spatial and temporal orientation of their own making which does not apprehend, cannot access, and cannot dissimulate in the alternate real in which they are constructed and observed as an actionable object for military force.

This logic of de-structuring the adversary’s cognition of the battlespace in order to induce a breakdown in their ability to self-organize to maintain the fight is preceded in Naveh’s own doctoral research on the history of operational theory, which highlights operational shock as an idealized effect of maneuver warfare (Naveh, 1997). The principle of amplifying impressions of disorder to inhibit the functioning of a military system echoes many of the fundamental insights of Colonel John Boyd, a former USAF instructor and an early theorist of postmodern warfare who was highly influential in post-Vietnam war debates on force transformation (Osinga, 2006; Boyd’s ideas are taken up in a subsequent chapter on military science). Kochavi’s (and Naveh’s) artefactual production for the Balata raid is a singularly remarkable extension of this principle insofar as they aim to leverage an explicitly avant-garde aesthetic philosophy of space in order to induce operational shock in the adversary system. Instead of merely applying pre-existing doctrinal forms (i.e., tactics) to instate these effects according to a phased operational plan, the operational concept is realized through a continuous and evolving occupation of space that aims to translate the spontaneous action and initiative of operators into an emergent combat system, realized through a non-deterministic, iterative and ongoing interpretation of the battlespace. The model for operations it imparts emphasizes a self-creating process, realized through actions

which allow the operator to define the battlespace on the fly, rather than simply moulding their ingress towards a spatial objective according to a pre-existing image of it.

Chapter 5: “The Battalion Skates the Tightrope”: architecture, event-space, and transgression

While neither Naveh’s or Hirsch’s writings cite him, sociologist and organizational process theorist Robert Cooper’s (1976) writings on the generative dynamic between structure and process in organizing human activity (recently explicated as a reference for Robert Chia and Robin Holt’s (n.d.) Continentally-inflected writings on strategy, operations and non-determinacy) is a helpful reference for grasping the implications of the “image” informing the operational deliberations around *Defensive Shield*. Speaking to the context of organizational behaviour in general rather than a specifically martial setting, Cooper describes the strategic function of images in directing organizational behaviour:

[theories] of human action typically presume that the content of most action is determined by the images people have of their environment. Images precede actions and give them meaning. The image is an active organization of experience through which history writes the future. As such, the image inhibits the possibility of creative transformation...In order to subvert the tyranny of the image, pure action, uncontaminated by a directing image, must be generated. (p. 1001)

For Cooper, both individuals and the organizations they embody hold pre-existing mental images of their environment that tend to delimit the possibilities of acting in and on those environments. To disrupt those tendencies and instate creative transformations in an organization or its environment, it is necessary to devise means of subverting the “tyranny of the image” (Chia & Holt, n.d.). Not unlike the chance operations of Duchamp’s *3 Standard Stoppages* (see chapter 1), for Cooper, this is only attainable through stochastic actions that break with the determinism of mental images which define the object of that action. Cooper’s example of this latter approach is action painting, a technique of abstract expressionism wherein the “content” of a painting is determined by the gestural action itself, rather than by reference to a received or projected image that the action is supposed to represent: in action painting (notable practitioners of which include

Jackson Pollock, Willem and Elaine de Kooning, and Franz Kline), the substance of the image is defined by the action that creates it, rather than a predetermined visualization of its content (p. 1002). The content of the work is determined by the chance behaviour of the materials under the influence of the artist's manipulation, which include qualities like the flow of dripped and even thrown paint, the drift of scattered cigarette ashes, etc.

Much like Cooper's description of action painting, "Between the Striated and the Smooth" advances the idea that the actionability of the urban battlespace is defined the interpretations of a force moving through it. These interpretations are determined by chance events and encounters, rather than received impressions of that space, informed by static visualizations in the model of a map or a battle plan which set out their movement deterministically according to the spatial abstractions of command (Weizman, 2007a, p. 198). And while SOD encourages sketching and illustration as a primary artefactual means of imparting an operational design (the abstract "image" of a fractal being the key figurative reference that informs the operational concept for the raid), that artefactual production is less about generating a detailed and precise representation of the battlespace with clearly defined spatial objectives than it is about conveying an actionable concept for making the battlespace other than it presently is: the image of the fractal is as much about imparting the means for "how to make" as it is about defining "what to make" (Graicer, 2017a, p. 27; see subsequent chapters on theoretical precedents for SOD).

Walking on the Wild Side

In much the same way that a canvas defines a field for the gestural action of the action painter, the operational concept for the Balata raid constructs the urban battlespace as a medium for the realization of the maneuver form. In the terms generated by the Naveh school, the

spontaneous intuitions of the operators transiting the battlespace are determinative of its content or meaning, which reframe the conditions of intelligibility and actionability implied by the conscious architectural design of that space (e.g., roads and alleys imply a conduit of transit, doors of ingress or exit, windows admit the passage of light and direct the gaze outward). While these interpretive spatial practices took very real forms during the Balata raid in February of 2002, and the temporary reoccupation of Balata in the offensive phase of *Defensive Shield* in April of 2002, this undercurrent of OTRI's engagement with advanced theory often appears more interested in engaging a semantic counter-rhetoric of space in the mould of the Situationist avant-garde than it is in articulating a communicable concept for operations in the pursuit of the aims of national policy. In that respect, it seems to say more about the desires and intentions of Naveh as an artist and a theorist than as an educator of the senior officers of a defense organization. While these two positions clearly coincide in the sets of practices which evolved from these intellectual engagements – practices which were tested under fire in Nablus, and which were arguably successful in their limited operational context – at the level of concepts, they also slide into the abstruse, speculative and the intangible in ways which are difficult to square with the educational needs of the officership.

There are precedents for this kind of conceptual play in other military contexts (John Boyd's (2006b) "Strategic Game of ? and ?", for example, arguably plays with the semiotics of designed objects in terms not far removed from the Naveh schools', on which Boyd was an influence). However, the extent of Naveh and Kochavi's embrace of abstruse terms and concepts produced by 20th cultural avant-gardes is remarkable to the extent that it centers conceptual transgression as a primary function of martial aesthetics. This is to say that these aspects of the Naveh school's engagement with transgressive literary texts and ideas seem to be pitched

towards provoking the imagination and the critical impulses of practitioners to ends that seem tied more closely to aesthetic gratification and pleasure than a specific military-political project. While that engagement arguably sharpens the poetic edge of Naveh's writing and terminology, opening that language to aesthetic evaluation and criticism, these conceptual exchanges are much harder to read as expressions of martial or strategic practice. This short chapter nevertheless works through the aesthetic implications of an intellectual exchange that generated a set of provisional concepts that, in turn, evidently informed the design of the tactics for which the Naveh school is most well known outside the world of PME: the practice of "walking through walls".

The martial aesthetic of transgression through movement and gesture is the element of OTRI's historical practice which appears most directly indebted to cultural avant-gardes of the 20th century, and has direct precedents in movements like Situationism (texts of which were, like Hakim Bey, staples of OTRI syllabi). But they can arguably be linked (at least analogously) to earlier avant-garde moments like Dada or Duchamp's ready-mades, which actively called attention to the way in which designed environment like art exhibitions or performances encode normative functions that reinforce social expectations. In the same way that organizers encouraged the act of throwing tomatoes at performers during the Dada festival in Paris at the end of WW1 as a means of staging a breakdown of the division between performer and audience effected by spatial partition of the stage, Naveh's paratroopers arguably sought to transgress the spatial partition of the urban environment in ways that could enact a counter-usage of those space's designed functions. In that way, they seem to engage in something like a semiotic reinterpretation of the architecture of the Balata enclave.

After French structuralist Umberto Eco's (1997) writing on the semiotics of architecture, it would be fair for a skeptical reader to ask: what is the purpose of questioning that a roof provides cover against the element, or that a drinking glass is designed to hold water in a way that allows a person to drink from it? (p. 175). In other words, why frame these functions as acts of communication when they are so obviously tied to designed functions? And the answer that Eco offers is that framing these designed functions as subjects of interpretation allows one to not only define that function more precisely, but to conceptualize functions that might exceed the design one. Features of architectural design may serve primary functions, like windows, roofs and stairs do. But they may also assume ideologies of inhabitation (e.g., a dining room assumes one aspect of the function of hosting, a parlour assumes another, and with them a temporal sequence to hosting) and, at a larger scale, broader sociological functions (e.g., a school, a hospital) (p. 185). They may even simulate structural functions that they do not actually fulfill, as the ribbed vaults of neo-gothic architecture do. Regardless of the architectural feature in question, Eco's key idea is that designed spaces communicate particular functions at least as much as they embody them, and that these communicative functions can be interrogated and re-envisioned.

Not unlike Eco's gloss on the semiotics of architectural forms, the paratroopers under Naveh and Kochavi's tutelage sought to reinterpret the architecture of Balata through a mobile, active and non-deterministic occupation of space that enabled them to subvert their adversary's definitive advantage in knowledge of the urban terrain. Where the Fatah fighters knew the layout of that designed urban space in definitive terms, they reasonably assume that a wall will continue to serve its designed function as a fixed partition between rooms or the outside elements, an alley will remain a passageway for pedestrians that is a tributary of a road, a road is a route of a transit

for mechanical vehicles, etc. By denying their adversaries the stable conceptual ground of their situated knowledge of the built urban environment, the Balata raid's concept of spatial transgression aimed to deny them access to their fixed mental image of a space they may otherwise know by heart.

By acting on spontaneous, situated impressions of the urban battlespace that do not conform to the normative sense imposed by the built environment, the paratroopers hope to trap the opposing force in their own conceptual image of the battlespace, informed by their own interpretation of IDF tactics, their cognition of the spatial layout of the urban environment, and the normative habituations of transit and passage this layout implies. The paratroopers imagine the operation is as an event-driven process for the realization of that subversion: their tactics attain to a formalization of an interpretative action realized through spatial transgression, by which paratroopers can de-structure their opponent's image of the battlespace through their own initiative. Engaged in an active decomposition of an architectural medium, the paratrooper units aim to realize the maneuver form by improvising a performative "syntax" of movement that actualizes their own counter-intuition of designed space. In this way, the Balata operation is conceived as means of realizing a "designed meaning" from the chance events and encounters arising from the actions of the operators within the battlespace, rather than fulfilling an idealized structure reflecting a static, representative visualization of that space according to an operational template.

"Between the Straited and the Smooth" imputes the defenders' presumption of this kind of image of the battlespace, informed by the defenders' historical understanding of IDF tactics, as one which imposes a deterministic interpretation of architectural space that can be exploited operationally. In this sense, Kochavi's instruction to "striae what they discern as smooth" (again,

directly lifted from Deleuze and Guattari) can be understood as an artefactual means of condensing the spatial abstractions of the design process into an operational program: it is a suggestive visualization of a how-to directive (Naveh, 2005). It is likewise a touchstone concept for a set of spatial practices that aim to deny their adversary's freedom of action by preventing their ability to recognize the opposing force as a targetable form, and by this feat of psychic and cognitive disorientation, to freeze them in indecision, immobility and inaction, effectively trapping them in the strategic and operational determinism of their own spatial imaginary.

Kochavi's conceptualization of the battlespace restages a set of discursive propositions that draw from avant-garde architectural practice of the late 20th century, inflecting them as conceptual levers for a martial practice that actively contests the discursive functions implied by designed architectural space. Eyal Weizman (2007b) identifies the influence of the Situationist practice of the "*dérive*" or "drift," a playful temporary occupation of space that aims to let participants be drawn to their own intuitions of the city, as a common touchstone informing OTRI's early practice (p. 68). Emphasizing the "psychogeography" of the city as a contestable structure, a *dérive* involves a staged encounter with urban space through behaviours that seem to deviate from the flows, fixed points, and materials that delimit the contours of city life by forbidding access or exit (Debord, 1958). By dropping the structures, habits and rhythms of normal life, the aim is to temporarily dominate the psychogeography of the city by counter-mapping it and imposing improvised cartographies, calculating possibilities that exceed the designed city's strictures of movement and inhabitation. The idea of subverting an adversary's intuition of the city street by constructing and occupying an alternative "real" clearly resonates with this Situationist practice and is another striking revisioning of post-1968 avant-garde culture to enhance martial knowledge and practice. But the idea that the Balata raid is informed by

particular design artefacts, and that these artefacts present a kind of formal program for transforming the urban battlespace, the forces and relations that define it, also resonates with the “disjunctive” architectural practice of Swiss architect Bernard Tschumi (1994a), another common reference on OTRI syllabi. OTRI’s citation of Tschumi implies a deep engagement with aesthetic philosophies of space in the modelling of experimental martial practice.

In Weizman’s (2007a) interviews with Naveh and Kochavi, Naveh notes Tschumi’s notational method for reprogramming relations between space, movement, and events as a reference and an inspiration for OTRI’s thinking around violence, transgression and space (p. 200). Naveh likewise identifies Tschumi’s *Manhattan Transcripts* (1994b) in the same footnote he singles out Lawrence’s “Evolution of a Revolt” as a conceptual reference for designing patterns of maneuver and organizational templates for their realization (Naveh, 2007, p. 29). Directly inspired by Tschumi, Kochavi and Naveh’s concept evidently licensed paratroopers to transcribe divergent, confrontational “readings” of the urban combat environment which took the disjunction between architectural use, form and social value as an orienting principle (Tschumi, 1994b, pp. 7-13; Weizman, 2007b). This notational approach to operational planning empowered the designers to compose counterintuitive patterns of tactical movement by “drawing” outside the defined lines and designed spaces of Balata.

Running with a principle called “walking on the wild side” (e.g., the principle that standard patterns of troop movement are forbidden), the paratroopers’ practice explicitly rejected prescriptive planning techniques involving linear maps of troop positions and movements as an inhibition on spontaneous intuitions arising from the encounter with architectural space and a brake on the possibility of its transgression through applications of armed force. As such, we may understand the now infamous tactic of walking through walls, prototyped in the February

raid and scaled up in Nablus in April of 2002 during the large-scale mobilization of Operation *Defensive Shield*, as an improbable extension of Tschumi's concept of disjunctive architecture, an avant-garde philosophy of spatial practice that emphasized transgression of the built environment.

Architecture and Disjunction

Disjunctive architecture emphasizes the idea that the function of architectural space is not singularly defined by the static image of its enduring form, but rather by the actions of bodies, the aspirations of occupants, the events that punctuate those sites with meaning (Hannah, 2019). It can be understood as an extension of some of the principles of situationist psychogeography within a developed, artefactually-informed spatial practice of conceptual architecture (Fontana-Giutsi, 2016). In a series of manifestos, lectures and essays composed between 1976 and 1981 Tschumi's *Architecture and Disjunction* advances a theory of spatial design that attempts to express implicit paradoxes undergirding modern architectural thought and practice. These writings theorize a spatial practice that plies the disjuncture between architectural concepts (e.g., designed forms and functions) and the ephemeral desires and intuitions arising from those designed spaces by making the abstract work of "questioning the nature of space" coincide with action, movement and spatial experience (p. 28). Tschumi's concept of "event-space" provides a grounding set of terms for conceptualizing this practice.

Event-space is a philosophy of designed space that eschews simple correlation between static architectural forms and their designed or intended functions. Tschumi's conception of architecture as event-space models a practice of inhabitation and movement "whereby inhabitants are constantly reconstructing their perception of, and engagement with, the built environment through its occupation" (Hannah, 2019). Abstracting the corollary principle "there

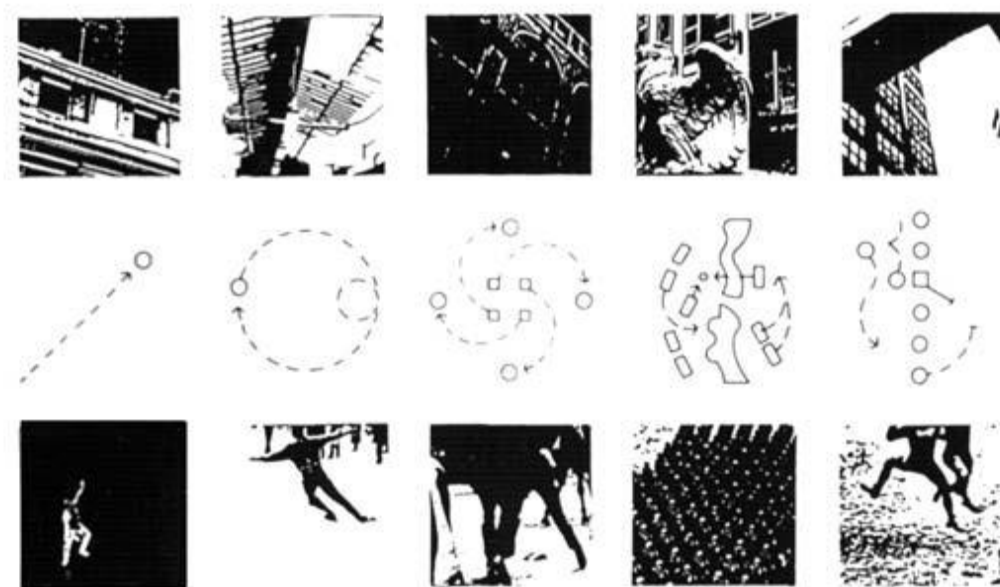
is no space without event,” Tschumi’s practice of “paper architecture” foregrounds the discursive, socially constructed nature of built spaces, recontextualizing architectural forms and functions by encouraging spontaneous actions and transgressive movements of inhabitants that separate the architectural object from its signification (Hannah, 2019, p. 82; Hartoonian, 2012, p. 10). Abstracting the concept of event-space as means of liberating architectural practice from the determinism of designed forms, disjunctive architecture emphasizes non-deterministic uses over implied functions, proposing a productive distinction between “defining space and activating space” by playing with conventions of architectural notation (plans, techniques of sketching and illustration) in order to question the conceptual boundaries of architectural knowledge (Armitage, 2015, pp. 97-98). While Tschumi has indeed commissioned prolific architectural works (including the *Parc de la Villette* (Tschumi & Fournier, 1987) in Paris and the New Museum of the Acropolis in Athens), the notational process he describes in *Architecture and Disjunction* and *the Manhattan Transcripts* involves paper visualizations or “transcriptions” of imagined spaces, ideally overlapping with idealizations of actual places.

Tschumi’s transcriptions are characterized by “promiscuous collisions of programs and spaces, in which the terms intermingle, combine and implicate one another in the production of a new architectural reality” (Hannah, 2019, pp 9-11, quoting Tschumi). Resembling the Derridean concept of “spacing” in which “punctuation enacts its own performative utterance” (and which Derrida in fact revisited in his collaboration on Tschumi’s *Parc de la Villette* in the Villette neighborhood in Paris), Tschumi’s transcriptions of event-space function in the sense that hyphenation joins static terms: they actively destabilize those terms by contextualizing them in dynamic interaction (p. 12). The practice of transcription reimagines formal elements of the built environment (be they a city throughfare, a public park, an apartment courtyard, a spire, a tower,

an arch, or a doorway) that can be deconstructed by performative utterances that recontextualize their functions (See Fig. 4). Where the illocutionary act of speaking can have the effect of “doing something” (i.e., realizing a performative function, like the naming of a ship; a physically, materially existing vessel that is supplemented by the act of its naming) it is the “provocation of an event,” after JL Austin (pp. 12-13, quoting JL Austin). In this sense, the transcription process aims at inducing a performative “spacing” of architectural designs: a transcript is an architectural act that bridges between the architectural design and the experience of its inhabitants, redefining architecture as an active becoming rather than a passive, inert being (p. 13). The idea is that the juxtaposition between terms (i.e., a design and a defined function that exceeds that design) alters those terms by instating a dynamic interaction. Tschumi’s conception of event-space therefore presumes that architecture is as much a creative act (i.e., a design, and therefore a doing) as much as it is a thing done (i.e., an artefact).

Figure 4

"MT 4: The Block" a notational program for disjuncture of the inner courtyards of a city block.



Note. From *The Manhattan Transcripts* (p. 46), by B. Tschumi, 1994, Academy Group. Copyright 1994 by Bernard Tschumi.

Taking cues from performance art, cinema, and literature, Tschumi specifies that the explicit purpose of this notational approach “is to transcribe things normally removed from conventional architectural representation, namely the complex relationship between spaces and their use; between the set and the script; between ‘type’ and ‘program’; between objects and events” (Tschumi, 1994b, p. 7). This practice is most fully realized in *The Manhattan Transcripts*, a collection of architectural studies of New York conceived as visual programs for the transgression of its spaces (Central Park, for example) by events with distinctive underlying logics (however improbable) that exceed the designed functions of their formal elements (e.g., a woman murdering her lover in a park, a fall from a tower, or a re-enactment of a famous battle in the middle of a city block). The scenes and settings which these transcripts depict (which Tschumi specifies are not representations of concrete reality) presuppose an actually existing reality (e.g. Manhattan is a real place, Central Park is a real place), however they do not necessarily presuppose real buildings or events, taking the reality of the sequence less as an “accurate transposition of the outside world” than as a subjective logic of action that the notational sequences themselves display through the framing and isolation of particular architectural elements (p. 8).

The images that make up the movements of the *Manhattan Transcripts* (which include maps, news photographs, and schematics of elements of parks and buildings alongside choreographic movements and film frames) are conceived as fragments of reality which implicate the “rational structure of abstract concepts”: they are architectural materials, the disjunctive arrangement of which facilitate a continuous questioning of the nature of existing architectural signs as components of the built environment (p. 8). The reality delineated by these transcriptions is therefore a disjointed one, consisting of isolated objects (of buildings, of maps,

photographs), movements (play, sports, dance) and events (news and archival photos), which are constructed by the viewer who interprets their significance against the background of the others (pp. 8-9). Their arrangement in a sequence of disjunctive frames aims to instate an effect of surprise, a kind of “jump-cut” where architectural space is taken apart and reassembled in a way that deconstructs its implied limits (p. 12).

The ideal effect of these transcriptions is to question “humanist programs” that prioritize architectural functions necessary for human survival and production, and to indulge activities that a “humanist program” would normatively identify as negative or unproductive, drawing directly from the language of continental philosopher and surrealist Georges Bataille’s (1985) “Notion of Expenditure” to qualify these kinds of activities: “luxury, mourning, wars, cults; the construction of sumptuous monuments; games, spectacles, arts; perverse sexual activity” (Tschumi, 1994b, p. 9; quoting Georges Bataille). Bataille, a surrealist and influential continentalist whose writings often revelled in orgiastic concepts of excess and transgression, argues in “Notion of Expenditure” that concepts of utility which predominate in industrial society actively repress the significance of non-productive expenditure and consumption (p. 117). As Bataille would have it, that repression impoverishes concepts of human activity by privileging the utility of productive activity (and with it assumed principles of conservation and reproduction of human life) over non-productive expenditures that present no end beyond themselves, but which (like art) are essential for making meaning from destructive processes like death, sacrifice, etc. Architecture, in Tschumi’s gloss, particularly where it is realized in expressions of what in an earlier period might have been called *bourgeoise* culture and ideology, would seem to be a designed, spatialized medium of this kind of repression. In Tschumi’s language, the disjunctive nature of the act of transcription implies a degree of programmatic

violence that contradicts the defined social functions of architecture: the transcripts plot excessive movements “that bring architecture to its limit” in the same sense that an 18th century square can become the scene of a 20th century revolt, (or in a far more banal sense, an industrial workshop can become a residential loft) (1994b, p. 9, XXII). The aim of transcription is to delimit shifts in the contextual-determined meaning of designed spaces in a way that implies a critical statement about social institutions embodied in architectural forms.

It would be fair to point out that the deconstruction of architectural reality through notational artefacts that are in fact arranged visualizations of non-places nevertheless implies an evident contradiction. For Tschumi, the idea that reality of the transcriptions is defined by the actions and events those arrangements map out rather than the actuality of places themselves implies an intentional paradox. That paradox is the conceptual lever of the practice. Tschumi’s (1994a) stated intention in leveraging this paradox (and the evident impossibility it seems to imply) is to foreground the disjunction between ideal and real space: where architecture was reconceived by particular schools and critics after 1968 as an institutional projection of idealized functions (and by extension, of a socioeconomic structure, i.e., a structure other than the architectural object - think of Foucault’s diagrammatic visualization of the prison, for example), it called into question the distinction between architecture as a discursive formation and the situated day-to-day experiences of inhabitants (pp. 66-70). If a designed space is both an idealized projection of a concept (an image, say, and an institutional strategy) that is not the building itself and the reality of the inhabitants who experience that space (and whose patterns and rhythms of inhabitation nearly certainly deviate from its idealized institutional strictures), that implied function is necessarily contradicted by the intrusion of reality through events that exceed those idealizations. For Tschumi, the recognition of this apparent paradox means that

[a]ny relationship between a building and its users is one of violence, for any use means the intrusion of a human body into a given space, the intrusion of one order into another. This intrusion is inherent in the idea of architecture; any reduction of architecture to its spaces at the expense of its events is as simplistic as the reduction of architecture to its facades [...] Architecture's violence is fundamental and unavoidable, for architecture is linked to events in the same way that the guard is linked to the prisoner, the police to the criminal, the doctor to the patient, order to chaos. This also suggests that actions qualify spaces as much as spaces qualify actions; that space and action are inseparable and that no proper interpretation of architecture, drawing, or notation can refuse to consider this fact. (pp. 121-122)

Tschumi frames this "paradox" in terms of an irreducible conflict between the idea implied by a designed architectural space and the reality of its inhabitation, one which necessitates transgression of designed space as a precondition of architecture's reality:

Architecture and events constantly transgress each other's rules, whether explicitly or implicitly. These rules, these organized compositions, may be questioned, but they always remain points of reference. A building is a point of reference for the activities set to negate it. A theory of architecture is a theory of order threatened by the very use it permits. And vice versa. (p. 132)

In this sense, the violence of architecture, and the coinciding excess of pleasure or enjoyment of the inhabitants who transgresses its limits, is not a bug of the discipline, its manifest objects, or its conceptual artefacts, but a feature, which conditions the possibility of non-normative uses, potentiates speculative deconstructions of its delimitations, and so on. The transcriptions are therefore a means of tracing the transgressive potential of events which exceed the idealized functions of designed space and mobilizing the same. That transgression, after Bataille, implies an excess that fringes over into mutually implicated capacities for violence and pleasure, the realization of which presents a challenge that menaces the figurative idealizations of designed space and their material imposition of highly ordered patterns of movement and inhabitation.

To be sure, Tschumi's (1994a) abstraction of the violence of transgressive architecture is a particular construction of avant-garde culture, drawing from the legacy of modernists like Bataille, Andre Breton and Antonin Artaud (pp. 65-75; Hannah, 2019, pp. 244-245). While the

violence of architecture is comprehensible in the sense that a prison or a barricade or a fortified city wall clearly manifests a diagrammatic idealization of force as an ordering principle, the violence of transgression Tschumi imputes to paper architecture doesn't appear to escalate beyond the aesthetic, the figurative, the speculative. Whether one is inclined to accept the evident hyperbole of Tschumi's framing of paper architecture, this strange equivocation (which intentionally confuses the reality and idealization of violence) is in a sense the point of the speculation engendered by the transcription process: "paradoxes equivocate. They lie, and they don't; they tell the truth, and they don't. Each meaning has to be taken with the other [...] The paradox is literally speculative" (Zweibelson, 2020, p. 40 quoting Tschumi).

This speculative aspect of Tschumi's transcription process is a key mechanism for mobilizing the spatial practices evidenced in the Balata raid: the concept for the raid described in "Between the Striated and the Smooth" aims at fostering a counterintuitive martial disposition which exercised a sovereign prerogative to transgress the psychogeography of the Balata encampment, the architecturally defined functions and ordered perceptions which made the space apprehensible to the combatants who inhabited, occupied, fought over and defended it. The violence here is quite literal, even if the conceptual bases which impart the framework for its realization are unmoored from (and even antagonistic of) a conception of the city as a singularly unified and coherent field of representation and experience: the practice of constructing an actionable concept of the urban battlespace that transgresses the deterministic functions of the street and the alley, the wall and the window, by arming paratroopers to cut paths through those concrete delimitations with hammers and demolition charges, aligns the violent reality of kinetic combat operations with the speculative aspect of Tschumi's (essentially performative) transcriptions. The act of "walking through walls" actively calls into question the self-evident

functions of various elements of the designed space of the Balata neighborhood in a way that aims to deny an armed opponent access to their own terms of reference so that they can be disoriented and organizationally dismembered. Nevertheless, by refusing the idealized functions of those elements, “walking through walls” attains to an event-driven process of transcriptive disjunction, realized through violent actions exceeding the speculative idealization of designed space inhabited by the occupants of these spaces.

The practice of “walking through walls” repurposes a disjunctive poetics of “spacing” in much the same way Tschumi frames transcription as a means of both “reading” architecture through events that confound its institutional functions and of notating actions that can realize this disjunction. By aestheticizing the violence of a kinetic military operation in terms of its capacity for realizing non-normative interpretations of architectural space, Naveh and Kochavi’s practice pushes the principle of transgression well beyond the typically figurative violence fetishized by various avant-gardes of the 20th century, among them Breton, Bataille and Artaud. There nevertheless remains a clear continuity between the performative function of Tschumi’s practice of paper architecture and the disjunction of Kochavi’s practice of inverse geometry.

The *Manhattan Transcripts* describes disjunction in terms of a scrambling of architectural codes, licensed under the guise “of a sort of poststructuralist questioning of the sign, whereby movement, object, and event become fully interchangeable” (p. XXVI). Framed in this way, the disjunctive “syntax” of the transcription as a visual artefact generates incompatibilities along the lines of “the quarterback tangoes on the skating rink; the battalion skates on the tightrope” (p. XXVI; see fig. 4). Many of the disjunctive events transcribed in the *Manhattan Transcripts* are evidently impossible. A battalion cannot skate on a tightrope, no matter how the transcription “spaces” these respective elements. But in a more stylistically measured essay reflecting on the

institutional history of the development of the transcription process, Tschumi describes the operative effect of the practice in more straightforward terms:

If writers could manipulate the structure of stories in the same way as they twist vocabulary and grammar, couldn't architects do the same, organizing the program in a similarly objective, detached, or imaginative way? For if architects could self-consciously use such devices as repetition, distortion, or juxtaposition in the formal elaboration of walls, couldn't they do the same thing in terms of the activities that occurred within those very walls? Pole vaulting in the chapel, bicycling in the laundromat, sky diving in the elevator shaft? (Tschumi, 1994a, p. 146)

When it is proposed as a practice of simply reinterpreting architectural space by actualizing unintended functions (e.g., skydiving in the empty vertical space of an elevator shaft) through a kind of performative utterance that recodes the designed meaning of architectural space, disjunction appears to lose much of its critical edge. It is nevertheless far more amenable to the kind of speculative inhabitation of the battlespace incentivized by Kochavi's designs for urban warfare, and approaches more coherent terms for the framing of an attainable set of martial practices.

The transgression implied by the kind of usages Tschumi lists above resonates less with the logic of Bataille's notion of expenditure than it does with the enterprising spatial imaginary of a skateboarder or a parkour *traceur*. Where swarming paratroopers redefine space by blasting through not only physical delimitations, but cognitive ones, they improvise means of repurposing the urban fighting environment through usages well outside of its abstracted terms of enclosure. The transformation of the urban battlespace through spontaneous realization of speculative usages shifts the terms in which the apparent closure of urban space, physical and visual, is apprehended by combatants, restaging architecture itself and its attendant forms and functions as a platform for the development and expression of tactics, ultimately aiming at surprise and incapacitation of the enemy. To "inhabit" architectural space through literal acts of violence and

transgression of its idealized functions is to reconstitute the urban environment as a medium of war in a way that takes the performative utterance – the act of naming that changes the terms of knowability and answerability – as the primary instrument for the tactical realization of organized violence. Once again, the effect is to make aesthetic practice, realized through an enhanced critical attention to questions of artistic form and medium, an instrument of war. And while the elevation of that martial practice by way of reference to avant-garde theory confounds the emancipatory terms of those works by instrumentalizing them for the realization of organized state violence, this does not negate the liberatory effect of that language itself on its practicing users.

The capacity to reframe the actionability of the battlespace by artefactual design seems to impart to operators an intensely satisfying and even pleasurable capacity for getting ahead of the enemy, denying their rivals the ability to apprehend their own operational form. The fact of that denial sets the conditions for winning. Winning is an absolute aim of a kinetic military operation. Calculated manoeuvres and fire effects are orchestrated to surprise an enemy, and either shatter their organizational cohesion or outright destroy them. But in enlisting Tschumi's philosophy of transgression as a means of actualizing these moves, the aesthetic practice has a secondary effect of tying the enjoyment or pleasure of winning to the liberation of cognitive and intellectual faculties connected with the martial functions of the operators' and combatants' ontology. In an interview with *Haaretz* (Feldman, 2007) during his period of ignominy following the second Lebanon war, Naveh is direct about the desirability of this effect, describing his practice as a way of enacting a dynamic of liberation that runs along the lines of "creating a prison and dismantling it". Abstracting a form or structure of thought, whether embodied in a building or an operational

form or even a principle like mass, in order to dismantle it, the design practitioner conceives a set of artefacts for the realization of permanent change as an organizational prerogative.

While the explicit political objective of the Balata raid and the subsequent Operation *Defensive Shield* was the destruction of aggressing elements of terrorist organizations in the Palestinian territories, the enhancement and refining of creative-destructive capacities for apprehending the battlespace as a locus of creative possibility is arguably more valuable and efficacious from the vantage of martial epistemology. This is the speculative aspect of the kind of paradoxical play that Tschumi's transcriptions attempt to mobilize against dogmatic ideations of architectural theory. And it is this liberatory capacity which latter iterations of Naveh's practice, developed and externalized in the formal model of SOD, aims to mobilize through speculative play and abstraction. The aim of this kind of speculation is to imagine how not only the conflict environment and the complex network of relations imbricated within it, but the defense organization itself and its web of psychic and material entanglements, could be other than they presently are. But in the context of the Balata raid, the speculative aspect of Kochavi's aesthetic practice hews towards a specific problematic of organized violence, conceptualized as an eruption of pleasure, echoing the language of Antonin Artaud (1958), in the work of creative destruction: "The problem is to make space speak, to feed and furnish it; like mines laid in a wall of rock which all of a sudden turns into geysers and bouquets of stone" (Hannah, 2019, p. 233; quoting Artaud).

After Action Report: “(de)legitimation” and the paradox of constructive violence

OTRI's weird detour through French theory took on a particular notoriety in the aftermath of Operation *Defensive Shield*. Naveh's participation in a variety of academic forums (most notably the by-invitation “Archipelagos of Exception” symposium at *Centre de Cultura Contemporània de Barcelona* at which he presented “Between the Striated and the Smooth” as a panel paper, and at which Giorgio Agamben and Zygmunt Bauman were keynote speakers) and a smattering of incendiary interviews with leftist academics and journalists created a minor academic controversy. That controversy still occasionally flares up in the literary press, as it did following Operation *Guardian of the Walls* in May 2021, where Israeli architectural scholar and critic Eyal Weizman renewed his longstanding grudge with then Chief of the General Staff Kochavi with a fresh airing of dirty laundry around the publication of Weizman's *Hollow Land* in the *London Review of Books* (Weizman, 2021). The profile of these publications and the written record of hostilities between Naveh and the IDF brass following his hasty retirement in 2006 led the episode to acquire an infamy among humanities scholars that has in some ways ossified the terms in which Naveh's continuously evolving practice, extended through a variety of iterations of SOD and the renewal of the “general's course” in the IDF's staff college after 2014, has been analyzed and evaluated.

