

DESIGN THINKING AND OPERATIONAL ART: THE UNDERSTANDING OF THE RELATIONSHIP BETWEEN INTERNATIONAL SECURITY AND WAR

Zoltán Jobbágy¹

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Abstract: *In order to uphold the architecture of international security, most countries are committed to the peaceful resolution of disputes. In case diplomatic efforts fail, most of them have the military power to settle disputes by the use of military force. The outgoing 20th and the unfolding 21st century have clearly displayed that conflicts can degenerate into asymmetric, irregular and low intensity wars with the involvement of non-state actors. It has also become clear that these actors take advantage of the volatile, uncertain, complex and ambiguous, or in short VUCA environment posed by globalization. The social wave - front theory provides a useful narrative to this environment as it regards human history as a succession of three waves of changes and every time the waves clash, bloody wars break out as tensions between the representatives of different waves accumulate. Tensions can feature macroeconomic and geostrategic forces, risks on a regional and global scale that pose challenges of a various kind to humankind. In this paper the author argues that this requires a new lexicon and a special approach that have their mark on operational art. Integrating ends, ways and means to align forces and actions in time and space meaningfully is very much needed for the successful conduct of military operations to get a grip on the dynamics of the VUCA environment.*



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¹ Col. Dr. Zoltán Jobbágy - Associate Professor at the Faculty of Military Science and Officer Training, National University of Public Service – Ludovika, Budapest, Hungary. HU-1101 Budapest Hungária krt. 9-11. e-mail: Jobbagy.Zoltan@uni-nke.hu

Introduction

Not necessarily most popular on a global scale, it is obvious that NATO is still the strongest player of the international arena. The Alliance consists of 31 independent member states with Finland being the latest to join it in 2023 and Sweden most probably soon following suit. Its security posture results from the member states' values and interests and as an international political-military organization, the Alliance's sole task is to guarantee the member states' freedom and security through the implementation of various political and military means. They can consult and cooperate on defense and security related issues in order to solve problems, build trust, and prevent conflict. The Alliance is committed to the peaceful resolution of any disputes, but in case diplomatic efforts fail, it certainly has the military power to undertake any sort of operations that may fall under the collective defense clause of the North Atlantic Treaty or under the United Nations mandate. NATO may carry out such operations either alone or in cooperation with other countries and various international organizations.²

Non-state actors

Since the end of the Cold War, military operations have fed from many sources. The first is the unwanted and long-lasting consequence of the demise of the bipolar world order that increased the number of non-state actors, who constantly challenge the status quo. Unlike the traditional international arena in which state actors primarily interact with other state actors, the last three decades witnessed state actors increasingly interacting with various non-state actors.

The second is the proverbial complexity of the international arena that provides non-state actors with an abundance of opportunity to become successful, even over a long period of time.³

The third is that contrary to the optimistic assumptions, the end of global confrontation did not end armed conflicts as various forms of state versus non-state actor interaction have come to the fore. Globalization offers a limitless terrain for these interactions that can erupt anytime and anywhere. State versus non-state actor interactions very often feature violence fed by the endless cycle of terror and counter-terror that occasionally displays an unprecedented level of lethality.⁴

² What is NATO? Available at: <https://www.nato.int/nato-welcome/index.html>, accessed on April 20, 2021.

³ Porkolab, Imre. (2013). When the Goldfish meets the Anaconda: A modern fable on unconventional leadership. *Counter Terrorism Exchange*, 3 (3). pp. 5-21.

⁴ Hardt, Michael, Negri, Antonio (2004). *Multitude: War and Democracy in the Age of Empire*. Penguin Press. pp. 26-27.

State versus non-state actor interaction is also a strong actor versus a weak actor contest and can result in asymmetric, irregular and low intensity wars. The consequence of this special type of war is serious, as an examination of their outcome in the last two hundred years reveals. Weak actors increasingly win the percental outcome of strong actor versus weak actor contests displays.

