

*Blending Postmodernism with Military Design Methodologies:
Heresy, Subversion, and other Myths of Organizational Change*

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“The traditional meaning of metaphor was reversed: one never knows whether one is inside or not, since one cannot grasp it in one look. Just as language gives us words that encircle us but that we use in order to break their surround, the Labyrinth of experience was full of openings that did not tell whether they opened toward its outside or its inside.”

Bernard Tschumi, *Architecture and Disjunction*¹

“Postmodernists find numerous ways to challenge the notions that organizations have or are cultures...some use postmodern literary theories...to suggest that the idea of shared understanding is an illusion.”

Mary Jo Hatch, *Organization Theory*²

¹ Bernard Tschumi, *Architecture and Disjunction* (Cambridge, Massachusetts: MIT Press, 1997), p. 44.

² Mary Jo Hatch, *Organization Theory: Modern, Symbolic, and Postmodern Perspectives*, Third Edition (Oxford, United Kingdom: Oxford University Press, 2013), p. 193.

What does it mean to be a 'modern military' confronted with 'post-modern' challenges? I start this article with quotes from an architectural philosopher and an organizational theorist describing the notion of 'postmodernism' in very different ways. For military audiences, using that term might conjure up images of longhaired eccentrics or pipe-smoking philosophers that traditionally are shunned from being considered useful for military affairs. Yet despite various postmodern movements across many other fields and disciplines, should Armed Forces consider whether there is a postmodern movement within war and the conduct of warfare? This is an article about military transformation, novel approaches to thinking about war, and how Armed Forces across the globe appear to be struggling with these deep and often controversial questions of institutional change.³ Architects, philosophers and social scientists are clearly not alone in this fascinating and unpredictable journey of human experimentation and innovation; an increasing number of military thinkers and practitioners are joining the discussion.

I would like to explain the term 'post-modern military', in that many might consider the 'modern military' entirely appropriate for the emergent challenges of the 21st Century.⁴ To claim that war is now 'postmodern' implies that it has changed from something that once was suitably dealt with in purely modernist approaches, perhaps. However, the modern military war machine is largely a construction of the 19th and 20th centuries, where nation-states and the Industrial Era of centralized hierarchies could steer massive organizations along multiple geographic regions in highly complicated war

³ For examples of the postmodernist military debate in theory and doctrine across the Anglosphere, see: Anders Sookermany, "On Developing (Post)modern Soldiers: An Inquiry into the Ontological and Epistemological Foundation of Skill-Aquisition in an Age of Military Transformation" (dissertation for the degree of Dr. Philos, University of Oslo, 2013); Paul Mitchell, "Stumbling into Design: Teaching Operational Warfare for Small Militaries in Senior Professional Military Education" (tri-fold poster, Canadian Forces College, Toronto, Canada, 2015), https://www.doria.fi/bitstream/handle/10024/117634/MITCHELL%20Paul_poster_Designing%20Design,%20Teaching%20Strategy%20and%20Operations%20for%20Small%20Militaries.pdf?sequence=2; Alex Ryan, "The Foundation for an Adaptive Approach," *Australian Army Journal for the Profession of Arms* 6, no. 3 (2009): p. 69; Markus Mader, *In Pursuit of Conceptual Excellence: The Evolution of British Military-Strategic Doctrine in the Post-Cold War Era. 1989-2002* (Bern, Germany: Peter Lang AG, 2004).

⁴ Markus Mader, *In Pursuit of Conceptual Excellence: The Evolution of British Military-Strategic Doctrine in the Post-Cold War Era. 1989-2002* (Bern: Peter Lang, 2004), pp. 70–71; Robert Cooper and Gibson Burrell, "Modernism, Postmodernism and Organizational Analysis: An Introduction," *Organization Studies* 9, no. 1 (1988): pp. 91–112; Max Boisot and Bill McKelvey, "Integrating Modernist and Postmodernist Perspectives on Organizations: A Complexity Science Bridge," *Academy of Management Review* 35, no. 3 (2010): pp. 415–33.

activities in space and time unlike anything in recorded history. Some researchers use 'industrial' and 'post-industrial,' while others might argue 'Eastern' and 'Western' within different categories of structuring the nature of war and civilization. I do not think that postmodernism replaces modernism, but it does challenge it and deconstruct deep beliefs and structures as well as language.

Doctrinal researchers and military theorists such as Paparone and Jackson have also employed the sociological terms of 'positivism' and 'anti-positivism' for related concepts in organizational framing of reality.⁵ However, positivism is more closely associated with epistemological (how we know about doing things) processes, while 'modernism' and 'post-modernism' are apt to be applied to movements or eras in human understanding. To further complicate things, the concept of new paradigms completely replacing existing ones as scientific philosopher Thomas Kuhn explained are also not necessarily applicable.⁶ In today's emergent and complex conflict areas, war seems to blend different movements into fluid and paradoxical combinations. War still occurs over territory in physical space, but also now is absolutely occurring within people's minds and their social construction of reality. We have much more to consider when waging war, and many more 'tools' to equip ourselves with.

I use the terms 'modernist' and 'post-modernist' to describe the transition of Anglo-Saxon Armed Forces from a 20th century war perspective (attrition warfare, tri-service configuration, single-paradigm fixation) towards an emergent 21st century one.⁷ The post-modernist military frame expands with the arrival of the Information Age, as well as the rise of trans-regional enablers, social networks, globalization, and the potential softening of nation state relevance as illustrated by military instruments of power being rendered inadequate in unconventional warfare.⁸

⁵ Aaron Jackson, *The Roots of Military Doctrine: Change and Continuity in Understanding the Practice of Warfare* (Fort Leavenworth, Kansas: Combat Studies Institute Press, 2013), pp. 65–77; Christopher Paparone, *The Sociology of Military Science: Prospects for Postinstitutional Military Design* (New York: Bloomsbury Academic Publishing, 2013), p. 68.

⁶ Thomas Kuhn, *The Structure of Scientific Revolutions*, 3rd ed. (Chicago: University of Chicago Press, 1996).

⁷ Mader, *In Pursuit of Conceptual Excellence*, pp. 28–34. This article adapts Mader's position that the tri-service development associated with World War II had profound organizational impacts upon Armed Forces.

⁸ Antoine Bousquet, "Chaoplexic Warfare or the Future of Military Organization," *International Affairs* 84, no. 5 (September 2008): pp. 915–29. Bousquet offers the term 'chaoplexic' that combines 'chaos' with

The 'modern military' is associated with complicated maneuver across multiple physical domains, and the full-scale war requirements of the 21st century certainly provide a continued need for modernist military organization, form and function.⁹ Yet the rise of the Information Age and the blending of social environments with vast new networks of interaction and innovation have threatened the stability of the modernist nation state; the rise of a 'post-modern military' is occurring despite the resistance of modernist military traditions, values, rituals, and social structures.¹⁰ Paparone describes the postmodernist design movement succinctly with, "the idea is to pursue, critically and creatively, challenges to conventional wisdom with a purpose to help reveal and examine institutional monistic forms of framing, characteristic of modernism...the critique entails mixing and matching styles of inquiry to achieve an aesthetic and multidisciplinary approach to antithetical arguments."¹¹ I find the postmodernist perspective to also feature a normative (how the world should or could be) outlook that is limited only by our socially constructed boundaries.

If any instrument of the modernist nation-state might formally and informally resist the transformation from modernism to post-modernism, the military might be the ideal candidate. Ministries, various governmental agencies, and non-government organizations across the Anglosphere (as well as non-Anglo-Saxon advanced societies) inherently have fewer organizational obstacles to the evolution or revolution in becoming post-modernist.¹² To be a post-modern organization, we must soften the reliance upon a strong centralized hierarchy of command and control, modify the language and associated concepts to incorporate many different perspectives (including paradoxical and incommensurate ones), and deconstruct previously unquestionable organizational

'complex'; this concept is highly useful in explaining the emergence of new societal processes and interactions that render traditional concepts for war inadequate.