A parallel track of criticism developed in military circles, one which is unsurprisingly steeped in a more conservative outlook consistent with military-academic disciplines. This track set up an institutional discourse within the IDF which hastened the closure of OTRI, and heaped part of the blame for the failures of the Second Lebanon War on the incomprehensibility of SOD and its incompatibility with IDF doctrinal approaches (Kober, 2011; Vego, 2009). This line of criticism tends to regard SOD as an elitist intellectual exercise which only obscures clear military

thinking and communication. OTRI's neglect of classical military philosophy and operational art in favour of outsider writings and its quirks of pedagogical method (like the refusal to commit ideas in writing) compounded the sense of SOD's inaccessibility and made it easier for skeptics both within and beyond the IDF to marginalize OTRI. Oddly enough, both of these seemingly inimical discourses occasionally draw from one another to impress the point of either OTRI's debasement or its ignominy. Avi Kober (former editor of *Ma'archot*, the IDF's professional journal) cites Eyal Weizman, for example (Kober, 2011, p. 190). Weizman's (2021) abrading of Hirsch's command in southern Lebanon mimics language from the Winograd commission which sought to determine the causes of the IDF's failures in 2006. The argument that SOD's intellectual inaccessibility was a liability that inhibited its uptake by military practitioners is a salient one. However, this brief re-examination of scholarship around OTRI's practice as it concerns Operation *Defensive Shield* will focus on the reception of Naveh's ideas in the humanities in order to engage some of the harder ethical and moral questions that the episode raises. This approach is consistent with the spirit of SOD's engagement with outsider texts and disciplines, and its embrace of tensions, even if it is critical of aspects of Naveh's practice.

If one takes Weizman's writings as the primary reference for understanding the episode (indeed, they are among the few publicly accessible English language works detailing OTRI's experiments), SOD's pedagogy appears as little more than an elevated justification for the exercise of military force that abstracts the real and material violence of the Israeli occupation of the Palestinian territories. This line of scholarship only regards the episode as remarkable insofar as it demonstrates an instrumentalization of theory in pursuit of a refinement of military tactics that fulfil liberal war's criteria of proportionality (again, normatively understood as a *sine qua non* for the political legitimacy of Israel's exercise of military force) while nevertheless ensuring

the domination of Palestinian lives through the built environment of the occupation. In this read, the Balata raid and the subsequent Operation *Defensive Shield* are extensions of both the figurative and material architecture of occupation which enhances and entrenches the Israeli prerogative of “authorship” over Palestinian spaces (Weizman, 2007, p. 5). An inversion of Edward Said’s charge that TE Lawrence “designs meaning” for the Arab Revolt, the effect of Naveh’s literary practice is to leverage creative martial practice in order to decide what the world “is” for the colonized others those practices take as their object of martial manipulation.

In this view, the appropriation of situationist concepts like *dérive* and the Deleuzian terminology of smoothing space merely serves to impress a transgressive imperative of Israeli sovereignty to assert military dominion over Palestinian spaces, to the terror of Palestinian civilians whose homes are violated, if not destroyed, by the demolition charges of the mouseholing paratroopers (pp. 212-218). Civilians who were subjected to these maneuvers only apprehend these transgressions as violence against themselves and their homes. Pushing this argument further into the denunciatory by following the line of inquiry pursued by Israeli documentarian Yotam Feldman (2013), the prototyping of tactics by the elaboration of profound theory represented in “Between the Striated and the Smooth” appears as an extension of an unwritten defense policy that has allowed the spaces of the occupation to become a laboratory for Israel’s defense industry. In this view, the development of OTRI’s practice is the extension of a policy that permits Palestinian spaces to become testing grounds in which new weapons systems are proven to be sold on the international arms market, as Feldman charges in his 2013 documentary *The Lab*, in which Naveh was an enthusiastic interview participant.

These enduring lines of criticism often serve as a kind of shorthand for dismissing the influence of postmodernism and poststructuralism on military practices as evidence of their

instrumentalization in support of a liberal ideology of war and empire. Weizman's more polemical lines of argumentation are unlikely to resonate with a military readership which apprehends questions of the legitimacy of martial force through a fundamentally different criteria than the terms presented by Weizman's anticolonialism. There are nevertheless substantive criticisms embedded in this line of scholarship that are worth evaluating as they concern military efforts to construct a durable security in Israel's strategic environment. By mapping out the distance between the evaluative terms proposed by this critical scholarship and those which actually developed from OTRI's provisional engagement with outsider disciplines, this brief recapitulation of some of these criticisms aims to bridge some of the distance between the two, even if they are unlikely to be reconciled.

Elements of Naveh and Kochavi's practice circa 2002 clearly resonate with these aspects of Weizman's criticisms. In his book-length study of the spatial and cultural abstractions underlying the architecture of the Israeli occupation, for example, Weizman's chapter on OTRI frames the purported radicalism of OTRI's leveraging of theory as overstated. For one, Weizman traces the tactic of "walking through walls" by demolition of domestic partitions back to 19th century pamphlets for constructing and countering urban barricades in France during the Paris commune and questions its apparent novelty: the tactic of breaking through walls appears to have been reinvented in nearly every urban battle in history, and is preceded as recently as Israeli operations in Jaffa during the 1948 War of Independence (p. 212). Nor does OTRI's appropriation of the critical of language of poststructuralism meaningfully disrupt the military apparatus in its execution of its sovereign function as an instrument of state violence. In Weizman's dismissal of Naveh's claims to radical practice, the IDF remains an apparatus of state violence that perpetuates the dominance of Israel's security environment and the lives that

populate it on Israel's terms. The organization serves to fulfil a political mandate of national security that is simply transmitted by Israel's political leadership into strategic directives to be interpreted by IDF strategists and operators. These individuals may indeed undertake structural transformations in their organization. But the radical implications of these transformations are nevertheless stunted by their nesting within military hierarchies and procedures. Following this line of criticism, there's arguably a sense in which the intellectual sophistication of OTRI's practice serves to cultivate and reinforce impressions of "control, superiority, and orientation" (Beaulieu-Brossard, 2021, p. 109). These emancipatory effects arguably serve to simply enhance martial prerogatives to dominate space through projections of force and power.

For Weizman, who is less interested in the pragmatics of generalship than the moral implications of Israel's state violence against Palestinians and its pathologies of self-sophistication, OTRI's turn to theory is a low-cost "smart weapon" that provides a kind of civilizing cover that permits the IDF to preserve its legitimacy as a fighting force while simultaneously engaging a hostile dialogue with the enemy, one that only serves to communicate the message "you will never understand that which kills you" (Weizman, 2006). While Weizman presents this caustic burn as one that is hostile to the terms articulated by Naveh and Kochavi's self-directed pedagogy, it is essentially consistent with their own practice circa 2002. Weizman's framing could even double as a sales pitch to a military audience: in the battlespaces of low-intensity conflicts, the ability to outthink an enemy by getting inside their head is arguably more valuable to a resource-constrained defense organization that needs to act to transform a threatening situation while minimizing the risks to both the soldiery and civilians in the crossfire than a complicated weapon platform. This kind of creative improvisation of finite military resources is in fact the object of operational art. From an institutional perspective, this is the

purpose of this kind of conceptual tool. In this light, Weizman's argument about the political and economic benefits of Naveh's practice (i.e. OTRI's "function" is to legitimize IDF operations while masking the violence of the occupation and imparting saleable martial techniques for the GWOT) seems to discount its instrumental function: OTRI's practices and aesthetics of liberation are explicitly about improving martial functions and processes, whether they concern tactics (as is in fact quite rare for most military design practices that follow from the Naveh school's innovations) or the internal processes and relations of a defense organization (Beaulieu-Brossard, 2021, p. 94). Those improvements or "liberations" are surely relevant to a military practitioner who inhabits a defense organization: they impart new ways of doing and being that beg a precise explication as they concern the development of concrete practices. Moreover, this work of improvement is motivated by the conscious intentions of its designers, and those intentions are significant points of meaning for any sense-making inquiry into that history of practice (Beaulieu-Brossard, 2020). The terms and concepts generated by those practitioners are significant for a critical analysis of martial practice because those terms provide criteria for grappling with their implications for not only users and practitioners, but for the collectives for whom those practices are binding or over whom they exercise the prerogative of organized violence.

Understood as a conscious and intentional effort to impart and improve upon martial concepts, "Between the Striated and the Smooth" is arguably working at a discursive level to "(de)legitimate certain types of violence" (Beaulieu-Brossard, 2021; Geis, 2021, p. 69). Where concepts are engaged in a process of institutional struggle, they serve a semantic function which Anna Geis, in a recent volume on the linguistic infrastructure of global security, connects to the conceptual action of "(de)politicization". (De)politicization transpires in the interface between

the concepts generated by social and political sciences and the legitimization of political decisions and policies by which those choices are made collectively binding, if not the subject of public discussion. The term captures a reciprocal dynamic of politicization and its subversion: on the one hand, politicization involves making explicit and contingent what a practice or concept takes for granted in order to interrogate what a political framing assumes to be essential, invariable, obligatory or necessity. On the other, the pejorative of depoliticization (which of course remains a political move) makes a discursive move towards closure and fatalism that removes, negates, or conceals the contingency of political choices and actions. Both of those moves may be actualized by the same political act or argument.

(De)legitimation of violence, as an extension of (de)politicization, concerns the mobilizing and contesting of concepts that structure imaginaries of threat, projections of “order” over the disorder of violence, and orients the choices of military strategists and policy makers (pp. 69-70). The debates about war which transpire through the (de)legitimation of violence involve controversies about war’s nature or definition that are in turn reflected in institutional struggles over the implications of military policies and their potential consequences. Academic and scholarly efforts to codify and disseminate concepts like asymmetrical warfare, hybrid warfare, counterinsurgency, and low-intensity conflicts so these concepts will in turn inflect policy and decision making around security and defense arguably reflect such a process. In this sense, “Between the Striated and the Smooth” is arguably an artefact that enacts the discourse of (de)legitimation: the document stages a conceptual breakthrough in the context of an institutional struggle between the conceptual paradigm of mechanistic, industrial warfare and the contingent, highly complex urban sociology of low-intensity conflicts. The document questions the strategic relevance of 20th century concepts of warfare and emphasizes their destructive consequence for

the kind of urban battlespaces the IDF elected to engage in during the mobilization of *Defensive Shield*. At the same time, it nevertheless presumes a sovereign prerogative of authorship over Palestinian space that is realized through expressions of organized violence, and which it is largely untroubled by (even while it is working to mobilize a more discerning ethics of violence tailored to the social density of these spaces).

This argument about (de)legitimation would seem to map neatly to Weizman's criticisms of OTRI's practice were it not for the reality that, notwithstanding the *Archipelago of Exception* conference, Naveh's apparent discourse of (de)legitimation did not filter out into a broader public conversation about the legitimacy of Israel's exercise of organized violence. Naveh's practice only tangentially engaged in the dissemination of publicly digestible rationales for military operations. Most of his post OTRI writings (like *Operational Art and the IDF*) were produced for think-tanks and defense contractors if they were published at all. Naveh's concepts are not part of the public imaginary of security discourse, either inside Israel or in the public debates about terrorism and security outside of it. Naveh's ideas continue to influence internal debates about operational art and design practice, but their density and abstraction simply does not resonate with either the broader public, the vast majority of the leadership or rank and file of defense organizations, or the mainstream of political and security discourse. Nor did these conceptual struggles stabilize into a coherent, unitary framework for actualizing organized violence that exceeded the immediate application of Operation *Defensive Shield*. In this sense, OTRI's criteria for validation of its concepts does indeed engage in a discourse of (de)legitimation. But that discourse is primarily and transparently about understanding, recontextualizing and rethinking the security mandate of a defense organization, rather than

universalizing a singular theory of warfare or making such a theory marketable to the general public.

The insularity of these smattering of writings is arguably a reflection of the reality that the concepts which developed through OTRI's practices were not "applied" according to a linear teleology of knowledge production whereby the development of a theory informs the formalization of practice in a continuous, additive relation. They reflect what Philippe Beaulieu-Brossard (2020), building on his field research with former students, practitioners, and sponsors of OTRI, has identified as a "craft" approach to transforming security realities. Craft approaches to security, of which OTRI's teachings are exemplary, are characterized by their privileging of abductive reasoning, their embrace of self-correction, their consciousness of choices and intentions, and their focus on the particular and contingent rather than the universal. Craft approaches are about producing workable, practicable approaches to particular problems, and their theories of action are necessarily provisional. Accordingly, OTRI's craft approach to developing and implementing martial concepts meant that most of the "outcomes" of the conceptual struggles OTRI engaged through its practice were not formally disseminated by publication, either as doctrine or as academic research. This is because these concepts were not formulated as universal principles, but rather as orienting terms grounding contingent approaches to particular security problems. They are heuristics, rather than "algebraics", to use Lawrence's terms. These concepts, the practices they inform, and the artefacts they generate, are validated by security practitioners based entirely on their capacity to transform the conditions of particular security problems. This is to say that users evaluate the efficacy of these concepts by their capacity to draw a particular security situation towards conscious goals that are concrete, discrete, and contingent.

In order for a military readership to evaluate those practices and the conscious choices they entail, it makes sense to contextualize the secondary and tertiary consequences of that (de)legitimation of violence as they concern this primary, consciously goal-oriented mandate of security organization. Such an approach does not preclude an examination of the material and strategic consequences of the real violence these organizations enact, but it contextualizes those consequences in terms of the validation of a martial practice, rather than an abstracted criteria that elevates theoretical self-consistency. For a defense organization the question “is this approach ethically defensible and consistent with a strategy for the realization of a two-state solution that satisfies the imperatives of national security?” suggests a more substantive line of inquiry than “is this statement faithful to the spirit of the writings of Deleuze and Guattari from which it develops its terms of action?”. Contextualizing the raid as a limited operation primarily conceived to disrupt or destroy the infrastructure of active terrorist operations against Israeli civilian targets suggests clearer terms for analyzing the secondary and tertiary political effects of that operation in light of a conscious military strategy which aimed to transform an emergent security crisis. Recognition of that context enables lines of reflexive critique that aim to understand how particular choices inflected consequences that may not have been anticipated (or, just as credibly, that were consciously excluded by the (de)politicizing logic of (de)legitimation).

The Balata raid should indeed be contextualized as an experiment in raiding tactics for urban warfare which presumed a prerogative to transgress the boundaries of Palestinian space. That experiment was improvised in the context of the escalation of suicide bombings against targets inside Israel which the IDF lacked an obvious means of either deterring or preventing with its extant training and doctrine. The operational approach to the Balata engagement described in “Between the Striated and the Smooth” can be understood as an example of a

strategic raid: it was a limited strike conceived and intended as a test case for an abductive hypothesis that sought to investigate the local conditions for counterterrorist operations and develop an emergent practice that could disrupt active attacks on Israeli civilian targets (see subsequent chapter “Everything Flows” on strategic raids). That operation was surely calculated to preserve aspects of a political strategy for the peace process (the credibility of Israel being a crucial component of that strategy in the post-Clinton era). But the “meta” level criticism of OTRI’s philosophical erudition as a convenient cover for the violence of the occupation itself obscures not only the limited nature of the raid as a “one-off” tailored to a particular security problematic unique to the context of second intifada, but also the explicit strategic objectives of the large-scale mobilization of *Defensive Shield* in April of 2002.

Extant OTRI literature from this period emphasizes strike-driven strategic raids as an ideal operational model for exploring emergent relations of a given conflict system. But that literature makes few prescriptions about how to undertake a strategic raid beyond the idealization of operational learning (a provisional and incremental approach to self-correction through reflexive practice) through an “injection of energy into the system” (Naveh, 2006; Sorrells et al., 2005, pp. 20-22). This absence of an attempt to codify the experiment as an externalizable template for military action likely reflects a strategic mindset particular to the IDF in which friction is nearly a constant in the security environment, within which the imperative to surprise an adversary is understood as a vital imperative of survival. It is certainly questionable whether this survival was indeed “at stake” in the (now evidently lapsed) “post-heroic” context of Israel’s immersion in low-intensity conflicts in the same way it was during its formative wars (Kober, 2011, pp. 183-184). In this capacity, the characterization of Israel’s security environment as one intensified by near constant friction, and one which necessitates an ethos of decisive military

action as an existential condition of national survival would seem to fulfill Geis' definition of depoliticization: these assumptions are seemingly taken for granted as imperatives that impinge upon the framework of military decision making (and which are, after October 7th, still clearly relevant to Israel's security). Nevertheless, the contextualization of the operation within the emergent context of the second intifada (a context which arguably cannot be generalized to contexts outside of Israel, or at the very least is not readily analogous) limits the practicability of any model or template for military action a military readership might hope to derive from the example. The Balata raid should therefore be understood as a provisional, contextually bound attempt to surprise the enemy in a particular set of conditions, and by that act of surprise, to induce a particular change in the circumstances of an evolving conflict system. The effects of that operation are worth exploring in order to evaluate their efficacy on both the conflict system and the spaces over which they claimed a prerogative to exercise violence.

The operation, the largest mobilization since 1982, began on 29 March 2002 with incursions of brigade-sized forces into the cities of Nablus, Bethlehem, Tulkarm, Ramallah and, infamously, Jenin, in order to reoccupy these centers, reassert martial sovereignty and compel militants to abandon terrorist operations against targets in Israel. However, the objectives of *Defensive Shield* went beyond disrupting terrorist operations directly, an approach typified by the then-novel doctrine of targeted assassinations of militant leadership, and sought confrontation with elements of the recognized Palestinian security apparatus. To this end, IDF forces besieged the Fatah headquarters in Ramallah to isolate Yasser Arafat politically and demonstrate the inefficacy of his leadership to the emboldened Palestinian militants. Operation *Defensive Shield* was arguably successful in reducing suicide attacks inside Israel after "Black March," and the reoccupation of outposts in the West Bank likewise provided a framework for intelligence

gathering that permitted the IDF to thwart the majority of suicide bombing operations for the remainder of the second intifada. Israeli casualties from suicide attacks in 2003 and 2004 fell to about 50% of the 2002 rate (Ganor, 2021, pp. 225-226). At the same time, despite the 35th paratroopers' efforts to implement an approach that would prevent civilian casualties in Nablus, Operation *Defensive Shield* is principally remembered for the excesses of the Battle of Jenin, where Palestinian fighters put up the most organized resistance of any of the engagements, a resistance which the IDF eventually sought to neutralize through excesses of force and firepower.

In Jenin, various Palestinian factions had been organized under the leadership of a single commander, Abu Jandel, who had assigned several patrol-sized units of twenty fighters to defensive sections in built-up areas which were mined and barricaded to slow the IDF's advance (Bergman, 2016, p. 251). Thirteen reservists were trapped and killed in an ambush on April 6 in what amounted to the IDF's single bloodiest day in twenty years and efforts to retrieve the bodies were obstructed for several hours. Sensitive to the likelihood of further casualties, Israeli forces abandoned counterterrorist tactics in the form of house-to-house raids conducted on foot and improvised a policy of overwhelming tactical destruction. Any empirical account of Operation *Defensive Shield* would be remiss to overlook the procedural demolition of a built-up civilian space vital for to the economic livelihoods of Palestinian residents of Jenin. Armoured D9 bulldozers, supported by tank companies and helicopter gunships, undertook a systematic demolition of a 200-meter diameter city block passing through Jenin's central market (pp. 251-252). Unsurprisingly, the aftermath incited a political backlash which diminished international support for the operation among Israel's allies. The deaths of 52 Palestinians and the displacement of 4000 by the demolition of a densely inhabited neighborhood had the effect of

galvanizing Palestinian resistance and attracted a UN inquiry, undermining the foreign ministry's efforts to impress the political legitimacy of the operation.

The excesses of Jenin are arguably not an example of OTRI's historical practice. But they did transpire in the context of Operation *Defensive Shield*, many of the operational concepts for which developed from Israeli defense practitioners' engagement with SOD. As such it suggests something of the limitations of Naveh's discourse of (de)legitimation: the concepts generated by OTRI's craft approach to security did not, in themselves, gather the critical mass to overturn the operative modalities of the dominant model of organized violence in the mechanistic ethos of tactical destruction, even in the immediate context in which they were conceived and applied. There are clearly limitations to conceptualizing complex security problematics, particularly in the realm of low-intensity conflict, in terms of tactical problems to be solved, rather than strategic problems to be finessed: every problem a nail.

In Weizman's (2021) view, the legacy of *Defensive Shield* is one in which the Palestinian territories are not apprehended as a lived environment, "but as a complex geometrical system that requires endless interpretation, and reinterpretation, in order for the problem it presents to be solved". This last charge about spatialization is a significant one for an alternative pedagogy of generalship that is defined, at least in part, by its efforts to foment a paradigmatic break with generic military conceptualizations of space. Perhaps more constructively from perspective of a readership whose mandate as defense security practitioners includes functions like counterterrorism, critics writing from the vantage of developing teachable urban warfare analogies have argued that OTRI's swarming tactics and the operational discourse of "inverse geometry" presume an overly materialist conception of the city that is arguably counterproductive of urban security (Sullivan & Elkus, 2019a). Whatever the tactical brilliance

of the IDF's early experiments with swarm warfare, that approach emphasizes the manipulation of the city as a fluid operational space to the neglect of the social spaces that are necessary for building a durable condition of security in the urban sphere: "the net effect is to reify the concept of the city as a protracted battleground instead of gaining the support of the population and developing resilient security infrastructure" (pp. 40-41). This latter critique frames the limitations of any lesson a security practitioner might hope to take from the Balata example: the abstraction of security problematics as complex spatial problems to be resolved by tactical interventions arguably stunts the potential for deeper systemic approaches in which the social and political relations of the conflict system can be apprehended as strategic stakes of conflict that might be improved upon outside of a framework of force escalation. Friction may be a constant in war (even in low-intensity conflicts and conflicts short of war) but developing a feedback mechanism responsive to friction does not in itself necessitate violent interventions in the form of strikes and raids to learn about the conflict system. The propensity of friction itself (i.e., the distance between expectations and evidentiary outcomes, even outside of a situation of direct contact with an enemy) might on its own provide such a feedback mechanism. It is worth noting that later iterations of SOD have essentially caught up with this criticism and even integrated this model of friction into its pedagogical model. Likewise, SOD's post-2014 focus shifted well away from the improvisation and refinement of tactics towards the sharpening of strategic cognition and the development of heuristics and probes to aid emergent operational decision-making. Recent models of SOD's creative pedagogy prioritize directing the gaze of martial abstraction inward to explore systemic tension, taking the blue force as the object of disruption, and emphasizing strategy-making as a key output of pedagogical experimentation (Graicer, 2017b; Graicer et al., 2022). SOD will surely be revisited after the catastrophic intelligence failures of October 7th. At

the time of writing, it remains an open question how SOD's remaining champions in Israel will evolve their thinking to a rapidly changing security environment.

In a 2007 interview with Feldman published in *Haaretz*, Naveh frames the relative success of operation *Defensive Shield* in terms of the brief window of strategic potential it afforded Israel's political military leadership. Self-identifying as a proponent of a two-state solution, Naveh argued that military operations undertaken by the IDF against Palestinian militants needed to be conceptualized in terms of their capacity for liberating the Palestinians in a way that leads to the establishment of an eventual Palestinian state. But the development of that liberatory potential should not be understood as continuous or linear but emergent. This means that whatever the operational successes of *Defensive Shield*, the changeable and unstable nature of the security environment requires a continuous re-evaluation of its circumstances. The military apparatus must be willing to "switch the disk" (Feldman, 2007). After the reoccupation of the West Bank and the construction of the security fence, the 2005 withdrawal from Gaza, and the Second Lebanon War in 2006, Naveh argued that a broader and more comprehensive change in direction was necessary for the construction of an adaptive framework for collective security: "Everything we go on doing will supply the illusion of security; in the long term we are destroying everything around" (Feldman, 2007). In this capacity, Naveh is clear eyed about the tension between security and the mechanistic logic of tactical destruction, however its operational efficacy is framed. The abstraction of creative destruction is in essence a paradox that may be necessary to the dialectical development of martial capabilities (in same the sense that the essence of warfare is to betray the model), but its material consequence in the spaces in which it is applied is to generate legacies of grief and grievance which compromise the capacity

to build an enduring framework of security between inimical groups and powers. These are not conditions for strategic victory.

This is arguably why it is useful for a design practitioner to contextualize the episode within the continuing evolution of SOD's creative pedagogy. Weizman's bracketing of the episode as a narrative of folly and destruction which culminates in the disaster of the Second Lebanon War (which oddly doubles the IDF's own dismissal of the subversive influence of OTRI) misses not only the influence of Naveh's practice on practitioners both inside and outside of Israel, but the evolving sophistication of its model and its scope. It is this influence which suggests one of the most significant turns in recent military history towards a transformation of martial ethics. IDF operations subsequent to *Defensive Shield* in which SOD was formally applied in support of planning (like the 2005 withdrawal from Gaza and Operation *Good Neighbour* in the Golan Heights during the Syrian civil war) have tended away from kinetic operations, emphasizing generally peaceable policing, influence and humanitarian operations (which, it is fair to note, may indeed be calculated to influence regional and international perceptions of Israel).

Retired MGen. Gershon Hachohen's (who holds a masters in comparative literature and philosophy) command of the settler evacuation from Gaza, for example, engaged SOD to develop a conceptual language for engagement with not only resisting settlers but reluctant soldiers who perceived the withdrawal as a betrayal of their religious convictions. The conceptual language that emerged from Hachohen's engagement with SOD would support the complex, multifaceted criteria of avoiding violence against the settlers and avoiding escalation of internal political tensions that could encourage soldiers to refuse orders, while simultaneously moving towards the explicit goal of evacuating the settlements (Beaulieu-Brossard, 2020). The

output of Hacoheh's exploration was a discursive approach to managing tensions between a variety of contradictory vocational demands and existential positions embodied in both the settlers and the soldiery tasked with carrying out the evacuation. The calculated effect of this was to dispel the impression (both internally and externally) that the operation was about engaging an enemy "other" who must be compelled into compliance. The operation was not templated by doctrine, jargon, or operational timetable, and was oriented by the principle that no external model of action could be applied to the contingent and particular facts of the situation any given officer confronted. A common language that would allow officers and settlers to understand each another was an efficacious tool for realizing the domestically controversial political directive of the withdrawal while preserving the dignity of those subject to the operation and the soldiers tasked with carrying it out. While the larger strategy motivating the Gaza withdrawal was arguably a failure, the operation itself managed to avoid a single death among the 8000 settlers evacuated from Gaza and the 41 000 soldiers mobilized.

While limited scholarship exists around these operations in English, they nevertheless suggest that OTRI's discourse of (de)legitimation had an influence which exceeded the scope of Operation *Defensive Shield* and the strategic context the second intifada. While Naveh couched his argument for the avant-garde novelty of the tactic "walking through walls" in terms of a paradigmatic break with the ethos of industrial warfare which permeated his own martial culture, the nature of OTRI's influence has been provisional and iterative. It has not gathered the critical mass for a radical overturning of the way of Western war, in Israel or beyond, because it arguably cannot do that. But it did inaugurate a legacy of divergent martial practice that has enabled a self-selecting group of IDF officers and like-minded defense practitioners in contexts outside of Israel to rethink the nature of their profession as soldiers and officers in service to the national interest

in a way that suggests means for moving beyond the singular martial focus on the optimization of organized violence.

Study 2: SOD as sensemaking apparatus of a martial avant-garde

The opening chapter on method described a multidisciplinary practice of avant-garde sensemaking in defense organizations conceived to transform the power-knowledge relations underlying military decision-making. Whether they attempt to transform the relationship between a general staff and political leadership, the strategic rationale guiding the planning of operations, the organizational structure of a brigade or division, or the syllabi of a war college, these practices actively disrupt (often through subtle or indirect means, in the manner of “trojan horsing,” as one influential design practitioner puts it) in order to unsettle the organizational rituals authorizing the production and validation of institutional knowledge (Zweibelson, 2017). However, for entirely comprehensible and pragmatic reasons, most of the military design approaches that have been institutionalized in Western militaries do not aspire to the same depth of conceptual abstraction as the critical approaches evident at the height of OTRI’s influence in the IDF. Design practitioners who have engaged with US Army’s Design Model (ADM), for example, describe it as a kind of “reverse-engineering” project for joint planning doctrine (Zweibelson, 2018b). While many forward-thinking practitioners of PME saw value in SOD, the critical sophistication of OTRI’s philosophy of deep reading was recognized as a barrier that inhibited its uptake among the senior officers it was ostensibly conceived to educate (an impression that was reinforced by the failures of the second Lebanon war) (Matthew, 2006; Ryan, 2011).

Francois Jullien’s compelling axiom that the essence of warfare is to betray its ideal model (upon which this dissertation’s central concept of the postmodern military avant-garde is hung) remains a niche outlook on the relation between critical sensemaking and appreciation for the contingent in war and strategy. That particular critical outlook has not been generalized across

the range of emerging military design practices. A special issue of University of Calgary's *Journal of Military and Strategic Studies* devoted to the reflexive turn in military epistemology consisting of articles written by a multinational cohort of design practitioners and educators makes only one reference to Jullien's work, unsurprisingly in the chapter devoted to the Israeli experiment (Graicer, 2017b, p. 28). And because OTRI's craft-inspired engagement with theory was, in practice, ephemeral, and because it was not externalized in any enduring form by design and intent, there is little in the way of a published output that would allow a reader to retrace how their method of deep reading oriented a coherent outlook on the relation between theory and practice. Working through some of the Naveh's footnotes and citations in his more theoretically minded publications, the six essays in this case study nevertheless attempt to explicate how that outlook was codified at the level of theory in Naveh's written oeuvre, supported by analogous historical and theoretical references in order to situate those theories more clearly as they concern sensemaking in defense organizations.

Bricolage and organizational sensemaking

As a martial philosophy of self-disruption, SOD is arguably among the most explicit and developed extensions of avant-garde principles: SOD's pedagogy of disruptive knowledge creation, influenced by the principle of creative-destruction (after John Boyd's work on military science and strategy), arguably seeks to change the conditions in which defense organizations and the individuals who embody them know their world, themselves, and the constitutive dynamics of their interactions (p. 35). But despite the critical sophistication of its references, SOD's approach tends to be abidingly pragmatic. It principally seeks to improve the efficacy of the organization's functions by attuning them to the world of conflict it aims to transform. As modeled by the "craft" approach detailed in the concluding essay of the previous textual study,

SOD does not develop or “apply” theory in any kind of linear, additive fashion. Which is to say that despite OTRI’s insistence on profound reading, SOD recognizes that practices of alternative sensemaking are only useful to a military organization insofar as they empower practitioners to deliver on that organization’s mandate. They may grant themselves a certain latitude to define that mandate on their terms (and even then, they are scarcely tolerated, as the rocky history of the Israeli experiment demonstrates). But the key agency SOD aimed to impart was the ability to attune the critical sensibilities of the organization those practitioners lead to the world of threat and instability which their organization aims to transform to advantage. To that end, SOD was conceived as a means for developing a critical appreciation for the evolving systemic relations of the organization’s emergent context.

SOD can be understood as both a structure and a process for the self-education of military leadership. In its earliest incarnations, that process was structured as an evolving critical discourse that explores frames of intelligibility through iteration and reframing (p. 25). The iterability of that process was its critical value. With every inquiry, one began anew by constructing a frame of reference that would allow the designer to comprehend and explain emergent phenomenon of war in its unique context. As SOD evolved, it enabled practitioners to generate any number of different kinds of outputs and artefacts: it might enable practitioners to identify and refine a theory that can explain threatening developments or account for unanticipated friction. It might aid them in devising cognitive heuristics (or, as Naveh puts it, an “aesthetics” of operations) for agile decision-making in contexts without precedent in the institutional imaginary, or for sensemaking to move past the limitations of that imaginary. It may simply empower practitioners to tell their own stories to account for new phenomena and map their emergence within a broader strategic narrative. Which is to say that whatever critical

capacities SOD (and, indeed, many of the military design models which came after SOD) aims to enhance, its practitioners remain characteristically agnostic about the means. These practices, and the concepts with which they transact, are only as useful as they empower practitioners to “make do” with the resources available to address the situation at hand. The paradigmatic revolution in operational art and theory that Naveh’s writings agitate for is therefore largely about the transforming the process of organizational learning and education and less about transforming the direct means of war themselves (although they may occasionally do the latter, as the Balata example demonstrates). And that process is principally about devising tools, probes and artefacts that aid comprehension and enhance cognitive agility. These outputs enable operators to provision their own understanding of events, and to communicate that comprehension in collaboration with others within the organization in order to enhance the effectiveness of that organization within the security environment in which it is engaged and set conditions for success.

To facilitate this process, SOD approaches theories of martial learning and behaviour according to the principle of bricolage. Appropriating the language of the influential organization theorist Karl Weick (1993b), who drew from Claude Levi-Strauss and Jacques Derrida (among others), the principle of bricolage presumes that a theory or a concept is only meaningful insofar as it enables practitioners to *create order* out of what is ready at hand. Instead of working within a totalizing theory or system of meaning (and organizational knowledge-accountability) in the manner of, say, an engineer, a bricoleur works to scaffold meaning out of the inventory of concepts, ideas, heuristics, etc., that an individual or the organization they embody have on hand. Creative improvisation with tools and concepts is conceived to mobilize knowledge in a way that will permit its users to move beyond the limitations of an organization’s normative

understanding of a given context or problem set. The idea is that the broader the repertoire of theories, the more conceptual artefacts at hand, and the more analogies and references accessible to the organizational imagination, the greater the resilience of that organization as it confronts crises of knowledge and meaning that threaten its organizational coherence and efficacy.

Recognizing a bricolage sensibility in Naveh and OTRI's practice-centered engagement with theory, one which is clearly evident in the dense reading lists Naveh prescribes in *Operational Art and the IDF*, the approach that this case study develops explicates some of the theoretical references drawn from the Naveh school's conceptual repertoire. It does this to draw out some of the key insights of Naveh's written body of work, particular as they concern narrativity and narrative theory. It does so under the assumption that these references are complementary components of a holistic and intuitive approach to martial learning and experimentation that resists attempts to devise a totalizing schema of knowledge conventions or impose a singular order of meaning on the world (Beaulieu-Brossard, 2021, p. 97).

At the same time, the narrative of conceptual experimentation it develops must contend with the reality that many of Naveh's writings invest in a kind of Kuhnian logic of paradigmatic revolution in military science and philosophy, which at some level implies totalizing organizational shifts in the foundations of martial epistemology. The imperative to transition from the model of mechanized industrial warfare to post-heroic, postmodern warfare for LICs described in "Between the Striated and the Smooth" is framed by Naveh as one of these paradigmatic shifts. Indeed, Naveh's most speculative work, *The Structure of Operational Revolution*, or simply *The Prolegomena*, a conceptually dense primer on the theoretical principles underpinning his own operational theory produced in collaboration with SAMS instructors for Booz Allen Hamilton, pays direct homage to the title of Thomas Kuhn's (1996)

renowned theory of epistemology. The narrative developed in this case study does not attempt to resolve this evident contradiction because it is only tangentially relevant to the pragmatic questions of practice and applicability which preoccupy SOD's architects and practitioners (although it certainly has implications for institutional and organizational uptake of these ideas).

Whether SOD's conceptual references contradict each other is less significant to questions of practicability, in the fashion of bricolage, than the nature of their complementarity. Deleuze and Guattari's conception of nomad sciences (and the mutable, contingent, multiple character of scientific practice that theory advances) implies a contradiction with John Boyd's (2006a) hypothesis of a dialectical engine driving knowledge production for adaptive strategy making, for example. That contradiction is less significant to this narrative than Naveh's observation that Boyd's comprehension of creative-destructive knowledge production (and the comprehension of set theory it leverages) is comparable with, if not complementary to, the logic of deterritorialization explicated in Deleuze and Guattari (Naveh & Graicer, 2017). The question of what these concepts enable practitioners to think and do, and – more importantly – how they enable practitioners and the defense organization they embody to surpass what they already perceive and think (and therefore “know”) is the question that determines their relevance for the case study at hand. There are obviously tensions between evidently contradictory concepts that are worth addressing, but this narrative (much like SOD itself) assumes that those tensions are generative insofar as they implore mediation and resolution, rather than disclaiming.