Strong actor dominance dropped from 88.2:11.8 in the period between 1800-1849, to 79.5:20.5 in the period between 1850-1899, to 55.1:44.9 in the period between 1900-1949, and to 45:55 in the period between 1950-1998.⁵ It has also become clear that weak actors very often use time to help their cause against the strong actor. Clausewitz stated that one can win by using time. The main goals include the setting of limited objectives, for example, causing small, but continuous casualties to strong actor. In this way, weak actor can exhaust strong actor over time, thus negating obvious shortcomings in terms of DOTMLPF.⁶

The major NATO involvements in the first decade of the 21st century in Iraq and Afghanistan were, despite the Alliance's clear technological and material advantage, long campaigns that did not end with a clear defeat of the weak actor. In a classic article published in *Foreign Affairs* half a century ago, Henry Kissinger lamented on what went wrong during the war in Vietnam. He concluded that the strong actor wanted to fight a military war, but the weak actor fought a political one.

The strong actor sought physical attrition, whereas the weak actor preferred psychological exhaustion. During the war the strong actor lost sight of one of the cardinal maxims of this special type of war: weak actor wins if it does not lose and strong actor loses if it does not win.⁷ Things have just become worse for the strong actor since then. The dramatic increase in the number of non-state actors, the accelerating trend of technology development, the explosion in the number of information exchange result in the fact that strong actor has to cope with a wide range of simultaneous threats and challenges.⁸

Three waves

The conduct of military operations takes place in an environment that contemporary military terminology describes as volatile, uncertain, complex, and ambiguous, or in short VUCA. The social wave-front theory provides a useful narrative to understand these attributes. The theory regards human history as a succession of

⁵ Arreguin-Toft, Ivan: How the Weak Win Wars: A Theory of Asymmetric Conflict, *International Security*, 26 (1), 2001, pp. 93-128.

⁶ Clausewitz, Carl von (1993). *On War*. Everyman's Library, pp. 102-103; DOTMLPF is an acronym that stands for Doctrine, Organization, Training, Materiel, Leadership, Personnel, Facilities. Rowan, James R.: A Quick Look Across the DOTMLPF Domains, *Engineer*, January-April 2009, pp. 13-19.

⁷ Kissinger, Henry A. (1969). The Viet Nam Negotiations. *Foreign Affairs*, 48 (2). pp. 211-234.

⁸ Porkoláb, Imre – Zweibelson, Ben. (2018). Designing a NATO that Thinks Differently for 21st Century Challenges, *Defence Review*, 146 (1). pp. 196-212.

three waves of changes such as the agricultural, the industrial, and the informational one. The basic assumption is that innovations and break points influence human social development which generates waves moving at certain speed.⁹ Thus, the social wave-front theory explains the way wars change as the waves accumulate their force. A thorough understanding of the waves is of utmost importance, since general conclusion is that every time the waves clash, bloody wars break out, as tensions between the representatives of different waves accumulate.¹⁰

According to the social wave-front theory, the way humans generate wealth and the way they wage war are related. War is a part of human social existence, and reflects the society with which it evolves in consonance. Understanding the social context of military operations is critical as throughout human history wars, social entities other than states, social organizations other than armies, and combatants other than soldiers, waged war. Clausewitz acknowledged that nothing is eternal in war and there could be "little doubt that many previous ways of fighting [would] reappear".¹¹ During a long period of human history, wars were a permanent way of life, mostly conceived as a natural phenomenon. Most non-state actors represent earlier waves and see war from a different perspective. They fight for different aims and by different means.¹²

The NATO forces can commit to such operations maximum lethal efficiency, as their capability to kill is unparalleled on a global scale. However, political effectiveness often counts more than military efficiency, and in the VUCA environment, indicators of military efficiency might often be irrelevant to political effectiveness.¹³ Military operations tend to degenerate and become confusing, distant, and squalid, rather than decisive or heroic. Similar conflicts held off large armies during the First Wave, when the price to be paid seemed too high or the gain too small for empire builders.

The Western expansion and colonialism during the Second Wave proved that primitive or imperfect warfare could not defeat modern armies supported by

⁹ Toffler, Alvin (1980). *The Third Wave*, Bantam Books. pp. 10-12.