⁹ Antoine Bousquet, *The Scientific Way of Warfare: Order and Chaos on the Battlefields of Modernity* (London: HURST Publishers Ltd., 2009), pp. 93–120. Bousquet associates different ages of military development with metaphors; the modern age of warfare is associated with the computer. However, previous incarnations of warfare continue within the modern regime, where a military may feature mechanistic (clock) features as well as thermodynamic (engine) ones as well.

¹⁰ Mader, *In Pursuit of Conceptual Excellence*, p. 71.

¹¹ Paparone, *The Sociology of Military Science: Prospects for Postinstitutional Military Design*, p. 17.

¹² An excellent example is observed in the Israeli Defense Force and their adaptation (and subsequent revisit) to postmodern design theory in the late 1990s through 2006, and again starting in approximately 2013. See: Shimon Naveh, Interview with BG (Ret.) Shimon Naveh, digital transcript, November 1, 2007.

tenets and principles.¹³ Those in the Armed Forces that generate this iterative transition from the modernist military form towards a post-modernist one might be considered ‘change agents’ as well as other colorful terms (such as heretics, radicals, or deviants).¹⁴

On Change Agents and Heretics: Organizational Change and Design

Weick, an influential sociologist in the military design movement, once termed being a “change agent” for an organization as a transformational yet difficult position.¹⁵ The term ‘change agent’ puts a positive spin on what others have described design theorists as, such as ‘heretic,’ ‘deviant’ or ‘subversive thinker.’ To transform an organization requires experimentation as well as failure; iterations of ‘problematizers’ offering advice to kings that might still execute them despite novel insight, to take from post-modern philosopher Michel Foucault.

To problematize, as Foucault explained, is to question deeply, “How and why certain things (behavior, phenomena, processes) became a problem,” the very act of seeing deep awareness of the nature of a problem is quite dangerous.¹⁶ The king just might kill you, but afterwards the king has one less person willing to seek out novel truths that are dangerous to consider. Thus, the designer might be executed as a heretic or subversive thinker despite their actions being useful; the organization just was not quite ready to make the change.¹⁷ Foucault is addressing the nature of organizational change,

¹³ Hatch, *Organization Theory: Modern, Symbolic, and Postmodern Perspectives*, pp. 117–121; Paul Jeffcutt, “From Interpretation to Representation in Organizational Analysis: Postmodernism, Ethnography and Organizational Symbolism,” *Organizational Studies* 15, no. 2 (1994): pp. 241–74.

¹⁴ Christopher Papparone, “Design and the Prospects for Deviant Leadership,” *Small Wars Journal* (September 8, 2010): pp. 1–9; Karl Weick, “Drop Your Tools: An Allegory for Organizational Studies,” *Administrative Science Quarterly* 41 (1996): pp. 301–13; Karl Weick, “Improvisation as a Mindset for Organizational Analysis,” *Organizational Science* 9, no. 5 (October 1998): pp. 543–55.

¹⁵ Karl Weick, “Reflections: Change Agents As Change Poets- On Reconnecting Flux and Hunches,” *Journal of Change Management* 11, no. 1 (March 2011): pp. 7–20.

¹⁶ Michel Foucault, “Discourse and Truth: The Problematization of Parrhesia” (lecture, University of California at Berkeley, November 1983), http://foucault.info/system/files/pdf/DiscourseAndTruth_MichelFoucault_1983_0.pdf.

¹⁷ See Aaron Jackson’s article in this series for a variation on the same theme.

and within complex social webs that form institutions; there frequently is a fear of radical change and those agents that bring it about.

Change agents enable innovation in organizations by realizing how and why the organization does what it prefers, and thinks about the world in an exclusive (and often limiting) manner. This is ‘thinking about thinking,’ and setting the necessary conditions for an organization to move towards large change (innovation) versus incremental and controlled improvements. Military organizations are unique in this light due to the nature of conflicts and millennia of social, cultural, and technological pressures to reinforce the benefits of predictability, stability, uniformity, and centralized hierarchical control.¹⁸ Militaries resist radical change, often for good reason.¹⁹ However, our militaries also tend to institutionalize many social constructs for how to do business and “hang on [to them] long after they have outlived their usefulness.”²⁰ Postmodernism and design may be for the military the most controversial yet needed catalysts for transformative action.

Post-modernism requires the military to break out of conventional and highly convincing modes of thinking; these organizational frames are powerful and also tend to avoid the spotlight of critical self-examination. The modernist military form follows the function of convergent thinking, in that the cycle provides a single-loop model for organizational learning and standardization that works profoundly well in traditional military contexts associated with conflicts spanning much of human existence.²¹ The orchestrated maneuver of forces over or within a physical domain to accomplish

¹⁸ Karl Weick and Karlene Roberts, “Collective Mind in Organizations: Heedful Interrelating on Flight Decks,” *Administrative Science Quarterly* 38, no. 3 (September 1993): pp. 357–81; Ben Zweibelson, Grant Martin, and Christopher Papparone, “Frame Reflection: A Critical Review of U.S. Military Approaches to Complex Situations,” *OODA*, September 2013, https://www.ooda.com/wp-content/uploads/2013/09/Frame-Reflection_A-Critical-Review-of-US-Military-Approaches-to-Complex-Situations-final.pdf; Barry Posen, *The Sources of Military Doctrine: France, Britain, and Germany Between the World Wars* (Ithaca, New York: Cornell University Press, 1984); John Shy, “Jomini,” in *Makers of Modern Strategy: From Machiavelli to the Nuclear Age*, ed. Peter Paret (Princeton, New Jersey: Princeton University Press, 1986); Ori Brafman and Rod Beckstrom, *The Starfish and the Spider: The Unstoppable Power of Leaderless Organizations* (New York: Penguin Books, 2006).

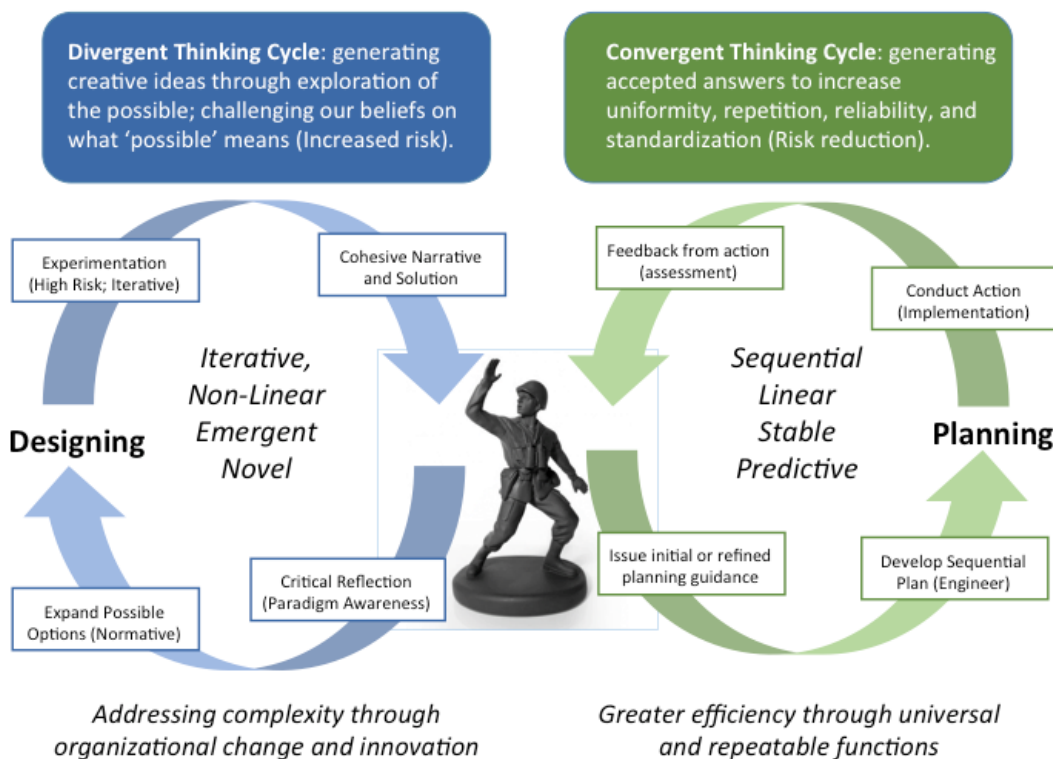
¹⁹ Posen, *The Sources of Military Doctrine: France, Britain, and Germany Between the World Wars*, pp. 41-46. Posen describes the resistance of military organizations when encountering radical change, and the primary drivers for when this does occur in militaries.