In other words, Naveh's practice is arguably less about explicating the timeless essence of war or strategy (even where proponents of the Naveh school claim to do so, as in the oft-repeated mantra from Francois Jullien) than it is about empowering practitioners to realize their own capacities to define what is contingent in war, strategy, and operations on their own terms, to

their own ends. The underpinning theory is continuous with the orienting theory governing Boyd's (comparably ephemeral) project, which Boyd describes as an intentional and creative process of induction and synthesis that works through the breakdown of the orienting principles and models governing military decision-making (p. 134). Boyd's oeuvre unsettles the coherence of the established domains of knowledge within which received concepts inhere in order to synthesize new concepts from these deconstructed constituent parts. By analogy to Graicer's articulation of SOD self-reflexive meta-methodology, Boyd's "Destruction and Creation" is a "theory about theory" 2024-10-15 12:40:00 PM. As such, the theoretical explorations developed in the ensuing case study aim to enumerate what Boyd calls "a changing and expanding universe of mental concepts matched to a changing and expanding universe of observed reality" in order to support a readership looking to understand the same in Naveh's writings (2007a, pp. 138-139). While this narrative explores implicit tensions, paradoxes and contradictions in the theoretical artefacts these writings engage, and in the transitional phases between significant shifts in military power-knowledge in the breakdown of its constituent domains, it does not aim to solve them, dialectically, in order to impose a singular interpretation or corrective. The narrative principally describes these concepts as they occur *in situ* in Naveh's writing, with exegeses, historical analogies and critical elaborations that refine some of the fuzzier aspects of their often-opaque articulation in Naveh's written output.

Why theory?, or, what has it done for me lately?

There are nevertheless some overarching epistemological principles drawn from these critical references that serve as abiding terms of reference for Naveh's engagement with theory, and indeed for several influential design practitioners who came after him. One of Naveh's enduring insights into sensemaking for military epistemology is that the production of narrative

artefacts is a means of tracing and anticipating emergent patterns in the strategic environment. The process of storytelling allows for the exploration of spatiotemporal sequences involving a variety of competing, cooperating and conflicted actors with divergent ideations of the operational and strategic environment. As such, it is an invaluable tool for the analysis of materialities of the battlespace that escape the comprehension of more conventional rituals orienting military decision-making (Naveh et al., 2009, pp. 75-78). As such, *The Structure of Operational Revolution* qualifies storytelling's viability as a para-scientific medium for transforming the ideational paradigms which orient conventional military planning. For Naveh, the production of narratives is an artefactual means of mapping the systemic dimensions of strategy and anticipating emergent processes that tend to escape the analytic focus of conventional operational planning. It is likewise a means of situating an observer who can intuit the logic of emergence and communicate it in a way that imparts meaning and structure. In this capacity, "the storytelling function," as Naveh calls it, attempts to shift the practice of operational art away from ritualized application of predefined templates to predefined operational problems towards the creation of unique spatiotemporal logics of strategic cognition and operational modes for their realization. Seeking new terms for interpreting friction and their unique bearing on operational problems in the battlespace, SOD encourages strategists and operators to invent and refine their own concepts and narrative forms in order to compose compelling narratives of events. This process aims to help the organization both intuit the generative potential of the environment in which it seeks to intervene and capitalize on the inherent uncertainty with which virtually all forms of warfare must contend.

To support the development of these capacities, OTRI's pedagogy mobilized elements of literary study that complement the world-making approach to operational learning that SOD aims

to foster in reflexive practitioners of operational art. Accordingly, literary concepts have come to have an outsized, if oblique and improbable, influence on the emergence of military design, a legacy which carries on even outside Israel. This complementarity hinges on a productive tension between a scientific disposition that aims to generate theories and models that can explain and account for battlefield phenomenon, particularly where it concerns systemic implications of cultural ideation and social behaviour, and a creative disposition that can synthesize the insights of novel theories and analytic approaches into workable programs for capitalizing on evident crises of organizational meaning. In this sense, SOD hinges on a dialectical interplay between the knowledge production of scientific methodology, which necessitates the falsification of hypotheses for the establishment of a bases of consensus between investigators, and the world-making activity of aesthetics, which undertakes sensemaking activities that can translate “idealist” models of phenomena that impart meaning to contested spaces and events.

In plainer language, theory is serviceable to military design insofar as it lends itself, on a provisional and iterative basis, to theorizing interpretive discourse. A handy device among the bricolage of the military designer’s epistemological toolkit, literary theory imparts terms and concepts that are specifically attuned to interpreting paradoxes and contradictions (think, for example, of a semiotic square, which is sometimes applied, via “trojan horsing,” as a conceptual heuristic in military design exercises), rather than the visible “facts” characteristic of IPBs and the probabilistic universe such a construction assumes (Zweibelson, 2015). These kinds of interpretive problems, which are problems of meaning, are distinct from the kinds of problems that beset conventional operational planning, which tends to conceive of the uncertainties of war in terms of the incompleteness of the intelligence picture (e.g., the location, movement and provisioning of opposing forces, the nature of terrain hazards, known and unknown knowns of

varying configurations, etc.). The problems that confront a planning staff who need to interdict the movements of enemy submarines, for example, are significantly different from the problems that confront a planning staff charged with developing a program for mentoring soldiers from a host nation with a vastly dissimilar professional military culture from their own. Both examples arguably concern the devising and application of appropriate heuristics for understanding the environment, the events unfolding within it and the intentions and expectations of the engaged actors. However, an interpretative method for comprehending the contradictory impressions of a conflict's social and cultural milieu appears far more germane to the operational problems implied by the latter than the probabilistic methods of spatial intuition and intelligence analysis which the prior presupposes (even where that knowledge nevertheless concerns some anticipation of martial culture through the understanding of enemy doctrine, mindsets, etc.). And the provisioning of theory is a productive mean for testing and refining these kinds of creative-interpretive heuristics.

“A dialectical engine”: science, aesthetics and strategic thought

Theory, more broadly conceived as the work or product of theorizing (i.e., as a necessary function of scientific inquiries into environmental patterns, and into the provisioning of forms and schematics which make those patterns apprehensible as an object of study or intervention), provides an alternative (read: non-doctrinaire) epistemological bases for the kinds of creative sensemaking activities SOD aims to stimulate. Theory supports the creation of terms that empower strategists to pose alternative constructions of the conflict environment. Theory provides an adaptable framework for articulating the types of actions that are appropriate to complex strategic problems. And theory suggests a means of modelling the systemic tensions that these alternative models aim to transform. Accordingly, SOD's framing discourses tend to

both draw on and produce theory (broadly conceived) ad hoc, testing its relevance to the context to which it is applied, and, ideally, refining its precision and efficacy through actualization in operations. Indeed, the mismatch or “drift” between theory and the logic driving emergent events is both a necessary and irreducible condition of theory-making that paradoxically enhances the efficacy of the theory to the world it aims to transform. As such, theory is both a necessary function of SOD’s military-epistemological inquiry and a necessary supplement to its aesthetic practice. Theory is therefore a fundament of SOD’s design praxis: theory-making provisions a cognitive basis for actualizing interpretations that can capitalize on environmental friction. Testing those interpretations through an aesthetics of operational intervention that can translate them into concrete actions is a necessary feedback mechanism for refining strategy. Rather than a framework for defining a singular axiomatic order governing the nature or essence of war, theory is for SOD a distinct mode for intuiting conflict’s emergence as it concerns the evolution of a variety of competing, conflicted and cooperating systems, and likewise intuiting the potential for making the underlying systems which structure and sustain a conflict other than they already are.

Naveh cites the formative influence of John Boyd’s influential essay “Destruction and Creation” in the modelling of SOD’s relationship to knowledge-production (Naveh & Graicer, 2017, p. 32). Making an offhand comparison between Boyd’s essay and the Deleuzo-Guattarian dynamic of deterritorialization, Naveh identifies Boyd’s text as a touchstone for comprehending the dynamic between theory and aesthetics that grounds SOD’s epistemology. Boyd’s oeuvre, which remains highly influential in military circles some 50 years after its inception, tracks an evolving, self-directed discourse that “surfaces” figurative abstractions drawn from 20th century mathematics, systems theory and cybernetics in order to unsettle the governing military-institutional assumptions of his day. Transacting with alien intellectual materials with the aim of

reflexively defamiliarizing the ready-to-hand models and instruments of military science and education, Boyd's conceptual prototypes endure in the theoretical DNA of Naveh's *Prolegomena* because Boyd's approach embodies the kind of fluent, provisional orientation towards complex phenomena which SOD's design problematic was conceived to instate. I will forgo a thorough exploration of Boyd's theory of strategic cognition embodied in the OODA loop⁸. For now, suffice it to observe the creative-destructive dynamic of knowledge production that Boyd's (2006a) solitary essay-form work, "Destruction and Creation," hypothesizes: namely a "dialectical engine" of destructive deduction and creative induction that models the entropic movement of ever-complexifying systemic change in the behavior of military systems.

Abstracting from the principles of Kurt Gödel's incompleteness theorem, Boyd argues that in order to "determine the consistency of any new system, we must construct or uncover another system beyond it" (p. 136). The need to construct or uncover a larger system "beyond" to define the consistency of a system at a lower level produces a cyclical, reciprocal dynamic that 1) abstracts a concept that is consistent with the ordering of the system as it is known, and 2) develops observations that refine the concept by dismantling or invalidating its predecessors. The incompleteness of this non-resolving process suggests an irreducible cognitive problematic underlying systemic inquiry, namely that any inquiry into the nature of a system depends upon a mismatch between concept and observed reality to make sense of it. For Boyd, it follows that

whenever we attempt to do work or take action inside such a system...we should anticipate an increase in entropy and hence confusion and disorder. Naturally, this means we cannot determine the character or nature (consistency) of such a system within itself, since the system is moving irreversibly towards a higher, yet unknown, state of confusion and disorder. (p. 137)

⁸ Frans Osinga's (2006) *Science, Strategy and War* and Antoine Bosquet's (2010) *Scientific Way of Warfare* are excellent resources for understanding the scope and influence of Boyd's OODA loop heuristic on contemporary military thought.

In Boyd's interpretation of this problematic, the irreducible tendency of open systems towards entropy and instability means that efforts to close the gap between concept and observed reality in the modelling of an abstract system only increases the mismatch between the two.

Pushing back against the compulsion to close the gap between inductive inference and deductive certainty, "Destruction and Creation" abstracts a decision model for organizing strategic responses to emergent phenomenon, the meta-projection of which is, again, "a changing and expanding universe of mental concepts matched to a changing and expanding universe of observed reality" (pp. 138-139). Instead of working towards completing the intelligence picture of the system and erasing uncertainty – an impossibility for Boyd, and a dangerous, self-defeating pursuit for a military system that aims to understand its relationship with a changing environment – a military system should embrace uncertainty by fostering a diversity of independent strategies for understanding itself, its adversary, its environment and their compound interrelation. The provisioning of theory from this expanding universe of mental concepts provides a generative basis for mediating uncertainty, and for intuiting potential strategies that can exploit its cognitive implications.

The intertwining of this "dialectic engine" is, in part, the subject of the ensuing essays, which qualify the aesthetics of Systemic Operational Design. It aims to clarify the interrelationship between science and literary aesthetics in the epistemology of operational design, and to qualify the epistemological bases for a variety of provisional schemas and interpretations that theorists and designers engaged in military epistemology have contrived to grapple with the operational and strategic problems of postmodern warfare. As I have argued in previous chapters, the problematics of postmodern warfare destabilize the theoretical terms of the paradigms of modern industrial warfare through which the events of war are perceived by the

learning apparatus of the military state. As such, they imply a comparable dynamic to the one described by Gilles Deleuze and Felix Guattari's (1997) hypothesis of the war machine: they persist in dynamic tension with the dominant rationalities of military science (or technoscience), which attains to universal comprehension of the events of war by minimizing uncertainty and maximizing efficiency and precision.

Externalizing a war machine: Nomadology and the military sciences

Deleuze and Guattari's *A Thousand Plateaus* is another of SOD's touchstones for expanding the conceptual register of military epistemology. OTRI's engagement with Deleuze and Guattari is oft noted in both critical and military design literature. Indeed, "Between the Striated and the Smooth" leverages explicitly Deleuzean language as conceptual figures to model the de-structuring action of counterterrorism operations in Nablus. But aside from a small handful of articles there has been little in the way of precise explication of how this engagement informed the Naveh school's thinking and practice, and even less in the way of commentary that seeks to expand on those references. One of the most recent and fruitful articles of scholarship that explores this legacy nevertheless generates useful terms for grasping the implications of their ideas: Philippe Beaulieu-Brossard (2021) argues that the continuing relevance of Deleuze and Guattari for understanding and even informing military design practices (for the tiny minority of practitioners who remain willing to claim this inheritance, at least) concerns their foregrounding of "movement" as the paradoxical fundament or ground of military-epistemological knowledge and sensemaking (p. 97). Deleuze and Guattari employ several flexible metaphors for grasping the generative dynamics of movement in martial epistemology, including deterritorialization, nomadology, and the war machine, all of which qualify aspects of this paradoxical movement. This brief exegesis of Deleuze and Guattari's theory of the war

machine and its epistemological effects in the related concept of “minor sciences” seeks to define some of those terms as they concern the dynamic and continuous movements of military power-knowledge, and the pragmatic inquiries into the same which Deleuze and Guattari’s writings have in no small part enabled in Naveh’s practice.

OTRI’s readings of *A Thousand Plateaus* generated a set of conceptual references which, in turn, enhanced an evolving field of research and pedagogical practice through which military power-knowledge become the subjects of an intensive, active process of self-disruptive learning. The concept of rhizomic maneuver described in the previous case study is arguably the most explicit output of this engagement. Taking the metaphor of the root-like structure of a rhizome as a model for the non-linear, decentralized pattern of movement and firepower characteristic of the tactic of walking through walls, Kochavi’s command discourse mobilized Deleuze and Guattari’s terms to augment a set of martial practices that could mediate between strategy-making, operations and the hostile interactions of combative systems vying to maximize the disruptive efficacy of military occupations of space. But the one-off nature of that engagement belies the limited applicability of that reference as a model for operations. While it is a particularly rich historical example of OTRI’s mobilization of aesthetics, it only serves in a particular context, and was not generalized in the manner of doctrine or standard operating procedure. This is because it was not intended as a normative model to be conventionalized, but rather a bespoke model for grasping the contingent in a particular operational environment (Beaulieu-Brossard, 2021, p. 97). As such, it indicates a deeper engagement with the principles of epistemology articulated by Deleuze and Guattari’s oeuvre. That engagement provides a conceptual model for the revolution in martial behaviour (rather than warfare) that Naveh’s practice arguably aspires to.

In textbook Deleuzian fashion, Naveh's emergent pedagogy (of which rhizomic maneuver is the most notorious example) would seem to reverse the semantics of Clausewitz's famous maxim concerning war's extra-political character (i.e., as a continuation of policy into a space that is in outside political norms and conventions): by attempting to revolutionize military-institutional learning, SOD actively contests the organizational politics of the IDF in order to mobilize that political contest into a vehicle for attuning the organization to war's innate capacity for undoing (Deleuze & Guattari, 1997, p. 421; Reid, 2003, pp. 65–71). SOD arguably politicizes questions related to the organizational logic underlying the state-form structure of the armed forces by prioritizing the force of war itself as something exterior to the state-form, and at the same time *generative of it*. This politicization surely resembles the logic of (de)legitimation described in the previous study, and (de)legitimation might be understood as a kind of realization of its process. But the politicization of war's dynamism assumes the primacy of war as an abstract force that conditions and transforms the organizational politics of the state, particularly as those politics are realized in the embodiments of martial organization. In this construction, war remains something that is outside of the normative logic of the state because it is paradoxically transformative of the political, social, and technological orders within and upon which the state form inheres. The state cannot tame it, only attempt to control it in a provisional manner. We clearly see something like this logic underlying the arguments of Tariq Barkawi and Shane Brighton explicated in the first chapter of this dissertation. But the specificity of Deleuze and Guattari's terminology for this dynamic requires some unpacking and contextualization as they concern SOD's "revolutionary" pedagogy.

In its earliest iterations, SOD inquired into fields as disparate as cybernetics, organization and management theory, semiotics, and architecture in order to tease out unobserved systemic

tensions between political, environmental and economic forces brought into play within a given campaign. Adapting the insights of these alien disciplines through bricolage, SOD aimed to model sophisticated operational and strategic concepts that ply systemic tensions in support of the planning of joint operations. Defining external tensions with an adversary to better get a handle on systemic patterns and dynamics was a principal focus of the operational design process. However, the design process was likewise conceived to disrupt the internal systems (doctrines, command hierarchies, strategic assumptions encoded in directives) of the organizations within which it was applied. In this capacity, SOD imparts what Deleuze and Guattari term a “war machine” to military planners, strategists and commanders. Naveh’s pedagogy aimed at mediating a disruption of the military state’s idealized models: SOD was conceptualized as a powerful ward against the consolidation of ossifying power-knowledge structures, engaging a perspective of exteriority that reimagines military intelligence, science and education as a perpetual field of variable interactions. In Naveh’s words, which draw directly from Deleuzian terminology, SOD’s war machine aspires to smooth out the internal “striation of the territorial understanding of the state apparatus” (Naveh et al., 2009, p. 81). The ideal effect of this self-disruption is to liberate military-institutional functions, hierarchies and procedures from their habitual statism, their default modelling of warfare as a contiguous instrument of state policy and a vehicle for its linear realization.

A central text in Naveh’s heretical canon Deleuze and Guattari’s “Treatise on Nomadology” hypothesizes an abstract, virtual potentiality of war that unsettles the delimiting, territorializing functions of sovereign imperial and capitalist states. The hypothesis develops a genealogy of war that proceeds by a series of axioms, propositions and problematics that posit a constitutive relationship between this virtual potential and the development of state powers

which this potential frustrates, subverts and antagonizes, and which the state quickly learns to incorporate into its stratified functions and hierarchies (pp. 352–358). On the one pole, the war machine describes moving vectors of disruptive potential exterior to the state’s ideal patterns of organization. These vectors impart capacities for rapid self-organization, dissolution and disappearance between transitively interlinked bodies. On the other, the state apparatus describes the sovereign state’s milieu of interiority, the delimiting functions of which capture territory and code authority by distributing binary relations and occupations of space. These functions aim to conserve and perpetuate the organs of state power. The classic example is the smooth *nomos* of Go, with its variable geometries and emergent topography, versus the stratified *polis* of chess, with its codified strictures of movement and strategic functions. These two poles are not simply opposed or inimical: they compose emergent relations of knowledge and force that both unhinge the state’s formal models and facilitate the appropriation of the war machine’s disruptive modalities by accretions of state power. To this end, the treatise posits the war machine as a “perpetual field of interaction”; an intensified relationship of exchange and metamorphoses between the modes of variable bodies at war that tends to overturn, decode and disorder the stratification of state territory and power (p. 360).

Crucially, Deleuze and Guattari argue that the war machine doesn’t necessarily take warfare as its direct object, and may emerge from aesthetic innovations, scientific practices, new technologies, commercial enterprises, or religious heresies that simply disrupt the centers of political gravity (pp. 422-423). Rather than conceiving of war as an essential instrument of state policy or an “extreme modality of the political,” *à la* Clausewitz, the hypothesis of the war machine posits war as an event that is exterior to the state form, one “consisting solely in an ideal and transhistorical continuum...that can realize itself in infinitely varied socio-technical

environments” without necessarily taking the submission of an enemy as its object (Sibertin-Blanc, 2010). A war machine may pull towards total war, as the evolutionary arc of industrial warfare following from the Napoleonic conquests through the Second World War implies. Conversely, a war machine may only take up war as a supplement, as an indirect effect or consequence of the transformation of social and political organization.

Examples of the productive exchange between war machine and state apparatus abound in the literature surrounding the treatise. Deleuze and Guattari themselves put forward the incorporation of nomad warriors as officers of the vanquished empires in the aftermath of the Mongol conquests as a kind of archetype, prefixing the title of the treatise with the date of 1227 AD, the year of Genghis Khan’s demise. They likewise identify “minor sciences” like chemistry and artisanal metallurgy as epistemological war machines insofar as they developed from heuristics that guide the molecular accidents that arise from working dynamic materials like hot steel. Minor sciences tend to condition and resolve the problems of manipulating fluid materials and emerge in opposition to “royal” sciences like physics and molar chemistry, which tend to impose rules and universalize theorems and axioms to bring these emergent practices to heel (pp. 361-363). Abstracting Deleuze and Guattari’s argument about the self-organizing turbulence of machinic “singularities” in the development of military science, Manuel DeLanda (1991) identifies the advent of European gunsmithing in 14th century Florence as another potent war machine: Florentine gunsmiths invented new techniques for moulding the emergent properties of metal and gunpowder into semi-workable assemblages of firepower absent any governing theory of physics or chemistry (pp. 29–31, 62–63). These inventions unsettled the conventions of warfare to increasingly devastating effect in the ensuing centuries: following on the revival of the phalanx and the entrainment of pike formations, the advent of European firepower, coupled with

the reinvention of formal drill, transformed massed firearms “into an almost automatic instrument of state policy, the armed expression of the sovereign’s will” (p. 63). 19th century innovations like cartridges, barrel rifling and conoidal bullets in turn liberated infantry from tight synchronized formations arrayed in linear blocks for volley fire into roving semi-autonomous units, in time augmented by the mobility of radios and the precision and reliability of repeating firearms. The Bedouin war machine Lawrence partook of and documented in “Evolution of a Revolt” suggests another obvious archetype for the nomadic war machine: by exploiting the overdetermination of the cult of the offensive in the conceptual imaginary of the imperial powers, the Arab insurgency, embodied in the Bedouin raiding parties, was able to induce the piecemeal dissolution of the hardened Ottoman presence in the Hejaz desert. But whatever the conditions of their emergence, the key takeaways are the idea that any encounter with a war machine tends to unsettle the state apparatus in ways which agitate the productive matrixes of state power, the idea that the state often learns to incorporate the war machine and adapt its disruptive edge for its own purposes, and the idea that the war machine nevertheless retains the potential to compose novel constellations of social organization which evade capture and appropriation.

SOD arguably takes the implications of the war machine hypothesis for granted, embracing the abstract movement between war machine and state apparatus as the conceptual basis for a paradigmatic revisioning of the relationship between military-political power, knowledge production and dissemination, and, pragmatically, the education of senior officers. As such, the concept of the war machine, particularly in the figure of the nomad, imparts to SOD a potent metaphor for comprehending emergent martial phenomenon. Both the theory and the figurative language it mobilizes serve as conceptual devices for framing the ephemeral elements

of war (rather than abstract principles like mass) as contingent phenomena for study and experimentation. It also provides a framework for conceptualizing the disruptive effects these elements imply, the agencies they impart, and the transformations they facilitate in a broader system of emergence within which the defense organization is already immersed. For the Naveh school, the critical value of the hypothesis of the war machine is that it provides an assortment of terms and concepts through which to construct and deconstruct the reflexive capacity for military thought, whether it's realized through operational action or strategic deliberation.

Conceptualizing “the field”

It's worth noting that as Naveh's ideas spread into major centers of defense research and pedagogy (particularly SAMS) and military design courses were institutionalized in certain venues for professional military education, the defining influence of postmodern theorists like Deleuze and Guattari was supplanted by more accessible writings from fields like management, organizational studies and public administration (Beaulieu-B. & Dufort, 2017b). The abstruse prose and radical pretensions of these critical texts, and the intellectual prestige that engagement with them implied, became liabilities for OTRI's early practitioners. Many students of OTRI came to resent these writings, and their influence remains a point of tension between more conventionally minded practitioners and the legacy of design's shamanistic vanguard. The sophistication, if not the sheer density, of the “Treatise on Nomadology” alone is a barrier to accessibility which limits its value to a military readership. This means that explicit engagement with this foundational text has been limited in recent military scholarship around the SOD's legacy. Nevertheless, there remain some key insights from those writings to unpack which are helpful for understanding the epistemological implications of Naveh's practice. Although Naveh doesn't say much about it, the concept of the minor sciences is particularly useful for qualifying

the approach to knowledge production and education which most military design practitioners are actively engaged in, whether they come from the old guard of the Naveh school or from more approachable schools of thought on military innovation. The ensuing exegesis takes the concept of minor science as an abductive hypothesis to explain the theoretical foundations of the Naveh school and the knowledge practices it modelled.

DeLanda's (2016) *Assemblage Theory* expands on the dynamic between minor and royal sciences in the development of the field of chemistry and his extrapolation of these concepts gives us helpful terms for grasping their implications for the epistemology of military science and philosophy. Insofar as the interactions between military epistemology and reflexive military practice constitute an emerging field, we may understand that they compose assemblages which impart agencies and foster dispositions among a community of practitioners engaged with the problems of "the field". As defined by DeLanda, the field – the distinct domain of objective phenomena which the various communities of reflexive military practice take as their object of study – is made apprehensible by particular tools, locales and instruments. What binds these communities of practice together

is the set of cognitive tools that govern the personal practices of its members: the concepts they use to refer to the properties and dispositions of phenomena; the statements about phenomena they believe to be true; the problems posed by phenomena [;] the reasoning strategies developed to tackle these problems; and the classification schemas used to order the domain. (p. 89)

DeLanda argues, after Deleuze and Guattari, that these cognitive tools form an open set and their affiliations accrue according to their terms of exteriority, that is, according to extrinsic qualities that cut against principles of "holism" that would approach these relations as functions of a monolithic governing theory or paradigm. Paradoxically, the terms of exteriority would seem to

apply even where their parameters are stratified by the rules and hierarchies of formal military organization that sanction their investigations.

Think of how the fact or condition of generalship is defined by a general's positioning within a nested set within the order of battle. The order of battle is itself a changeable configuration, an open system that is nevertheless subject to an intense hierarchical structuring, implying a complex network of relations and tensions with differing echelons and embodiments, all tied to differing capabilities and functions, be they political, tactical, logistical, communicative, administrative, etc. When Naveh agitates for a paradigmatic revolution in operational art to realize the creative-destructive potential of military knowledge production, he recognizes that reordering their affiliation alters the complementarity of their effects. This kind of organizational improvisation is a key function of operational art, a fundament of generalship which is about mobilizing resources to induce a certain responsiveness and agility within the organization, attuned to the unique contingencies of a particular problem space. While this reordering no doubt continues to depend on clear hierarchies to enforce accountability, the agencies imparted, the dispositions enhanced by these affiliations and disaffiliations, are nevertheless mutable, changeable and divergent. This is particularly so where they reconsolidate the field's terms of interiority through new staffing arrangements, officer and unit qualifications, doctrinal formulations, deployments, etc. The act of reordering their terms of affiliation generates novel terms, concepts and artifacts for apprehending the field, and for apprehending new possibilities with strategic and operational implications.

Taking DeLanda's exegesis of the minor sciences as an abductive hypothesis, we can provisionally describe the innovation of the Naveh school's experimental pedagogy as the inception of a minor field that emerges from a kind of oppositional tension with military

doctrine's royal sciences. Where the latter interrogate martial phenomena in an analytic mode that qualifies the "regularities displayed by ideal phenomena," the prior is concerned with following the "sensual materiality of the phenomena" (p. 91). This is a disposition that is plainly evident in SOD's investigations of systemic transformation and flux (see subsequent chapter "Everything Flows"). As a technique of a minor field, reflexive operational art in the Naveh school's construction likewise tends to "allow phenomena in the domain to pose problems" (p. 91). This is distinctly different from the approach of conventional military philosophy, which tends towards inductive rationalization of general laws, and the schemas of conventional military doctrine which often reinforce a deductive logic that defines phenomena in relation to axiomatic structures established by pre-existing statements (Beaulieu-Brossard, 2021, pp. 96–97; Zweibelson, 2018b; see subsequent chapter "To deviate from doctrine"). However, as an intertwining of war machine and state apparatus, the poles of the minor and major sciences are not exclusive of one another. They may amount to formally different conceptions of military-theoretical practice, but they arguably compose a unitary, if not singularly coherent, field of interaction composed within a continually shifting matrix of assemblages. As DeLanda puts it: "royal science continuously appropriates the contents of...nomad science while nomad science continually cuts the contents of royal science loose. At the limit, all that counts is the constantly shifting borderline" (p. 101; quoting Deleuze and Guattari). The composition of this borderline and the patterns of transformation, exchange and appropriation that continuously decompose and redefine it are both the subject and the object of SOD's methodology: the border defines both the territorial stakes of what is contested by reflexive military practice, its inside and its outside, and determines the dynamic of the contest.

Between these territorializing movements, the minor sciences of military design (broadly conceived by my abductive reasoning to include successors of SOD) define and redefine a moving field composed by “assemblages of assemblages,” after DeLanda (pp. 100-101). This field, as a domain of study, consists of the communities, the methods and instruments that pull them together. Likewise, these components are composed by constellations of phenomena, tools for making and apprehending, and individual practitioners and organizations all with distinct qualities and patterns of interrelation. In this sense, the field with which military design engages is an expansive concept that might include doctrine, chains of command, war colleges, technologies like weapon systems and platforms, informational and logistical systems, the actors engaged by them and the sites where these assemblages are prototyped, tested, or otherwise brought to bear. These constellations are circumscribed by prescriptive patterns of filiation and disaffiliation particular to military state apparatuses, just as they are opened and extended by emancipatory potentialities that exceed those apparatuses normative strictures. In DeLanda’s analysis, it follows that “each assemblage in this nested set must be conceived as having its own parameters,” and any claim that a decoding movement has transpired (e.g., that a novel approach to the challenges of operational art transforms the sciences of warfare) must specify the level at which such a movement occurs (p. 100). This follows for the recoding movement that, in defining new axiomatic statements to explain new conditions or properties observed in the field, re-stratifies the structures of martial comprehension that nomad science cuts loose.

DeLanda’s extrapolation of assemblage theory in the ordering of minor and royal sciences provides this inquiry into SOD’s martial avant-garde with a provisional basis for theorizing how military science potentiates, refines and indoctrinates disruptive innovations. It suggests the underlying dynamic of an epistemology for marshalling their convergence within

recomposed hierarchies of knowledge that serve principally to enhance the operational efficacy and “self-regulating aptitude of a fighting system,” as Naveh qualifies the functions of military hierarchy (1997, p. 15). Between these two poles, the perceptual tools and instruments of operations theory and design practice continuously compose and decompose martial assemblages: in the operational “field,” where units realize their orders and adapt to contingencies of friction; in the order of battle, where units are defined according to their functions and capabilities and allocated resources to manage strategic priorities emanating from political leadership; in the staff headquarters and colleges, where the interactions of military systems are theorized and modelled to capitalize on the observation of novel martial and extra-martial phenomenon and the refinement of the capacities of practitioners to appreciate them.

After DeLanda, the mutation of the borderline between a military-epistemological war machine and state apparatus is punctuated by a chronicle of inaugurations, transitions, consolidations, subtractions and reversals, movements that scale up or down depending on the variables and parameters they decode and reterritorialize. To chronicle these events and sites of mutation and passage is to track military power-knowledge’s perpetual becoming in relation to a dynamic of emancipation and re-appropriation of its constituent elements. Developing narratives and counter-narratives of these events is a core function of reflexive military practice, one which aims at the inception of new meanings to define military actions and their effects through novel terms and figures (Beaulieu-B. & Dufort, 2017b, p. 4). Tracking the inception and arc of these events and their implications for the field is a means of qualifying their instrumentality viz the domain of conflict that they intervene in and reorder. The narrative developed over the ensuing case study of the theoretical underpinnings of SOD tracks the tangential becoming – the emergence, development and obsolescence – of a particular trajectory of military epistemology

as it aspires to self-emancipation (and, conversely, where those aspirations exhaust themselves and submit to incorporation and defeat). DeLanda's elaboration of the epistemological war machines of the minor sciences lends us a provisional schema for comprehending the work of military epistemology in its mediation of outside knowledge. Likewise for the transformational implications of these encounters for the field.

Defining the field in this way does not in and of itself necessitate an emancipation of the political destiny of military institutions nor, plainly, of the lives and subjects that they act upon through operations (be those subjects composed in sovereign or occupied states, national or extranational communities, either in peace or at war or suspended in a state of exception between them). In other words, conceiving the field of martial philosophy and science in this way does not "humanize war," as Naveh (2005) qualifies the limits of the paradigmatic revolution in operational thought he proposes. Ideally, military innovations are constrained by moral and ethical considerations that qualify the legitimacy of their means and aims viz the state institutions that authorize their development and application. However, military excellence (the high bar of aspiration for defense organizations that submit to the abstracted contest of war's absolute) is a multifaceted quality that is defined by the efficacy of the organization to the situation it aims to transform, the efficiency of its functions, and the professional competencies of the practitioners who execute the latter to realize the former. What radical transformation entails for practitioners in this field is defined by a profoundly different sense of possibility than that which inflects emancipatory discourse in the humanities. Whatever the self-imposed limits on that organization's capacities to liberate or empower practitioners of force, the pursuit of excellence in military affairs, whether through PME or real-world operations, implies enhancing the responsiveness of an organization that was conceived for managing the efficient realization of

organized violence to the environment it aims to transform to strategic advantage, and not some kinder criteria. But the argument that battle is simply agnostic (i.e., the claim that questions of efficacy in war are ultimately apolitical insofar as they must answer to the absolute imposed by the condition of fighting) ignores the question of the relationship between a defense organization's values and its orientation to the world that organization aims to transform to advantage. There is arguably a constitutive relationship between a defense organization's principles and the means it pursues.

Despite Naveh's rebuffing of a humanizing discourse of military innovation, the discourse of (de)legitimation his practice mobilizes nevertheless creates an opening for movements of military science, philosophy and education that do not simply take war as their direct object, and that would seem to retain the potential to emancipate the subjects of military organizations to realize knowledge practices that do likewise. That the first American application of SOD during TRADOC's Unified Quest wargame in 2006 infuriated its military sponsors when the design syndicates proposed a comprehensive strategy for non-kinetic operations suggests something of the disruptive potency of the approach (to say nothing of the potential danger it implies for its practitioners and their careers) (Beaulieu-B. & Dufort, 2017b, p. 12). Usages of SOD outside of Israel are of course rare and there is scarce documentation of its uptake in other contexts (although Naveh's influence in the military design community is far-reaching). As we have seen, Israel's security context is difficult to generalize, and SOD is presented here as a niche example of military innovations. But insofar as an epistemological war machine instates movement as a first principle, SOD's innate philosophy of self-disruption potentiates mutant usages and applications which might, if not surpassing war itself, suggest potent means for politicizing that which seems unquestionable and self-evident to the military state apparatus.

While the narrative this case study reconstructs principally retraces the reordering of explicitly martial functions in their normative construction (i.e., as they concern a defense organization's capacity to anticipate, prepare for, and fight war), the hypothesis of the war machine (and those captivated by its creative-destructive potential) need not be constrained by the same contrivance of its limitations. The idea that a defense organization, through the cultivation of martial competencies which is its unquestionable mandate, might paradoxically discover means of emancipating itself from its war's innate power of coercion is an aspiration that is worth opening space for.

Chapter 6: “To deviate from doctrine, one must know doctrine”

Naveh’s (2009) pointed critique of the prevailing paradigm of military decision making in *The Prolegomena* advances the hypothesis that conventional military planning, realized by following a set of formal templates, extends a uniform “system of ideas” that both shapes communities of martial practice and fixes institutional beliefs (pp. 24-26). The formal logic of conventional military planning and execution arguably models operational command, for example, as an intensely hierarchical linear system, with routinized, tightly defined inputs and outputs unfolding according to a predictable, regimented spatiotemporal sequence (see fig. 5). This kind of linear modelling arguably reinforces a Newtonian conception of the spatiotemporal nature of operations: operations appear as a kind of aggregate of tactical and operational actions (Courses of Action or COAs) arranged in sequence to realize idealized objectives within a randomly determined, probabilistic universe (pp. 88-89). Naveh argues that planning, when practiced as an organizational sensemaking ritual at the strategic or operational level, tends to affirm the prevailing strategic paradigm, embodied in the organization’s formal templates for thinking and tactical action, to the neglect of the learning operation necessary to grasp the irreducible contingency which is constitutive of emergent strategic reality.

Conceptualizing a defense organization as a system, or as a “system of systems” as is practically a cliché of contemporary command philosophy, is not new. The cybernetic revolution during the Cold War imparted a conception of strategy and military decision making that assumed the principles of general systems theory as given. One could easily single out other precedents that predate the computer age. What is novel is Naveh’s insight that military planning functions as an extension of a system of ideas that codifies and enforces social uniformity: the formalization of decision making in a set of organizational templates reinforces a certain

tendency to ritualize institutional forms of knowledge production to the neglect of the self-critical exercise necessary for coherent strategy-making and adaptive operational learning (pp. 71-74). Those organizational forms are principally embodied in the written body of formal military conventions known as doctrine.