¹⁰ Toffler, Alvin – Toffler, Heidi (1993). *War and Anti-War, Survival at the Dawn of the 21st Century*, Little, Brown and Company. pp. 19-25.

¹¹ Coker, Coker, Christopher. (2002). *Waging War Without Warriors, The Changing Culture of Military Conflict*, IISS Studies In International Security, Lynne Rienner Publishers Inc, 2002, p. 6; Clausewitz, pp. 84, 101, 173; Hammes, Thomas X.: *The Sling and the Stone, On War in the 21st Century*, Zenith Press, 2004, p. 3; Toffler – Toffler, p. 64; Creveld, Martin van: *The Transformation of War*, The Free Press, 1991, p. 73; Quotation in Clausewitz, p. 624.

¹² Wegman, Yehuda. (2005). *Israel's Security Doctrine and the Trap of "Limited Conflict"*, Military Technology, March. pp. 86-89; Clausewitz, p. 608.

¹³ Hammes, Thomas X. (2004). *The Sling and the Stone, On War in the 21st Century*, Zenith Press, 2004 pp. 16-32, 207-215; Wilson, G. I. – Sullivan, John P. – Kempfer, Hal: *Fourth Generation Warfare, It's Here, And We Need New Intelligence-Gathering Techniques for Dealing with It*, *Armed Forces Journal*, October 2002, pp. 56-62; Wilcox, Greg – Wilson, Gary I.: *Military Response to Fourth Generation Warfare in Afghanistan*, Internet, accessed 23. 09. 2002, available at: www.emergency.com/2002/4gw5may02.htm; Knox, MacGregor – Murray, Williamson: *The Dynamics of Military Revolution 1300-2050*, Cambridge University Press, 2001, p. 192; Biddle, Stephen: *Afghanistan and the Future of Warfare*, *Foreign Affairs*, 92 (3), 2003, p. 46.

advanced technologies and organization. In the context of the unfolding 21st century, it seems so that political and psychological factors predominate over traditional military ones.¹⁴ This Third Wave is characterized by several parallel revolutions in information related technologies, the continuous geostrategic restructuring, and the diminishing role of the nation state. Traditional poles of attraction break down as boundaries and dividing lines in the international arena evaporate. Whereas the Second Wave allowed for discernible principles and boundaries, the Third Wave stands for constant fragmentation and fractalization.¹⁵

Non-state actors display a wide variety of relations including both alignments and enmities often without a dominant axis. Allies on a particular issue might be adversaries on the other. Various patches on a global and regional scale emerge and disappear constantly. They feature both enclaves of order and disorder, very often existing side by side. This constellation is extremely war-prone as various forms of violence can flourish in highly anarchistic enclaves. The Second Wave stood for a multitude of conventional wars between ambitious and capable state actors, but the Third Wave increasingly yields the aforementioned special type of war waged in the VUCA environment. Most non-state actors exploit and feed on hopeless poverty, wealth discrepancies, and various religious motives. This indicates new and hybrid forms of violence that can negate NATO's advantage in traditional terms and dangerously stretch resources.¹⁶

Six megatrends

In the Third Wave certain macroeconomic and geostrategic forces called megatrends shape the world on a global scale. These are rapid urbanization, demographic and social changes, climate changes and resource scarcity, shift in global economic power, and technological breakthrough. Megatrends alter the current status quo and definitely have the potential to influence the world collective future in a profound way. The implications are broad as megatrends stand for tremendous risks that require mitigation. The depth and the complexity of the forces involved indicate security challenges that reach deep into the very fabric of the societies involved. Solutions have to ease the confluence of the defense and security challenges posed by these trends on a mega scale.¹⁷

¹⁴ Gray, Chris H. (1997). *Postmodern War, The New Politics of Conflict*, Routledge. pp. 21-23, 81, 155-158, 168-177, 196.