²⁰ *Ibid.*, p. 44.

²¹ Robert Flood and Norma Romm, “Contours of Diversity Management and Triple Loop Learning,” *Kybernetes* 25, no. 7/8 (1996): pp. 154–63.

established principles and achieve desired outcomes is at a deep, ontological level (within one’s paradigm, what is or is not real) where experience and applied practice build towards certainty in conflict.²² In Figure 1 below, the convergent thinking cycle is illustrated in green on the right side of the graphic, and denotes a familiar process in warfare that remains manifested throughout most variations of Anglo-Saxon decision-making methodologies through current practice.

Figure 1: Military Change Agents and Cycles of Divergent and Convergent Thinking



Postmodern military thinking encourages a critical reflection upon not just ‘how the military thinks’ in the green cycle of preferred convergent processes, but also a deep exploration of alternative thinking cycles such as the blue colored ‘divergent thinking’ process on the left. I do not suggest that the modernist military paradigm lacks divergent thinking; divergent thinking occurs in both, just as convergent thinking occurs in the blue

²² Aaron Jackson, *The Roots of Military Doctrine: Change and Continuity in Understanding the Practice of Warfare* (Fort Leavenworth, Kansas: Combat Studies Institute Press, 2013), pp. 1-15. Jackson’s study of US Army doctrine includes a comprehensive discussion on ontology and epistemology for application to military organizations and behaviors.

cycle on the left. The key difference is that the organizational form and function of both models pushes an organization strongly towards one or the other. Yet the function of military planning compels an organization towards the convergent cycle where sequential processes work within a largely linear construct, and stability as well as predictability are sought after, with risk mitigation becoming a primary application for western democracies.²³

Figure 1 provides on the left side a depiction of how a divergent “designing” cycle moves in iterative (not sequential), non-linear ways, where emergence precludes any focused attempt to reverse engineer campaign plans or operations from singular desired end-states.²⁴ Many design processes are novel, and cannot be codified into doctrine or best practices; experimentation is encouraged while failure does not always indicate a “dead end,” rather a necessary stepping-stone towards emergence.²⁵ Figure 1 is one way of illustrating the striking differences in design processes and planning processes for military audiences.²⁶

I use the term ‘postmodern’ to specify some alternative concepts frequently associated with French postmodern (and Eastern) philosophy as well as several other unique and niche disciplines; these interdisciplinary concepts all are part of the postmodernist movement for the modernist-based society to transition into a post-

²³ Paparone, *The Sociology of Military Science: Prospects for Postinstitutional Military Design*, pp. 2–5.

²⁴ Ysanne Carlisle and Elizabeth McMillian, “Innovation in Organizations from a Complex Adaptive Systems Perspective,” *Emergence: Complexity & Organization* 8, no. 1 (2006): pp. 2–9; Ben Zweibelson, “Gravity-Free Decision-Making: Avoiding Clausewitz’s Strategic Pull,” *Directorate of Future Land Warfare, Australian Department of Defence, Army Research Papers*, no. 8 (2015): pp. 30–33.

²⁵ Kenneth Stanley and Joel Lehman, *Why Greatness Cannot Be Planned: The Myth of the Objective* (Switzerland: Springer International Publishing, 2015). Stanley and Lehman offer a novel way to explore nonlinearity and emergence in complex adaptive systems by applying lessons learned through artificial intelligence research. Stanley was invited by the JSOU-O design faculty to present their findings at a Gray Zone workshop held in August 2016 at the Joint Special Operations University in Tampa, Florida. Stanley and Lehman’s concepts challenge nearly all sequential military planning processes and campaign design at fundamental levels, although while publishing their research they did not anticipate military interest in their findings.

²⁶ For more information on this conference on post-modern military design, see: Philippe Beaulieu-Brossard and Philippe Dufort, “Introduction to the Conference: The Rise of Reflective Military Practitioners” (*Hybrid Warfare: New Ontologies and Epistemologies in Armed Forces*, Canadian Forces College, Toronto, Canada: University of Ottawa and the Canadian Forces College, 2016).

modern one.²⁷ In some fields or disciplines, the post-modernist transformation occurred quickly and earlier than others, such as in art, architecture, poetry, literature, and film.²⁸ In other parts of the Anglosphere, the transformation is ongoing, and in the case of Anglo-Saxon Armed Forces, it seems that transformation is just beginning.

Applying Sociology and Paradigm Theory to Military Decision-Making Models

To frame some postmodern concepts in relation to traditional military frames that include detailed planning, campaign design, and most all military decision-making and innovation processes, designers might utilize the social-paradigm construct of sociologists Burrell and Morgan, first developed in the late 1970s.²⁹ Burrell and Morgan's "four paradigm" model uses two major tensions along the vertical and horizontal axis to create an organizing logic for each paradigm. Figure 2 below demonstrates the tensions that will later provide the basis for their model (shown in Figure 3) and helps frame why the military has such a negative reaction towards innovation inspired by postmodernism.³⁰

²⁷ Francois Jullien, *A Treatise on Efficacy Between Western and Chinese Thinking*, trans. Janet Lloyd (Honolulu, Hawaii: University of Hawai'i Press, 2004).

²⁸ For architecture, see: Tschumi, *Architecture and Disjunction*; For film and media, see: Patricia Pisters, ed., *Micropolitics of Media Culture: Reading the Rhizomes of Deleuze and Guattari* (Amsterdam: Amsterdam University Press, 2001); For film, see also: Jean Baudrillard, *Simulacra and Simulation*, trans. Sheila Glaser (Ann Arbor: The University of Michigan Press, 2001). Baudrillard's work was adapted in the motion picture 'The Matrix.' See: Andy Wachowski and Larry Wachowski, *The Matrix* (Warner Bros. Pictures, 1999. DVD). For managerial and organizational applications, see: Hatch, *Organization Theory: Modern, Symbolic, and Postmodern Perspectives*.

²⁹ Gibson Burrell and Gareth Morgan, *Sociological Paradigms and Organisational Analysis: Elements of the Sociology of Corporate Life* (Portsmouth, New Hampshire: Heinemann, 1979); Dennis Gioia and Evelyn Pitre, "Multiparadigm Perspectives on Theory Building," *Academy of Management Review* 15, no. 4 (1990): pp. 584–602; Majken Schultz and Mary Jo Hatch, "Living with Multiple Paradigms: The Case of Paradigm Interplay in Organizational Culture Studies," *Academy of Management Review* 21, no. 2 (1996): pp. 529–57.

³⁰ Figure 2 is a graphic that first appeared in an article that appeared in the US Air Force's Air and Space Power Journal. See: Ben Zweibelson, "Thinking beyond the Books: Sociological Biases of our Military Institutions," *Air and Space Power Journal* 30, no. 2 (Summer 2016): pp. 15-37.