Doctrine refers to the formalized procedures for organizational behaviour that serve as models for military planning and execution. Doctrine usually defines a coherent, communicable model of self-organization for implementing tactical and logistical actions suited to various contingencies within the battlespace, or it may simply impose a template for communication and command prerogatives. As a mediation between theory and practice, doctrine provides an inventory of heuristics for military planning and initiative. In essence, doctrine is formalized to equip troops and their commanders with routinized models of organized behaviour to actualize in abstracted conditions. Examples of doctrine might establish protocols for a certain ordering of fire and movement, consignment of weapons and equipment or configuration of support vehicles in the event of a battlefield encounter on a particular type of terrain, at a particular time of day, anticipating a particular kind of adversary in a particular formation or entrenchment. But whatever the envisioned task, when applied as a heuristic for military planning, doctrine assumes certain constants (e.g., “mission, form, and the physical variables implied by the concrete space of action”) and its references for defining a mission are “found in the body of prevailing conventions ... encompassed within the existing strategic paradigm” (p. 89).

In Naveh’s construction, conventional planning, modelled by doctrine, circumscribes the organization’s understanding of the conflict environment and the modes of decision and action that understanding makes intelligible according to a logic of interiority (p. 90). Formalizing knowledge-production and legitimation, the planning process idealizes a linear patterning of

organizational direction that acts to isolate its command component from its environment: an abstract strategic directive, received from political authority and translated as commander's intent to the planning staff, is in turn translated to operators, tacticians and soldiers as a mission to be accomplished in close compliance with the ideal timelines and conditions set forth in the planning phase of the operation, all following a typical rubric of doctrinal patterns (p. 109). The execution of the operational plan, and, by extension, the realization of its strategic ideal as political reality in space and time, is accomplished by following a linear sequence of troop-leading procedures at the company and platoon level, wherein doctrinal formulas model tactical initiatives to instate the ideal conditions set out by the definition of the mission.

For Naveh, this delineation of martial order over the irreducible friction of armed conflict is archetypal of the statist disposition of most modern military planning. At the same time, the codification of martial order in a defense organization's doctrine, a practice intensified by the conceptual development of mission-oriented tactics during WW2, attempts to mediate the uncertainty of war by dispersing the uncertainty across the chain of command instead of concentrating it at the top (DeLanda, 1991). The adaptive logic implied by the concept of mission-oriented tactics, for example, arguably instates a generative cognitive tension between unit-level tactical initiative and the political aims of strategic direction that nevertheless creates a cognitive basis for decision-making. DeLanda describes this tension, citing Martin Van Creveld's (1985) *Command in War*, in terms of a deliberate tendency to break up the concentration of vital information at the top of the chain of command in order to, paradoxically, induce a greater degree of stability in the lower echelons. Where a tactical unit assumes a greater degree of uncertainty (i.e., they must make decisions around contingent facts of the battlefield and assumptions as they understand and perceive them *in situ*, rather than simply executing received

orders in an idealized timing and battlefield configuration that conforms to the information picture held by highest echelon of command), the ideal effect is to complexify the responsiveness of the fighting system to inputs at lower levels of the organization. Instead of simplifying the model of the system by generalizing a total picture of command concentrated in a single decision-making apparatus, the assumption of uncertainty at lower levels aims to link agility and stability of the fighting system to enhanced communication between a multitude of tactical nodes and sensors. The essential tension is one pulled between the need for hierarchies of accountability (which come naturally to military systems) and the need for responsiveness, agility and initiative that nevertheless preserves the cohesion of the fighting force. This later ideal was intensively theorized in the era of industrial warfare by Boyd and others. Naveh takes this idealized model as a helpful reference for grasping the organizational paradigm of industrial warfare that his own practice aims to surpass.

The mission-command concept

The mission-type orders concept (sometimes called *Auftragstaktik* or simply the mission-command concept in the Anglosphere) suggests a prototype of the modern approach to mechanized warfare. Naveh (1997) points to Prussian Field Marshall Moltke the Elder's exploitation of the electric telegraph in the Franco-Prussian war (particularly during the Battle of Sedan in the late summer of 1870) as an enabler of an agile form of "directive control" that enhanced strategic-operational C2 (pp. 57-58). Moltke's ingenuity suggests to Naveh a prototype of the mission-command concept. The term, however, was not conceived until after the WW1, and the concept was arguably first formalized at the level of doctrine in the *Truppenführung* HD-300 (Condell & Zabecki, 2001) operations manual by General Ludwig Beck's military reforms of the *Wehrmacht* in the 1930s. That document articles an exhaustive inventory of protocols

informing the conduct of units at every level of the order of battle, from air to armour to infantry to horseback courier, in both defensive and offensive tactics, and in logistical support tasks.

These protocols defined a fixed inventory of applicable concepts to be rehearsed and drilled in massed combined arms exercises in order to instate organizational cohesion and cooperation in field maneuvers. Such exercises also permitted soldiers and their commanders to test and learn from the mutual effectiveness and multiplying effects of new technologies like two-way radio, close-air support and mechanized armour. These technologies of speed required an unprecedented degree of coordination to employ effectively, and to refine understanding of their complementary effects. At the same time, the mission-command concept paradoxically assumes an elastic principle of subordinate initiative to adapt tactics as necessary to realize the strategic intent of the mission. In this way, HD 300 attempts to mediate a paradox between centralization of command and decentralization of decision-making. On the one hand it encourages the initiative of subordinates to exploit actionable conditions that emerge from contingencies of the battlefield. On the other it requires a clearly defined mission intent to harmonize higher-level goals (say, at the level of the campaign or theatre) with company and platoon-level initiatives.

Boyd (2007), a former USAF colonel and air combat instructor who was involved in the development of the F-15 and F-16 fighter programs and whose ideas were formative in the development of the US Army's AirLand Battle doctrine in the 1980s, defines this harmonizing function as the "*Schwerpunkt*," the decisive or hardened point, the implication of which is often translated as "center of gravity," but in Boyd's usage implies an abstraction that lands closer to "point of emphasis" (p. 78). As the 1993 edition of FM 100-5, the US Army's former field manual on *Operations* specifies, these decisive points are not centers of gravity in the sense of a geographic or spatial feature of the battlefield upon which operations converge, but are rather

concepts that focus organizational cohesion and convergence through messaging (Condell & Zabecki, 2001, p. 12). For Boyd, *Schwerpunkt* “mediates a unifying concept” for rapidly reshaping the focus and direction of effort (p. 78). That unifying concept’s cohesion and adaptability functions to “harmonize support activities with combat operations” by decentralizing tactical command while maintaining the focus and cohesion of the overall effort around an identical concept (p. 78).

By way of illustration, Boyd cites General Gunther Blumentritt, a key operational architect of Germany’s invasions of France and Poland, and of the failed Operation *Barbarossa* on the Russian front. Blumentritt reflects that the rigorous uniformity of German officer and troop education in the interbellum, in no small part facilitated by documents like HD 300, instilled common habits of speech and behaviour in both officers and their subordinates that generated a productive nexus for coordinating operational efforts (p. 156). The democratic generalization of operational language this required connotes a decisive institutional break with the authority-deferential bureaucratic rationality characteristic of German civic administration (Condell & Zabecki, 2001, pp. 9–10). The common vocabulary enabled by German army doctrine cultivated a shared understanding of modes, patterns and functions of military action and hence produced “a body of officers to whom all tactical conceptions were fully clear” (Osinga, 2006, p. 156; quoting Boyd).

Structured around the communication of flexible and well-defined *Schwerpunkt*, the systematic coordination of the mission-command approach worked to instill the principle of freedom of action while setting out the boundaries of acceptable subordinate initiative, “[fixing] responsibility and [shaping] commitment at all levels and through all parts of the organism” (p. 156, quoting Boyd). The presiding moral-professional imperatives encoded in paragraphs 6 and 9

of the *Truppenführung* make this linkage clear: “the command of an army and its subordinate units requires leaders capable of judgement, with clear vision and foresight, and the ability to make independent and decisive decisions,” and, likewise, “every leader in every situation must exert himself totally and not avoid responsibility” (Condell & Zabecki, 2001, pp. 17-18).

However, the decisive responsibility of a command must not “be based upon individualism without consideration of the whole, nor used as a justification for failure to carry out orders...Independence of spirit must not become arbitrariness. By contrast independence of action within acceptable boundaries is the key to great success” (p. 18). In this way, the shared vocabulary of tactics embodied in the thousand odd directives of HD 300, an expansive article of doctrine informing, in turn, the conduct of every element of the order of battle, productively mediates a cognitive tension between competing values of responsibility, independence and initiative, subordinated to a shared understanding of the principles underlying the collective effort.

As Naveh (1997) puts it in his chapter on the mythology of the *Blitzkrieg* (a non-doctrinal notion which Naveh argues was ultimately an impediment to sound operations, in part precipitated by the Nazis’ aversion to innovators like Beck), the result was a comprehensive professional basis for criticism of operations at every level of command (pp. 116-117). The clear and succinct statement of directives facilitates the rapid communication of new information, necessitates timely deviations from extant plans and orders, and encourages the undertaking of local initiatives to capitalize on the ambiguities and chance encounters of the battlefield. As Boyd puts it, again citing Blumentritt, the effectiveness of the German C2 system was underwritten by its emphasis on implicit rather than explicit communication and understanding of the requirements of a given mission (p. 158). This model for critical operational and tactical

leadership allowed for “rapid concise assessment of situations, quick decisions and quick execution” according to the principle “each minute ahead of the enemy is an advantage” (Boyd, 2007, p. 78, quoting Blumentritt). By linking different rhythms and patterns within a continuum of collective effort and shared understanding that enhances organizational coordination, the synergistic effect of the mission-command concept is to compress the decision-making reaction time of the attacking system and minimize its friction while simultaneously stretching out the reaction time and maximizing the disorder of the defender’s perceptions and reactions. The shock and dismemberment that results from maximizing this temporal disorder in the adversary’s command apparatus is, in Boyd’s analysis, the desired effect of the *Auftragstaktik*’s fragmentary operational gestalt.

During the early years of WW2, German field commanders were able exploit these organizational reforms, often popularly attributed to blitz warfare, to profound effect during the advance into Poland and France, in the early phases of Operation *Barbarossa* in Russia in June of 1941, in North Africa from 1941-42, and in the counteroffensive in Western Europe in late 1944. Several late 20th century combined arms doctrines for synergising the mobility of armour and the penetrating spatiality of airstrikes adapted a comparable organizing logic: Israel’s successful counter-offensive in 1973, in which the IDF’s armour corps improvised bold offensive maneuvers to produce impressive breakthroughs against Egyptian and Syrian defenses, were likewise patterned on the model of “blitzing”. And though early renditions of Boyd’s seminal “Patterns of Conflict” seminar make no mention of it, the AirLand Battle doctrine, employed by the US Army to devastating effect against Iraq’s Soviet-style formations in the first Gulf War (at the Battle of 73 Easting, for example), would appear to fit with Boyd’s blitz model: indeed, Boyd’s insistence on intellectual development of military professionals over the material

superiority of forces was influential enough within post-Vietnam debates around doctrine that his insights were incorporated into an improved edition of FM 100-5 for *Operations* as an update to the AirLand Battle concept in 1986 (Osinga, 2006, pp. 49–50). And while FM 100-5 has long since obsolesced with the adoption of the principles of joint warfare and multi-domain battle, many NATO armies (among them the American, British, Canadian and Dutch) continue to adopt a mission-command approach to the PME of field grade officers and the institutionalization of doctrine.

While Naveh's research on operational theory reveres the ingenuity embodied in HD-300, and the critical reflexes that Boyd's theoretical discourse aims to prime and condition, Naveh's pointed intervention into the knowledge production rituals of military planning assumes that the strategic paradigm within which doctrinal approaches to warfare are conceived eventually trends towards regression, lapsing into counterproductive dogma and obsolescence. His preface to a 1995 article recommending major reforms to both PME and strategic doctrine in the IDF quotes J.F.C. Fuller's (1993) *Foundation of the Science of War*, a seminal interbellum work on the importance of tactical innovation for the effective use of armour, to impress this point: "the central idea of an army is known as its doctrine...in its ultimate relationship to the human understanding this central idea...is nothing else than common sense – that is, action adapted to circumstances. In itself, the danger of doctrine is that it is apt to ossify into a dogma" (Naveh, 1995, p. 168, quoting Fuller). Because a mission-command approach to planning operations "centers on conforming to the obliging doctrine," for example, planners' "ability to introduce substantial changes that will comply with the contextual characteristics is limited to the adaptation of existing conventions and formal patterns" (Naveh et al., 2009, p. 90). As a generalized knowledge of pre-existing forms communicated in the terms intelligible to a shared

common sense, the cognitive default to established doctrine also tends to pre-define missions as a “consequential logic to be attained by certain forms of action” (p. 89). In Naveh’s pointed criticism of the persistence of the paradigm of industrial warfare, the ordering schemas of the military state apparatus entrenches this consequential logic as a kind of organizational dogma, condensing the common-sense military-institutional understanding of the Newtonian battlefield into strategic and professional conceits that tend to reinforce uncontested assumptions about the involved military systems, be they internal, friendly or adversary. And while Naveh’s intervention in the IDF’s strategic paradigm at the end of the last century faults Israel’s overdependence on its armoured corps and the assumptions of offensive doctrine it reinforced, the doctrinal logic of the military state apparatus he describes can be abstracted to other rituals of military decision making. Indeed, we can arguably observe a general patterning of linear, causal logic in the doctrinal common sense that informs the strategic thought, operational planning and tactical execution of most conventional military forces in the West.

Planning and linearity

A prime example of linear doctrine for operational planning is the US Army’s Military Decision-Making Process (MDMP), which in theory (though evidently less in practice) favours the hierarchical MADACAP protocol for developing mission orders: Receive *Mission*, Conduct *Mission Analysis*, COA *Development*, COA *Analysis*, COA *Comparison*, COA *Approval*, Orders *Production* (see fig. 5). Conventional operations planning, in the pattern of MDMP, imposes a hierarchical ordering whereby a given operation is conceptualized according to a fixed rationalization of strategy, planned in linear sequence, and executed as parallel, synchronic movements both across and down the chains of command. Receipt of Mission from a higher authority alerts participants to the general facts of impending operations, indicating the relevant

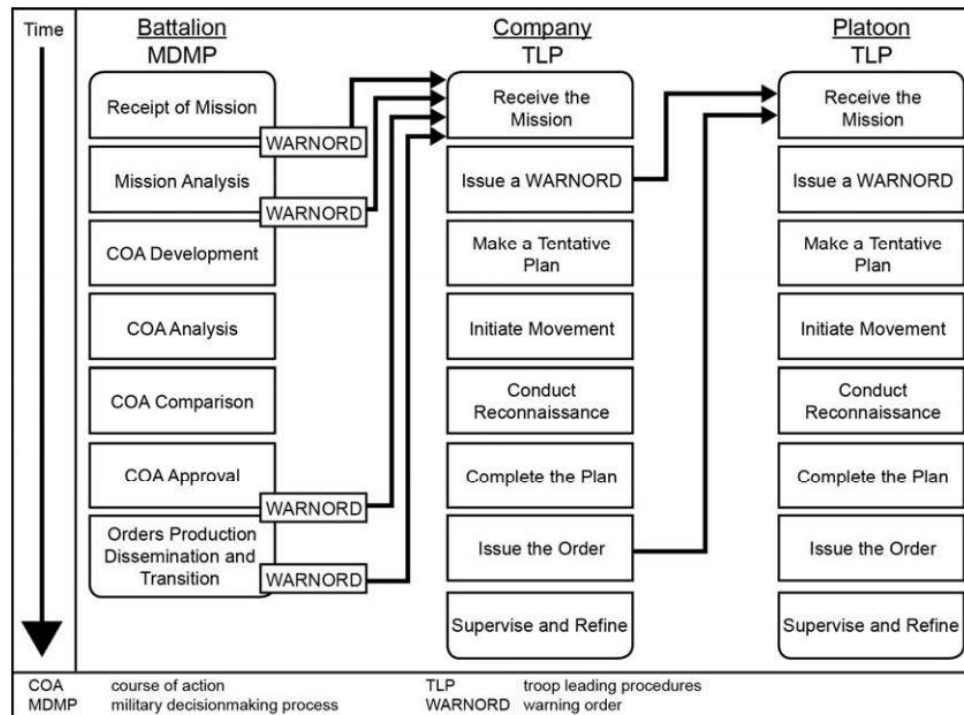
timelines, geographies and extant plans and orders issuing from headquarters (US Army, 2010, pp. B4–B5). This initial phase principally identifies planning requirements and time constraints. Staff develop running estimates of operational considerations relevant to various staff functions (e.g., information on friendly and opposing forces, logistical issues and resource constraints, civil and humanitarian considerations, etc.). Receipt of this initial guidance requires the commander to issue a warning order to subordinates and supporting units outlining the generalities of the operation and any instructions for initiating movement or reconnaissance.

The Mission Analysis phase begins to identify the “what” which the operation is to accomplish and the specifics of “when” and “where” the operation is to take place. This process also aims to concretize an understanding of the strategic rationale for the operation – the “why” – which is closely tied to command’s reckoning with the strategic and tactical problems implied by the mission (p. B6). The analysis phase is information-intensive and aims to generate a series of key outputs that synthesize the extant knowledge of the operating environment, friendly and adversary forces, and mission requirements. It also aims to produce a thematic rationale for the operation and to develop supporting messaging to impress those themes as serviceable imperatives linked to concrete tasks undertaken by involved actors. Staff gather critical facts and develop assumptions that estimate the current situation and presuppose future events to identify decisive issues for command. They likewise analyze orders to determine the specified, implied and essential tasks required to accomplish the mission and ensure continuity and stability in its aftermath. Planners produce an initial Intelligence Preparation of the Battlefield (IPB) to ground situational understanding of the terrain and the threats that reside in it. The IPB identifies potential enemy COAs, high value targets, civil considerations and gaps in the intelligence picture that require further inquiry and clarification. An ISR (Intelligence, Surveillance,

Reconnaissance) synchronization table is developed to aid staff in managing the various information requirements to maximize the efficient use of time and resources.

Figure 5

Parallel sequences of the MDMP and troop leading procedures



Note. From *Commander and Staff Organization and Operations* (FM 6-0, p. 10-1), by the Department of the Army, 2020. Public domain.

In this phase, commanders and staff begin to coordinate their messaging around a “unifying or dominant idea or image that expresses the purpose for military action” (B-11). These information themes are “overarching” and apply to public relations, psychological operations and both officer and soldier engagements. Messages can be verbal, written or electronic and are conceived with actors whose perceptions matter to the success of the operation in mind. The aim of this messaging is to provide supporting rationales focused on specific actors and actions. Overarching these themes, the chief of staff develops a summary mission statement that consolidates the organization’s essential tasks into clear, unit-specific directives (see fig. 6).

The mission statement draws from doctrinally approved tasks described in the combined arms field manuals and should stick to activities performed in tactical operations or maneuvers. Finally, this process culminates in a comprehensive mission analysis briefing which provides a forum for exhaustive analysis of the gathered materials and operating assumptions. The commander issues a statement of intent that summarizes their visualization of the operation's purpose and its desired end-state, alongside planning guidance that outlines the general actions that will create this end-state through battlefield actions and the outlines of specific COAs that the commander intends for staff to explore in planning. The warning order issued on completion of this phase contains the mission statement, commander's intent, details for task organization, a schematic of the area of operations, and guidance on acceptable risks: it will broadly describe "when, where and how the commander intends to deploy combat power to accomplish the mission within the higher commander's intent" (B-13).

Figure 6

Missions statement for a phased operation

Example. 1-509th Parachute Infantry Regiment (**who**) seizes (**what/task**) JACKSON INTERNATIONAL AIRPORT (**where**) not later than D-day, H+3 (**when**) to allow follow-on forces to air-land into AO SPARTAN (**why/purpose**). On order (**when**), secure (**what/task**) OBJECTIVE GOLD (**where**) to prevent the 2d Pandor Guards Brigade from crossing the BLUE RIVER and disrupting operations in AO SPARTAN (**why/purpose**).

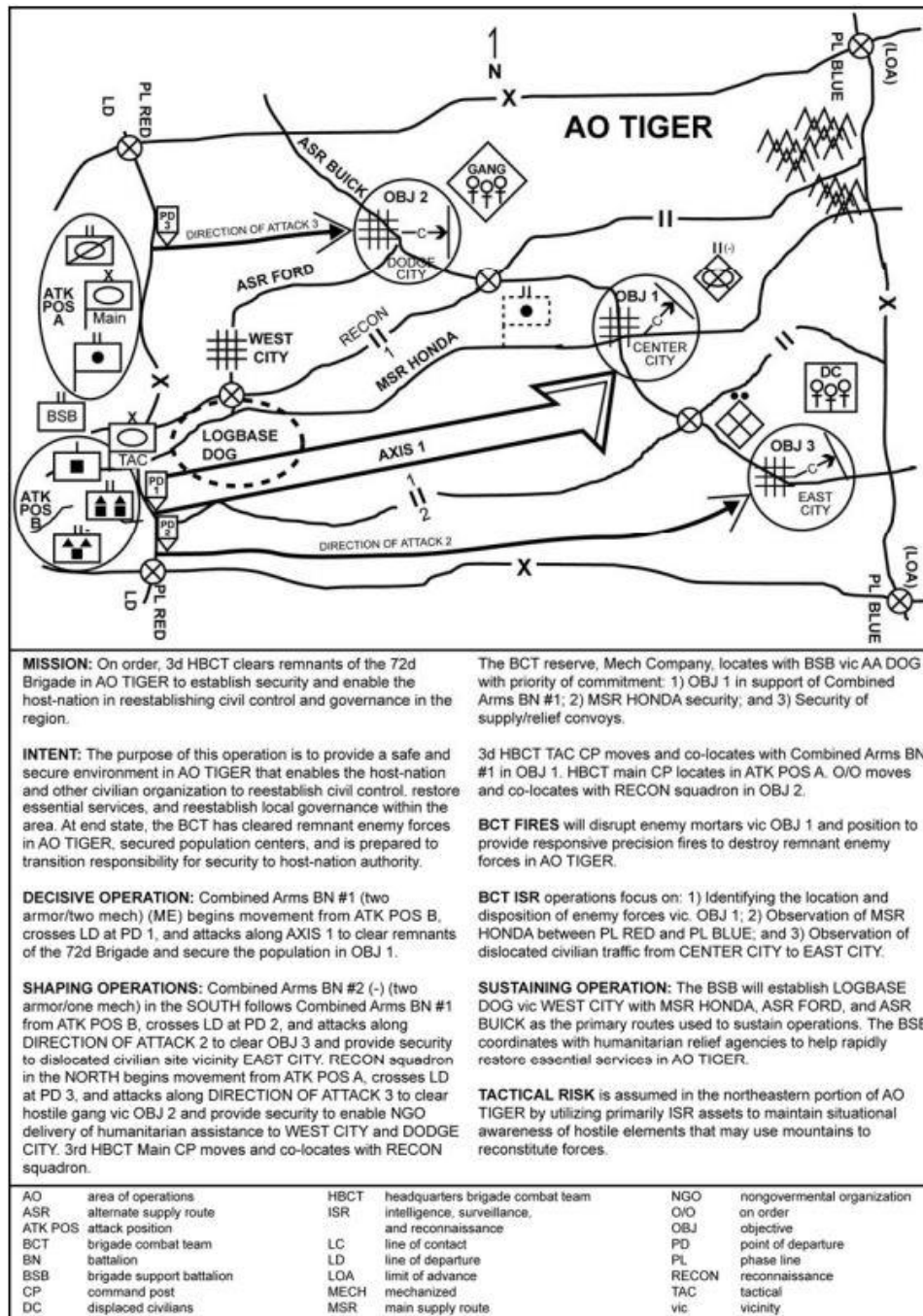
Note. From *The Operations Process* (FM 5-0, p. B-12), by the Department of the Army, 2010. Public domain.

The ensuing four phases (COA Development, Analysis, Comparison, and Approval) aim to translate the broad concepts developed in the proceeding steps into a clearly defined program for the application of operational efforts. Comparably information-intensive, these phases commence with COA Development, which translates the broad concepts into narrative and

graphic forms that describe plausible actions, identify risks and define restraints (see fig. 6).

COA statements and sketches express how the combined arms concept will be conducted, how

Figure 7
Sample brigade COA sketch



Note. From *The Operations Process* (FM 5-0, p. B-20), by the Department of the Army, 2010. Public domain.

defensive and offensive efforts maintain conditions for the mission's accomplishment, and illustrate movement, maneuver and positioning of forces. The proposed COAs must also elaborate on how the decisive operation accomplishes the mission, how shaping operations and stability tasks are accounted for. The Analysis phase then delegates the task of wargaming potential COAs. Differing roles are assigned to the assistant chiefs of staff and the executive officer determines the wargaming methodology appropriate to the nature of the operation. The key outputs of this phase are refined impressions of potential COAs and conceptual diagrams or matrixes for decision support and synchronization of key operational tasks. Comparison and Approval complete the selection process. These last steps aim to produce a clear, decisive Concept of Operations (CONOPS) in a final COA statement and COA sketch (see fig. 7) that provides the overlay for the implementation of the operation. Orders are then produced and issued alongside supporting information, with subordinates immediately confirming their receipt.

Critics charge that processes like the MDMP (or NATO's Operational Planning Process) tend towards a thoroughgoing bureaucratization of military planning and decision making. While the MDMP allows for abbreviation depending on the timeline, the intensity of the information requirements nonetheless tends to direct an inordinate amount of labour and resources towards producing and analyzing briefing materials, which locks the planning process into technical rationalizations of command imperatives (Martin, 2015). The effect of this is to arguably "situate the estimate," as a common military saying jibes, rationalizing decisions by reverse-engineering justifications. One SAMS instructor, US Army LTC Grant Martin, who ran concurrent exercises to compare the effectiveness of the MDMP against less linear military design methods like Army Design Model (ADM), observed that teams who applied the MDMP during the Robin Sage portion of the Special Forces Qualification Course in 2012 were drawn to a kind of ideational

hubris that confused their planning efforts. Teams that applied MDMP exclusively in planning tended to accept and mimic the assumptions of headquarters without questioning the logic behind the orders, which meant that they struggled to articulate the logic and intent behind the infiltration and training missions they were tasked with. This was doubly the case for the non-commissioned officers who weren't engaged in the teams' planning process by design according to MDMP protocols. Their briefings often exceeded 100 slides. The intelligence analyses developed in the planning phase simply copied IPBs received from headquarters. War games during the analysis phase focused nearly exclusively on engaging the enemy to the neglect of neutral and civilian actors. Proposed COAs hinged on either leading or organizing guerilla forces directly. Most damningly, the transmissive reception of headquarters' mission themes and priorities reproduced unhelpful assumptions about the conflict environment:

All teams and the vast majority of members assumed they would have to win the hearts and minds of the people, and that the guerillas would have to do likewise; that the guerillas local interests naturally aligned with those of the larger shadow government; and that everyone's interests naturally aligned with those of the United States. (p. 46)

In simulated field exercises, the MDMP teams struggled to develop rapport with local guerillas, had trouble figuring out what was happening in their sectors and refused to adjust their assumptions when confronted with contrary information.

The implications of LTC Martin's observations are that conventional planning tends to be carried along by an organizational inertia that is oblivious to social dynamics of the conflict environment which are properly the concern of strategic deliberation in the context of unconventional warfare. These are the kinds of conceptual failures of a technical military rationality that military design models like SOD and ADM were conceived to overcome. As a counter to these organizational failures of critical thought and reflexive practice, Martin advocates for more loosely structured approaches to operational planning that foster both an

agnostic disposition towards reductive, doctrinally-sanctioned rationalizations of a given mission and appreciation for the irreducible complexity of a mission's strategic context.

Naveh's argument about planning and doctrine, however, pushes much further than Martin's cautious agnosticism, aiming to systemize skepticism towards the authority of official military knowledge to support the emancipation of military practitioners from a paradigmatic military-technical rationalizations. Where Naveh et al. (2009) observes that the sense-making rituals of planning lock command into technical rationalizations of its decision-making, he does so in order to agitate for heretical practices that challenge the authority of doctrine itself. To take Naveh's premise as an abductive hypothesis, the system of ideas encapsulated in and reproduced by processes like MDMP appears to reinforce the interiorizing of military planning and analysis which idealizes military actions as expressions of its idealized forms. The organizational process tends to prioritize internal consistency over appreciation for contingency. The operationalization of these forms in a probabilistic field of action plays out in kind of perpetual present, unfolding in line with the command relations undergirding the organizing logic of the planning process. Emerging information is only relevant to operational command insofar as that information confirms or disconfirms an initiatives' accordance with the logic of the plan, measuring degrees of resistance and opposition, moving laterally between the echelons of command only as a bureaucratic transfer of information. The emergence of gaps between the plan and the evident transformation of the battlespace as a result of logistical friction or contact with the enemy requires only supervision and refinement at the company and platoon level to verify the conformance of actions and results with the conditions defined by the logic of the mission.

Constructed this way, the (logical, rational) prioritization of organizational consistency and mechanical effectiveness that is endemic to the mission-command concept directs an inward

focus that tends to view the unique, dynamic contingencies of an active operation “through the lenses of existing institutional knowledge and doctrinal patterns” (p. 68). This organizational mindset tends to apply doctrinal protocols like MDMP to wildly dissimilar contexts: the planning of a dangerous, strategically sensitive armed campaign, for example, follows the same doctrinal template that applies for planning the renovation of a campus museum (Beaulieu-B. & Dufort, 2017b, p. 6). A natural outgrowth of the kind of military thinking that crystalized in the industrial milieu of the interwar period, Naveh argues that the self-confirming *telos* of these formal procedures enhances the prerogative of a pervasive, all-powerful command function that impedes the development of reflexive approaches better suited to the aberrant, non-conventional forms of conflict that predominate in the contemporary period. As Martin van Creveld’s seminal *Command in War* frames it, the birth of the Cold War professional army and the tremendous inflation of attendant staff induces the risk of the bureaucracy of command becoming an end unto itself (pp. 3-5). While Naveh’s construction of that teleology arguably fringes towards an abstraction of that process which affects a comparable idealization of its form, it is this teleology of strategy, communication and command which SOD takes as the subject of its martial art of deconstruction.

Chapter 7: “Everything Flows”: cosmology for emergent operations

In the same dense set of improbable footnotes that Naveh (2007) cites Tschumi, Deleuze and Guattari, Lefebvre and DeLanda as theoretical references for situating his “nomadological” concept of generalship, he references *The Songlines*, a work of literary non-fiction reflecting on Bruce Chatwin’s (1988) travel research on nomadic peoples (p. 41). *The Songlines* is a non-fiction travel narrative that centers the ethnogeological practices of indigenous groups in the Australian outback. The novel narrates Chatwin’s own movements in the outback in the late 1980s between palimpsestic reflections on literary, anthropological and philosophical texts from across the Western and non-Western canon. The juxtaposition of literal and cultural narratives enables Chatwin to develop an implicit, para-academic genealogy of the development of human language and civilization (and, indeed, the military state) that traces its emergence and sophistication through indigenous people of Australia’s practice of coding space and territory by creating songlines (pp. 203-204). While the reference is only a brief footnote, Naveh argues the novel illustrates the Deleuzian principle of nomadology: space is a “temporal emergence defined relatively by movement” (p. 41). The notion that space and concepts of territory are transitory, and that they are defined provisionally through movement and situated experience, is a fundament of the Naveh school’s thinking on the temporospatial nature of war and human conflict. It is also arguably a fundament of the Naveh school’s literary practice.

As Chatwin’s travel companion and mediator, Arkady, describes it in the opening chapters of the novel, a songline is a “map and a direction finder” (p. 13). In a brief capitulation of the poetic logic of the songline (which Chatwin explicitly connects to the concept of *poiesis*) Arkady describes how the aboriginal travellers’ act of “singing up the land” ties geographic features of the landscape to the mnemonic devices of song in a way that imparts a communicable

meaning, history and provenance to that geography (pp. 13-14). Once sung (i.e., once a song is composed as an oral mnemonic and can be recalled), the songline is passed down through ancestral lines, and assumes a narrative legitimacy that ties a shared mythological imaginary to the negotiation of kinship with the land and other people in shared and contested spaces. As Chatwin tells it, a songline sings a place into being in the sense that it makes the land tangible to a shared imaginary of meaning and spatial recognition: “Aboriginals could not believe the country existed until they could see and sing it – just as, in the Dreamtime, the country had not existed until the ancestors sang it” (p. 14). The inference Chatwin draws from this cursory introduction to the songlines is that for the land to exist, it must be perceived. It follows that the songline is a potent creative medium for infusing space with dynamic meaning in a culture where knowledge and social memory (and with it, knowledge of morality, territory, etc.) is produced and shared orally. As he often does over the course of the novel, Chatwin realigns the concept with the Western canon to make it palpable to a Western imaginary: “one should perhaps visualize the Songlines as a spaghetti of Iliads and Odysseys, writhing this way and that, in which every ‘episode’ was readable in terms of geology” (p. 13). The impression this dialogue with Arkady produces (upon which Chatwin’s narration significantly elaborates over the remainder of novel) is one in which the itinerant character of human inhabitation of the earth is a boon to the production of dynamic social meaning. In other words, the songlines are a potent vector for the production and dissemination of knowledge of contingent aspects of the terrain in which humans not only eek out survival, but imbue their inhabitation of space with profound meaning.

The principal idea that emerges from this short discourse is that the Aboriginal songline ties the itinerant act of traversing space (the songline is, in part, a narrative of territorial history

engendered by the traveller's "relative movement" over an otherwise undefined space) to narrative in a way that makes their inhabitation of the land "hang together" within a comprehensible (if changeable) whole. Their narrative practice encodes episodic and semantic memory in a way that ties their movement through space to a universe of inhabitation and kinship. Those territorial codes are birthed by the act of naming and renewed by the act of traversing a songline.

The reference to Chatwin in *Operational Art and the IDF* implicitly foregrounds the cosmological underpinnings of nomadic forms of sense-making and their significance in conceptualizing the emergent nature of space and territory. The narrative practices detailed in *The Songlines* (which include Chatwin's travel narrative as much as those of the songlines themselves) project order and continuity over the universe through the work of making patterns of meaning from seemingly random dispersions of spaces and events. Extrapolating from Weick's work on the pattern-seeking underpinnings of most organizational sense-making practices, we may understand that *The Songlines* is a work of cosmology that generates an inventory of concepts of the nature and propensities of the universe (i.e., time, space, change) from localized perspectives on contingent events (Weick, 1993b). And like Chatwin's novel, Naveh's underlying theory of the creative agency of general officers encourages its ideal readership to seek deep significance in observed trends and emergent tendencies as they concern time, space, change, and the contingency of events. The significance of the reference is that, instead of totalizing knowledge in the mode of the military state's Newtonian conception of space, it aims to produce changeable conditions for learning from the situated knowledge engendered by the "relative movement" of martial agents in a conflict environment.

While Naveh does not cite Weick in either the *Prolegomena* or *Operational Art and the IDF*, Naveh's criticism of the military state's tendency towards interiorizing knowledge-power relations (see previous chapter) is grounded in a philosophical worldview that assumes a comparable cosmological agency to Chatwin's in the work of strategy-making for emergent operations. Pushing back against representational tendencies that arguably come as first nature to military planning and the highly specialized distribution of functions and offices typical of military hierarchy, SOD agitates for a reordering of the relationship between critical inquiry and military planning in order to transform the epistemological grounding of military learning and practice. When the evolution of the strategic environment induces crises of organizational meaning and purpose, the conceptual models that inform martial thought and behaviour must be productively unsettled to stay ahead of that evolution. Once again, the essence of warfare is to betray its ideal models (see discussion of Francois Jullien in chapter 1). As Naveh et al. (2009) tells it, the fundamentals of military planning, which include most conventional formats for reporting mission adjustments, resource requirements, the success or failure of initiatives, fall short of satisfying the epistemological requirements of adaptive learning insofar as they fail to aid strategists and operators in appreciating the emergence or "becoming" of the strategic ecology of the battlespace (pp. 98-99). Like Karl Weick (1993) and DeLillo's Richard Elster, the *Prolegomena* treats reality as something that is "accomplished" by the perceiver who works the given materials of events over to create order and temporal sense of their significance within a broader system of emergence (p. 635). This chapter and the following unpack how Naveh conceives of knowledge production through cosmology as a means of sharpening martial agility and intuition of strategic potential. The first of these essays largely situates these knowledge

practices are informed by systems theory, where the second takes them up in light of literary theory and narrative practice.