¹⁵ Binnedijk, Hans. (1995). A Strategic Assessment for the 21st Century, *Joint Force Quarterly*, Autumn 1996, p. 67; Lyotard, Jean-François: *The Postmodern Condition: A Report on Knowledge*, University of Minnesota Press, 1984, pp. 14-17; Kumar, Krishan: *From Post-Industrial to Post-Modern Society, New Theories for the Contemporary World*, Blackwell, 1995, pp. 101-104.

¹⁶ Brown, Seyom (2003). *The Illusion of Control, Force and Foreign Policy in the 21st Century*, Brookings Institution Press, 2003, pp. 67-69; Peters, Ralph: *Fighting for the Future, Will America Triumph?* Stackpole Books, 1999, pp. 1-17; See also Jobbagy, Zoltan. (2005). *Wars, Waves and the West: Putting Effects-Based Operations into Context*, TNO Defence, Security and Safety, May 2005, pp. 11-25.

¹⁷ Five Megatrends and Their Implications for Global Defense & Security, PWC, November 2016, Internet, accessed 20 April 2021, available at: <https://www.pwc.com/gx/en/government-public-services/assets/five-megatrends-implications.pdf>.

A very wide variety of military and non-military risks that come from multiple sources and point into multiple directions influences the security of the NATO member states. These risks contain uncertainty and instability, and are difficult to predict. They have the potential to cause regional problems at the periphery of the Alliance that originate from ethnic rivalries, religious tensions, disputed territories, conflicts over resources, especially water scarcity, inadequate income, failed reforms, human rights abuses, collapse of governments, and dissolution of states. This can affect regional stability, cause human suffering, and ignite armed conflicts that can spill over into neighboring countries, including the NATO member states. Global problems stem from the prevailing global context and contain risks on a much larger scale. The acts of terrorism, various forms of sabotage, organized crime, the disruption of the flow of vital resources, the uncontrolled movement of great numbers of people profoundly and adversely affect the perception of security and stability of NATO on a global scale.¹⁸

According to a recent UN report, the number of conflicts has sharply increased since 2010. For example, in 2015, the number of ongoing conflicts increased to 50 compared to 41 a year before with battle related deaths largely concentrated in the Middle East. Conflicts increasingly affect civilians living in densely populated areas with the result that the number of forced displacements since the end of World War II is all the time high. Despite the relative high number of battle related deaths it seems so that in the unfolding 21st century interpersonal and gang violence kill much more people than political violence.

These forms of violence tend to be increasingly interrelated in countries where institutions are weak and social norms tolerate violence. This tendency does not affect all regions in the same way, but they are persistent as many countries and subnational areas face cycles of repeated violence, weak governance, and instability. Conflict and violence also have the tendency to cross borders and can affect life in multiple ways. A result is that the poor are increasingly concentrated in countries suffering from prolonged conflicts as these conflicts keep countries poor.¹⁹ Things have just become even worse since the outbreak of the Russo-Ukrainian War in 2022.

Risks on a regional and global scale demand a vast range of different responses with the consequence that NATO is required to execute a variety of military operations concurrently and at different scales. Non-state actors attempt to achieve their goals through different forms of destabilization by taking advantage of the VUCA environment as boundaries between state and non-state actors increasingly blur. The NATO forces may confront an enemy, who blends the elements of conventional and unconventional warfare thus waging the aforementioned special type of war. The recent discussion on hybrid warfare well reflects this reality.

¹⁸ Allied Joint Doctrine, Allied Joint Operations AJP-01(E) pp. 2-6 – 2-10

¹⁹ Marc, Alexandre. (2021). *Conflict and Violence in the 21st Century*, Current Trends as Observed in Empirical Research and Statistics, World Bank Group, Fragility, Conflict and Violence, internet, accessed 29 April 2021 available from <https://www.un.org/pga/70/wp-content/uploads/sites/10/2016/01/Conflict-and-violence-in-the-21st-century-Current-trends-as-observed-in-empirical-research-and-statistics-Mr.-Alexandre-Marc-Chief-Specialist-Fragility-Conflict-and-Violence-World-Bank-Group.pdf>.