Figure 2: Tensions and Paradox visualized with two lines

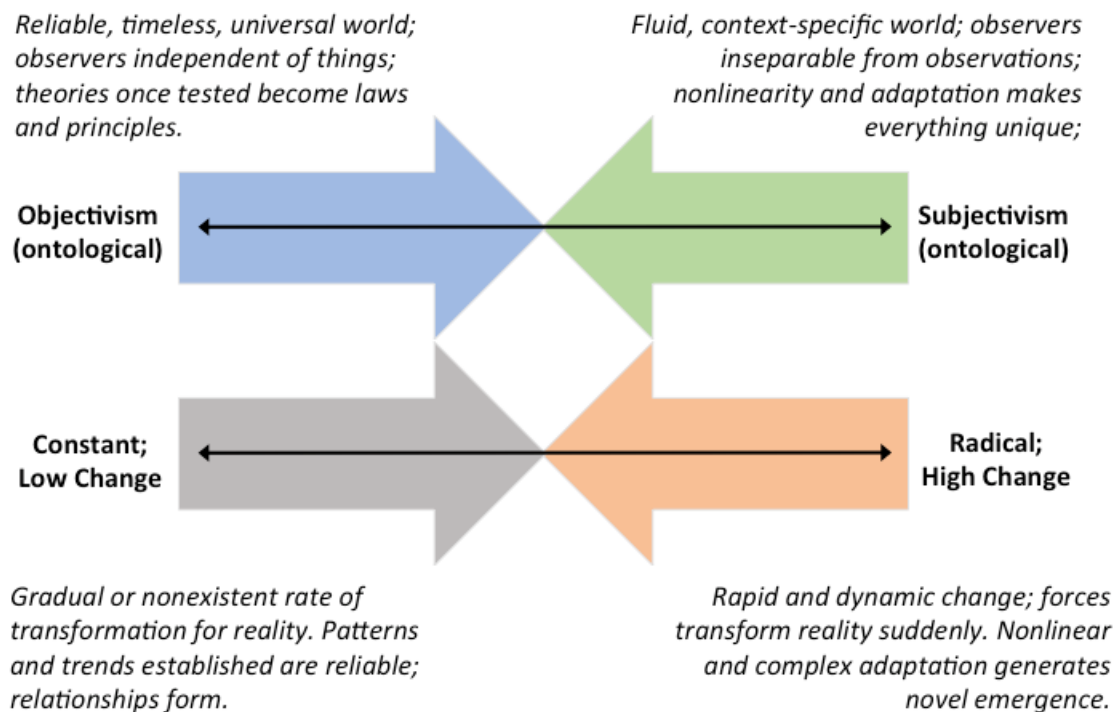


Figure 2 illustrates a perpetual tension between ontological objectivity and ontological subjectivity, where one might see traditional military decision-making and planning oriented towards objectivity, and military art as a subjective opposing concept. Our modern military enterprise fixates upon technology, extensive planning towards predictive end states, and frequently a perpetual desire to seek winning the next war the way a previous or favorite conflict unfolded.³¹ Military art is frequently cast as an extension of the objective planning approach, where ‘operational art’ is doctrinally framed as decision points, centers of gravity, tempo, phasing, and other engineering constructs.³² The second tension is of particular importance for framing postmodernism

³¹ John Waghelstein, “Preparing the US Army for the Wrong War, Educational and Doctrinal Failure 1865-91,” *Small Wars & Insurgencies* 10, no. 1 (1999): pp. 1–33; Azar Gat, *War in Human Civilization* (New York: Oxford University Press, 2006); Russell Weigley, *The American Way of War* (New York: Macmillan Publishing Co., Inc., 1973); Carl Builder, *The Masks of War: American Military Styles in Strategy and Analysis* (Baltimore: John Hopkins University Press, 1989); Weick, “Drop Your Tools: An Allegory for Organizational Studies.”

³² US Army Headquarters, Department of the Army, *Army Design Methodology (ATP 5-0.1)* (Washington, DC: US Department of the Army, 2015): pp. 1-5 to 1-6. ATP 5-0.1 cites accepted Army Doctrine for

in military contexts, in that ‘consistency or low change’ provides the necessary paradigm conditions for most military doctrine. Our militaries desire stable, universal tenets that once “proven” can be indoctrinated into rules, formulas, or sequences; only a reality that provides consistency permits this perspective upon war. This becomes the associated frame for the “modernist military perspective.”³³ However, a reality with the potential for radical change makes for a far more fluid and contextually unique conflict environment. This is where postmodernism can apply deconstruction to break up the illusion of objective and consistent military perspectives, and influence societies to embrace entirely different ways of appreciating reality and complex adaptive conflicts. Burrell and Morgan apply the tensions featured in Figure 2 in their frequently cited “four paradigm quadrant model” recreated in Figure 3.³⁴ They name each of the paradigms, of which for this essay orients upon “Functionalism” and “Radical Humanism.”³⁵

operational art, defined as a series of engineering metaphors tied to detailed planning and campaign design.

³³ Mader, *In Pursuit of Conceptual Excellence: The Evolution of British Military-Strategic Doctrine in the Post-Cold War Era. 1989-2002*, p. 71.

³⁴ Burrell and Morgan, *Sociological Paradigms and Organisational Analysis: Elements of the Sociology of Corporate Life*. Figure 2 is a variation of Burrell & Morgan’s paradigm model.

³⁵ Paparone, *The Sociology of Military Science*, pp. 138–140. Paparone provides another application of the Burrell and Morgan four paradigm chart that reinforces the approach in this essay.

Figure 3: Variation on Burrell and Morgan’s Quadrant Chart of Four Paradigms

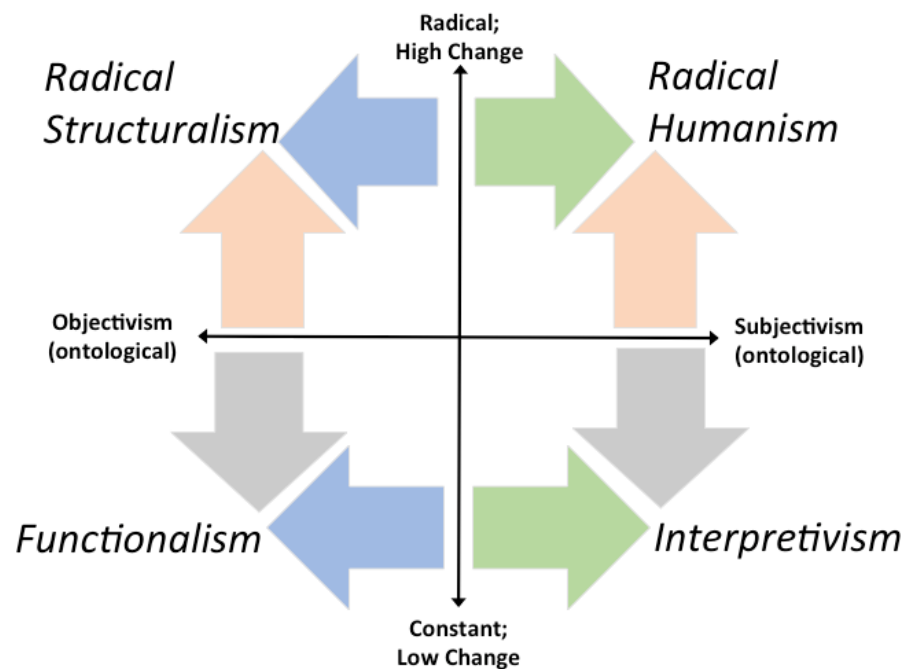


Figure 3 provides the ontological framework for “functionalism” as the dominant paradigm for most all western bureaucracies, corporations, militaries, and organizations.³⁶ Scientific approaches, analysis, prediction, and uniformity operate best in this paradigm. For simplistic and complicated systems, the functionalist paradigm works profoundly well; humans have put boots on the moon, unlocked our own genetic code, and have constructed massive empires of technology and wealth relying upon functionalist processes. However, not all systems respond to a functionalist outlook, thus when considering complex adaptive systems (such as anything involving human societies including organized conflict), other paradigms offer dissimilar interpretations.³⁷

³⁶ Functionalism can be associated with ‘positivism’ in many regards, although each term has specific nuanced differences. Other related terms are ‘Newtonian Style’ and ‘reductionism’ which again features various aspects of how Anglo-Saxon militaries seek to interpret and act upon a perceived reality.