Elevating Heraclitus' (2001) axiom "everything flows" to the level of *logos*, SOD conceives of flux and systemic variability as an irreducible condition of armed conflict (Naveh et al., 2009, p. 68). Assuming a meta-perspective of exteriority that discerns a kind of demiurge in the continuous transformation of the conflict environment and the systemic interactions which drive those transformations forward, SOD empowers operators and strategist to compose a cosmology of events and the forces driving them: it aims to liberate warfighters to "reinterpret the order of things" by imparting the "freedom to change the conditions and/or theory of learning" (Graicer, 2017b, pp. 28–29). More recent version of SOD's design praxis assumes the inevitability of conceptual "drift": the idea is that gaps continuously breach between perception of the world and the world itself. The task of operational design in Naveh's formulation is to mediate between institutional understandings of the strategic situation (the framing of the involved systems, the perception of the world those frames impart) and the emergence of a novel strategic ecology through operational intervention (the actualization of strategy by acting in the world, through operations). In essence, SOD seeks to formalize a comprehensive theoretical bases for martial learning (organizational cognition of the *logos* of systemic change) to accord with the transitive unfolding of operations in space and time (cognitive transitioning of operators following the *morphos* of operational emergence) (pp. 82-83).

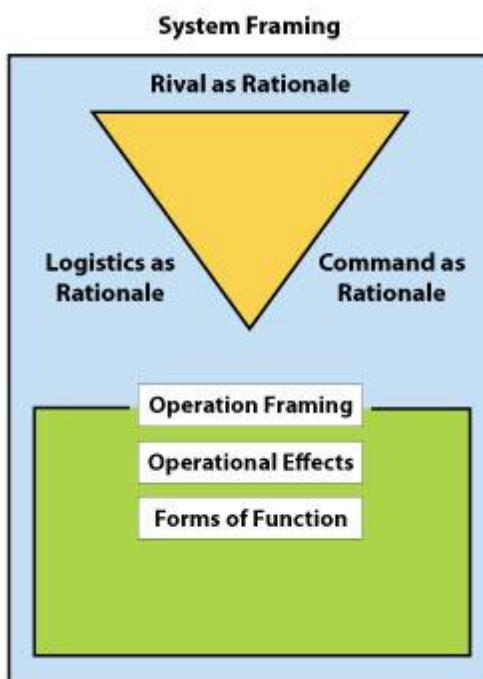
SOD as dialectic

Instead of linear, hierarchical analysis directed towards accomplishing an idealized end-state, SOD's earliest iterations modelled a process of creative interpretation that defines interrelated tensions between the elements of rivaling but interrelated systems in order to exploit

those tensions (Lauder, 2007; Sorrells et al., 2005). Capitalizing on the insights of systems theory, the design process is “based upon the principal that the problem-space is dynamic and adapts to inputs to the system” (Lauder, 2007). SOD’s bounding of the problem-space produces an “artificial construction that allows freedom for the designer to consider all those elements of a system deemed pertinent to the issue under consideration” (Sorrells et al., 2005, p. 17).

“Acknowledging that the boundaries of an open system are contrived by an observer for a specific purpose,” the design process requires that designers map the relationships between involved systems in order to define the problem the operation engages (p. 17). Thinking about the problem is only limited “by the designer’s ability to cognitively map a dynamic and complex system” (p. 17). Construction of the system is only constrained by the observer’s imagination, and they are given wide latitude to consider all its relevant elements.

Figure 8
Systemic Operational Design



Note. From *Systemic Operational Design: Freeing Operational Planning from the Shackles of Linearity*, by M. Lauder, 2007, Defence Research and Development Canada. Copyright 2007 by Defence Research and Development Canada.

Early iterations of SOD sought to reconfigure the relationship between intelligence, strategy-making and operational planning by agitating for “heretical” approaches to strategic and tactical problems. In the place of analysis of discrete “facts” of the battlefield in the mode of operational planning, SOD’s first-generation model emphasized a holistic process of design synthesis organized around seven discourses or “framed discussions” which feed into one another in an iterative, recursive sequence (see fig. 8). We may understand the discourse of framing “is dialectical in that the planners systematically investigate the nuances of the problem-space, seeking to expose falsehoods and truth through the stages of thesis, anti-thesis, and synthesis” (Lauder, 2007). Unfolding a dialectics of logic and form, the process of discursive framing aimed to transform abstract notions into concrete understandings, facilitating cognitive movement between institutional functions, operational problems and the material and ideological orientations of the involved system by foregrounding issues of “bordering, perspective and depth of field” (Graicer, 2017b, p. 25). This process allowed designers to map out potential for transformation of strategic conditions through “antithetical interventions” posed within a dialectical continuum engaged by the process of discursive framing (Naveh et al., 2007, p. 84). Likewise, the antithetical logic of intervention which advances the creative design synthesis claims a bold prerogative to depart from received strategic directives. In this fashion, SOD refines “the art of critical movement between cognitive frames” (Graicer, 2017b, p. 25).

The theoretical underpinning of SOD’s earliest iterations of design praxis was general systems theory. SOD aimed to capitalize on the principle that the input of energy into a system produces unpredictable effects within that system (Sorrells et al., 2005, pp. 55-57). Systems theory assumes that any change within a system will produce second and third order effects that complicate and multiply the consequences of a given event or action, making it impossible for an

agent acting within a system to do just one thing at any given moment. Since war is a non-linear event in which multiple rivaling systems compete for dominance in a flurry of charged interactions, it follows that “no single formula, methodology or capability can predict outcomes or guarantee victory” and that no patterning of doctrine can guarantee an effective COA at the operational level (p. 59). Rather, the dynamic contingency of battlefield events favours an adaptive framework for both the investigation of friction and for assessing and acting on evolving intelligence.

OTRI’s earliest experiments with SOD produced a focus on operational art that emphasized insight into the perceptions and cognitions of rivalling system in order to inform the organization of a maneuvering system. These early iterations of that model conceived of the input of energy into the conflict system in comparable terms, fostering an abiding focus on the tactical, conceptual and logistical implications of organizing a maneuver force for combat operations, as typified by the design artefact documenting the planning of the Balata raid. While SOD eventually turned its focus inward to emphasize the disruption of the organizational relations of the blue force, rather than the red, SOD’s earliest models idealized armed intervention, and the expenditure of energy implies as a principle means of engaging an inquiry and generating meaningful feedback on the strategic environment. The primacy of organized violence is arguably irreducible within the concept of both a national defense organization or a multinational force, whether that force is engaged in counterterrorism maneuvers or peacekeeping operations. As such, SOD presumes that a defense organization is part of the system of emergence within which armed conflict is realized and aims to transform that space through armed intervention that are nevertheless complementary to the contingent nature of that emergence.

Operation Palliser

In its earliest incarnation, SOD championed the strategic raid as a model for exploring the iterative dynamics of battlefield emergence. SOD's concept of the strategic raid differs significantly from doctrinal definitions like that of the DOD's *Dictionary of Military Terms*, which defines a raid as "an operation to temporarily seize an area in order to secure information, confuse an adversary, capture personnel or equipment, or to destroy a capability culminating with a planned withdrawal" ("Strategic Raid," 2016). Instead, SOD conceives the strategic raid as an injection of energy into the conflict system with the intent of affecting change, providing an opportunity for learning more about the threat environment and its potential interactions. In essence, a strategic raid is undertaken to enhance and complexify an intelligence picture of the involved systems. Exploiting the contingencies of the operating environment to test the propensities of the involved systems, a strategic raid plays a "critical role in informing the conduct of future operations after an opportunity to conduct learning has occurred" (Sorrells et al., 2005, p. 22). The purpose of a strategic raid may simply be to cause the rival system to reveal their form, unmasking "intent and tactical form for achieving intent," as was the case with both the British intervention in Sierra Leone in May of 2000 and the Balata raid in 2002 (p. 21). But whatever the strategic objectives of the political leadership viz. the overall campaign, a strategic raid operates under assumption that "the presence of one's own forces sees them increasingly form part of the system" (p. 22).

The Sierra Leone intervention is often presented as a textbook example of what a strategic raid is conceived to accomplish. The near collapse of the United Nations Mission in Sierra Leone in the spring of 2000 put pressure on the British government to evacuate diplomatic and humanitarian personnel from its former colony, to secure its capital, Freetown, and to

recover hundreds of UN soldiers who had been captured by Foday Sankoh's Revolutionary United Front (RUF), which was consolidating control over large areas of the country in defiance of the Lomé convention. However, the British cabinet lacked the intelligence picture required to develop coherent directives for operational intervention. The government dispatched an Operational Reconnaissance and Liaison Team (ORLT) to the British High Commission in Freetown to make a rapid assessment of the military situation and provide recommendations to joint headquarters and onwards up the chain to cabinet (Dorman, 2009, pp. 72–83). The evacuation mission took priority, with the limited options coalescing around an airlift from Lungi airport outside Freetown, the only serviceable airfield beyond RUF control.

On May 6th, the West African monitoring force ECOMOG lost control of the route between Freetown and Lungi, prompting fears of a UN withdrawal from the country. Whitehall delegated the ORLT and the High Commissioner the authority to begin an operation, which would be codenamed *Palliser* (Ucko, 2016, p. 853). However, the intelligence picture of the situation on the ground remained tenuous. Elements from 1 and 2 PARA battalions, deployed to a forward mounting base in Senegal, launched a raid on May 7th with the objectives of seizing the airport and establishing a staging area inside the city proper. A company sized force seized the airfield in a tactical landing at sunset and set up a perimeter to keep RUF artillery out of range. A complementary force from 1 PARA secured critical areas inside Freetown the following morning, arresting the escalating violence around the capital and encouraging entitled UN personnel to weather the deescalating civil tensions. After an amphibious commando group arrived with reinforcements on May 17th, the RUF pressed an assault on Lungi field which was repelled, resulting in an RUF withdrawal from the area (Prins, 2002, p. 203). Aerial and long-range recon elements were then employed to enhance the command perspective on the intentions

and capabilities of the RUF, which was buttressed by signal intercepts by Sierra Leone's land forces who exploited the RUF's poor communications discipline in a sophisticated psychological warfare operation (Dorman, 2009, pp. 93–94; Prins, 2002, pp. 205–207). The improved security situation generated a set of new options for transforming the political situation in the country and renewing the faltering peace process.

It would be a mistake to credit Operation *Palliser* for winning the peace in Sierra Leone, as if the rapid deployment decisively resolved the political and social crises which produced the long-simmering conflict. Taken alone, the operation did not instate the political conditions to end the war. The RUF's strategic centers of gravity were unaffected by *Palliser* and the group continued to draw support from the diamond trade with Charles Taylor's regime in neighbouring Liberia (Ucko, 2016, pp. 862–863). There were major setbacks in the coming months, most notably the kidnapping of 11 Irish Rangers by the West Side Boys militia that resulted in the dramatic rescue operation *Barras*, but also a renewed RUF offensive in the north in the fall of 2000 which displaced thousands of people. A series of phased operations, notably *Basilica* and *Silkman*, coordinated with neighboring states with capable armies, were required to transform Sierra Leone's troops into a maneuver force for the UN mission, to cut off the RUF's supply routes, and isolate Liberia politically. In the longer term, robust domestic reforms were undertaken to address the post-Cold War "crisis of the patrimonial state" which had produced the conditions for conflict in the first place (Prins, 2002, p. 193). The charge of mission creep surely resonates with the expansion of strategic priorities after the initial operation. However, *Palliser*'s limited intervention generated a rapid infusion of the information needed to orient a coherent, multifaceted approach for staging efficacious operations inside a fraught environment. Guided by this evolving informational picture, informed by situated knowledge of the effects of the raiding

initiatives within the conflict environment, the allied forces of the UN mission were better equipped to make strategic decisions aimed at resetting the peace process. And in this capacity the *Palliser* raid was a success: it generated a set of options that were unknowable from the strategic vantage of planners at the outset of the mission. And while the operation predates the earliest operational applications of SOD by a handful of years, its rendition of the strategic raid nonetheless demonstrates the kind of systemic efficacy to which SOD's pedagogy of active military learning attains to.

Constructing a logic of exteriority by design

As SOD evolved, it came to foreground the cosmological mediation of operational space and strategic time via the production of artefactual narratives. Conceptualizing time as an iterative, multifaceted, event-driven process was seen as crucial to actualizing unrealized systemic potential: the construction of time and space as unique systemic variables that could be apprehended in different terms from different situated contexts fostered incredulity towards the implicit teleologies of strategic idealism embodied in the prevailing planning paradigm. By directing critical focus towards the organizational sensemaking process, SOD emphasizes the multiplicity of an emergent conflict system and aims to actively construct a means of understanding and acting within it. By formalizing systemic framing as the epistemological vehicle for conceptualizing the interactions of the variable elements of an evolving conflict system, SOD encouraged the refusal of conventional rationales for planning ops that mandate the planning of campaigns from beginnings through specified strategic end-states. To counter this assumed teleology, SOD favours an iterative approach that capitalizes on the potential of drift, (i.e., the idea that action-induced changes within the operating environment will overturn many of the assumptions embedded in the initial theory of action). Accordingly, the resolution of an

effective program for operational intervention necessitates the development of an adaptive conceptual schema (i.e., an aesthetics) capable of mediating the emergent ecology of the battlespace to planners, commanders and tacticians. These schematics may not necessarily specify ends so much as they direct organizational focus towards generating strategic attractors, the means of which function to displace the centers of gravity which moor the abiding strategic focus of the rivaling systems, projecting a kind of destabilizing dialectic that ideally resolves into a more peaceable future equilibrium, rather than idealizing a terminating strategic objective (Naveh, 2005). Naveh's retelling of the planning of the Balata raid arguably presumes a comparable logic: the change in strategic conditions the raid aims to induce does not aim to instate peace by quelling armed resistance. It simply changes the relations of the systems so that the blue force retains a cognitive advantage in decision-making and can more effectively anticipate emergent threats in the strategic environment.

Unsurprisingly, the integration of adaptive learning systems into military hierarchies complicates the political organization of those hierarchies, which is a complication that SOD's design praxis actively agitates for. Levelling command hierarchies to facilitate frank and open discourse, the design process seeks to foster "supportive group interaction" as a framework for learning, adaptation and the transference of collective knowledge (Lauder, 2007). The operational designers (i.e., the involved staff and command officers) commit themselves to candid, democratic discourse that is supportive of divergent thinking in order to maximize the creative potential of the design process. Insofar as framing discussion facilitates a deliberated, qualitative redistribution of knowledge that fosters subordinates' ability to challenge the epistemological bases for military planning and decision-making, SOD attempts to transform the

traditional asymmetry of information that defines relationships between subordinates and superiors, and attempts to redefine the political relationship between planners and commanders.

In short, SOD promotes a mode of organizational functioning that privileges the expression of conceptual subversion and heresy as a kind of complementary counter to the idealism of mission-oriented planning (Naveh et al., 2009, p. 72). Operational mediation requires that designers question the relevance of the established institutional paradigm, examine the compatibility of extant methodologies with the problems implied by the circumstantial context, and develop novel concepts and terminologies relevant to the unique strategic situation (pp. 73-74). Designers “must frame a relevant epistemology, construct a pertinent theory of learning, and develop an appropriate practice of investigation that would enable them to critically appreciate the novelty of the environment they observe” (p. 75). To design effectively, designers “must confront matters that, by definition, reside outside the existing strategic paradigm” (p. 74). The dual requirements of developing an “exterior” meta-cognition of systemic tensions that complements construction of a consistent internal ordering of learning raises practical questions about the methodologies structuring the critical inquiry:

What references, both academic and experiential, would enable [designers] to observe critically the difference between the emerging ecology and existing knowledge? What metaphors would help them lift the cognitive fog screening those variables hidden by the uniqueness of the situation? Which projected perspectives would help them order their inquiry in a manner that unravels the complexity implied by the idiosyncratic context? What approaches would facilitate cognitive bridgeheads for understanding operations in extraneous cultures, eccentric modes of thought, and alien forms of behavior and functioning? (pp. 73-74)

In answering these questions of form and content, practitioners of SOD were encouraged to construct a comprehensive learning system of “theoretical and conceptual artifacts” to facilitate the dialogic framing and reframing of exogenous and endogenous relations between actors engaged by an operation (p. 72). The production of design artifacts generates conceptual

references that function as heuristics for a cyclical, continuous construction/deconstruction of military theory and practice. Implicitly anti-doctrine in both form and practice, design artifacts might take the form of conceptual diagrams, interviews or dialogues, theory papers, narrative reflections, or PowerPoint decks. But whatever their form or content, the key takeaway is that the dialectical play between the artifactual methodologies of inquiry and the conceptual framing facilitated by those artifacts functions to regulate the learning process of designers, “both in the inquiry prior to the operation, and during the operationalization of their initial design” (p. 75).

Where the early models of SOD emphasized disruption of the adversary as an ideal effect of the operational design, a key output of the design process was a conceptual schematic of the systems involved in the problem, a series of heuristic diagrams mediating operational tensions to aid planners in reframing directives for operational intervention, a principle aim of which is to generate what Naveh terms “operational shock” or the “disruption of adversary-as-system” (Naveh, 1997, pp. 16–20). However, this generalization of the aim of effecting operational shock arguably understates the practical implications of producing this effect, of translating a strategic directive to a serviceable task or COA that can exploit the effects of this shock to displace the extant strategic ecology and the systemic relations that sustain it. For Naveh, theory on its own is insufficient without an aesthetics capable of translating an operational concept into practice. A practicable operational concept implies a functional relationship between the products of theorizing (the statements that describe the apparent *logos* ordering systemic interactions) and the necessity of designing actions to test their efficacy (the *morphos* of their expression through actions that condition battlefield emergence). The medium, in other words, is the message. To this end, SOD emphasizes three indispensable requirements of an operational concept that can productively schematize a relationship between context, problem and solution.

First, the concept must be expressible in language that makes it apprehensible as a defined pattern (Graicer, 2017a). Likewise, the concept must be conceivable as a figure (i.e., one must be able to draw it) “since it defines a field of spatial relations” (p. 27). And finally, the concept must have strong, clear name to define it for actors charged with actualizing it. Without these three components to pattern the operational concept, commanders will struggle to communicate to their subordinates “what to do in order to make ‘one’” (p. 27). The previous narrative on the Balata raid and the concept of inverse geometry demonstrates how a developed aesthetic that realizes these three elements inflects the design process. For now, it is enough to understand that SOD, by defining the central task of operational planning as the creation of a “single, shared, evolving pattern language, which everyone contributes to and which everyone can use,” fomented a paradigmatic break with the established conventions of collecting, analyzing, presenting and acting on intelligence, embodied in the rituals of military planning and decision-making (p. 27). Between the appreciation of operational drift, the discursive elaboration of systemic tensions, the subversion of command prerogatives, and the promotion of active and explicit cosmology, SOD imparted a loose and evolving formal framework for design praxis, mediating between the work of theorizing about the world and acting in the world; between rationalization and operationalization; between strategy and tactics (Graicer, 2017b). The alien premises of its intervention in the authoritative epistemologies of the military sciences points to the development of a sophisticated aesthetic philosophy that attunes the critical sensibilities of military practitioners to the kinds of representational concerns that preoccupy literary studies.

Chapter 8: Story, Plot, Narrative

Hybrid warfare: cultural narratives of martial resilience

The paradigm of industrial warfare has been significantly complicated by the emergence of highly resilient and adaptable non-state and para-state actors as key players in the global dynamics of armed conflict. While the concept of insurgency is not new, the dynamics of insurgency do not fully account for the ways in which these kinds of actors have proven capable of adapting limited resources to disrupt the strategic designs of better-equipped conventional state adversaries. The Vietnam War is arguably the most famous of this kind of emerging conflict dynamic (Johnson & McCulloch, 2013). Between 1964 and 1975, the Vietnamese Worker's Party orchestrated a combined force of irregular volunteers in tandem with a more conventional army in an anti-imperial struggle to break the US's will in its fight to uphold the Republic of Vietnam, eventually resulting in the historic collapse of the latter. But as LICs become an abiding focus of Western defense organizations after the cold war, these kinds of actors have become less exceptional and more commonplace, exerting a profound influence on the dynamics of global security, complicating the strategic designs of Western defense organizations who are more likely to be constrained by laws, norms and conventions restricting the use of armed force.

Among the more hotly contested of the emerging discourses to qualify these strategic actors is that of hybrid warfare, provisionally defined as "violent conflict utilizing a complex and adaptive organization of regular and irregular forces, means, and behavior across multiple domains to achieve a synergistic effect" (p. 56). The model of hybrid warfare loosely describes an unrestricted expression of armed conflict that blends aspects of conventional and irregular warfare with influence and information operations, and even terrorism and criminality, in order to exploit the norms governing a conventional adversary's perception of the political and moral

boundaries of armed conflict (Fleming, 2011)(Fleming 14-22). These activities may fall below the threshold of war, and may involve the use of force (but also indirect means) by state and non-state organizations that wouldn't usually be recognized as military in nature to pursue strategic ends that would contest norms of international politics (think, for example, of how the Chinese Coast Guard harasses Philippine ships engaged in legal fishing activities in the South China Sea). In essence, hybrid warfare describes an unconventional approach to strategy which emphasizes convergence between a variety of modes and ways of waging armed struggle (Hoffman, 2009b).

As Frank Hoffman describes the concept, the concept of hybrid warfare implies an ongoing collapse of neat distinctions between different modes of armed conflict (p. 35). Hoffman characterizes the hybrid threat in terms of a simultaneous and synergistic application of different forms of conflict at different levels:

instead of separate challengers with fundamentally different approaches (conventional, irregular, or terrorist), we can expect to face competitors who will employ all forms of war and tactics...our greatest challenge in the future will not come from a state that selects one approach but from states or groups that select from the whole menu of tactics and technologies and blend them in innovative ways to meet their own strategic culture, geography, and aims. (pp. 35-36)

The key idea animating Hoffman's concept of hybrid warfare is that this convergence and blurring of ways of waging war centers the strategic, operational and tactical advantages of complex adaptivity in ways that are novel to the 21st century. The idea is that transitively networked assemblages of irregular and conventional forces, state and non-state actors, kinetic and non-kinetic capabilities produce a flexibility and responsiveness that increases the lethality and the tempo of the forces involved, negating the advantages enjoyed by conventional joint forces at all three levels of war. Hoffman observes the effectiveness of the hybrid threat is qualified by their ability to capitalize on the creative potential of a highly diversified and provisional network of forces. That creative diversity enables a hybrid force to confound and

defeat the kinds of rigid hierarchies and doctrinal formulas that arguably come as second nature to the military education of conventional forces. These improvised networks allow for technology transfers that can increase the capabilities of otherwise resource-constrained organizations, enable overmatches against conventional forces, engender a propensity for novelty which enhances the capacity for strategic surprise, and enhances the diversity of situational knowledge of the battlespace. In this way, the hybrid force counteracts many of the advantages afforded to conventional forces by globalization and high levels of economic development in the West.

In summation, approaches to hybrid warfare optimize the coordination and synchronization of different force structures to take advantage of the political, economic and geographical limitations imposed by the involved organizations' social and cultural milieus, and re-organizes them for complex adaptivity in order to capitalize on circumstances unique to their strategic situation. A hybrid force generally takes territorial defense as its primary task (which might include offensive operations of a non-expeditionary nature), which allows it to impress an ideological coherence that links cultural and existential narratives to its defensive goals and deterrent aims. Hybrid actors may only obliquely serve extrinsic, state-defined goals, if at all, and may interact with proxy forces that provide involved states deniability and more flexible options for limiting escalation. The exercise of engaging in hybrid warfare may simply serve the aim of enhancing organizational capabilities, as with Iran's transfer of missile technologies to Houthis in Yemen, transitioning force postures, as was arguably the case with the Russian annexation of Crimea in 2014, or protracting conflict to disrupt the strategic intentions of an overpowerful adversary, as was the case with Hezbollah's war with Israel in southern Lebanon in 2006.

The last of these examples is an emblematic case and has been extensively theorized as an exemplar of the hybrid threat. Hezbollah is a militant Shia political organization which emerged in response to the IDF's invasion of southern Lebanon in 1982. It is funded by Iran, armed by the Revolutionary Guard, and sustained by political support from the Baathist regime in Syria. Its paramilitary wing arguably outclasses the recognized government's armed forces. Its military capabilities are formidable, characterized by a blend of irregular forces and uniformed troops, and both cellular and hierarchical organizational structures. It has proven skilled in the effective application of small arms, IEDs and swarming tactics, high-end combined arms weaponry, including sophisticated anti-tank and anti-ship missiles, alongside more conventional weaponry like medium-range rockets and artillery (Johnson & McCulloch, 2013, pp. 23–24). While its political wing maintains a minority presence in Lebanon's parliament, the party does not hold the reigns of sovereign government, sitting in opposition as part of a bloc of Shia and Christian nationalist parties. Nonetheless, it retains something like political control over Shia-majority areas inside Lebanon, providing social services and security, and its political activities attract considerable support from Lebanese Christians who live in these areas. Crucially, Hezbollah's political endurance is sustained in part by its media and communications network, which affords Hezbollah the ability to impress a narrative coherence which undergirds its cultural claims to political legitimacy as both a historic defender of Lebanon and an exemplar of Islamic revolution.

Military scholars working to clarify the significance of hybrid warfare have argued that Hezbollah's success in the 2006 war resulted from the operational synergy of irregular and conventional tactics (that is, physical and material effects of varied deployments of force) orchestrated to exhaust superior IDF forces by confounding the IDF's strategy and protracting

the conflict (that is, subverting their adversary's cognitive understanding of the conflict and its aims) (pp. 21-25, 49-51). The war broke out after Hezbollah ambushed a border patrol near the village of Zar'it, killing three IDF reservists and capturing two more to use as leverage in treating for prisoners with Israel. The ambush followed on several months of harassing rocket attacks against settlements in northern Israel, one of which destroyed an antennae farm connected to the IDF's northern command center (Matthews, 2006). A Merkava tank crew was killed after striking an anti-tank mine in pursuit of the captives and the IDF launched airstrikes to take out bridges and roadways in southern Lebanon to prevent their escape. The conflict quickly escalated from a limited engagement into open war after IDF Chief of the General Staff Dan Halutz, a former fighter pilot and IAF commander, expanded the aerial campaign, attempting to destroy Hezbollah's rocket forces and other critical strategic assets. The air force ratcheted-up attacks against civilian infrastructure in southern Lebanon and Beirut, including the destruction of the runways at Rafic Hariri international airport, in order to compel the Lebanese government to intervene with Hezbollah. Events quickly escalated out of the IDF's control. The rapid escalation of the conflict coupled with the IDF leadership's unguarded comments about air strikes against civilian targets in Lebanon encouraged Hezbollah's leadership to develop a compelling narrative for a novel adaptive strategy, with secretary-general Hassan Nasrallah exhorting: "You wanted an open war. Let it be an open war. Your government wanted to change the rules of the game. Let the rules of the game change...we are not a regular army, we will not fight like a regular army" (Johnson & McCulloch, 2013, p. 51).

The IDF's considerable advantages in land, sea and air were nullified by the novelty of Hezbollah's operation. The precision strikes characteristic of Israel's burgeoning airpower doctrine of Effects-Based Operations (EBO) failed to disrupt Hezbollah's cohesion as a fighting

force (Vego, 2009, pp. 72–73). EBO aimed to exploit advantages in real-time surveillance and targeting enabled by the IDF's advanced ISR capabilities which would, in theory, facilitate the surgical destruction of critical nodes in Hezbollah's rocket network and in turn precipitate the swift collapse of rocket operations (Hirsch, 2016, p 197). The IAF's decisive success during Operation *Mole Cricket 19* suggests a clear historical precedent for this operational approach. *Mole Cricket 19* was proof of concept for Israel's advanced targeting capabilities, which integrated sophisticated IT systems and precision strike weapons into a unified reconnaissance-strike complex that eliminated Syrian air defenses in Lebanon's Bekaa Valley in a one-day campaign in 1982 (Adamsky, 2010). However, Hezbollah anticipated the new systems-thinking doctrine and dismantled centralized control over its rocket forces, "creating a network of autonomous cells with little inter-cell systemic interaction" (Matthews, 2006, p. 21). Precision strikes by warplanes and stand-off weapons failed to substantively disrupt Hezbollah's rocket operations. Rocket and missile attacks, supported by a network of hidden tunnels and munitions bunkers, continued against cities in northern Israel, displacing tens of thousands of Israeli citizens. The decisive advantage in surveillance and targeting assumed by the EBO doctrine proved unattainable. The air war's failures led to the shelving of EBO (alongside other systems-thinking concepts like SOD) during the IDF's internal reckoning in the aftermath of the failed operation, and eventually led US Joint Forces commander Jim Mattis (2008) to officially dismiss EBO terminology in an article in *Parameters*.

Lacking a workable strategy for terminating the fighting, the conflict began to drag out in ways the IDF failed to strategically anticipate. Seeking to impress the superiority of its land forces and thereby generate a "consciousness of victory" and impress a "cognitive perception of defeat" to break Hezbollah's fighting resolve two weeks into the war, IDF battalions

maneuvering around Bint J'beil in southern Lebanon were surprised in a meeting engagement by a mixed force of entrenched anti-tank units and distributed nodes of guerilla fighters, producing considerable attrition of Israeli armour (in upwards of 10 percent of the IDF's committed main battle tanks) (Johnson & McCulloch, 2013; Matthews, 2006, pp. 45–47). Recognizing the calamity, IDF reservists called in to cover these losses refused orders to advance into Bint J'beil and were arrested. Combat helicopters refused to provide ground support across the border. The intensity of Hezbollah's omnidirectional anti-armour attacks forced Israel's tank forces to vacillate indecisively between massing and dispersing, preventing the IDF's ground offensive from gathering momentum. After three weeks of war, IDF land forces had advanced less than four miles into southern Lebanon.

The volume of casualties produced by both rocket attacks on civilian targets and anti-tank defenses quickly demoralized Israel's fighting resolve, with the domestic press turning on the IDF's leadership. The logic of the Dahiya doctrine, which encouraged punitive strikes on civilian targets inside Lebanon linked to Hezbollah, diminished international support for the IDF's campaign. Israel's political leadership couldn't provide a clearly articulated strategic rationale for the campaign (were operations undertaken as leverage on Lebanon's legitimate government? to destroy Hezbollah's rocket forces? diminish Hezbollah's political authority? force Hezbollah to withdraw from southern Lebanon?) and the IDF failed to strike a decisive resolution in any of its primary engagements (Graicer, 2017a, pp. 22–24). Company commanders received 70 changes to their mission orders in the span of two weeks and battalion commanders in turn became “masters of avoidance”, recognizing the senselessness of compelling their forces to advance into enemy kill zones (p. 29). Lacking a coherent operational rationale, IDF commanders “were pulled between an end state which was not achievable without sustained land warfare, and a

strategic context which would not allow sustained land warfare...operationally and strategically” (Johnson & McCulloch, 2013, p. 51). Hezbollah was neither deterred from aggression against targets in northern Israel, nor was its cohesion as a fighting force disrupted by the IDF’s technocentric application of the EBO concept. Moreover, Hezbollah’s standing in the Arab world was enhanced by its domination in the contest of narratives. Hezbollah was able to effectively marshal well-timed symbolic attacks (like an unprecedented anti-ship missile strike against INS corvette *Hanit* following Nasrallah’s speech) to galvanize Lebanese support for Hezbollah’s defensive operations. The effectiveness of Hezbollah’s economization of limited military resources lent it a measure of prestige as the world’s most formidable non-state actor.

As with many attempts to categorically define the elements of war, the contingency and adaptivity of hybrid warfare necessarily frustrates categorical description of its common aspects and thus frustrates the formulation of coherent doctrine to counter it. As we have seen, doctrine tends to assume a baseline of predictability that justifies the prescription of certain actions to confront certain contingencies within the battlespace. Where the technical rationality of approaches like EBO attempts something like holistic systems-thinking in order to identify centers of strategic gravity that sustain the adversary’s operations, the guiding assumption that these kinds of effects can be reliably prescribed by the coupling of technology and doctrine is founded on specious reasoning (Mattis, 2008). Doctrine runs aground where it is uniformly applied against an adversary capable of confounding expectations at any level of war. The enemy gets a vote, as the adage warns. And an enemy that can impress its own narrative of events to convince a global audience of their military efficacy implies a formidable strategic challenge.

Johnson and McCulloch argue that in order to effectively challenge the hybrid threat’s psychic resolve and operational cohesion, the strategist arguably needs to be able to compose

cognitive models of these actors' behaviour that appreciate their inherent adaptability and address the conflict environment holistically (pp. 102-104). While Hoffman (2009b) argues that PME will continue to provide necessary foundations for countering these kinds of threats, effectively countering these threats is likely to place a high premium on the ability of decision-makers, particularly at lower levels of the organization, to learn by quickly recognizing and adapting to the unknown (p. 38). Framing an operation in multidomain battlespaces requires that commanders see their forces as forming part of a broader social and cultural environment that is highly dynamic, instead of simply perceiving the enemy as an impassive object detached from their own subjectivity (Johnson & McCulloch, 2013, p. 102). To multiply synergistic effects, hybrid actors interact with civil and cultural infrastructures as intensively as they transact in violence, as was the case in 2006. Accordingly, Johnson and McCulloch have argued that cultural narrative makes up a central component of the hybrid threat's operational logic, amounting to a critical cognitive aspect of the hybrid threat's operational art. Effectively countering hybrid threats, it follows, necessitates methods for operational deliberation capable of comprehending the narrative patterns of strategic employment which hybrid threats are skilled at improvising.

While SOD was shelved in the rush to assign accountability within the IDF's leadership after the failed Lebanon war, both the intended levelling effect of SOD's methodology (where outside influences are granted a credence they might not otherwise be afforded in military circles), and its cultivation of divergent mindsets are arguably pitched towards improvising these kind of cultural framings. The charge that SOD's elitism was a hinderance to operational effectiveness in the Lebanon war is worth noting, and we will return to it in the closing section of this chapter. For now, the crucial point is that SOD is implicitly anti-teleology and aims to generate fruitful conditions for strategic learning through operationalization (i.e., the

actualization of warfighting), rather than accomplishing artificial end-states (Ryan, 2011). To that end, SOD foregrounds narrative development, analysis and manipulation as natural mediums for systemic deliberation, and hangs many of the creative functions of design on the designers' capacity for "storytelling, story construction and story operationalization" (Naveh et al., 2009, p. 75).