Hybrid wars arise when a compound of coincidental or uncoordinated state or non-state actors successfully mix conventional and unconventional threats in a simultaneous and coordinated manner. Their activity can gain momentum by the implementation of a broad range of non-military measures to exploit the NATO vulnerabilities wherever they see it possible.²⁰

State or non-state actors, who wage hybrid war, do not necessarily follow those legal or ethical standards that are accepted by the NATO member states. The spread of nuclear capabilities, the proliferation of CBRN weapons and devices, and the easy availability of innovative delivery means remains a matter of serious concern. Despite the existence of international non-proliferation regimes, weapons technology proliferation increases the access to sophisticated military capabilities. Non-state actors possess the ability to acquire offensive and defensive air-, land- and sea-borne systems, various theatre missiles, and other advanced weaponry. The hallmark of the Third Wave is information technology and the reliance on such systems is growing. This creates vulnerability to cyberspace attacks that can even reduce or cancel the NATO forces' superiority.²¹

Design thinking

Megatrends, risks on a regional and global scale, and challenges of different kind require a new lexicon to foster innovative thought and promote original approaches. Non-state actors successfully manipulate the perception of audiences on a local, regional and global scale, and can fully exploit modern communications media to mobilize supporters and sympathizers. Their speed of action surpasses the speed national governments can achieve by far. Non-state actors exploit ingrained belief systems composed of religious, ethnic, tribal, or cultural elements for the creation of extremely lethal and very often non-rational reactions among social groups. They use various real and cyber domains to create ideological, religious, or cultural blind spots.

From these safe havens or legal loopholes, they can provoke state actors into an overreaction that results in expensive containment, prevention, and response efforts in dozens of remote areas.²² Non-state actors try to exhaust state actor and force it to change its political objectives. In modern conflicts, exhaustion does not necessarily come from high military casualties, but to remit the political support in the home country. Modern democracies cannot wage war without political and public support for long.²³

²⁰ Allied Joint Doctrine, Allied Joint Operations AJP-01(E) pp. 2-10 – 2-13.

²¹ Ibid, pp. 2-13 – 2-17.

²² Kilcullen, David J. (2021). New Paradigms for 21st Century Conflict, *Small Wars Journal*, Internet, accessed 20. 04. 2021, available at: <https://smallwarsjournal.com/blog/new-paradigms-for-21st-century-conflict>.

²³ Mack, Andrew. (1975). Why Big Nations Looses Small Wars: The Politics of Asymmetric Conflicts, *World Politics*, 27 (2), 1975, pp. 175-200.

The defeat of non-state actors requires a special sort of approach that stands for creativity ranging from problem definition to problem solution, including iterations. A problem solution is a viable result that can differ widely in terms of applicability from other similarly good enough solutions delivered by others. Every creative process is messy and painful as a high degree of creativity and originality has to be controlled and directed to channel early approaches towards a few possible solutions, from which one is selected. A creative process is full of tensions characterized by the constant need to balance between planning and adapting, knowing and sensing, executing and coping.²⁴

Military operations feature challenges manifested in a broad range of various problems that can be either tame or wicked. A tame problem is linear in nature and yields to traditional approaches. It is decomposable into parts and solvable through a chain of causal assumptions. Unfortunately, the bulk of problems posed by such operations are wicked, and not amenable to linear solutions.²⁵

In the VUCA environment chaos meets order constantly in a disorderly way, as occurrences move continuously back and forth. The resulting complexity denies the primacy of order and causality, and the drive for efficiency and constant affirmation. Tackling complexity requires freedom and openness, action and possibility.²⁶ The bewildering array of relationships among the constituents spans over several scales. It features emergent properties that come from the constant interplay of chaotic and non-chaotic forces, and a network of various alternatives. A creative approach helps to deliver an explanatory framework to help frame, perhaps even understand, the spatial and temporal consequences of actions and effects.²⁷ The VUCA environment reveals both deterministic outcomes and random fluctuations that come from the constant shuffling between stability and instability.²⁸

²⁴ Ambrose, Gavin – Harris, Paul. (2017). *Design Thinking, the Act or Practice of Using your Mind to Consider Design*, AVA Book, 2010, pp. 6-8; Anderson, Wendy R. – Husain, Amir – Rosner, Marla: *The OODA Loop: Why Timing is Everything*, Cognitive Times, December 2017, Internet, accessed 02. 04. 2020, available at: https://www.europarl.europa.eu/cmsdata/155280/WendyRAnderson_CognitiveTimes_OODA%20LoopArticle.pdf.