³⁷ Jamshid Gharajedaghi and Russell Ackoff, “Mechanisms, Organisms, and Social Systems,” in *New Thinking in Organizational Behaviour*, by Haridimos Tsoukas (Oxford, United Kingdom: Butterworth-Heinemann Ltd, 1994), pp. 25–49; Haridimos Tsoukas, *Complex Knowledge: Studies in Organizational Epistemology* (New York: Oxford University Press, 2005); Antoine Bousquet and Simon Curtis, “Beyond Models and Metaphors: Complexity Theory, Systems Thinking and International Relations,” *Cambridge*

Postmodernism frequently operates in what could be characterized as the shared boundary of 'Radical Humanism' and 'Interpretivism' (or one half of the Burrell and Morgan model). Of the two, 'Radical Humanism' is in complete opposition to 'Functionalism,' thus any postmodern concepts that are decidedly 'Radical Humanist' would be most incommensurate with a military seeking functionalist perspectives.³⁸ This is also where change agents operate.

Applying Design Subversively in Afghanistan 2011-2012

There are many important sources for military postmodern thought, particular the ideas of Gilles Deleuze and Felix Guattari, Jean Baudrillard, Jacques Ranciere, Michel Foucault, Hayden White, Paul Ricoeur and others.³⁹ I deployed for a yearlong senior staff planner assignment for NATO Training Mission-Afghanistan (NTM-A) in Kabul, Afghanistan and was given several demanding design inquiries. These were inquiries at the strategic level, however these occurred accidentally, and entirely due to other planners being too busy with other projects or uninterested in pursuing design applications.

Within a small group of SAMS graduates familiar with some design techniques, I generated several of Deleuze and Guattari's "assemblage" concepts for articulating organizational change within NTM-A, the Afghan Security Forces, and the Intermediate

Review of International Affairs 24, no. 1 (2011): pp. 43–62; Jeff Conklin, "Wicked Problems and Social Complexity," in *Dialogue Mapping: Building Shared Understanding of Wicked Problems* (CogNexus Institute, 2008), <http://www.cognexus.org>.

³⁸ Martin Kilduff and Ajay Mehra, "Postmodernism and Organizational Research," *Academy of Management Review* 22, no. 2 (1997): pp. 453–81; Boisot and McKelvey, "Integrating Modernist and Postmodernist Perspectives on Organizations: A Complexity Science Bridge"; Cooper and Burrell, "Modernism, Postmodernism and Organizational Analysis: An Introduction."

³⁹ Gilles Deleuze and Felix Guattari, *A Thousand Plateaus*, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987); Baudrillard, *Simulacra and Simulation*; Jacques Ranciere, *The Ignorant Schoolmaster: Five Lessons in Intellectual Emancipation*, trans. Kristin Ross (Stanford, California: Stanford University Press, 1991); Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences*, Vintage Books Edition, April 1994 (New York: Vintage Books, 1994); Hayden White, *The Content of the Form: Narrative Discourse and Historical Representation*, paperback edition (Baltimore: The John Hopkins University Press, 1990); Paul Ricoeur, *Time and Narrative*, trans. Kathleen McLaughlin and David Pellauer, vol. 1 (Chicago: University of Chicago Press, 1983).

Joint Command (IJC).⁴⁰ We combined these with exploring tensions within the three organizations, and subsequently applied a design variation of Shell Oil's 'scenario planning' construct to Joint Operational Planning with a larger planning group. During Course of Action selection process, we incorporated a variation using 'Swarm Theory' and masking it with some inspiration from Foucault, White, and Ricoeur's work on narratives.⁴¹

In all of these instances, the design elements of abstract philosophy and esoteric design methodologies were obfuscated from the larger planning group, although I frequently used a white board to walk individual senior members through multiple concepts when they inquired. These inquiries produced highly successful results at the international and strategic levels, and I was able to publish frequently upon that work in multiple open-source articles.⁴² Nonetheless, those design deliverables suffered the same eventual fate of most all other planning endeavors; within a few rotations of personnel and policy changes, they were lost in the changing tides of bureaucracy. Design only works if the organization continues to conduct design progressively.

Throughout this period, I learned that discussing postmodern concepts such as an assemblage, rhizomes, or postmodern narrativization within classical military planning constructs was disadvantageous if done openly and in large planning teams.⁴³ This echoes a concept that Jackson describes in his essay in this volume as 'sales resistance.' Many of the international professionals were not familiar or well studied in NATO or

⁴⁰ Deleuze and Guattari, *A Thousand Plateaus*.

⁴¹ White, *The Content of the Form*; Ricoeur, *Time and Narrative*; Michel Foucault, *Discipline & Punish: The Birth of the Prison*, trans. Alan Sheridan (New York: Vintage Books, 1995); Foucault, "Discourse and Truth: The Problematization of Parrhesia."; Foucault, *The Order of Things*.

⁴² Ben Zweibelson, "Let Me Tell You About the Birds and the Bees: Swarm Theory and Military Decision-Making," *Canadian Military Journal* 15, no. 3 (Summer 2015): pp. 29–36; Ben Zweibelson, "Seven Design Theory Considerations: An Approach to Ill-Structured Problems," *Military Review* 92, no. 6 (December 2012): pp. 80–89; Ben Zweibelson, "Three Design Concepts Introduced for Strategic and Operational Applications," *National Defense University PRISM* 4, no. 2 (2013): pp. 87–104; Ben Zweibelson, "Breaking Barriers to Deeper Understanding: How Postmodern Concepts Are 'Value Added' to Military Conceptual Planning Considerations," *Small Wars Journal*, September 21, 2011; Ben Zweibelson, "Does Design Help or Hurt Military Planning: How NTM-A Designed a Plausible Afghan Security Force in an Uncertain Future, Parts I and II," *Small Wars Journal*, July 2012.

⁴³ Pisters, *Micropoetics of Media Culture: Reading the Rhizomes of Deleuze and Guattari*. Pisters provides a variety of essays on postmodern concepts such as rhizomes; their application to film, music, and other art gives a variety of perspectives on a challenging topic.

Joint doctrine, and some were relatively ignorant of their own national and service doctrine outside of tactical or technical manuals. Some showed up to various planning groups desiring only to be specifically directed on clear tasks, or they were fixated on their 'day job' requirements and already overworked. With the extremely short timeline and an inability to educate multiple groups on extensive and confusing design constructs, our design team improvised by performing the heavy design work 'in-house.' The larger planning team later were taken through processes that bore some similarity to established Joint Planning methodologies, however they had been significantly modified to complement postmodern and non-functionalist concepts.

As Foucault warned, problematizers face a hazardous road, and had we announced that the planning team was really working with assemblages or that the COA selection groups were operating under swarm theory, we likely would have been summarily fired. Sometimes, designers need to 'Trojan Horse' some experimentation and design thinking into an organization that is not quite ready or willing to increase uncertainty and risk.

Why Such Institutional Resistance to the Post-Modern Military Developments?

Multiple programs across military institutions such as the National Defense University in Washington, DC, and more infamously, the Israeli Defense Force had first applied design to their Armed Forces and after the 2006 Lebanon War removed it from their programs.⁴⁴ The U.S. Army School of Advanced Military Studies has gone through multiple iterations of various design movements, with dramatic course corrections with

⁴⁴ The author met with NDU faculty in Washington, DC in November 2016 for a design theory discussion. At the meeting, faculty from the Informations Resources Management College as well as the NDU Center for Complex Operations expressed renewed interest in a design program. Faculty remarked that previously, they had provided a design module, however it no longer was offered. The Israeli Defense Force purged Systemic Operational Design after the 2006 Lebanon War, however as recently as 2015 Shimon Naveh had returned to providing design education to the IDF. See: Ofra Gracier, "Self Disruption- Beyond the Stable State of SOD," in *Cluster 1* (Hybrid Warfare: New Ontologies and Epistemologies in Armed Forces, Canadian Forces College, Toronto, Canada: University of Ottawa and the Canadian Forces College, 2016).

the changing of key faculty and senior military leadership.⁴⁵ The Joint Special Operations University provided Israeli-based Systemic Operational Design through 2014, and later replaced it with a different design application that blended elements of military and civilian design with sociology as well as complexity theory.⁴⁶ I also collaborated with the Canadian Forces College from 2015-2016 on their emerging design program where they blend multiple civilian and military design methodologies in a manner unlike most of their contemporaries.