The storytelling function

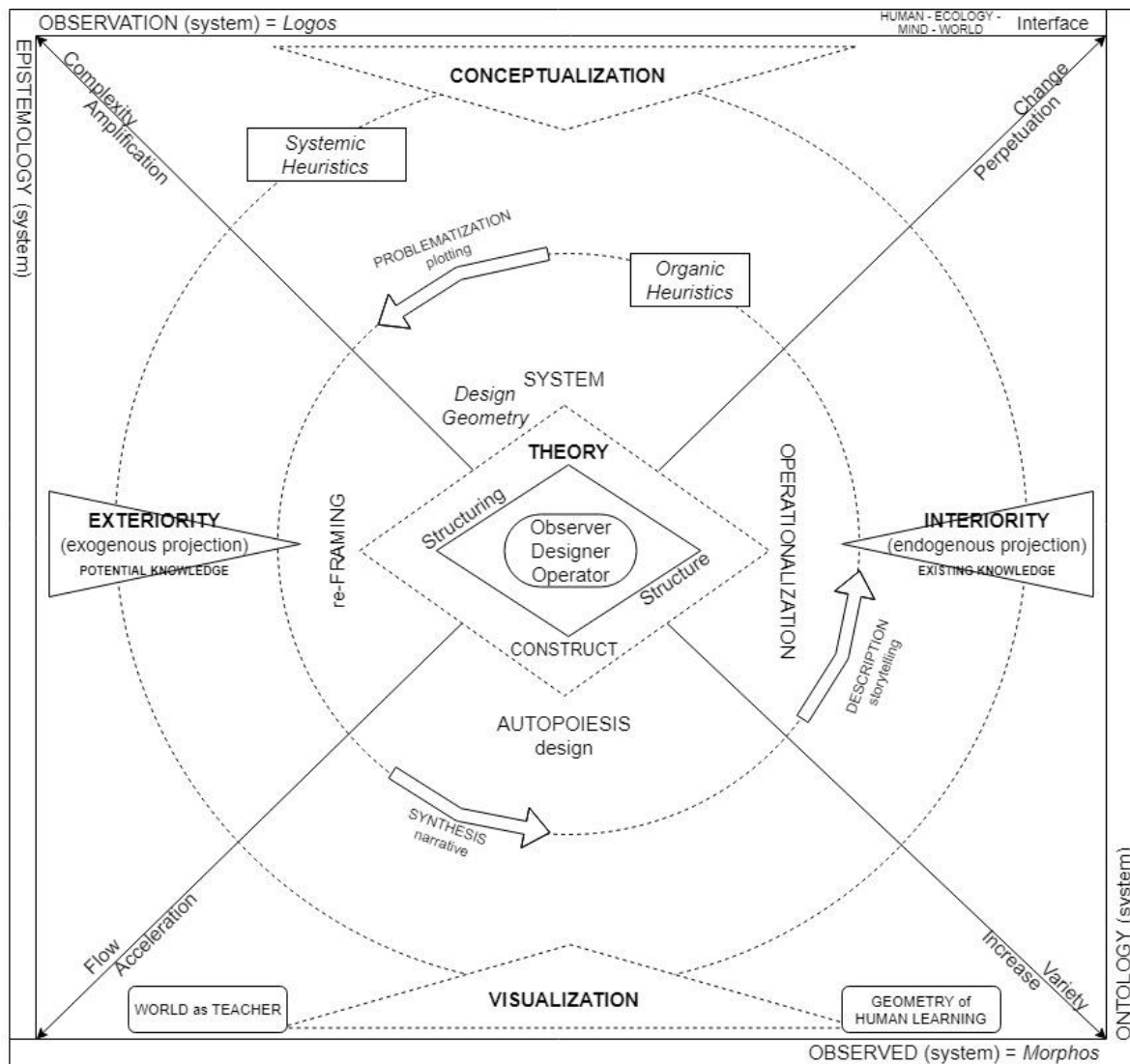
For Naveh, stories serve as a raw material for reflective thinking, as a medium for constructing understanding and as a device for the continuous unfolding of dialectical learning. The construction of stories is a key technique of SOD's process of artifactual production insofar as it "offers a non-engineering metaphor that allows military designers to overcome cognitive impediments imposed by a milieu dominated by a positivist approach and a preference for hard sciences":

Story production provides a multilevel platform for constructing understanding – as a form of systems mapping, as an expression of the learning-operationalization continuum, as the embodiment of a time sequence, as an artifact communicating their understandings, as a space for critical discourse with superiors, peers and subordinates, and as a reference for reflection on emerging situations. (pp. 76-77)

In short, the artifice of storytelling enables designers to synthesize a coherent framing of the dynamic iterability of the conflict system that indexes and marks the narrative significance of time, which is often qualified by cultural determinations as much as sequences of change in the physical world. By bringing the inherited narrative forms which make the events of war intelligible into sharpened focus, and by subjecting them to various techniques of analysis and problematization, SOD's narrative discourse guides operational learning from "the explicit to the implicit, and from pattern recognition towards pattern creation" (p. 77). This approach is clearly

evidenced in a document like “Between the Striated and the Smooth,” as it is in Lawrence’s “Evolution of a Revolt”.

Figure 9
The learning spiral



Note. Adapted from a slide in *Northern Storm: A Narrative of Reflective Command, Operational Learning and Systemic Design 2002-2005*, by S. Naveh, 2006, Booz Allen Hamilton. Copyright 2006 by Shimon Naveh.

Naveh’s explanation of the storytelling function implies a deep conceptualization of time at multiple levels of meaning and experience. One of the central ideas in this aspect of his

thinking is that there is fundamental relationship between the anticipatory logic of cultural and organizational narratives and the sensemaking effect of certain narrative forms and devices on the concept of temporal and spatial order implicit within those narratives. This concept has deep implications for thinking about the relationship between perception of the battlespace, conceptualization of the forces driving its evolution, and actualization of programs for transforming it to advantage through operations. The ensuing sections will disentangle some of the more profound implications of this theory for understanding Naveh's approach as a literary practice. For now, an explication of Naveh's dense construction of the storytelling function's multifaceted composition of a logic of strategic time and operational emergence in *Structure of Operational Revolution* will serve to orient that explication.

A key aspect of SOD's storytelling function is the embodiment of a time sequence. Naveh frames this function as a process that reconstructs the institutional contexts of inherited legacy systems, maps the emergence of the current state of systemic interactions between the involved actors, and charts their transformative potential by projecting a desired system into an unrealized future. The components of this "system of time" (legacy system>current system>desired system) are embodied in the storytelling function, which combines three qualitatively distinct, interconnected learning configurations, namely "the initial story, the plot and the narrative" (pp. 76-77). The initial story articulates existing knowledge and indexes the referential evident which the learning cycle "problematizes" through the projection of plot (p. 76). The initial story gathers primary observations of circumstantial materials, describing the preliminary understanding of events and phenomena as a grounding context for reflection, composition and reframing. In doing so, the initial story composes an elementary text which the plot deliberately subjects to a process of narrative complication and disruption. The projection of plot allows designers to

explore contradictions between their comprehension of the initial story, anomalies in the emergent conflict environment, and the strategic problems that emergence implies. To this end, the plot develops a “system of questions, rigorous propositions and differential logics” which designers introduce to elaborate tensions between the existing understanding embodied in the initial story and the antithetical displacement of those figures as the narrative unfolds via operationalization (p. 76). Plot’s logic of intervention structures development of the narrative and gives its characters “their active shape (*morphos*) as thinking actors” (p. 76).

Narrative is the most ineffable of the three learning configurations and Naveh’s description of its attributes and effects in the *Prolegomena* is elusive. However, we may understand that narrative encapsulates the storytelling function’s discursivity as both a narrative systematization of a temporal sequence and as a key artefactual reference for planners. The most generalized of the three storytelling functions, narrative expresses a “higher level of relevant understanding,” the coherence of which is achieved through the synthesis of initial story and plot (p. 77). This patterning of the narrative cycle can be diagrammed as a learning spiral (Fig. 9). The spiral cycles across the three components of the time sequence in macro, operationalizing a “metanarrative” of strategic problems, aims and actions unfolding with the emergence of operations in time (p. 77). At the same time, the narrative spiral recurs in micro as is operational learning refined at the level of command and logistics, and conceptualization of friction in the operational problem space (p. 77). The meta-cognition of strategy generated by the narrative element is a principal discursive artifact of systems framing, crystallizing as a central reference for planning operations. For want of a better way to simplify it, narrative encapsulates the broader systemic significance of the story at both the micro and the macro levels of the organization.

Laden within the exceedingly dense terms and concepts set out in Naveh's design manual (the language of which occasionally baffles even the author of this dissertation), the significance of narrative is that it functions as a governing point of reference for the strategist. It enacts a temporal structuring of the emergent context that alters the relationship between its historical materials by composing that content in a way that aims to generate new meaning (Graicer et al., 2022). In this way, narrative functions like a unifying symbol or symbology which clarifies and consolidates the relations between the variable functions of storytelling: it composes a coherent image of a conflict between the ideational legacies that define the military-institutional outlook on a given strategic situation and the imposition of meaning and significance from outside that context which complicates and even invalidate the prior's knowledge and assumptions, compromising their efficacy and pushing them into irrelevance to the situation they aim to transform. Narrative, in this sense, traces the evolution of knowledge of an emergent system and the relationships that influence its evolution as they are known and understood by the strategist. "Between the Striated and the Smooth" is exemplary of this kind of narrative artefact, as is "Evolution of Revolt". Lawrence's modernist framing of the irrelevance of the cult of the offensive to the conditions of the Arab Revolt tracks the inception of the concept in his military education, emplots the undoing of that model in a conflict environment both alien and hostile to its governing assumptions, and composes that epistemological conflict into a unitary narrative form that communicates the resolution of their antithesis as an instrumental concept for desert operations. Naveh's postmodern incredulity towards the cult of the mechanized offensive in Israel's strategic doctrine begins with an initial story that centers the wicked problems that frustrate attempts to forcibly resolve LICs. That document emplots an asymmetry trap implied by the encampment of Palestinian militants in the Balata enclave and details a post-heroic effort to

instate an alternate reality in the conflict environment through a set of poetic practices for the deconstruction of urban space. Those practices enabled the paratroopers to subvert their adversary's understanding of their own environment and their anticipation of the IDF's standard narrative tropes for combat operations. "Between The Straited and the Smooth" likewise projects a temporal continuity that exceeds the immediate narrative context of the operation, envisioning the operation as an episode in a story that will continue to evolve dialectically over a much wider stretch of historical time. In both examples, these narrative artefacts serve in the aftermath of an operation as a measure of a strategy's qualitative success: they generate compelling accounts of what worked as a basis for further refinement of relevant martial concepts in comparable domains. While these artefacts have been given an enduring form that presents them as literary texts, less formal versions can be improvised during the operational design process to impart a comparable narrative agency to the relevant actors within the organization.

The important point is that these kind of design narratives actively situate the observer within the system they are observing. This empowers that observer with the agency to explain systemic change in a comprehensible form in order to impart initiative to the agent charged with enacting the strategy. It is this act of constructing an observer who is in turn transformed by the emergence that distinguishes the storytelling function as a vital element of strategy making: storytelling is not only about transforming the conflict environment to advantage, but transforming the observer-agent who takes the initiative to transform the emergent relationships embodied in the conflict environment. It is not simply about imposing an idealized end-state on a threatening situation as it is about imparting a self-creating capacity for making complex, meaning-laden entanglements of social and cultural tensions and relationships other than they already are.

The storytelling function serves as a means for not only explicating the competing ideations which the conflict environment comprehensible to the actors engaged in it, but of making the spatiotemporal sequences and event-driven processes which operations necessarily involve apprehensible in terms and figures that defy the sense of a naturalized *telos* inherited from paradigmatic constructions of institutional knowledge. While SOD depends on other creative tools of sense making, particularly the capacity for inventing figures to orient operational pattern making, alongside more conventional forms of intelligence gathering and dissemination (signals intelligence, human intelligence, IPBs, etc.), the storytelling function augments an innovative conceptual focus on the potential for altering strategic relations between the involved actors that is far more expansive in scope than most instrumental forms of sensemaking in warfare are likely to admit.

The dissemination of SOD within US war colleges like SAMS in the late 2000s put SOD into conversation with a number of practitioners (including Chris Paparone and Ben Zweibelson) who augmented SOD's exploration of storytelling with elements narrative theory, and SAMS syllabi from that era attempted to introduce students to writers like Hayden White and Paul Ricoeur (Zweibelson, 2018a). That exchange augmented SOD's approach to narrative production and analysis in terms of the discursive function of narrativity, which is a descriptor for the way narrative composes a temporal system for working through the non-linear complexities of historical events and their transitive unfolding. By plotting events within a topology of actions, effects, and transitions, rather than a serial chronology of facts, narrativity imparts a conception of strategic time that breaks with Newtonian models of causality in order to model the transformative potential of events. Narrativity came to function within SOD as a hinge between theory and praxis: narrative becomes both a medium for testing and contesting the meaning of

events, and for mapping boundaries between the imaginary and the actual in the modelling of the same.

Elaborating on the compositional modalities of SOD's narrative element, American military design practitioner Ben Zweibelson argues that the narrative function of military design parallels Paul Ricouer's (1983) elucidation of Aristotelian "emplotment". Insofar as *mythos* and *mimesis* are for Ricouer intertwined operations of emplotment rather than formal elements of narrative structure, we may understand that the operative character of these concepts indexes an "active sense of organizing events into a system" (p. 33). Together, *mythos* (the intervention of plot unfolding within a logical sequence of events) and *mimesis* (the imitation of actions signifying *praxis*, abbreviated as the agency of actors composed within the sequencing of *mythos*) organizes an inextricable temporal concordance which composes narrative as an intelligible sequence amounting to a unified whole (White, 1987, pp. 175–178). Leaving aside the question of whether a narrative is fictive or historical, we may understand that narrativity amounts to a symbolic mode of discourse that "does not simply reflect or passively register a world already made" (p. 178). Instead, narrative emplotment of the kind codified by the storytelling function "works up" the given materials that impart perception of the world and reflection on the same, fashioning events and actions as distinctly intelligible forms of apprehensibility (p. 178).

Ricouer's is a concept of narrative time that transcends mere chronology of serial events. Rather, the symbolic efficacy of the narrative composition renders the emplotment of its events and actions within a temporality of "inaugurations, transitions, and terminations of processes" which gather significance and impart meaning by virtue of their compositional sequencing (p. 177). Understood in this way, narratives generate "an index of the kind of actions that produce

the kinds of events” marking the transitional contingencies of future, past and present into patterns that are meaningful as temporal continuities (p. 179). If we were to begin an inventory of the kind of significant actions which narrative emplotment indexes, we might count projects, commitments, prohibitions, redoubts, reprisals, reversals, victories, defeats, stalemates, upsets and failures among the modes of temporalization which confer significance on actions unfolding within narrative time. This organization of intelligible plots and actions from disparate contingencies into temporal unities defines the “concordant discord” that is the essence of Ricouer’s elucidation of narrative emplotment.

It follows that the deliberated emplotment of SOD’s storytelling function organizes the significance of events in the conflict environment into a system of narrative time fundamentally different from any informative chronology of factual events. Unlike the continuous present-tense of mission-time implied by planning processes like MDMP, SOD’s narrativity imparts to planners a mode of historical consciousness that regards actors and events through a partial logic of narrative temporalization, the representative modes of which depart from the factual reporting of passing instants, all granted equal weight by virtue of their seriality. Even as a mode of historical emplotment (as opposed to a strictly fictive mode), the storytelling function arguably recognizes the causes, patterns and motive forces that impel narrative meaning among “the *topoi* of literary plots, rather than the causal laws of science” (p. 44). This is arguably the case with “Evolution of a Revolt”, as I’ve suggested, the narrative outlines of which, following Edward Said’s critique of Lawrence, track with other modernist imperial narratives like those of Joseph Conrad. So too with “Between the Striated and the Smooth”, which appropriates the Situationist mythologies of the 1960s to mobilize martial transgression of the built environment.

This is not to argue that narrative compositions are deficient to the task of modeling the consequential logic of the world and its actors. Rather, it is to argue that the knowledge imparted by narratives (whether historical or fictive) is the result of a testing of systems of meaning that map the boundary between the imaginary and the real (p. 45). As a mode of historical narrative, SOD's storytelling function tests the capacity of cultural fictions (myths, fictions, dramas) "to endow real events with the kinds of meaning that literature displays to consciousness through its fashioning of patterns of 'imaginary' events" (p. 45). Apprehended in this way, historical narratives refigure the events that constitute their principal referents, transforming them into patterns of meaning that a strict logic of factual literalization cannot consolidate (p. 45). This transition from the level of factual events to narrative discourse proceeds by a tropology of figures: "transition is effected by a displacement of the facts onto the ground of literary fictions or, what amounts to the same thing, the projection onto the facts of the plot structure of one or another of the genres of literary figuration" (p. 47). This is how poetic displacement functions: through *allegoresis* (p. 45).

Narrative temporality functions as an index of meaningful actions. Actions performed within narrative time produce meanings by their consequences – whether those consequences be intended or accidental – which in turn become embodied within social institutions, political norms, customs, cultural conventions and their dialogic interactions (p. 50). To comprehend the significance of historical actions in this way is to "grasp together" elements of narrative intelligibility (intentions, actions, consequences) as they are reflected in their social contexts, and to grasp them together as intelligible wholes, rather than as scattered events. This grasping together generates a sense of time which links endings to beginnings, forming "a continuity within a difference," consolidating the imagistic function of Ricoeur's concept of symbolic

discourse (p. 52). To paraphrase, after Hayden White, narrative, understood this way, “is a ‘symbol’ mediating between different universes of meaning by ‘configuring’ the dialectic of their relationship in an image” (p. 52). He continues:

Telling a story...necessarily reveals a plot. This plot “symbolizes” events by mediating between their status as existants “within time” and their status as indicators of the “historicality” in which these events participate. Since historicality can only be indicated, never represented directly, the historical narrative, like all symbolic structures, “says something other than what it says and...consequently grasps me because it has in its meaning created a new meaning. (White, 1987, pp. 52–53, quoting Ricouer)

We may understand that *allegoresis* transpires through the refiguring of the “ordinary” time in which events take place as tropological compositions, the symbolic totalities of which cohere as temporal continuities rather than scattered events, producing a sense of time in which the relationship between future, past, and present figure as the significance of time itself, and the extension of the finitude of its experience (p. 53). The tropology of narrative time imparts understandings of the contextual relationship between events (often at the level of patterns as much as direct causalities). These understandings generate novel constellations of meaning which are in turn grasped as symbolic unities. These patterns of emplotment are inbuilt into virtually all processes of ideological and representational knowledge construction, including operational planning (and indeed, military design), and make the commitments these processes facilitate inhere as temporal structures that govern their social, cultural and political significance (Zweibelson, 2018a). This is, to be sure, both a legacy problem of first-generation design (of which SOD’s storytelling function is the most developed example) and an epistemological limitation emerging design methodologies must contend with if they are to escape indoctrination and obsolescence. But the poetic function of *allegoresis* nonetheless qualifies a model of narrative comprehensibility or meaning making on which many subsequent practices of military design came to depend.

The narrative element of Systemic Operational Design is an indispensable aspect of its strategic practice and was significantly enhanced by the exchanges with SAMS. By engaging the storytelling function, SOD aims to transform the social reality of a given conflict by constellating its historical materials (conflict actors, defense organizations, cultural ideations, contested spaces and territories, operational forms and patterns) into symbolic unities. That act of emplotment serves as the foundation of strategy, which amounts to a comprehensible and compelling narrative of desirable change in the security environment. It works by imparting a comprehensible image of change to be actualized through operations that implement a logic of action (the *mimesis* of purposeful actions, realized through the praxis of agents whose actions realize the image of the emplotment) that accords with the image of contextual change (*mythos*).

While this approach surely risks a slippage whereby the image of the change, itself a conscious ideological construction of an environment that is liable to bite back in ways that throw that image into question, comes to stand in for the reality it purports to represent in much the same way as MDMP reinforces a kind of linear idealization of military operations. Put another way, strategy-making in this mode arguably risks taking a desirable image of a favourable resolution (or, perhaps more accurately, favourable evolution of the environment) as the reality it aims to transform. The crucial distinction, however, is that by foregrounding the irreducible difference between the imaginary and the actual in the act of representation, and by actively constructing a logic that tests this boundary as it concerns the ideations of a variety of agents who are engaged in a kind of narrative plot for influence, it aims to impart a liberating capacity for self-creation to defense organizations and the agents who embody them. That capacity is conditioned by the reflexivity of the agents engaged in strategy-making for

operations. Storytelling, or simply the capacity to construct meaningful narratives of events and how they might be otherwise, is an indispensable device for testing and refining that reflex.

The density of SOD's theoretical language (and Naveh's *Structure of Operational Revolution* is probably the most egregious example of this kind of thing in his published oeuvre) surely created a barrier to the education of military professionals that dogged the careers of several of SOD's key apostles (particularly Naveh and Hirsch). The Winograd commission charged that OTRI's concepts were an impediment to establishing a common language and shared vocabulary for effective operations during the second Lebanon war and swept SOD up in the same lot as EBO in the haste to assign blame for the IDF's disastrous performance (Kober, 2011). That association was probably undeserved to the extent that Winograd conflated two wildly dissimilar methodologies with completely divergent aims and philosophical underpinnings – one was a theory of martial learning, the other was a linear patterning of doctrine (Van Riper, 2012; Wass de Czege, 2009). Naveh had been pushed into retirement in the months before the war, OTRI was shuttered, and SOD-informed contingencies for war with Hezbollah had been shelved and superseded by CGS Halutz's preference for American concepts like EBO and system of system analysis (SoSA) (Wass de Czege, 2009, p. 4). Nevertheless, those findings have clung to SOD's legacy in ways that have made SOD's legacy a non-starter for many military professionals and academics who are more comfortably grounded in strategic literature than abstract theory. But whatever the merits of these arguments (and proponents of the Naveh school have presented credible counter-narratives; see Ofra Graicer's "Between Teaching and Learning"), the second Lebanon war signalled the onset of a novel, 21st century threat that purposefully subverts the binary categories of war that persist in the martial imaginary of Western militaries and the kinds of linear problem-solution orientations that saturate their

educational contexts (Hoffman, 2009a; Van Riper, 2012). SOD and its successors remain valuable for making sense of novel security problematics, particularly in Israel's security context, but just as likely beyond.

To compartmentalize Israel's (ongoing) fight against Hezbollah or the (presently expanding) regional conflict with the Houthis in the Gulf of Aden as conflicts which maps to normative categories like COIN or counterterrorism is to double-down on culturally-reinforced patterns of strategic employment that creative, highly adaptable networks of adversaries have repeatedly demonstrated they will exploit to advance their own strategic projects and initiatives. Again, the enemy gets a vote, and can choose to tell their own stories for their own purposes. Those stories and the sophisticated employments they entail in the battlespace, the infosphere and the political domain, will likely continue to confound expectations grounded in the culturally-determined and institutionally-reinforced perception of the superiority of Western politics and ways of war. In a situation defined by dynamic novelty, the capacity to achieve a set goal is arguably subordinate to the ability to set a meaningful goal in the first place and envision creative means for its realization (Wass de Czege, 2009, p. 5). Hoffman argues that the ability of defence organizations to recognize and adapt to the unknown, particularly at lower levels of the organization, will be critical to not only the survival of these organizations, but their success at all levels of war. In this sense, Hoffman's prescriptions center the need for martial organizations to develop capacities for critical reflexivity that can situate and empower self-witting agents within an adaptive and evolving networked hierarchy.

Chapter 9: Cybernetics, plasticity and narrative agency

As we saw in the previous chapter on narrativity and strategy, Naveh's *Prolegomena* positions the storytelling function as an implicit challenge to dominant cultural narratives underlying military decision making. By foregrounding the iterability of narrative constructions of events, the storytelling function aims to cultivate agency and leverage capacities for self-reflexivity in the agents charged with conceiving and realizing strategy. The rationale for this approach to narrative production was enhanced by SOD's interface with military intellectuals in the US, but is also arguably continuous with a certain trajectory of cybernetic and systems theory in military philosophy. This essay identifies theoretical precedents from cybernetics (and military histories that draw on cybernetics) that can account for SOD's turn towards the production of narratives as a means of enhancing the reflexivity of military systems and practitioners. It also aims to enhance the picture of literary theory's complicated relationship with the legacy of cybernetics and systems theory, all three of which continue to impress a pervasive influence on military design practice. To this end, the essay expands on insights into military science and technology developed in Antoine Bousquet's (2009) *Scientific War of Warfare*, which postdates Naveh's written output, but which overlap with several of SOD's historical references. First it qualifies the function of "cognitive metaphors" viz metaphor's diagrammatic capacity for what Donald Schön (1963) terms "displacement of concepts" with relevant examples drawn from the history of cybernetic warfare. Second it develops an account of reflexive cognition in the theory of autopoiesis to qualify the reflexive capacities of military systems. Those reflexive capacities are qualified by their ability to model emergent relations between social actors, conflicted spaces and the temporality of events, particularly in narrative registers. Naveh references the latter through the work of Chilean biologists Valera and Maturana (1980, 1992) to distinguish SOD's

inherent anti-teleology: SOD attempts to actively unsettle the encoded processes innate to certain military systems the better to synthesize conscious capacities for discernment and action in military organizations. This unsettling action articulates some of the cognitive fundamentals of SOD's practice.

Cognitive metaphors, abstract machines

The interpretive methodology Antoine Bousquet develops in *The Scientific Way of Warfare* provides a helpful theoretical framework for grasping how metaphor, particularly in engineering applications, functions as an anticipatory device that informs the organizational logic of military systems. An influential work in the field of critical security studies, *Scientific Way* describes the rationalities of “technoscience” underpinning different historical paradigms of warfare from the 17th through the 21st centuries. Drawing from the seminal writings of the 20th century design theorist Donald Schön, whose concept of reflexive practice is frequently referenced in military design literature, Bousquet frames the function of metaphor in light of metaphor's capacity for displacement or cognitive transfer, for conceptualizing one domain in terms of another (pp. 25-29). Understood this way, metaphors are “speculative instruments”: devices for transferring cognitive implications of well-organized conceptual models into novel constellations of organized thought and behaviour (p. 28). Removed from its literary context, Bousquet conceptualizes the metaphor as a distinct cognitive mode of imparting insight “which brings disparate domains into cognitive relation and constitutes new relations that cannot be antecedently predicted” (p. 27). In this way, metaphor functions to order experience by translating existing structures of intelligibility to scaffold over the disorder and confusion that follows the spontaneous eruption of novelty. In turn, the novelty of the metaphoric displacement alters not only the conceptual system from which it arises, but the perceptions and actions that

the conceptual system presupposes: “it is on the basis of the new understanding afforded by metaphor that future actions can be justified and control exerted” (pp. 27-28).

Drawing on Deleuzian terminology in a mode that diverges from Manuel DeLanda, Bosquet describes metaphor’s capacity for machinic abstraction as a primary function of the regimes of military technoscience: cognitive metaphors inherited from engineering (specifically the clock, the motor, the computer, and the network) function diagrammatically as selective schema that organize social, political and ideational capacities, prescribe certain behaviours and modes of being, and prohibit others (p. 19). After *A Thousand Plateaus*, Bousquet understands that the machinic function of these technologies is not merely technical, but social and political. Technologies emerge within techno-social assemblages, embodying a condensation of agencies and capacities linking machines, political and social organizations and “ideational arrays” that confounds any simple delineation of a “pre-eminent causal flow between either the ideational and material realms or the technological and social realms” (p. 19). For Bousquet, the engineering metaphors of military technoscience constitute abstract machines insofar as they can be abstracted as generalized models of functioning: they are figures of political technology that can be detached from any particular use or form of expression, even as they manifest in the assembly of armies, and in the technical apparatuses of military administration that modulate those embodiments (p. 19). Functioning as diagrams and abstract machines, technological metaphors map relations between forces within a “supple and transversal network” of technical and political agencies, an amorphous constellation of knowledge and power unfolding in a perpetual disequilibrium of forces (Deleuze, 2006, p. 31). As such, cognitive metaphors function like a “non-unifying immanent cause” within the assemblages which they compose: insofar as these abstract machines are coextensive with the social fields within which they emerge, they

intensify power relations within the array of forces which they map and organize, and which they bring to bear on the varying strata that pass through their controlling schema (Bousquet, 2009, pp. 31-32).

A helpful example of a cognitive metaphor in military science would be the computer, the figure of which, for Bousquet, schematizes the technoscientific regime of cybernetic warfare. As an abstract machine, the computer supposes a self-regulating mechanism of information feedback. It is a potent metaphor for the centralization of command, communication and control and the drive for predictive modelling that empowered the development of military science in the early Cold War. The figure of that abstract machine was first realized through technologies like the AN/MSQ-18 Battalion Missile Operations System, a computer terminal for coordinating air defenses which entered service with the US Army in 1954. Another example is the continent-spanning SAGE semi-automated ground environment, coming online to coordinate NORAD defenses five years later. Abstracting the mechanisms of control which manifested in the design of these projects, the displacement of the figure of the computer intensifies the formalization of the chain of command (another cognitive metaphor) by projecting a centralized hierarchy over a diversity of organizational structures, a sequential ordering of information processing which executes command functions, and the mediating function of an operator who modulates input and output in an efficient technicity of control. Displaced by the metaphor of the computer, “information becomes conceptualized as the source of all order” (p. 33). Bousquet argues that this patterning of information warfare doubles the domain of conflict it purports to mediate into a kind of simulation, a closed system that models the deadly chaos of armed conflict as an orderly sequence of events to be marshalled by technicians empowered by techniques of scientific information management (pp. 123-128).

Bousquet argues that the technoscientific rationality of information processing in the Cold War imparted a particular patterning of organization and strategy within the American military state apparatus during the Cold War, the unchecked development of which can be linked to the disastrous incompatibility of US policy with the strategic context of the Vietnam War. The logic which centralized statistical management as the basis for strategy enhanced the abstract machinery of information processing in ways that impeded the development of both an understanding of the adversary's strategic mindset and an effective program for terminating the war. The production of statistics (bodycounts, hamlet pacifications, the success rate of air sorties, etc.) detailed a regulated flow of data, recorded by troops in the field, to be centrally processed and aggregated for managerial consumption (Van Creveld, 1985, pp. 240–251). Information bottlenecks were as commonplace as the distortion of battlefield events, thickening the fog of war by overload instead of dispersing it. As Bousquet puts it, statistical analysis of the attrition strategies of US and ARVN forces imparted a modelling of adversary behavior which redoubled the mindset of the information warfare paradigm: American strategists, both civil and military, recognized the North Vietnamese politburo as a “cybernetic system which could be steered towards the desired behavior by a selective input of information in the form of targeted aerial bombardment” (pp. 157-8). For Bousquet, “this amounted to a communicative theory of war according to which the level of violence is alternatively ratcheted up or alleviated depending on the message to be sent” (p. 157). Framing the conflict through the abstractions of cybernetic warfare, the war's managers misconstrued the strategic mindset motivating the politburo and its armed factions in PAVN and the Vietcong, projecting a stereotyped image of the self-preserving rationality assumed in game theory over the behaviour of capable and determined adversaries, the resistance of whom was grounded in historically-resolved anti-imperialism.

The worldview which recognized the war as a technical problem to be overcome through the concentration and application of *materiel* in accord with defined statistical methodologies failed to recognize historical conditions motivating its rival's behaviour, displacing the intrinsic patterning of its own systemic logic within a technical simulation of the conflict environment. We can arguably identify something similar happening in the IDF's development and application of EBO in the air war over Lebanon in 2006: where the tightening of armed reflexes via advanced information feedback loops and real-time targeting primed the IAF for the unprecedented technical success of *Mole Cricket 19* in 1982, the overreliance on the linkage between information processing, intelligence development, target acquisition and campaign direction in the 2006 air war against Hezbollah locked the IDF into a counterproductive strategy of escalation bereft of a viable criteria for termination of the conflict.

Bousquet's argument about the function of metaphor in military science has significant implications for grasping the aesthetics of Naveh's design methodology. It implies that the metaphors which pattern military thought and organization, particularly as they are drawn from engineering, tend to naturalize certain effects as functions of an abstract cause embodied in mechanistic concepts of organizational behaviour. We can observe something like this happening in the extension of the principles of information science within the management of the strategic direction of the Vietnam War, or the 2006 war in Lebanon: scaling up bombing against targets in North Vietnam, or expanding the air campaign to target civil infrastructure in Lebanon, for example, sends "a message" to a rival that will effect a change in their behaviour to induce a desirable strategic outcome. In this extension of the metaphor, the abstract machine of information processing is both constructed as and imparts the means of military domination. Bousquet argues that while the technological metaphors which structure the abstract machines

upon which military systems are patterned arguably appear, after Heidegger, a revealing of the world that also orders the world into forms that can be acted upon, it also appears that this ordering manifests as a compulsion, after Freud, to repeat certain actions in order to spare decision-makers dangerous hesitation in their exercise of military judgement (p. 13). In other words, the technological metaphors that structure the logic of military systems persist in the residual concepts that modulate the behaviour of those systems. These residual concepts can lapse into patterns of apprehension that often encumber strategic deliberation: they tie decision making to the recognition or even projection of familiar patterns that prefigure the appropriate interventions for widely dissimilar strategic problems.

The influential American military designer Chris Paparone (2012) has argued, following Schön and Bousquet, that despite the cogency of Bousquet's extension of Schön's meta-metaphor, the work of analogizing cognitive metaphors (i.e., bridging them to sense-make around new situations and patterns) implies a creativity that remains valuable to military institutions so long as the practitioners are aware that their metaphors are linguistic mediums for the displacement of concepts. Scores of martial metaphors in fact come from domains like sports and the humanities (theatre, command performance, and scenario, for example) and arguably imply different kinds of agencies than those taken from engineering (pp. 49-50). Paparone's argument is that when those practitioners are not aware of their metaphors' formative implications, and repeat those metaphors without consideration for the new context, they are arguably carrying dead metaphors over into a situation to which they are alien in significance. The risk is that dead metaphors can become passive conveyers of foreknowledge that are more likely to have a deleterious effect on institutional and organizational effectiveness than metaphors that have been carefully considered and adapted to their novel context. Of course, it's

a truism that all human language engages in metaphor and many of dead metaphors are perfectly serviceable in well-defined institutional contexts. The crucial distinction is in the application of metaphors with deep institutional significance (e.g., fog of war, centers of gravity) to contexts to which they may be ill-fitted. The likely effect of dead metaphors in those situations is to project patterns of institutional meaning as kinds of foreknowledge that may be harmful or counter-productive, and which diminish the responsiveness of an organization to a situation which they hope to transform for the better. The ability to reflexively interrogate and sophisticate one's own language and capacity for analogy is a critical skillset that military institutions could better learn to cultivate to adapt to the human complexities that complicate strategy and war. The institutional need to cultivate these kinds of skillsets arguably remain in a kind of tension with many of the technoscientific rationalities of the military state, even as these rationalities sophisticate to incorporate emerging insights from complexity theory.

Autopoiesis, reflexivity and narrative

Bousquet, drawing on later schools of cybernetic, systems and chaos theory, develops an analysis of the ideational paradigm of NCW to draw the concept of multiplying disorder into the scope of the technoscientific project. In Bousquet's exegesis of the emerging paradigm of what he terms "chaoplexic" warfare, chaos and complexity "does not stand against or outside the technoscientific project of control but rather recasts it so that order is not so much imposed against chaos as made to emerge from disorder by utilising the latter's properties" (p. 173). The metaphor of the network is the abstract machine on which Bosquet's analysis is premised, and NCW is taken as paradigmatic of that scientific regime. NCW conceives of the unruliness of a multidimensional security environment as a productive condition for realizing novel operations, rather than a hinderance to coherent strategic deliberation: active cognition of the emergent

properties of disorderly patterns, spaces, and temporalities informs, in turn, the ideation of the actionable space of conflict in ways which aim to capitalize on that disorder's generative potential. The multiplication of the dimensions which impinge on strategy and security is therefore a creative problem as much as an interpretive one.

Bousquet presents two key bridging concepts that clarify the structuring relationship between chaos and control for the technoscientific project. These are namely autopoiesis, a concept drawn from the second wave of cybernetics in the 1970s, and emergence or emergent behaviour, a property ascribed to the phenomena of complex adaptive systems, drawn from cybernetics' third wave in the 1980 and 90s. Both are significant for grasping SOD's aesthetic practice insofar as they define key concepts through which we can understand SOD's reflexive aesthetics, particularly where it aims at developing actionable schemas for interpretation and creativity. Since we have already extensively qualified emergence in previous chapters, the ensuing section will explore the relevance of the theory autopoiesis within SOD's conception of operational aesthetics.

In order to ground the unpacking of this terminology, we may understand that SOD and the Naveh school's concept of operational art recognizes a defense organization as an open system that adopts an iterable, emergent form to effectively intervene in a dynamic and highly changeable conflict environment. For a military system to inhabit this kind of formal openness without coming apart requires that the system develop reflexive capacities for sensing and cognition that can track and model descriptive registers of temporality akin to narrative production and analysis. In developing these capacities, SOD aspires to open the construction of the organizational system, embodied in the reflexive agents which are its component parts, to transformative potential which is exogenous to its own internally-formed logic. The logic of the

military system, in effect, only becomes iterable insofar as it can be made other than it is by its own design or intention. Developing an ability to model operational space and time in alternative registers of meaning and significance is indispensable to enhancing that system's reflexivity in this respect, and these concepts are helpful for understanding the scientific premises for SOD interest in aesthetics.