²⁵ Liedtka, Jeanne. (2020). *The Essential Guide to Design Thinking*, Darden Executive Education, 2015, pp. 3-6; Jobbagy, Zoltan: *Innovation Methodologies for Defence Challenges: On Design Thinking and Organic Approaches*, Hungarian Defence Review, Volume 148, Issue 2. pp. 50-64.

²⁶ Lefebvre, Eric – Letiche, Hugo. (1999). *Managing Complexity from Chaos: Uncertainty, Knowledge and Skills*, Emergence, 1 (3). pp. 7-15; Axelrod, Robert – Cohen, Michael D.: *Harnessing Complexity, Organizational Implications of a Scientific Frontier*, The Free Press, 1999, pp. 28-31; Lissack, Michael R.: *Complexity: the Science, its Vocabulary, and its Relation to Organizations*, Emergence, 1 (1), 1999, pp. 110-125.

²⁷ Levin, Simon A. (2003). *Complex Adaptive Systems: Exploring the Known, the Unknown and the Unknowable*, Bulletin of the American Mathematical Society, 40 (1). pp. 163-168; Baranger, Michel: *Chaos, Complexity, and Entropy, A physics talk for non-physicists*, pp. 9-11, Internet, accessed 24. 11. 2005, available at: <http://necsi.org/projects/baranger/cce.pdf>; Cilliers, Paul: *Complexity and postmodernism, Understanding complex systems*, Routledge, 1998, pp. 2-5; Nicolis, Grégoire – Prigogine, Ilya: *Exploring Complexity, An Introduction*, W. H. Freeman and Company, 1989, pp. 5-8, 31-32; Prigogine, Ilya – Stengers, Isabella: *Order out of Chaos, Man's New Dialogue with Nature*, Heinemann, 1984, pp. 131-137.

²⁸ Stacey, Ralph D. (1996). *Strategic Management & Organisational Dynamics*, Pitman Publishing. pp. 324-329.

Creativity can help comprehend things localized in space and time, and to attain a temporary and partial interpretation to avoid confusing causation with correlation and simulation with prediction. Whereas the former refers to the preference for creating retrospective validation to identify best practices, the latter points to the fact that even if it is possible to simulate something, it does not obviously mean that it is possible to equally predict its future.²⁹

Operational art

Creative processes balance with several different possible futures, where there is not always time for mechanical, deductive systemic analyses aimed at detecting causality. Thus, instead of focusing on certain desired effects, the emphasis should be on the ability to respond consistently to unpredictability. The VUCA environment prohibits the conduct of military operations based on single and prescriptive models as such operations require that the NATO forces adapt and evolve rapidly in order to handle dynamic and changing situations.³⁰ This naturally raises the demand for a better conceptualization when it comes to operational art. One has to be satisfied with understanding certain general features in terms of correlation rather than attempting to discover causal mechanisms. Consequently, the VUCA environment of the 21st century of military operations should be regarded as an opportunity to successfully act in evolving situations instead of inaccurately predicting futures in terms of desired effects.³¹

Traditionally, operational art is a conceptual framework that underpins the planning and conduct of military operations by taking advantage of two interrelated concepts such as operations design and operations management. Operational art helps clarify the problem at hand, provides a framework to assess opportunities and associated risks, fosters possible actions to gain advantage, and delivers logical and executable solutions to complex problems posed by an operating environment. It integrates ends, ways and means, and determines which forces conduct what actions in time and space to achieve objectives and end states. Operational art blends intuition, experience and leadership, and serves as the critical link between strategy and tactics, and allocates the necessary military and non-military resources.³²