It is unfair to characterize any of these design educational developments without acknowledging the contextual social, political, and institutional forces within. There are likely many reasons for each organization to shift, modify, or eliminate design that exceeds the scope of this essay. Instead, we might look for overarching patterns within the form of the military institution holistically, and how the design content might cause excessive tension between a favored methodology of decision-making and what could be considered surprising, experimental, and contradictory.

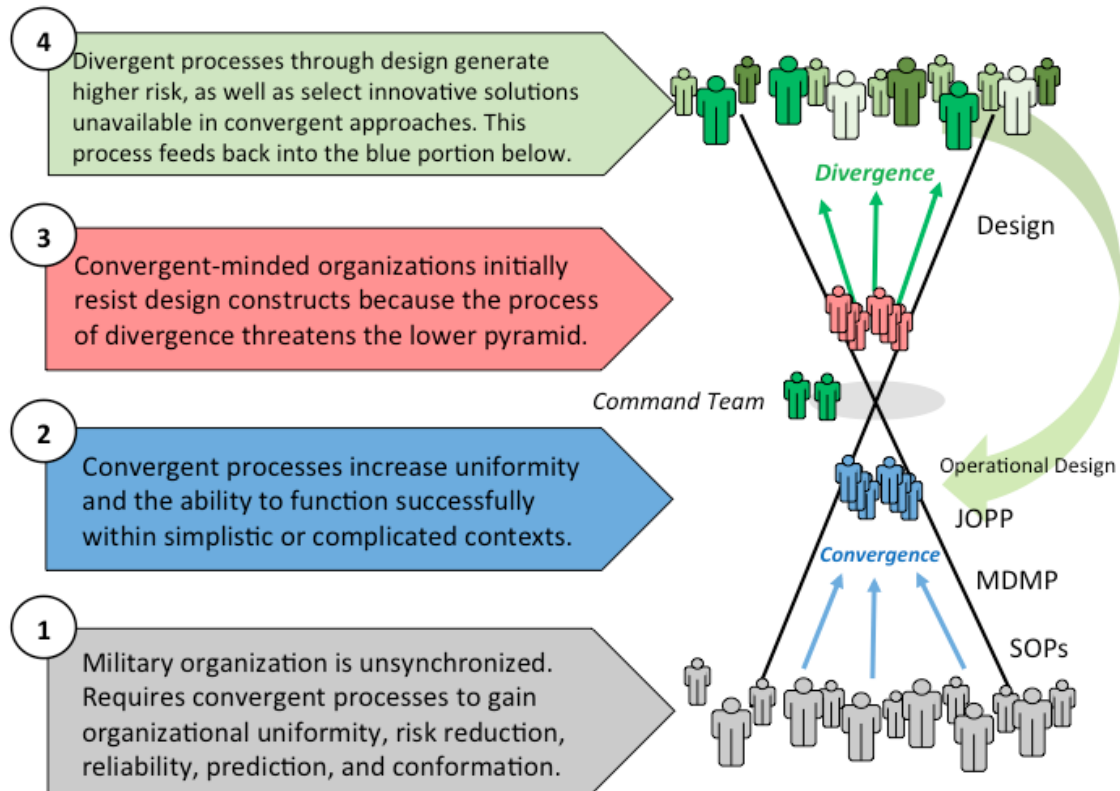
One way of visualizing the way that militaries in the modernist construct seek to organize is through the pyramid of convergent methodologies as shown in Figure 4. The modernist approach, nested in the Industrial Era and set within a centralized hierarchical form, seeks to synchronize and reliably produce conforming behaviors and effects. This

⁴⁵ Alex Ryan, "A Personal Reflection on Introducing Design to the U.S. Army," in *Cluster 2* (Hybrid Warfare: New Ontologies and Epistemologies in Armed Forces, Canadian Forces College, Toronto, Canada: University of Ottawa and the Canadian Forces College, 2016); Stefan Banach, "Educating by Design: Preparing Leaders for a Complex World," *Military Review* 89, no. 2 (April 2009): pp. 96–114; Stefan Banach and Alex Ryan, "The Art of Design: A Design Methodology," *Military Review* 89, no. 2 (April 2009): pp. 105–15; Wayne Grigsby et al., "Andrew Nocks, "The Mumbo-Jumbo of Design: Is This the Army's EBO?," *Small Wars Journal*, September 20, 2010; Milan Vego, "A Case Against Systemic Operational Design," *Joint Forces Quarterly* 53 (quarter 2009): pp. 70–75; Grigsby et al., "Integrated Planning: The Operations Process, Design, and the Military Decision Making Process," *Military Review* 91, no. 1 (January/February 2011); Anna Grome, Beth Crandall, and Louise Rasmussen, "Incorporating Army Design Methodology into Army Operations: Barriers and Recommendations for Facilitating Integration," *U.S. Army Research Institute for the Behavioral and Social Sciences*, Research Report 1954 (March 2012). Ryan reflects on the SAMS experience firsthand in his personal reflection piece. For an example of one of the major design shifts in methodology and pedagogy, see the Banach and subsequent Grigsby articles. See also the Grome, Crandall, and Rasmussen study.

⁴⁶ The author was invited in 2015 to contribute design theory to JSOU as their faculty began building new design courses to replace the cancelled SOD program. The author was subsequently invited to become adjunct faculty and instruct the design theory modules. In 2016, the author became the JSOU course director for the design programs.

is important in many military contexts and has served Anglo-Saxon Armed Forces in numerous wars through the 20th century. Today, even a post-modernist military needs these convergent processes to synchronize vast groups of professionals across time and space.

Figure 4: The Role of Military Leadership in Convergent and Divergent Processes



The inverted pyramid featured at the top of Figure 4 illustrates a different process altogether, where the convergent methodologies of modernist decision-making tools no longer are applicable within a design divergent process.⁴⁷ The military organization while planning relies upon a rigid centralized hierarchy, while within the iterative design process a design team ‘flattens’ those structures to establish different conditions to enable creativity and innovation. Postmodern approaches attempt to deconstruct established

⁴⁷ The NATO decision-making process, Joint Operational Planning Process, and the Military Decision-Making Process are all related examples of the modernist convergent methodology in Anglo-Saxon doctrine and practice.

social contexts, exposing previously unexposed institutionalisms to critical reflection and inquiry. Essentially, the postmodern military command team must stand between both the convergent and divergent processes, and operate as change agents across both cognitive domains. This is sophisticated, and in some ways threatens the established modernist methodology for decision-making and detailed planning.

Military professional education across the Anglosphere favors the scientific and modernist mode of detailed military planning methodologies. Currently, we tend to teach design only at the middle to senior-level, and design infused with postmodern concepts are even less available. Most design education relies upon a single-paradigm position espousing a functionalist outlook upon war and decision-making; U.S. Army Design Methodology is a primary example of this limited view. Few of the Anglo-Saxon war colleges offer design, with most providing a campaign design program, or a single-service doctrinal methodology on design. The US Air Force Air War College is a noted exception as of 2017.⁴⁸

Potentially, design education within the Anglosphere is fundamentally flawed in this regard. If design education were applied at all levels of professional education from initial training (in limited and appropriate contexts) throughout senior and specialized areas of study, a military service might be organizationally able to critically and creatively implement design with traditional (modernist) detailed-planning and decision-making methodologies. This would require significant transformation across the Armed Forces, and likely will only occur in one of two ways. The likely and gradual transformation will be a grassroots method that is already underway. As design discussions and practice expand across more avenues and through different organizations, the movement gains momentum. A second and less likely transformation could be rapid, but requires a senior leader to act as a champion of design, becoming a change agent for an entire service or military instrument of power.

⁴⁸ AY2017 Grand Strategy Studies Program (GSS) will feature advanced design theory modules and readings, which include postmodern concepts and processes.