The theory of autopoiesis and the historical scholarship around the concept clarifies the relevance of cybernetic theory to questions of aesthetics (particularly as those theories account for the reflexive capacity of living systems to develop new modes of perception). It also clarifies the analytic limitations of systems theory in assessing the kind of contingent, historical knowledge typical of descriptive observation that makes those questions meaningful in relation to human projects. Autopoiesis describes the operative logic of the process through which a self-created system articulates itself as an autonomous unity that is organizationally distinct from its environment. *Autopoiesis and Cognition*, the ground-breaking work of Chilean biologists Humberto Maturana and Francisco Varela (1980), attempts to explain how cognition arises from the self-creating processes by which a living organism produces itself as a complex, environmentally bound, autonomous unit. Among the significant speculative insights of Varela and Maturana's theory is the idea that the "cut" that separates an observer from the environment they perceive is produced by a recursion within an autopoietic process that enables an autopoietic system to represent itself to itself. The theory attempts to describe how a biological system's organization fashions an operative order of actionability that is divided from the world "out there," even as it remains structurally bound to it. It can be understood, after N Katherine Hayles (1995, 1999), as a seriated concept rather than a paradigmatic one. Which means that its genesis implies sequential, overlapping development of related concepts (rather than a decisive

conceptual break) that bridge between earlier cybernetic theories of reflexivity (e.g., homeostasis – the tendency of a system to minimize disorder and preserve conditions for stability) and the quality of emergence, by which the recursion of multiplying feedback loops generate new properties that a given system did not possess by design (p. 18).

According to Varela and Maturana, an autopoietic system has two defining characteristics. First, the interactions of an autopoietic system compose a unity of productive components that “recursively regenerate the network of production that produced them” (Bousquet, 2009, p. 166, quoting Varela and Maturana). Secondly, the autopoietic system “realize[s] this network as a unity in space [through] preferential interactions within the network,” producing a cleavage of surfaces that delimit the bounds of their existence against their background environment (p. 166, quoting Varela and Maturana). Together, this means that an autopoietic system produces the components that allow for its continuous self-production and that the autopoietic system likewise produces a permeable boundary with its environment that delimits its autonomy and facilitates the organized transfer of matter and energy across its “surface” (Osinga, 2006, pp. 92-93). Between these two characteristics, the permeable enclosure of an autonomous, self-producing autopoietic system permits for the continuous reorganizing of an organism’s repertoire of responses to the environment to which it is coupled, establishing the baseline conditions for both cognition and reflexivity.

In Varela and Maturana’s construction, cognition happens at the level of the cell as much as it happens at the level of sentient consciousness: the difference between the two is the degree of the sophistication of the system’s repertoire. An organism, in this view, is structured by the history of its cognitive interactions with the environment (Osinga, 2006, p. 93). Since the sophistication of the organism’s cognitive domain is environmentally conditioned, the organism

will develop differentiated functions and structures that themselves constitute a record of its interactions with that environment. Any structural change in organization is an act of cognition, and perception arises from the continuous development of new relations within an organism's cognitive domain. The concept of reflexivity implied by this enhanced definition of an organism as biological system attempts to redefine systems theory in a way that marks the permeability between a system's "outside" and the topology of that system's internal ordering. While an autopoietic system, modelled as a cybernetic feedback loop, is still conceived as a set of relations between its constituent parts, their function concerns not only their continuous operation, but the mediation of environmental conditions that allow for their continual reproduction as an autonomous, individuated system.

According to the case study that informed the development of the theory, a frog's visual cortex processes small, fast-moving objects akin to the movement of flies and mostly ignores large, slow-moving objects to the extent that it scarcely perceives them at all: reacting to the prior is a necessary function for the autonomous-biological-frog-system's survival where the latter is mostly irrelevant to the autonomous frog-system's self-production (Hayles, 1999). The premise embedded in this line of interpretation is that biological systems that evidently perceive a world do not represent "the world" to the organism, but rather compose a world that they then act upon according to the cognitive organization of that interior perception. In this view, the frog's visual cortex does not represent the world to the frog, but rather produces a world that the frog, as a biological organism and a self-manifesting autopoietic process, is both bound to and acts upon reflexively according to self-determined processes. In this sense the interior world of the frog functions more like an operative metaphor for the world "out there" than a representation of the world itself. The key to grasping this distinction is the idea that an

autopoietic system is informationally and operationally closed from its environment: its organization (and therefore its behaviour) is determined, reciprocally, through the process it engages, and the process it engages is determined, reciprocally, by its organization (Hayles, 1994, p. 74). Hayles, an insightful theorist of cybernetics, technology and literature, elaborates on the evident enclosure of an autopoietic system: “Events that happen in the environment do not cause anything to occur in the living organism. Rather, they are the historical occasions for triggering actions determined by a system's organization” (p. 76). In other words, if the behaviour of a nervous system is conditioned by that system’s autopoiesis, the result of that process is a circular, self-reflexive dynamic. Or so the theory of autopoiesis would have it.

The most significant (and problematic, in Hayles’ recapitulation) implication of this construction of reflexivity is the idea that the unity that this system composes is only distinguished as a composite unity within a separate medium (an “inside” distinct from an “outside”) by an observer. And the paradox underlying this explanation is that the observer is not separate from the observed, but is structurally coupled with it (Hayles, 1992, p. 142). According to Maturana, an autopoietic system in its purest expression is simply a self-enclosed, curricular process of self-production:

A living system is not a goal directed system; it is, like the nervous system, a stable state-determined and strictly deterministic system closed on itself and modulated by interactions [i.e., environmental events] not specified by its conduct. These modulations, however, are apparent as modulations only for the observer who beholds the organism or the nervous system externally, from his own conceptual (*descriptive*) perspective, as lying in an environment and as elements in his domain of interactions. (p. 139, quoting Maturana)

From the viewpoint of the autopoietic process (i.e., the informationally and operationally-closed feedback loop through which the autopoietic system realizes itself), the only things that exist are the operations through which autopoiesis is realized, playing out in a perpetual present with no

delineation of past or future. The inference of any teleology or cause and effect relation in the behaviour of this system is the inference of an observer drawn from a descriptive domain outside the enclosure of the autopoietic system.

Autopoiesis and Cognition gives the example of two teams assigned the task of building a house (pp. 53-55). One team knows it is a building a house. The tradespeople understand that a house is the ideal form which they are labouring to deliver and the end goal of the process in which they are engaged. The second team does not know that they are building a house. Instead, they are given tightly defined tasks to complete in a coordinated sequence that will, without their foreknowledge, methodically produce a house. In Maturana and Varela's telling, the latter illustrates how apparently teleological projects can emerge from processes that do not themselves possess an awareness of a goal. In Hayles' interpretation, however, the homebuilding example illustrates a substantive distinction between the contextual, historically-contingent knowing characteristic of a descriptive narrative and the constrained sequential logic of analytic reasoning endemic to systems theory. Where the first team can articulate a logic that relates the activity of the present to the past and the future, the second merely operates in a continuous present according to a specified set of processes that, "lacking any sense of purpose, causality or goal," cannot relate a story amounting to more than a series of statements that relate "this is happening, then this happening, then this is happening" (Hayles, 1995, p. 79). The descriptive knowledge of the first team makes the project of building a home in which they are engaged meaningful in a sense that escapes the second, whose observational scope only takes in the prescriptive terms of the process it engages.

One might make a comparison between the way the theory of evolution is constructed, discursively, as a goal-oriented system for the perpetuation of life on earth where the actual

activity of DNA telomerase through which an organism articulates its cellular structure (a process exemplary of the kind of abstract cognitive process which Varela and Maturana describe) resembles a haphazard assembly line wherein the uptake of coded proteins activates predetermined genetic sequences. The latter, as an autopoietic process, knows nothing of a survival instinct or the propagation of a species, and is simply activated through chance encounters between genetic coding machines and particular nucleotides. In this light, the theory of evolution that describes speciation as a goal-directed, linear process only makes sense descriptively insofar as it is expressed as a narrative that generalizes the historical contingency of the environments in which life arises, adapts and propagates itself. Evolution's irreducible cognitive mechanism appears, by contrast, a set of prescriptive responses to random molecular stimuli. This construction of the gap between the theory of evolution and its actual mechanism is wanting in several respects. It doesn't take in the flexibility of a genome's cognitive repertoire nor the complex networking of chemical processes and feedback loops through which DNA expresses itself, for example (Bousquet, 2009, p. 181). But it is nonetheless illustrative of the distinction between the levels of cognition the theory of autopoiesis implies, and suggests the necessity of narrative structure to meaningfully account for relation between cognitive processes and the significance of human projects and commitments.

One could easily extend the homebuilding metaphor to encompass the apparent dysfunction of the information hierarchies of MDMP which Grant Martin laid out in his anecdotal account of the Robin Sage exercise: the metaphor implies a distinction comparable to the distinction between the knowing of the planning staff who see "the big picture" and define the scope and the meaning of the operational narrative and the knowing of the lower echelon commander, equipped with doctrine, who reacts to battlefield events according to an inventory of

preordained forms and patterns. The planning staff articulate the logic of the mission in terms that contextualize the historical contingencies that define a strategic project and the historical commitments it implies. Extending the metaphor of autopoiesis, their ability to articulate that project in terms of a developed narrative rationale that marks historical factors implies a higher order of cognition than the observational situation of the operator and even the individual combatant, who are simply “coupled” to the terrain of conflict and the battlefield events that trigger their reactions.

The latter are surely observers in that they can self-represent their situated relationship within the environment in which they are engaged, and the mission-command concept assumes a principle like reflexivity: the observation of changing conditions on the battlefield necessitate that the fighting system modify their form and improvise their patterns of behaviour, even as that repertoire is determined by cultural factors like doctrine and professional ethic. But insofar as they are component unities subordinated within the composite unity of a system of operational command, the organization of the operational system does not appear to incorporate their comprehension of events in terms that exceed the observational scope of the feedback loops in which they are incorporated: MDMP conceptualizes them as feedback terminals that receive orders, actualize them through movement, reconnaissance, or contact, and report back on their fulfillment. They receive instructions and reproduce the intent of those instructions in their own fashion, and are therefore autonomous in a meaningful sense, but their actions are essentially subordinated to the teleology of the broader operational narrative. The components of a squad, a platoon or a company and their commanding junior officers can likewise take in the polysemous meaning of the events in which they are engaged, but their cognitive function within the operational system are defined by the composite unity of the operation of which they are ad hoc

components: their doing is their knowing and they function with a high degree of implicit knowledge, but their subordinate positionality in the chain of command does not obviously afford them the capacity for reflexive self-making, for creativity or evolution. Insofar as planning is an expression of a theory, only the planners are authorized to take in polysemous meaning and model the contingency of events so that they might be other than they are: planning's function reflects this self-construction, reflexively. The tactical echelons of the operational command system appear, by contrast, as cognitive ciphers for the mechanical execution of the operational narrative. Like the telos-bereft homebuilding team, planning and the tactical processes they enact function exclusively in the now, acting within the continuous present of serial events (Naveh et al., 2009, pp. 74-75).

As Naveh puts it, expanding on a brief reference to Varela and Maturana in *Operational Art and the IDF*:

the problems that [the tactical echelons] are supposed to solve are either set by their operational commanders, or are implied by the physical conditions of the combat situation. Therefore, for them, anything detached from the immediate logic of physical action, or residing outside their organizational and doctrinal boxes, is irrelevant. That which is not templated is either unintelligible or nonexistent, and abstract mediation is viewed as a waste of precious time. (p. 28)

In short, Naveh charges that the situational awareness of the tactical commander is not outfitted to take in the operational gestalt, which is the preserve of the planning staff. Or so an autopoietic description of an operational command system would have it. In a fluent combat situation, this kind of temporally-blindered disposition makes a certain sense insofar as the pace of threatening events necessitates the sharpening of the reflex between cognition and action. However, at the operational and strategic levels, the deficiencies of this asymmetrical construction of systemic hierarchy are telling, particularly as they describe the interactions of an organized social system composed of sentient actors possessing language, explicit and implicit knowledge, rather than an

abstract biological organism. This allegorical construction bears an obvious relevance for confronting the informationally-closed concept of military reflexivity which SOD aims to supplant: while the non-reflexive cognition implied by the continuous present of operational time is necessary for the survival of a tactical system engaged in active combat, it is arguably a hinderance to connecting concrete actions to the significant human dimensions of pretty much all strategic projects, and for thinking through the operational implications of military activity in an appropriately scoped temporal register.

Hayles' challenge to Varela and Maturana's rendition of the theory is that the analytic enclosure of systems theory (and the circular model of reflexivity it supposes) needs the descriptive supplement of narrative to meaningfully conceive of systemic logic and the historical contingency of the spaces and events from which an autopoietic system necessarily arises (Hayles, 1995, p. 72). In short, systems theory, particularly where it aims to describe social systems, needs narrative in much the same sense as narrative needs a spatiotemporal ordering to generate itself. In Hayles' sympathetic recasting of the theory, the question of the origin of the observer (which, in her critique, implies an endlessly multiplying recursion of observers) is less relevant to questions of systemic sophistication and iterability than the question of the observer's originary capacity for self-representation.

Hayles's recapitulation of the theory draws on Niklas Luhmann's (1990, 2018) sociological rehabilitation of autopoiesis to disrupt the solipsistic tautology of Varela and Maturana's (1993) rendition, which is stated in their opus, *Tree of Knowledge*, as "we do not see what we do not see, and what we do not see does not exist" (Hayles, 1999, p. 94, quoting *Tree of Knowledge* 242). Luhmann reinscribes this premise to mark the asymmetry between the observer and the environmental medium in which they are embedded, and through which they come into

cognition: “reality is what one does not perceive when one perceives it” (p. 97, quoting Luhmann). Luhmann’s revision marks the incommensurate relationality between the observer and their environment by shifting the emphasis onto the creativity of the observer: “the observer now generates the system by drawing a distinction” (p. 95). This nuanced revision of the theory of autopoiesis has the advantage of

investing the observer with the agency to draw a distinction. By making a distinction, the observer reduces the unfathomable complexity of undifferentiated reality into something she can understand; by proliferating distinction on distinction, she begins to reproduce within this space of differentiation some of the complexity and diversity of a reality that remains forever outside. (p. 98)

For Hayles, the desirable effect of this displacement is that, by emphasizing the contingency of a system’s construction, it becomes easier to conceptualize the outside against which a system’s enclosure divides itself. The operations of a system, in this view, appear less like an inevitability and become thinkable in terms that allow alternative constructions and orderings of that system that can respond creatively to changes in its environment. As Luhmann (2018) puts it in *Organization and Decision*, an organization that cannot observe change cannot itself change, because it cannot incorporate change into the terms of self-reference that perpetuate its condition of reproduction (pp. 128-129). The value of Luhmann’s revision of the self-originating capacity of the observer is that it encourages deep rethinking of the social aspects of a system’s construction on the scale of a state, a polity, an institution or some amalgam thereof that can break out of the circularity of that system’s interlocking assumptions (p. 93).

To move beyond these assumptions, Hayles argues, after Luhmann, that it becomes necessary to explore “ideas that, within the confines of a given system, can appear only as paradoxes or contradictions. One enlarges or escapes from a system, [Luhmann] believes, by interrogating what cannot be made logical, straight, or ordered within the system” (Hayles, 1995,

p. 72). The observer's capacity for describing that which appears unruly or incommensurate or intractable to the internal logic of the system, that which distorts, subverts, confuses or otherwise disorders its conditions of intelligibility, is a necessary supplement to any attempt to model the systemic interactions of the networked social systems in which they are embedded. In complex organizations of this variety, whether on the scale of a platoon, a brigade, or an entire theatre of operations, the mutable ideations which mediate time and space to observing agents at a variety of interdependent levels of conflict, competition, cooperation and alliance exist in tension and contradiction. Contextualizing these capacities descriptively within a changeable, dynamic environmental milieu of which the system is a part, the concept of the independence or autonomy of a self-creating system shifts away from defining and maintaining an originary condition of self-possession and towards a mode of reflexivity that asserts its autonomy by acting recursively on its own representations (Hayles, 1999, p. 149). This shift in descriptive emphasis is significant in that it decenters the idea of a system as an enclosed totality responding to random events according to a prescriptive inventory of functions with the idea of a system that is conditioned by its network of interactions.

While a system may remain operationally closed, as a military command does, in the sense that its functions are defined by the world it perceives and the repertoire of responses it develops and refines, the function of that system is no longer exclusively defined according to a self-identical internal logic: the coherence of that inner logic and the concordance between the observations and perceptions of its components are subject to a process of complication and revision that facilitates their continuous remaking to respond to new environmental potentials and patterns of interaction. This is especially so for meaning-making systems that communicate as the basis for reproducing meaning, through which their autopoiesis is realized. This means

that in order for a meaning-based social system to reproduce and survive, the system needs observers that can represent that difference between the system and its environment, mediate between events and situations, maintaining “closure under the condition of openness,” as Luhmann (1990) would have it (p. 13). This necessitates a certain condition of understanding through self-reference in the autopoietic social system, in order to integrate meaning into substantive changes in its condition of self-reproducibility. Communication of meaning in itself isn’t sufficient, even if communication necessarily informs understanding and action. What is necessary for the reflexive meaning-making system’s autopoiesis is an ordering of a sense of time – future, present, past – that marks the introduction of difference and discontinuity in both its environment and its internal ordering. This doesn’t mean dispelling paradox or contradiction, so much as making them legible as necessary conditions of meaning-making that condition the social system’s intelligibility of its environment and the quality of its organizational actions and functions. It’s arguably this sense that Naveh’s conception of the linkage between operations (i.e., functional actions unfolding in a continuous present) and strategy (i.e., a projection of meaning within a temporal emergence) as autopoietic process seems to be pitching at.

This line of argument would seem to bring us back to Lyotard’s concept of metanarrative incredulity. Naveh’s unpublished collaboration with Hungarian noble and retired US Army BGen. Huba Wass de Czege (2009) (which Wass de Czege recapitulated in an article for *Military Review*) centers the need for a kind of qualified and well-heeled skepticism, even at lower levels of the organization, towards the kinds of dimly perceived teleologies which are embedded in institutional terminologies, maps and narratives. This kind of incredulity might help transition military knowledge away from the perception of complicated, discrete problems that can be resolved in isolation towards a preference for considering human factors that can sophisticate the

responsiveness of the organization and its human embodiments. For Wass de Czege, as for Naveh, this would complexify the military hierarchy in ways that might make it more sensitive and responsive to the human factors of complexity in war, which are arguably the factors that matter the most in virtually any expression of armed conflict. Commanders' intent in this kind of system would seem to be something that needs to be actively negotiated and resituated by responsive agents that develop novel means of critiquing its assumptions. Whether such an overhaul would be institutionally viable in an organization that depends on clear hierarchies remains an open question (although most military design models, both inside Israel and beyond, presume at least a limited license to explore those possibilities). Nevertheless, such an overhaul would be entirely consistent with SOD's principle of capitalizing on difference to enlarge the scope of what matters to a learning military system.

Chapter 10: Negative capability and organizational transformation

Naveh himself does not reference the term, but we might call what his articulation of the storytelling function is getting at a kind of “negative capability,” after social theorist and radical pragmatist Roberto Unger (2001). English romantic poet John Keats’ version of negative capability, which is only sparingly described in Keats’ private letters, essentially describes a literary effect of defamiliarization that enables a productive suspension of judgement on the part of the reader or audience. In the English modernist tradition, the term is usually understood as a liberal conceit that augurs a literary work’s capacity for “the opening of the self to the multifarious otherness of the world” (Ou, 2009, p. 8). Or, as Stanley Fish (1988) put it in his rebuke of Unger’s early writings and their influence on critical legal studies, negative capability is the distinction of “the poet’s ability to completely sublimate his convictions” (p. 1005). In this version, the literary work entertains and multiplies doubts in ways that eschew any singular grounding in a faculty or structure of reason and enables the poet to “project himself sympathetically into the positions of his many and varied characters” (p. 1005). Naveh’s articulation of the storytelling function is not so much an index of this kind of negative capability (wherein the author of a literary setting encourages suspension of judgement about the figures they have called up to populate that context with designs and intentions, plots of whatever contrivance) as it is a purposive instrument of what Unger terms institutional disentanglement. After Unger’s repurposing of the term, negative capability is an index of the capacity to challenge social situations which are made to appear as innate, natural, given social facts by the imaginative and institutional formative contexts that give rise to them.

Formative contexts

Writing in the early 2000s, social theorist and radical pragmatist Roberto Unger, revisioning Keats famous term, develops the concept of negative capability to describe a social institution's capacity for reworking its formative contexts. As Unger defines it in *False Necessity*, negative capability is a kind of index of "empowerment that arises from the denial of whatever in our contexts delivers us over to a fixed scheme of division and hierarchy and to an enforced choice between routine and rebellion" (p. 279). In conditions of relative social or civic peace (i.e., outside a state of historical revolution), negative capability imparts opportunities for conscious redesign and revision into the activities upon which that institutional structures depend for their social reproduction (p. 279). In this sense, negative capability is conditioned by the degree to which the imaginative and institutional framework for decision making (i.e., the practical, functional choices that seem to be imposed, often as either/or binaries, by the arrangement of certain social situations) can be productively denaturalized and disentrained.

For Unger, social situations of every order are conditioned by a set of formative contexts. Those formative contexts establish the normal, functional routines that perpetuate themselves in processes and rituals of legitimation. They also establish reform cycles that (ideally) aim to restructure those contexts in order to ensure their perpetuation, usually through the extension of beliefs, principles, or relationships which those formative contexts aim to preserve and perpetuate. These formative contexts arise by settling and containing destabilizing conflicts that troubled their pre-existing social situation and become entrenched to the extent that they gain immunity to disturbance by the kinds of tensions and rivalries that persist in daily social activity. Formative contexts are neither governed by preeminent laws and tendencies that are innate to the process of social development, nor are they governed by determinative sequences, even where they make it appear so. For Unger, formative contexts are makeshift and "pasted-together,"

whatever their provenance (p. 34). They distribute roles and hierarchies or varying degrees of rigidity that both reflect and reiterate the beliefs about the ideal forms of living, working, practice and affiliation embedded in institutional and imaginative orders, making the political artefacts that affirm these arrangements appear like natural social facts as opposed to contestable frames that might be unsettled by self or collective assertion. These arrangements may be practical (i.e., concerning the way in which roles fulfill functions of the formative context) or they may be passionate (i.e. concerning the convictions and argumentative strategies which inhere to affirm an ideal model of life or terms of affiliation of those bound to a formative context). The key idea is that formative contexts mediate certain tensions between the apparent necessity of routine, or, conversely, reform, into rational structures that seem to inhere as institutional necessities.

Crucially, these formative contexts may be open to revision, to varying degrees, either intentionally or unintentional. Some are designed this way (think of the way the legal system is theorized as a continuum of judicial precedents, for example, which grants it legitimacy as a structure of deliberation). Others may simply lapse (usually by failing to fulfill a criteria for success) in a way that opens them to possibility of revision, appearing to those who inhabit them as routines without reason, unsettling the rigidities which seemed to inhere within the social situation they affirmed. This is to say that formative contexts reproduce certain routines, but likewise make certain revisions more accessible than others. As Unger puts it “much happens just because of what happened before, and the more or less intentional pursuit of negative capability has to share its influence with the power of mere sequence” (p. 36). This means that a formative context’s openness to reform or revision is no guarantee that it will emancipate or

empower its social agents with the same capacity, and that routine and sequence will nevertheless come to bear upon any revision of the formative context.

Speaking to a specifically martial context (which he distinguishes from civil economic and political contexts), Unger gives the example of the invention of light field artillery in the pre-Napoleonic era (p. 284). The introduction of these more accurate and mobile weapons (arguably war machines in their own right) favoured the revision of tactics and deployments in order to loosen up the density of marching formations and exploit the mobility of lighter infantry and artillery units. The German military formations of the era were unable to implement these field pieces in a way that could capitalize on their capabilities because the disciplinary nature of their formations (which included specialized soldiers in the rear of the advancing formation to prod reluctant soldiers forward with bayonets) reflected a formative context in which soldiery was a condition of serfdom, and the soldiers themselves had no intrinsic motivation to fight, let alone articulate or identify with the causes of the war. In contrast, the French army, made up of citizen-soldiers (another potent war machine) in the post-revolutionary period, had more flexibility to revision its martial formations because its formative contexts assumed the military belonged to the nation and the nation was not simply a possession of the elites. This meant France's continental army had an enormous advantage over its adversaries in morale and organizational flexibility and could integrate innovations in a way that enhanced the efficacy of military organization.

However, Unger notes that the successors of France's military innovations after the Napoleonic era did not need to shake the foundations of the social order as violently to acquire these same advantages. Prussian military reformers only needed to entrench a sense of national community and enhance the meritocracy of military recruitment and promotion in order to

implement comparable innovations in organizational practice and function. Where disentanglement of the *ancien regime* was, for the French army, a productive condition that arguably empowered the soldiery to a limited and contextually bound mastery over aspects of their formative context, in the Prussian example it only served a practical function that did not afford the soldiery any great power of revisioning. The analogy would logically extend to the formative context of the officer corps after the German Army's reforms of the 1930s: as envisioned by HD-300, the mission-command concept (arguably a powerful artefact of institutional disentanglement in its own right) did not affirm any emancipation of the soldiery beyond the practical refinement of military means. These reforms certainly imparted a gravitas to military reformers like Ludwig Beck, an influential conservative elite, that eventually put them into a power struggle with the Nazi regime. This does not mean that the degree of institutional disentanglement enabled by the mission-command concept was fixed by its formative context so much as it means that the disentanglement of tactical and operational initiative did not impart an obvious capacity for negative capability that could translate into emancipation of the soldiery or the officer corps from their defined socio-political roles.

For Unger, there is no stable, clear-cut division between routine and its subversion because there is no final closure by which a formative context can come to fully inform either our practical or passionate dealings with each other. Imagining empowerment in terms of imparting an agency of self and collective assertion to social actors to re-envision and remake their formative contexts, negative capability concerns the capacity for loosening the terms of affiliation and routine in a way that not only strengthens and enhances specifiable attributes of a formative context, but the capacity to conceive those specifiable attributes:

The most straightforward sense in which the disentanglement of formative contexts empowers people lies in the greater individual and collective mastery it grants them over the shared terms of their activity [...] This range of forms of empowerment is achieved by creative formative contexts that soften the contrast between context-preserving routine and context-transforming challenge. (p. 34)

Unger's pragmatist project in *False Necessity* can therefore be understood as an attempt to move beyond a futile dichotomy between antinomian rebellion, in which the overthrow of all formative contexts and conventions of governance is the precursor to developing mastery over the forms and structures of collective life (i.e. communist revolution) and the bad-faith acceptance of the outward rituals of social life as confirmation of ongoing progress and social evolution (i.e. naïve liberalism) as the only alternatives to compulsory re-enactment of established routine (p. 291).

Instead, Unger posits negative capability as an index of not only the resilience of an institutional or an imaginative formative context confronted with conditions that threaten its survival or success in fulfilling its functions, but its capacity to impart agency to actors to remake those contexts and the compelling logics which they impart, and upon which they inhere. This capacity is a question that is of central concern to questions of governance. As Unger tells it,

The most formidable statecraft is...the one that can enlarge the range of possible solutions by changing this context. At its most ambitious, this transformative political art does not merely replace one set of institutional and ideological assumptions with another system of the same kind. It inaugurates a framework that is permanently more hospitable to the reconstructive freedom of the people who work within its limits. (p. 34)

And in this capacity, Unger's thesis on negative capability is arguably homologous to the underlying concept of organizational pragmatism that animates the Naveh school's philosophy of self-disruption.

Naveh's practice aims to empower the generalship to change their conditions of knowledge socialization and expand their organizational repertoire by loosening the strictures of the education of general officers. Disruption, subversion, heresy are all watchwords for the

negative capability of high-level officers (usually above field grade) to conceive their own operative logics and realize their own transformational initiatives. Nevertheless, the unspoken assumption underlying this approach is that many if not most of the normative routines of military life must persist, for their agency as general officers is essentially meaningless absent them. This evident paradox presents one of the most significant challenges to the externalization of the Naveh school's conception of strategic agency.

The tragic cycle

Cultivation of negative capability, in these terms, remains a core competency of the present-day practices of the Naveh school, which continues to impress an imperative of denaturalization in the routines of political-strategic calculation. The IDF's general's course remains the principal formative context for cultivating this capability. This formative context, which was rejuvenated in 2014 despite the relative ignominy that SOD acquired in the IDF after 2006, is nevertheless a far cry from the hotbed of nomadic deterritorialization which Naveh's more incendiary writings envisioned. Where the Naveh school's early engagements foreground the dynamics of war machine and state apparatus as a governing metaphor for paradigmatic revolution in operational theory and practice, they imagine continuous movement and dissolution of the rigid and intractable in the stratification of martial organization as an emancipatory project in its own right, one which seems to map to a logic of permanent revolution. However, as Eyal Weizman (2007) and others point out, this approach vastly overstates the flexibility of the military state apparatus (p. 212). While the formative contexts that inform the distribution of roles, structures and functions of military organization are indeed open to revision in ways that are arguably unique to that particular niche of statecraft (in part because success and survival are interrelated in martial contexts in ways that have few obvious analogues in the sphere of the civil

economy or political life), it is difficult to imagine how a military organization could function without clearly delineated hierarchies and C2 arrangements, disciplinary accountability of varying degrees of rigidity. This creates an obvious tension between the need for disciplinary accountability and formative reinvention.

As the conclusion of a relatively recent special journal issue on reflexive military practice put it,

On the one hand, military organizations require the formalism provided by rationalism in the form of a set of rules socialized in training, education and exercises to ensure organizational cohesion enabling the chain of command. On the other, this formalism is detrimental to the adaptation and innovation required to thrive in the long term. (Beaulieu-B. & Dufort, 2017a, p. 277)

While the specifics of the terms of answerability in a chain of command can surely be revised (and are, in fact, often revised continuously), command itself is an undergirding structure for operations which makes martial organization possible. Pro Weizman, operations are indeed planned, analysed and executed within nested hierarchies, orders are issued as commands to be followed in accord with operational timelines and the defined logic of the mission (Zweibelson, 2018b). In this sense, the formative contexts of military education and discipline are conditioned by specifiable attributes and characteristics that depend on the distribution of roles and functions these formative contexts enable. Those roles and the hierarchies they entail are only meaningful (and valid, institutionally) insofar as those formative contexts inhere to impart order and coherence to the martial activities they underwrite. In this sense, the formative contexts of PME are dependent on their specified capacity to deliver on cultivating leadership excellence (or, at least, the appearance of it). The degree of institutional disentanglement those formative contexts impart must continue to fulfill that criterion (however it's envisioned or re-envisioned) or the

institution will cease to function. This is a problem that seems to condition the emancipatory potential of these kinds of formative contexts.

When Naveh's paradigmatic revolution failed to take hold in the IDF, his project was taken up in other military contexts where the breakdown in strategic thought and organizational sensemaking had induced profound crises of organizational knowledge (namely SAMS and JSOU). Those crises were particularly pronounced in defense organizations who had become ensnared in the strategic catastrophes of Iraq and Afghanistan during the GWOT. The stories that they told themselves about how and why they were fighting did not meaningfully account for the world they aimed to transform to strategic advantage. Those interfaces instated new formative contexts of PME where the military design movement continues to iterate and evolve in forms that, despite his profound influence on this field, Naveh's project little resembles. In spite of the ostensible radicalism of Naveh's writings, the formalization of design methodology in military settings has only entrenched its institutionalization in the two decades following SOD's inception. Beginning with the publication of the Australian Army's "Adaptive Campaigning" handbook in 2006 and carrying over into the doctrinal formalization of the Army Design Model (ADM) in the US Army's *Operations Process* field manual in 2010, design has insinuated itself into the executive functions of the military state apparatus in ways that are arguably contrary to the letter and intent of Naveh's operational revolution (Ryan, 2011).

SOD's original invective has of course been cut, its philosophical "venom" sapped by administrative pressures, requirements like deliverability and efficiency of organizational communication. OTRI's early champions, alongside active military design practitioners in contexts outside of Israel, charge that contemporary design processes function more like procedural checklists for creative thinking than as potent mediums for the invention of novel

paradigms and tend to conform to the doctrinal habits superseding their applied context (Graicer, 2017b; Zweibelson, 2018a). This is not to denigrate the aims of these interventions. The advent of military design marks an attempt to elevate ethical reflection within the prescribed techniques of operational art. While it retains no trace of the intimidating philosophical sophistication of SOD's theoretical texts, ADM nevertheless prioritizes social considerations that exceed the scope of operational rationalizations, and its methods are grounded in an attempt to develop ethically defensible rationales for military operations as a counter to the abidingly linear and tactical focus of operational planning. ADM encourages approaches to framing military problems that balance more socially-nuanced understandings of the moral risks of armed combat against the strategic calculations which qualify and sanction the application of armed force (Beaulieu-B. & Dufort, 2017b). Nonetheless, the focus on improving operational planning through design formats like ADM in order that the violence of an armed campaign realize ideal conditions for a "better peace," as one US Army LTC puts it, does not substantively unsettle the framing that conceives of those conditions as a problem to be addressed through the application of violent force (Antonelli & Hunt, 2015, p. 161). To its credit, the burgeoning military design movement is beginning to address this apparent paradox of design indoctrination. But this last insight is one which continues to trouble the legacy and evolution of military design.

SOD's later iterations strongly de-emphasize formulaic approaches to design, encouraging open-ended, contextually-informed explorations over any particular inventory of institutional processes (Graicer et al., 2022). The framing discourses of its early model have been replaced by a general heuristic for assessing drift in a variety of different registers of meaning, taking the condition of the thrownness of the general's situation as a given and working to simply define what that condition means for the national interest, however it might be defined. In this

capacity, it's interesting that SOD's conception of emancipation arguably evolved from a mindset of revolutionary emancipation of military hierarchies towards one more obviously couched in the existential freedom of the general. Nevertheless, SOD remains something of a bugbear to military academics, both inside and outside of Israel. The embrace of explicitly reflexive approaches to military education in defense organizations is hard-won.

Because military institutions are inclined to indulge reflexive thinking only in response to moments of organizational crisis, design practitioners have observed that reflexive military approaches like SOD tend to lock into a "tragic" narrative arc or cycle (Beaulieu-B. & Dufort, 2017a, pp. 281-284). Once the crisis which compelled a defense organization to undertake a reflexive turn subsides, like the crisis of the second Intifada for the IDF or the occupation of Iraq after the Battle of Fallujah for the US Army, the incentive to indulge critics of doctrinal orthodoxy disappears. The organizational tendency is to then "appropriate, resist or suppress" the new forms reflexivity (p. 281). The avant-garde consolidates an identity as exotic outliers. The defense organization loses interest in the substance of the reflexive approach and converts its resources into capital, either intellectual or budgetary, to underwrite organizational survival or, just as plausibly, advance career promotion (p. 283). Apprehended in this way, the tragic narrative "understands defense organizations as detrimental to the military profession when the urgent necessity of substantial change is not evident to stakeholders" (p. 283). The sustainability of any disruptive program for reflexive engagement with the social problems of campaign strategy is inherently compromised by this structural arc, and the tragic narrative is inbuilt into the outlook of many reflexive military thinkers on account of it.

The trope of the tragic cycle is valueable insofar as it accounts for a cyclical pattern of military innovation and organizational stultification. It suggests that the competing routines of

organizational accountability and innovation, tied to formative contexts unique to defense organizations, sync with sequences of organizational success and failure that loosen or constrain the formative contexts in which either organizational reforms or the enforcement of routine (or both) play out. A strategic failure in the face of an unprecedented crisis opens a fleeting window to innovative leadership by promoting faculties of institutional disentanglement. The tragic cycle therefore presumes an in-built limitation to the formative contexts of military education. Design needs organizational failure to be meaningful. And that condition of failure is uncomfortable for a defense organization to contemplate because it means taking a rigorous measure of its own inadequacy, its failure to anticipate and adapt. That limitation is essentially borne out by the recent history of military design. Design educators and practitioners continue to struggle to maintain a foothold in the absence of palpable, clearly defined crisis.