Operational art requires the maintenance of situational awareness, the balancing of ends and means, the determination of ways, and the orchestration of actions and the use of capabilities. It combines a broad vision, anticipation, planning, preparation, execution,

²⁹ Flood, Robert L. (1999). Knowing the Unknowable, *Systemic Practice and Action Research*, 12 (3), pp. 247-252; Kurtz, Cynthia F. – Snowden, David J.: The new dynamics of strategy: Sense-making in a complex and complicated world, *IBM Systems Journal*, 42 (3), 2003, pp. 462-463; Snowden, David – Stanbridge, Peter: The Landscape of Management: Creating the Context for Understanding Social Complexity, *ECO Special Double Issue*, 6 (1-2), 2004, p. 146; Stacey, pp. 346-347.

³⁰ Snowden, David. (1999). The Paradox of Story, *Scenario and Strategy Planning*, 1 (5), pp. 16-20.

³¹ Emmeche C. – Køppe S. – Stjernfelt F. (1997) Explaining Emergence: Towards an Ontology of Levels, *Journal for General Philosophy of Science*, 28. p. 116.

³² Allied Joint Doctrine for the Planning of Operations AJP-5, May 2019. pp. 1-1 – 1-3.

and assessment. The commander has a primary role in operational art as they have to frame the larger context, set forth objectives and priorities, identify opportunities and risks, formulate operational ideas, maximize the military effectiveness, and promote responsiveness and flexibility. The commander's staff conducts detailed planning and assessments. Operational art combines the commander's skills with staff-assisted processes. It includes framing the environment and the problem, developing or refining options that give a comprehensive logic to the operation, expressing a vision and refining plans and orders that have to be turned into action by integrating, coordinating, synchronizing, prioritizing and allocating military and non-military capabilities.³³ A key element of operational art is to find ways to weaken or destroy enemy centers of gravity, and strengthen or protect friendly forces centers of gravity sufficiently enough to achieve various objectives and the end states set. Centers of gravity are contextual and subject to change at any time during the execution of the operation. As a result, center of gravity analysis is an iterative, continuous process.³⁴

Conclusion

It is clear that players, forces and trends together craft the new architecture of international security. The road ahead is a bumpy end, and everyone has to expect challenges and threats that have to be addressed. Thus, military operations in this VUCA environment and practicing operational art in the unfolding 21st century in a meaningful way that requires a peripheral vision instead of a focused one. Understanding the periphery of such operations, becoming familiar with the dynamics of ethnic rivalries, religious tensions, disputed territories, inadequate income, failed reforms, human rights abuses, is extremely difficult, in some cases impossible.

Mastering information related technologies, being in sync with various aspects of geostrategic restructuring requires a new lexicon and innovative approaches. Only a broad vision makes it possible to detect and take advantage of unfolding opportunities and to harmonize external demand and internal diversity. Operational art has to become truly artistic, hence a creative process that balances the unity of perspective and the diversity of purpose with the diversity of perspective and the unity of purpose. In order for this to happen, one has to move away from focusing on predefined and static end-states aimed at synchronizing activities of the NATO forces towards ideas in which diverse elements collaborate simultaneously.

It is not enough to synchronize operational design with operational management. The VUCA environment puts a clear pressure on operational art must. Both the commander and the staff have to become able to self-synchronize, de-synchronize, and a-synchronize these two interrelated concepts. Fragmented directions, relinquished control and a multitude of possible options combine the higher rhythm

³³ Ibid, pp. 3-1 – 3-5.

³⁴ Ibid, pp. 4-1 – 4-12.

generally found at lower levels, with the lower rhythm generally found at higher level to achieve vertical and horizontal harmony within the NATO forces. Military operations require an operational art that has a simple focus and increased flexibility. A few critical processes can define directions without confining them.

Operational design and operational management as concepts should merge in the phase of transition that does not settle into stable equilibrium nor does it fall entirely apart. Operational art should be rigid enough to organize change, but not too rigid to prevent change. This requires agility, information sharing and a peer-to-peer relationship in which everyone is empowered to contribute.

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