Learning to Write as a Subversive Thinker: Design and Postmodern Expression

For my own design journey, writing and getting published has been a rewarding and successful aspect of conducting design research, practicing new applications, and educating military students in design. Getting design concepts out into the doctrinal debate for the profession appears to have some traction in spreading emergent concepts for consideration. One significant pattern relevant to this topic has been a continuous attempt by a small population of design 'heretics' to push postmodern topics into military design discussions through articles. This collection of essays, as well as the recent hybrid warfare workshop in Toronto illustrates the extent of this international postmodernist movement.

After learning from multiple disastrous publishing efforts early in my military writing career, I managed to get some postmodern concepts into mainstream journals.⁴⁹ I would not have accomplished this without extensive assistance and support from a small network of design theorists and researchers, including Chris Paparone, Grant Martin, Aaron Jackson, and Paul Mitchell. Their influence and friendship have been a major developmental force in my continuous design education. Our group, over the last six years, has been an important 'Design Cabal' for idea exchange and editorial recommendations; I would not be writing this essay today without these brilliant heretics pushing me to consider so many other perspectives.

The first article I managed to get into circulation with a peer-reviewed military journal was National Defense University's PRISM Journal, which published "Three Design Concepts Introduced for Strategic and Operational Applications."⁵⁰ The original title had "Postmodern Concepts" but had been rejected by several other journals. Once the article was accepted, one of the editors even wrote me a note stating, "it is refreshing to see Michel Foucault cited within an article in this journal," which for me indicated that others out there do appreciate the value of philosophy even if it runs counter-culture to

⁴⁹ Initially (2011-2013), I published multiple design articles in The Small Wars Journal, an online military journal and blog site located at: <http://smallwarsjournal.com/>. During this period, I was able to develop my composition style through interacting with many SWJ members and contributors online. Without the support of SWJ editors, contributors, and readers, I likely would not have moved forward in my military publishing activities.

⁵⁰ Zweibelson, "Three Design Concepts Introduced for Strategic and Operational Applications."

the modernist military community at large. This became the first toehold for my expanding journey into publishing postmodernist design concepts.

With subsequent articles, and as I took my appreciation of postmodernism deeper into research and practice, I decided to attempt more aggressive article compositions. For *Military Review* in 2012, I used Baudrillard's postmodern concept of simulacra and applied it to the Army's overarching training philosophy in both physical as well as computer simulated training exercises.⁵¹ The article, titled "Preferring Copies with No Originals: Does the Army Training Strategy Train to Fail?" used the sci-fi movie "The Matrix" to interest audiences. The producers, directors, and writers of "The Matrix" were directly inspired by Baudrillard's work, even requiring all of the actors to read the book before their audition.⁵² As a postmodern concept, Baudrillard's simulacra addresses socially constructed realities moving in similar company of interpretivist sociologists such as Berger and Luckmann.⁵³ "The Matrix," as an extremely popular movie for military audiences, became another 'Trojan Horse' process for introducing deeper postmodern concepts.

Within the next year, *Military Review* published a third design article titled "The Ignorant Counterinsurgent: Rethinking the Traditional Teacher-Student Relationship in Conflicts," based extensively upon the postmodern work of Ranciere and his book, "The Ignorant Schoolmaster."⁵⁴ Later, this article was added to the US Army War College's summer 2015 reading list, perhaps indicating that despite the overt postmodern applications in the article, military professionals appeared willing to consider alternative perspectives on conflict theory.

Last year, the US Air and Space Power Journal accepted an article I wrote about the US Army and US Air Force Chief of Staffs' reading lists and how they lack books from other paradigms such as Radical Humanism (where I most associate postmodernism).

⁵¹ Ben Zweibelson, "Preferring Copies with No Originals: Does the Army Training Strategy Train to Fail?" *Military Review* 94, no. 1 (February 2014): pp. 15–25.

⁵² Baudrillard, *Simulacra and Simulation*.

⁵³ Peter Berger and Thomas Luckmann, *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*, First Anchor Books Edition, 1967 (New York: Anchor Books, 1966).

⁵⁴ Ben Zweibelson, "The Ignorant Counterinsurgent: Rethinking the Traditional Teacher-Student Relationship in Conflicts," *Military Review* 95, no. 2 (April 2015): pp. 94–105; Ranciere, *The Ignorant Schoolmaster: Five Lessons in Intellectual Emancipation*.

The article, “Professional Reading Lists: Thinking Beyond the Books and into Military Paradigmatic Biases” ran in their Summer 2016 issue and used many of the paradigm concepts I have briefly touched on in this essay.⁵⁵ This article provided multiple suggested readings that deal with postmodern concepts, in the expectation that a military audience might see value in incorporating them with traditional military methodologies. The postmodern evolution (or revolution) for Anglo-Saxon militaries is progressing with an ever-expanding frequency of professional military articles, military workshops, and advanced military education such as at the US Special Operations Command’s Joint Special Operation University, the US Air Force’s Air War College, the Polish National Defense University at Warsaw, and the Canadian Forces College in Toronto.⁵⁶ As the postmodern design movement expands, our ‘design cabal’ continues to gain members and depth within the military community.⁵⁷

Is ‘Subversion’ an Accurate Way to Explain Postmodernism and Design?

To be subversive implies a process of deception so that values or principles of an established system are bypassed, dismantled, or destroyed. In political, social, and even military contexts, a subversive action is generally carries a negative connotation. A frequent remark popular in military design circles is that ‘design is an insurgency’ when considering the disruptive and critically reflective aspects of successful design. Design tends to challenge existing and frequently outdated methodologies, and design attempts to reverse many of the institutional military barriers to innovation, emergence, and

⁵⁵ Zweibelson, “Professional Reading Lists.”

⁵⁶ The author is the course director for the JSOU design programs where the faculty present elements of sociology and post-modern philosophy as part of a trans-disciplinary design program for Special Forces professionals. The author has developed design theory modules for the January 2017 academic year at the U.S. Air War College in their Grand Strategy Course. The author is also consulting the Polish NDU on design education on behalf of JSOU. The author provided post-modern concepts in multiple design education sessions with students at the Canadian Forces College in 2015 and 2016 academic years.

⁵⁷ Over the years, I have counted myself extremely fortunate to befriend design researchers in Canada, Australia, the Netherlands, the United Kingdom, and across America. A few of those individuals deserve honorable mention here. Dr. Christopher Papparone, Lieutenant Colonel Grant Martin (U.S. Army), Dr. Aaron Jackson (Australian Department of Defence), Dr. Paul T. Mitchell (Canadian Forces College), and Dr. Philippe Beaulieu-Brossard (University of Ottawa) have all been exceptional design collaborators, editors, co-authors, and most of all, good friends

creativity. If it were a direct, clear, and repeatable way to package design, such a manifestation would contradict what design must always possess. Design cannot be simplified, or mass-produced in military factories for purposes of innovation or reflective practice. Thus, design is perpetually within a paradox of constant transformation, experimentation, and reinterpretation...*any indoctrination of design will essentially eliminate the design from the doctrine.*

Subversion is a method for design, particularly within a larger organization that lacks design experience, design education, and is attempting to re-apply inadequate organizational methodologies towards a complex, adaptive problem. Yet in a military practitioner context, to be subversive in design is closer to what comedians, activists or theoretical physicists do to challenge institutional norms, or consider entirely novel ways of appreciating an environment. Subversion within a purely military context is associated with unconventional warfare, rebellion, or other action that has a negative impact upon part or all of a society. To intentionally mislead an organization to prevent or dismantle existing decision-making processes for the detriment of that organization would be subversive. I feel this is not an accurate explanation for how design works for postmodern applications.