By focusing on the highest levels of command, Naveh's theory of generalship limits applicability to a very specific institutional situation. It takes the "thrown" positionality of the design practitioner as given insofar as a general assumes a very high degree of responsibility for the choices that they make, and this empowers them to grant a latitude of creativity to subordinates in the design and execution of operations. That positionality is a precondition of their freedom to invent their own tools of learning and process of discovery through operations. A general staff engaged in a SOD exercise are permitted to identify where defense policy gets strategy wrong insofar as the organization failed to anticipate the emergence of a crisis in a way that prevents their deterioration from the perspective of national security. But this condition arguably cannot be generalized to positions outside of the strategic level. This means that field and tactical officers (or, indeed, even NCOs) are not afforded the same latitude for self-creation within the formative context that SOD envisions as the fundament of negative capability for

leadership in a military organization. This positioning might be understood as a problem for the translation of Naveh's ideas into other contexts. But even in translation to lower levels of the organization, design approaches aren't likely to encourage a deep revisioning of the foundations of national security policy, for example, as normatively defined by political authorities, because those questions are generally the prerogative of leadership levels above the paygrade of most officers undertaking PME. This is arguably a shortcoming of design as much as it is a limitation. The revisioning of PME, which is in some sense demanded of its formative contexts, simply grinds on out of necessity, regardless of the negative capabilities of the agents of martial innovation, be they nomads, heretics, dialecticians, or bricoleurs, who inhabit those mindsets in body, thought, and deed.

This expanded case study of Naveh's writings foregrounds the power of storytelling as a means of disentrenching that which seems inevitable or necessity to the systemic and institutional logics of a defense organization. But the terms of organizational accountability which the formative contexts of PME must fulfil, even as they ideally empower military leaders and innovators, do not in themselves necessitate that reflexive capacities directly enhance a defense organization's capacity for violence. They might just as easily be applied to clarify and strengthen military-civilian relations, ensure principles like equity and diversity in recruitment and promotion, dismantle bias in the apparatus of leadership, or simply rethink the nature of the received problem that an operation is conceived to transform. These are, of course, all relatively safe ways of posing questions that would otherwise seem to undermine the presumption of an "apolitical" nature of military leadership underlying the authority of defense organizations, upon which civil-military relations (one of keystones of modern civil society itself) seem to depend.

Tarak Barkawi (2018), who attended a foundational military design conference at St. Paul's University in Ottawa in 2017, observed that “design” has been able to insinuate itself into PME in military academies outside of Israel insofar as its advocates have strategically avoided questions that would seem to threaten the impression of its apolitical character. Perhaps as well they shouldn't. But that framing also undersells the value of negative capability to defense organizations. The political character of war is in no small part defined by defeats as much as victories. The recent defeat of the ANA in Afghanistan, after nearly 20 years of fighting, suggests the folly of mistaking strategy for the cumulative effects of successful operations. Many who deployed to Afghanistan, from enlisted to NCOs to company and field grade officers recognized the contradictions and critical failures of the strategies of nation-building, COIN, etc, and called them as much⁹. Those critical observations didn't unsettle the ultimate strategic teleology of the political prosecution of the war, which ended in a verifiable defeat with the collapse of the ANA in the face of a resurgent Taliban in the summer of 2021. Much like the Vietnam war before it, the interventions of the GWOT were all underwritten by a high degree of apolitical professionalism which in no way prevented the strategic (and often humanitarian) disasters of the GWOT's political outcomes. Iraq, Libya, the abandonment of the Kurds in Syria. The green machine simply ground on.

As Barkawi tells it, reflecting on the artificial limits imposed on the emerging context of military design: “PME has to prepare officers to operate in the political and social context of our times. Militaries cannot normally decide politics and policy. But they must be profoundly cognizant of them, in order to shape and influence, as domestic institutional actors and on active

⁹ See Michael Hastings' (2012) non-fiction accounts of the troubled exchanges between ISAF commander Stanley McCrystal and enlisted personnel in *The Operators* for an example of this kind incredulous savviness.

operations”. As Barkawi sees it, the destabilization of civil society, which appears to be teetering over an abyss of renewed authoritarianism (in the West as much as anywhere else), has undone the consensus on military-civil relations which held after the Cold War through much of the early 21st century. Barkawi’s corrective is for military design to find a political voice that is able to call out the ideologies of racial exclusion which underwrites many of the political aspects of national security policy. This is a logic of exclusion that arguably underwrites aspects of Israel’s domestic and security policy, and which is usually given short shrift in study of its strategic and martial culture (and by focusing on questions of martial technique and form over questions of explicit moral and political value, this dissertation is no exception to that tendency). But those political questions concern the “what” and the “why” of the values that defense organizations perpetuate and uphold. If the presumption of apolitical neutrality in the exercise of military leadership prohibits challenges to political values which threaten the principles of civil society upon which defence organizations depend for legitimacy, and which are deeply bound up in questions of collective security, then those organizational values need to be substantively revisioned. These are failures that will haunt defense organizations that cannot keep up with the political demands of our present moment, beset by a return to great power competition, political turmoil which casts the credibility and moral legitimacy of partners and allies like Israel and America into question, and declining interest in military service by all demographics of service age. In these domains, design and military education have their work cut out for them.

Conclusion: a short reflection on the risks and responsibilities of “giving war a chance”

This dissertation set out to build a bridgehead between war studies and literary studies. By constructing this bridgehead, it attempted to open the study of literature to questions of method, practice and inquiry that concern not only war studies, but also researchers and practitioners who support innovation in defence and security organizations in the pursuit of more critically responsive, self-reflexive and, ultimately, efficacious means of advancing the national interest in an increasingly threatening and unstable world. By writing across the military-civil divide, this dissertation has also attempted to prototype a method that engages the critical sensitivities of literary scholarship to subtle and transmutative properties of language in a way that is amendable to (if not entirely consistent with) the educational needs of defence organizations in conditions of epistemological crisis.

Traversing the rabbit holes excavated by the Naveh school's published corpus, this dissertation detailed literary and practical precedents for an innovative (if highly contentious) approach to strategy and operations which drew directly from a variety of formal and informal disciplines that privilege conceptual abstraction. Those precedents evidence both comprehensive and incidental efforts to foster creative inquiry into emergent phenomenon of armed conflict and, in more comprehensive terms, to emancipate sense-making capabilities in the military decision-making apparatus as a counter to the habitual scientism and teleology of the military state apparatus. As we saw in the chapters on “Between the Striated and the Smooth”, DeLillo's *Point Omega*, Lawrence's “Evolution of a Revolt” and the US Army's Military Decision Making Protocol, the tendency to situate doctrine and planning formats as primary sense-making instruments in defence organizations imparts a linear patterning of thought and organizational behaviour which reinforces impressions of a factual logic of narrative causality underlying the

unfolding of military operations in space and time. As I have argued, these tools (which, in fairness, remain indispensable, whatever their limitations) tend to reinforce generalizations of unhelpful assumptions about the operational environment and the nature of the conflict at the strategic and operational levels. These assumptions often frustrate strategic thinking and inhibit organizational learning. This is particularly the case when these kinds of linear models are applied to unconventional operational problems and strategic challenges like those of LICs, insurgencies, grey and hybrid conflicts that complicate epistemological categories foundational to modern military education. These kinds of unconventional fights tend to subvert the guiding assumptions of defence organizations in ways which call for deeper consideration of the ways in which cultural factors are likely to condition the terrain of modern conflict, which are bound as much to social and cultural issues and reinforced by subjective habits of perception as they are prefigured by the technical challenges which tend to preoccupy the profession of arms.

To enrich the conceptual repertoire of the postmodern turn in military thought and to unsettle military education's natural habits of scientism and deductive rationalization, the introduction described a method of unearthing reflexive episodes from the history of military operations and subjecting them to a revisionist analysis that attends the *allegoresis* underpinning their narrative composition. The study of narrative tropes and figures structuring the literary composition of histories of war and warfare suggests both a means of testing the boundary between real and imaginary events these narratives claim to represent and of comprehending patterns of real-world significance implicated in their composition. In the process of unearthing the Naveh school's improbable mobilization of avant-garde literatures in support of military learning, this dissertation has attempted to validate a poetic rationale for analysing literary texts and practices in light of representational concerns of military epistemology relevant to

practitioners of armed conflict. By detailing aesthetically compelling aspects of the Naveh school's forays into literary poetics, it worked to identify poetic, formal and narrative devices and relevant theoretical framings drawn from a literary corpus on modern and postmodern warfare that might make the emergent complexities which confront strategists and military design practitioners apprehensible through novel terms. In armed conflict, reality "bites back" in ways that tend to radically undo idealizations of narrative continuity and organizational coherence, in the process unsettling the idealizations which validate the production and exchange of knowledge. The capacity to invent terms and metaphors, to tell different stories about the how and why of martial activity that complicate seemingly settled conventions of knowledge can be powerful organizational enablers amidst the inescapable complexity of human projects, designs and intentions. Regardless of their level of education in the literary arts, an officer comfortable with the transmutative properties of language is likely to retain a critical edge amidst the radical instability of armed conflict (Paparone, 2012). The ability to read changing social conditions in light of paradoxes, ironies, and capacity for subversion of institutional forms and expectations is an essential competency for responding thoughtfully and purposefully to a complex world harried by radical threat and instability.

Military education would be well served by sense-making tools that can make this kind of reflexivity accessible to defense and security practitioners who likely already possess these critical sensibilities, but who struggle to reconcile them with a professional culture that tends to disavow its relevance to a world qualified by repeatability and verifiability. The Naveh school's radical approach to military education was unable to establish an enduring bridge between these two worlds for any number of reasons, but that does not mean that further efforts to develop critical reflexivity in either the command apparatus or PME more broadly are futile. After

Francois Jullien's recapitulation of Clausewitz, the creativity of war will continue to set conditions that confound defense organizations' formative institutional models. Accessible framings that can help defense and national security professionals reckon with the paradoxes of creative destruction will be increasingly required to pose effective organizational responses to emerging non-state and para-state expressions of armed conflict that exceed conventional models of strategy. In a more open-ended sense, these kinds of approaches could also be invaluable for conceptualizing the human-centric problems of collective security so that defence organization better serve and represent the needs and values of citizens who are increasingly sensitive to questions of equity and inclusion, questions which military organizations like the Canadian Armed Forces (CAF) have been slow to recognize. These kinds of challenges (like adapting to climate security, for example) imply timescales that are much lengthier than conventional operational planning usually allows, and may be generational in scope. In that light, these challenges will continue to impose conditions that require defense and security professionals to reckon with new forms of knowledge that reside outside the scope of conventional military affairs.

This dissertation's exploration of the Naveh school's resonances with literary scholarship around DeLillo's poetics likewise aimed to unsettle the deeply-seated assumption that literature and the humanities cannot contribute constructively to conversations about martial efficacy. The rapid and violent evolution of the post GWOT global order and the onset of major wars in Ukraine and Israel-Palestine suggest that questions of military power and strategic efficacy remain inextricably bound to questions of collective security and even national survival (as is certainly the case in Ukraine, perhaps for Israel) as much as they trouble political questions of the morality of expressions of organized violence (as is presently the case with Israel's campaign

in Gaza). Once again, war remains an unrelenting condition of global life, despite its inherent capacity for harm, cruelty and injustice. But the artificial separation of the study of literature from the study of the war as it involves human capacities for fighting is a provisional political strategy that arguably decenters war as a generative, organizing force in human affairs. That strategy has remained oddly consonant with the turn towards post-heroic concepts underwriting the compartmentalization of military activity from civil life that coincided with the onset peace dividends era (an era which appears to be passing into remission), as much as it would seem to underwrite an ongoing disavowal of the paradoxes that institutional preparation for the contingencies of armed conflict necessitates under conditions of modernity.

Literature and other creative and critical practices are often brought into dialogue with military philosophy and martial sense-making in ways from which literary scholarship has largely disengaged. In the conservative habit of PME, reading lists in staff colleges in the US, for example, often include works of literature (mostly novels and short stories) to better institutionalize doctrinal principles, model behaviours, and prepare officers to reckon with the vicissitudes of service and combat (Paparone, 2012, p. 52). That canon (which include works like Stephen Crane's *Red Badge of Courage*, Robert Heinlen's *Starship Troopers*, Eric Maria Remarque's *All Quiet on the Western Front*, Orwell's *1984*) implies a degree of self-awareness, irony and even incredulity towards the military state and martial authority that underscores the point that these institutions aren't monolithic in the way that the humanities' default antiwar tendencies often presume. But these texts are quite ancient in literary terms, and in that sense they are as likely to reinscribe regressive tropes as much as they are to illuminate the travails of military service. Which is another way of saying that the canon of serviceable military literature often looks like a delinquent boy scout's book locker circa 1965. Efforts to update and diversify

that canon would go a long way in cultivating the critical sensibilities and self-awareness of officers and NCOs. It would be a prudent move for literary scholars concerned with the institutional and civil ramifications of military education to find means of constructively intervening in those kinds of debates and projects, and providing options for their sophistication.

As I've argued, scholarship that reinscribes the disavowal of war-as-fighting when engaging with topics directly relevant to questions of defence and security is liable to misapprehend the ways in which the epistemologies of war incorporate innovative forms of knowledge creation into sense-making processes that ultimately serve to enhance martial cognition and capability. Those meaning and sense-making processes are central to understanding the agencies of combatants, and likewise for reckoning with the responsibilities of civilian "defence intellectuals" (like myself) engaged in disciplines that support the development of martial capabilities (which are, after documents like *Power to the Edge*, more often cognitive, and bound to cultural valuations of efficacy, meaning and purpose). The effect of bracketing their central problematic (i.e., how might a military system embodied in people adapt to survive and win amidst the radical instability of armed conflict and strategic competition?) is to disavow questions central to the study of war as it concerns subjects who embody war in thought and deed. The disciplinary effect of disavowing martial structures of knowledge and legitimization of martial authority is often to cede the qualification to speak to these questions as the exclusive preserve of those who possess their instrumental competencies. The risk of ceding that qualification is that questions of defence and security will continue to be defined on terms that are mostly unresponsive to the kind of nuances of human intuition which the humanities excel at sophisticating in pursuit of more just and equitable conditions. As I argued above, these martial competencies are essential to making sense of the modern condition, of which war seems to be

an inextricable facet. The humanities should have a central role to play in making defence and national security organizations more responsive and anticipatory of human needs. I would concede, after Naveh, that war can't be humanized. Even its tamest expressions involve brutal harms. This means that the principle of enhancing military efficacy in war (outside of trades like medicine and the chaplaincy, anyways) probably can't be reconciled with principles of pacifism and non-violence. But in the midst of a deep revisioning of the global security order compelled by a return to great power competition, irredentism and revanchist colonialism, there is a pressing need for scholarship that attends the ways in which security discourses can be directed to serve human interests.

Despite that argument, the approach to the study of war's mobilization of the arts modelled here will likely remain a hard sell to both of the readerships it attempts to provoke. But I would suggest that literary scholars who don't see themselves as subjects of the powers of war in the same capacity that this dissertation serves (or simply remain uncomfortable with the idea that literary studies can contribute constructively to disciplines that inform the professional study of war-as-fighting) may nevertheless contribute to public and academic understandings of the phenomenon of war as a force that transforms politics and culture. On this point, there are scores of researchers in PME institutions and adjacent fields who are engaged in earnest efforts to bring defence research and curriculum for PME up to speed on more controversial methods of contemporary scholarship relevant to the humanities. Take, for example, a recent special issue of the *Canadian Military Journal*, the flagship academic periodical of the CAF. The articles in that issue engage substantively with "intersectional feminist scholarship, decolonial and critical race theory, queer theory, critical disability studies, and critical political economy", supported by empirical data derived from the experiences of CAF personnel, in order to identify and

problematize the root causes underlying the CAF's longstanding issues of discrimination and misconduct arising from its organizational culture (Eichler & Brown, 2023, p. 7). As the introduction's authors put it,

The [CAF] needs to identify and dismantle the longstanding *impact* of these root causes on its culture as well as reconcile its own role in contributing to their *perpetuation and ongoing reproduction*. We argue that the [CAF] should play an active role in dismantling enduring systems of power and privilege within and beyond its institutional boundaries. (p. 7, authors' italics).

As the authors see it, substantive efforts to transform the CAF's military culture along these lines would have a significant ripple effect in Canadian society at large, and would likewise validate some of the insights of these disciplines to a broad spectrum of Canadian citizens and institutions. Fulfilling those objectives will be intensely challenging in the midst of the "culture wars", which have consumed Canada as much as anywhere else, and which threaten the limited progress that has been made around these topics in state institutions (like educational curriculum) over the last two decades. On the one hand, skepticism towards the CAF's efforts to resolve these issues is entirely fair, given that previous efforts to address these issues (like Operation *Honour*, which treated sexual misconduct more like a problem of leadership and discipline that could be resolved by the military independently) failed to instate substantive organizational change. On the other hand, leaving the framing of these kinds of intellectual efforts to opponents of these disciplines and the difficult conversations they tend to provoke is liable to reinforce widely-held public perceptions of those disciplines' irrelevance and illegitimacy. The failure of defence organizations to substantively revision their formative contexts to address these issues suggests that defence and security organizations need sincere and carefully targeted interventions to better serve not only the national interest but their own membership. I'd suggest that scholars,

researchers and even activists can engage constructively in these kinds of questions of martial purpose and identity without abandoning principles like non-violence or anti-oppression.

The harder sell, still, is the constructive efficacy of the kinds of critical interventions for defence and security organization who exist for the primary purpose of prevailing amidst the kinds of life and death problems that attend strategy-making for combat operations. Because these problems are “hot” in ways that have little precedent outside of the professions of arms, emergency response and medicine, there is limited institutional patience for the kind of social and cultural nuances that the humanities foreground and insist upon. But it’s difficult to imagine how these institutions can be well-served, particularly at senior levels, by leaders who can’t advance and or accept honest criticism of incoherence and regression of martial narratives in their own military culture. At the same time, the perceptions of audiences who are cognizant of those incoherencies (even if they are not versed in the operational or higher political or discourses of warfare) will continue to frustrate the efforts of defence organizations to manage complex security matters as if they were self-contained, if no-less complicated, technical problem sets.

As Emile Simpson (2018) argues in *War From the Ground Up*, extrapolating from Clausewitz, military plans cannot be abstracted apart from the question of how those plans will be interpreted by the audiences they aim to influence (p. 196). To that end, a strategic narrative is a structure through which its intended audiences can interpret actions. As Simpson tells it, the legitimacy of strategic projects is articulated through a dialectical process that aims to express a unity between its audience’s emotional and rational understandings of the relationship between modes of engaging war, their outcomes and their conceived ends (p. 196). That legitimacy is determinative of how deeply its audience (which is a multiple, fragmented body, often with

diverging motivations and expectations) buys into a particular strategic narrative as it plays out. In that sense, “a rational narrative that does not have purchase on the emotional substance of what it seeks to describe cannot claim legitimacy” (p. 197).

Operation *Swords of Iron*, the IDF’s offensive to degrade Hamas’s military capabilities in Gaza and rescue the hostages taken during the Oct 7th attacks, suggests a ready-to-hand example to support the relevance of this conclusion’s framing of the project. The ensuing narrative is presented as a kind of counter-narrative to the dominant discourses of the war thus far. It’s stated in blunt terms to center both the challenge and the necessity of developing a viable, compelling strategic narrative for military operations that can consolidate these diverging perceptions into a coherent continuity of perception, thought and effort. This is a particularly demanding criterion amidst a splintering of the post-cold war consensus on international security which seems to center longstanding questions of equitable treatment for marginalized populations “beyond the pale” of Western legitimacy. The stakes of the war imply vastly different things to different audiences, as much as they imply hard choices in the framing of rational and emotional commitment for the war’s principal parties. In the tradition of the Naveh school, it conveys the subjective impressions of this dissertation’s author on the current state of the war (although it should not be taken as representative of any of its practitioners’ views on the matter – they are the author’s alone).

Written from the vantage of the winter of 2024, the essential ideas it conveys are that strategy (which includes broader considerations of politics than military decision-making tends to allow) needs to consider cultural factors outside the scope of strictly military concerns in the development of strategic and operational narratives. In situations of security crisis, which are the kinds of security problematics SOD is conceived to address, there is a political need to tell a

story that consolidates rational and emotional attachments of its intended audiences in a way that suggests a plausible means of moving a threatening and chaotic situation into a more favourable configuration. As the war approaches its fifth month, this element of campaign strategy appears strangely absent from official narratives of the war. That this absence of targeted messaging or qualification for Israel's campaign for a broader audience has eroded Israel's strategic and political position (and its allies and partners along with it) underlines the case for the need for approaches that enable and even empower substantive critique of both military actions and their underpinning logic without losing sight of the problematics and appreciation for risk that structure security discourses and practices. At the same time, there's no escaping the risk that, in seeking advantage in conditions of radical threat and uncertainty, captivating narratives of war can pull the body politic of the societies they intend to mobilize or influence towards configurations hostile to the resumption of peace and the continuation of normal life. Israel does not seem to have been able to entirely resist the pull towards extremes in the current war, but the example is nonetheless instructive of some of the general cultural questions complicating what looks like an emerging crisis of global security. In a world of shifting alignments and interests that are increasingly disputed by a multiplicity of revanchist, imperialist, insurrectionist, authoritarian, liberal-democratic and anticolonial actors and claims, the familiar narratives which adhered since the end of the cold war no longer seem to have the purchase or relevance they once held, nor do the strategic continuities they implied.

The horrific violence of October 7th, the worst pogrom against Jews since WW2, put Israel's defence establishment in the position of no-win scenario: any action the IDF undertook in response to the attacks, which were played out 50 years and a day after the catastrophic opening strikes of the Yom Kippur war in 1973, was liable to embolden Israel's enemies – state,

para-state and non-state - in the MENA region. Opting to seize the initiative in a way that would restore Israel's deterrent, the IDF followed its deep-seated inclination to the offensive by taking the fight to the enemy. After undertaking a series of raids in the early weeks after the attacks, the IDF began a full-scale ground invasion of Gaza in late October of 2023 in order to remove Hamas from power. That offensive was undertaken with the knowledge that Hamas' strategy in Gaza continues to depend on an asymmetry trap that assumes that civilian casualties are to Hamas' benefit, and that external political pressure imposed by international audiences' abhorrence of the loss of civilian life will eventually compel Israel to capitulate before it can realize its campaign objectives. This problematic is compounded by the reality that Hamas has made very few provisions for civilian protection in Gaza and actively exploits aid agencies and NGOs operating in the territories. This means that the imperative to protect civilians often falls to the IDF, who must contend with that obligation while engaged in intensive fighting in a densely populated urban environment. As detailed in previous chapters (stop me if you've heard this one before), this dynamic historically defines the IDF's moral quandary in fighting Palestinian militants in the occupied territories.

The maximalist objective of removing Hamas from power and terminating its leadership means that the current fight has been significantly different from other fighting engagements with Hamas over the last two decades. The consensus in Israel's security establishment that the Israeli-Palestinian conflict is "post-heroic" – that pursuit of military objectives must avoid casualties to the extent that avoiding killing enemy civilians has priority over killing enemy targets - has evidently broken (Kober, 2013). The ground offensive resulted in a scale of urban fighting (as yet unresolved) without a lot of obvious precedents since WW2. Under a sustained bombardment by IDF air and ground forces, Gaza City's urban landscape quickly began to

resemble cities like Raqqa and Aleppo which were ravaged by heavy fighting during the Syrian Civil War. Gaza is roughly the half the area of Toronto, and with a population of over 2 million people, nearly twice as densely populated. The offensive displaced the majority of Gazans, who were pulled between IDF warnings to evacuate to the southern end of Gaza and Hamas' exhortations to shelter in place. At the time of writing, enormous numbers of these displaced civilians have been forced to live in improvised tent cities in south Gaza with limited access to humanitarian aid and fresh water. Tens of thousands of civilians have been killed in the fighting so far, at a rate that IDF sources admit are as high as two thirds civilians to enemy combatants ("IDF Officials: 15 000 Likely Killed in Gaza since Start of War, 5000 of Them Likely Hamas," 2023). This framing, reinforced by the widespread dissemination of visuals of the destruction of Gaza through social media channels, has dominated public discussions of the war in the West and is one of the defining narratives of the war for many external audiences thus far. In the process, the discourse has tilted away from mainstream expressions of sympathy for Israel, founded on the recognition of the ruthless inhumanity of the October 7th attacks, towards an emerging anticolonial solidarity with Palestinians against Israel and its security partners, galvanized by images of Palestinian suffering. This emergent narrative's resonance plies the emotional and rational sensibilities of its subscribers in ways that the official narratives (including those of Israel's partners) have struggled to catch up with: the assurance that the IDF has waged the current fight in way that adheres to an abiding moral principle of avoiding unnecessary harm to civilians is hard to square with the reality of the overwhelming material destruction of civilian lives and infrastructure in Gaza.

At the rational level, the current operation seems to have intentionally sprung Hamas' asymmetry trap in order to destroy the trap for good, and the IDF has evidently had some success

in degrading Hamas' military capabilities. But it would be prudent to underline the point that cumulative tactical successes in the first 100 days of fighting (like the clearing operations in Gaza City) have not translated into strategic success for Israel. Hamas's tunnel infrastructure, a key strategic asset, has afforded Hamas a considerable defensive resilience and continues to present significant tactical and targeting challenges. Hamas's command infrastructure seems to remain intact, even while Hamas has reverted to guerilla tactics in the areas in the north that have been subjected to clearing operations ("Israel Has yet to Destroy Even Half of Hamas's Tunnels," 2024). The tunnels have also allowed Hamas to maintain a kind of invisibility amidst a profusion of images of the destruction of Gaza. At present, analysis suggests that only 20 % of the tunnel infrastructure has been identified (Youssef & Malsin, 2024). At the same time, Hamas still holds over a hundred hostages. Thus far, the IDF has rescued three and mistakenly killed another three, the latter of which observers have attributed to the likelihood of loosened ROEs around distinguishing combatants. The vast remainder of hostages freed were exchanged during the brief negotiated ceasefire in November. Israel's deterrent has largely held, and the risks of uncontrolled escalation with Hezbollah appear thus far to have been contained. But emerging powers in the region, like Yemen's Houthis and the Iranian Revolutionary Guard, have been emboldened to test the limits of the desire of Western powers and their regional partners to avoid escalation. The Houthis in particular have leveraged a campaign of low-cost, high-impact attacks to amass a surprising international prestige in the process. In this light, the current government's maximalist aims for the campaign have not been met: there is little likelihood of a successful operation for rescuing the hostages, who are most certainly widely dispersed across Gaza, and the prospect of a quick military defeat of Hamas seems remote. And in the process of

pursuing these objectives, the IDF's credibility on the global stage has been profoundly damaged by the excesses of the campaign.

Edward Luttwak's (2024) recent commentaries on the importance of claiming victory, and the emboldening effect on a national audience of framing the stakes of conflict in that language, make the case that Israel's present fight in Gaza has set conditions for an exceptional victory in which the IDF can claim a 50:1 casualty rate of Hamas combatants to Israeli soldiers. That might provide a plausible criterion for claiming victory for Israel's public, who are the primary audience for that message, one which is consistent with Israel's security traditions. But, having wrongly called the conditions for a quick Ukrainian breakthrough that could break with that war's grinding attritional cycle via a 2023 offensive, the kind of binary simplifications of the strategic complexities of these intensive expressions of state-led conflicts that Luttwak (2023) seems to favour have clear limitations.

At the level of political audience, the current government has been unable to articulate a post-war plan that moves past a renewed military occupation, with the IDF eventually assuming responsibility for security in Gaza. It's difficult for an outside observer to escape the suspicion that this aspect of the conduct of the war is founded on the premise that the issues arising from a renewed occupation can be wished away and that a resumption of the status quo in Gaza is inevitable, or that a radical revisioning of the post-Oslo consensus is in the offing. It's also difficult to imagine how either policy would amount to anything other than a sustained insurgency, and the government hasn't articulated any compelling reason why they shouldn't. Either way, the IDF likely wouldn't be able to establish its legitimacy as an occupying force in Gaza, and no multinational force appears to be willing to shoulder the burden of that kind of occupation without criteria for transitioning to Palestinian-led governance. Israel resuming direct

security control over Gaza for an indefinite period without any provisions for a transition of power sounds like an extension of an endless cycle of violence, one that's arguably in its worst phase in the author of this dissertation's lifetime. The Israeli government's failure, after 100 days of fighting, to articulate a post-war strategy that engaged stakeholders could buy into will likely continue to frustrate Israel's efforts to marshal political support from partners in the region. I doubt that the government or the war cabinet is naïve on these questions, and diplomatic efforts by Israel and its partners are surely cognizant of these contradictions. But the refusal of the government to advance any counter narrative that addresses these concerns compounds this issue of buy-in, while making it more and more difficult for allies and partners to make the case for supporting the offensive.

The extent of this narrative disconnect was recently underscored by the critical remarks of former CGS Gadi Eisenkot, a member of the current war cabinet, during an interview with an Israeli news station. Eisenkot, whose son, a reservist paratrooper, was killed in the fighting in early December, stated plainly that the idea of an absolute military defeat of Hamas is unrealistic. He is one of a number of prominent Israelis in public life who have been critical of the government's political and military strategy, among whom we can also include former prime ministers Ehud Barak (himself a former CGS) and Ehud Olmert. Despite the IDF's successes in degrading Hamas' military capabilities, Eisenkot charged that "whoever speaks of the absolute defeat [of Hamas in Gaza] and of it no longer having the will or the capability [to harm Israel], is not speaking the truth" ("In Critique of PM, Eisenkot Says Talk of 'absolute Defeat' of Hamas a Tall Tale," 2024). In a lengthy interview in which he largely reserved judgement over the government's motivations for fighting the war in the way it has, Eisenkot also stressed that, given the extent of Israel's failure to protect its citizens on Oct 7th, at this point in the war the

priority of securing the release hostages should be paramount: “For me, the mission to save civilians comes before killing the enemy. The enemy can be killed afterward” (“In Critique of PM, Eisenkot Says...”, 2024). Adopting an approach which prioritizes the safety of hostages, which would align with diplomatic efforts of Israel’s partners to broker a lengthy pause in fighting to accelerate humanitarian relief in Gaza, would amount to a significant shift in strategy (one that doesn’t preclude further military operations in an ongoing conflict that will likely remain highly unstable and contested for some time to come). A strategic shift on the part of Israel that recenters the rational and emotional stakes of the conflict for both domestic and international audiences would be a welcome rejoinder to an official strategic narrative for the war that seems to be slipping the bonds of intelligibility for many of its several intended audiences. Eisenkot’s forthrightness on the disconnect between the stated war aims and the viability of Israel’s strategy thus far highlights the point that Israel’s current government has neither put forth a plausible narrative for resuming a condition resembling peace, nor reassured partners who are rightly disturbed by the plight of the Palestinians of an even nominal improvement of the Palestinian’s subjugation. So long as Israel’s political leaders continue to obscure these inherent tensions, Israel seems likely be pulled towards extremes that either compromise the security of Israel and the wider region, or undermine the liberal traditions on which much of Israel’s official security discourses are premised, perhaps terminally.

All of these questions of narrative imply hard choices about how to not only apply force to achieve military objectives, but how to define and communicate those objectives to audiences whose perception of their political and moral value can’t be abstracted from the question of defining “winning”. These aren’t choices that can be easily resolved or reconciled at any level of the national security apparatus. Nor are they choices that can be cleanly resolved at the level of

semantics. But the increasing disconnect between the aims, actions and audiences is a problem for defence strategists who must conceive, plan and sell strategic narratives, as much as it is for the survival of the liberal democracies that remain responsive to difficult and thorny questions about the morality of war.

The expanded case study around which this dissertation is constructed implies a kind of critical case study: Israel is a society that has been continuously at war, in some way or another, for the better part of a century, while remaining a liberal democracy (albeit an increasingly troubled one). The policy of conscription required to maintain Israel's high levels of military readiness means that the majority of its citizens have experience with military service, and bring to that service a multiplicity of perspectives, informed by educational backgrounds that would otherwise seem quite remote from the needs of the profession of arms. At its best, that diversity of thought has arguably been an enabler of renewed martial creativity in response to novel threats. At its worst, it has been a drag on education and communicability of martial concepts. This intellectual sophistication has not, however, enabled the sensibilities of some of SOD's most insightful practitioners to think past a cycle of continuous violence.

After October 7th, MGen (retired) Gershon Hachon (2024), a student of comparative literature, penned a three-part essay arguing that cultural differences between Arab and Israeli concepts of war are so diametrically opposed that perpetual war is an inevitable facet of Israel's existence, making a demilitarized Palestinian state an impossibility. Having more or less accurately called the outlying risks of Israel's doctrinal approach to security over the last decade, and recognized the danger of the presumption of the IDF's technological superiority as an enabler of rapid military decision in the mould of 1967 in his pre Oct 7th writings (2019), Hachon's argument that Israel requires a fundamentally new security consensus that terminates

the post-Oslo two-state discourse with finality has a credibility that's hard to brush aside. The current conflict looks like it could play out for years to come, well after the Gaza offensive eventually terminates, and it's difficult to imagine how the Clinton roadmap would continue to provide a guide for resolving an emerging conflict between a variety of new adversaries.

Hacohen's pre-Oct 7 writings also make a compelling case for the rejoining of the Palestinian and Israeli economies that suggests a constructive basis for breaking the cycle of enclosure and dispossession of the Palestinians that has become the hallmark of the occupation in the 21st century (2016). The author of this dissertation cannot personally endorse the central narrative image of Israeli military culture motivating Hacohen's assertions for the sole reason that it implicitly advocates for the wholesale adoption of a religious-nationalist philosophy of irredentism on the part of an Israeli society permanently mobilized for war. Perhaps I'm naïve and we're already there. But it's not a narrative image a conscientious outside audience is liable to be able to embrace, either rationally or emotionally.

Self-reflecting, the author of this dissertation is also keenly aware of parallels between this dissertation's war-centered methodology and Barkawi's observation, via Levinas, that war tends to make the subjects it touches bearers of the social meanings which war's disruption of certitudes works over and transforms. This awareness resonates with the feeling that, even though it was produced 1000s of kilometers from any active combat zone, this dissertation project has taken on a significance that escapes its author's intentions. Insofar as war tends to bend human projects and motivations to ends that don't serve human interests, this project has not bucked the trend: there are moral implications to this kind of research that require scholars to continuously revisit and renew moral and ethical principles as the unremitting condition of war tests and undermines them. And in that capacity, that dynamic suggests something of the

limitations of conceptualizing human activity outside the immediate scope of war-as-fighting through the martial gaze. War is interested in human capability and innovation in ways that aren't entirely reciprocated in the sense that humanity's interests might be served by war. Recognizing that, I would assert the value of restoring to war's human agents a playful and witting skepticism towards the adage, homologous to the paradoxes of war and peace, that good fences make good neighbours. It's worth noting that this allusion to Robert Frost is one Hacoheh (*Major-General (Res.) Gershon Hacoheh – 'to Wake up from the Conception,'* 2024) himself has made in reference to the failures of Israeli security policy, post-Oslo: regardless of one's position on the two-state problematic, in Hacoheh's usage the allusion makes it apparent that the architecture of the occupation does not appear to have meaningfully enhanced the security of either society ("to wake up from the conception"). In that capacity, the allusion (which remains fraught with irony and paradox) confirms something of the value of poetics as a means of making that which appears intractable or hostile to peace palpable in a common language that might provide a basis for constructing shared understandings.

The emerging crisis of international security is global, and a deep revisioning of the global order seems to be emerging. In the midst of a regression towards the kind of high-intensity fighting that characterized the major wars of the 20th century, it might be tempting for scholars and educators in PME and war studies to discard the kind of subtle cognitive arts which military design aims to foster as a kind of relic of the GWOT, one less and less relevant to the needs of the profession of arms. It is indeed difficult to imagine how a tool of inquiry like SOD is suited to the problems attendant on an infantry unit engaged in digging trenches in the Donbas, for example. However, in this new context, there is an opportunity to gear these kinds of conceptual approaches towards envisioning problems of collective security on a much deeper

timescale. However the current wars shake out (and the author of this dissertation expects they will remain very hot for some time to come), the epochal nature of the kind of questions of military purpose that trouble the postcolonial age are not likely to disappear.

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