Postmodern design methodologies challenge the modernist military paradigm, and therefore it tends to take more time and resources to inculcate postmodernist design applications into a military organization for acceptance and utilization. We are providing alien tools to the blacksmith when we hand her an acetylene torch in a world where only the hammer and wood furnace have existed. Unlike tangible artifacts such as tools for a blacksmith, providing a military organization new cognitive tools with design is far more challenging, because they lack the tangibility of artifacts and proximate causes. With design applications in complex adaptive systems, it frequently is difficult (or impossible) to demonstrate superior performance using a design approach, in that the system prevents replication to 'prove' a design success. In these conditions, design experimentation is difficult as well as suspicious to those that favor cognitive tools that the organization 'knows they work,' such as 'centers of gravity,' for example.⁵⁸ Getting

⁵⁸ For examples of postmodern arguments against the traditional military concept of 'center of gravity', see: Zweibelson, "Gravity-Free Decision-Making: Avoiding Clausewitz's Strategic Pull"; Kurt Vandersteen, "Center of Gravity: A Quest for Certainty or Tilting at Windmills," in *Addressing the Fog of the COG: Perspectives on the Center of Gravity in US Military Doctrine*, ed. Celestino Perez (Fort

the organization to 'drop their tools' is a sociological and organizational management challenge that perplexes theorists in the postmodern era.⁵⁹

If we cannot provide absolute proof for design applications due to the nature of complex adaptive systems and nonlinearity in fluid conflict environments, and our organizations tend to protect favorite tools and resist experimenting with novel or experimental tools at all, what might postmodernist designers do? In the imposed limits of time and space, most military challenges require rapid focus and action, even at the operational and strategic levels. Thus, design teams usually have a short time suspense (like most planning teams), however they are charged to implement design to an organization that will resist new concepts, demand that favored tools be used as much as possible, and most design applications will be done in fluid environments that will offer very little evidence of design success that might be repeated without significant reframing and additional design. This is where subversion comes in, for positive organizational reasons.

The postmodernist design practitioner, in my experience, performs design inquiries and enables a design team to use novel and experimental tools by subverting the existing system. This is done due to time constraints, or within environments where there is not enough time to provide extensive education to participants unfamiliar with design theory or application. Instead, design subversion occurs, with the result being a transformed organization that may not fully be aware of the design impacts or the 'why' of the epistemological variation in routine.

Conclusions: Where Shall We Be Going Next?

Traditionally, the conclusion section of an essay should summarize all of the other main points, and ought not to introduce any new concepts. For this essay, I will abandon this standardization intentionally. Instead, why do we not consider where military design

Leavenworth, Kansas: Combat Studies Institute Press, 2012), pp. 33–64; Christopher Paparone and William Davis Jr., "Exploring Outside the Tropics of Clausewitz: Our Slavish Anchoring to an Archaic Metaphor," in *Addressing the Fog of the COG: Perspectives on the Center of Gravity in US Military Doctrine*, ed. Celestino Perez (Fort Leavenworth, Kansas: Combat Studies Institute Press, 2012).

⁵⁹ Weick, "Drop Your Tools: An Allegory for Organizational Studies."

and postmodern thinking might move next, if they were perhaps unexpected dance partners moving in a sea of music and motion?

Design applications for military endeavors requires trans-disciplinary approaches that feature ample perspectives from postmodern concepts as well as leading theories from complexity theory, fractal theory, sociology, and myriad other disciplines that might influence a military appreciation of complex conflict environments. This essay discussed the Burrell-Morgan social paradigm theory comprised of four paradigms; however nearly any paradigm theory might suffice if it is relevant to the military context. Nonetheless, design education is currently limited largely to mid-grade professional development, and a majority of design education approaches marginalize multiple design disciplines in favor of a chosen one or two methodologies. This will not suffice for the 21st century.

As complexity within societies and technology increase, humans (as well as technology and potentially artificial intelligence) will gain abilities, interactions, and information at speeds inconceivable even from today's standards. The last decade of persistent conflict, coupled with largely a NATO military dismay at current processes and decision-making methodologies (that have failed to produce useful strategies), is ushering in radical change. This change will come in multiple forms, particularly in unconventional and controversial military approaches that combine critical and creative thinking in ways that reject institutional norms. This change again features aspects of Weick's "change agents" as well as Foucault's problematizer; too much radical change at a rate that the institution will categorically reject, and the design fails to take hold. Too little change, and the application will fail because it retains far too much of the outdated and irrelevant rituals that the institution attempts to preserve.

This paradox will maintain throughout design evolution, as militaries consider how much or how little to apply design to professional military education. Militaries will also consider when, to whom, and how to introduce concepts that feature trans-disciplinary design approaches. I do not have a crystal ball, but I would offer two observations. First, the current military model for design education is a failure. Collectively, we have either sterilized design into a simplistic and mechanistic dance partner for our still favorite detailed planning beauty, or we have focused design education too late, towards too small a useful population. Both of those might change,

but only through many experiments and iterations of higher uncertainty and risk tolerance will a more innovative solution be accomplished. Until then, I expect that a small population of theorists, practitioners, and design enthusiasts will, like an island of misfit toys, operate on the outskirts of mainstream military institutions.

Over time, radical change will likely occur, however military historian Barry Posen offers only three primary drivers for this.⁶⁰ First, a military frequently faces major failure that drives innovation and radical change. Essentially our enemies innovate first and drag us to those realizations through humiliating defeat. Second, an organization seeks to expand. This is valid, if an Allied military suddenly gains significant funding, political support, or the directive to prepare for a major theater of war. The third driver Posen proposes is that of external influence to change, typically the public or senior political leadership. Frequently, another accompanies one in that after major military failure, the public as well as the political leadership demands radical change.⁶¹

Design is about radical change towards a deeper and more sophisticated appreciation of complex conflict contexts, however design is not yet a mainstream endeavor for militaries. It is frequently considered a fad, or potentially just a current trend in doctrinal development.⁶² Where are we going? Likely, we will see all of these forces influence our militaries on why and how to advance design thinking in theory, practice, and doctrine. Some of our militaries will experience major defeat in the 21st century, where despite enormous technological, financial, and professional training in traditional (proven) war-fighting, a novel rival (or rivals) will innovate and generate emergent applications that transcend all of these advantages.

Some militaries might experience a demand to expand, and seek novel ways of making sense of complexity that current methodologies currently are inadequate towards. Many militaries will experience public and political pressure to radically change

⁶⁰ Posen, *The Sources of Military Doctrine: France, Britain, and Germany Between the World Wars*, pp. 38-48.

⁶¹ John Nagl, *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam* (Chicago: University of Chicago Press, 2002); Weick, "Drop Your Tools: An Allegory for Organizational Studies."

⁶² Andrew Nocks, "The Mumbo-Jumbo of Design: Is This the Army's EBO?," *Small Wars Journal*, September 20, 2010; Milan Vego, "A Case Against Systemic Operational Design," *Joint Forces Quarterly* 53 (quarter 2009): pp. 70-75; Grigsby et al., "Integrated Planning"; Jelte Groen, "Systemic Operational Design: Improving Operational Planning for the Netherlands Armed Forces" (monograph, US Army School of Advanced Military Studies, Fort Leavenworth, Kansas, March 2006).

in the 21st century. Other perspectives, such as Ryan in this series may find militaries more willing to experiment with non-modernist concepts.⁶³ Design will likely remain a fluid and often-subjective process of transformation, debate, and resistance. This is unavoidable, uncontrollable, and it will unfold in non-linear, emergent process that defies everything in our past. I expect that in light of all of these expectations that somehow postmodern concepts will become of increasing value to a military facing any of these pressures. Military applications of various design forms and methodologies might never coalesce into a single overarching frame or discipline, and likely that is a good thing for postmodern diversity of thought and action.

Like a fine wine aging, perspectives from the radical humanist might yet make a dent into the functionalist juggernaut. Lastly, as many postmodernist works are associated with the French, one might consider a maxim offered by Brillat-Savarin. He offered that “a dinner which ends without cheese is like a beautiful woman with only one eye.”⁶⁴ Perhaps we might modify this sentiment to offer, ‘a military that does not pursue a transdisciplinary approach to framing conflict environments is like ending a dinner without any cheese, and insisting it must always be one slice of favorite cake.’

⁶³ Ryan, “A Personal Reflection on Introducing Design to the U.S. Army.”

⁶⁴ Brillat-Savarin, *The Physiology of Taste*, p. 17.