

War in the Information Age: The Message is the Mission

A Monograph

by

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Abstract

War in the Information Age: The Message is the Mission, by MAJ Brad M. Wellsandt, 44 pages.

The confluence of advancements in information technology and postmodernist philosophies that thrive on confusion have created conditions where contests of narrative are, by far, the dominant method of achieving political and military aims. More operationally and strategically significant actions in future conflict will occur in the “information environment” than elsewhere. Events in the physical domains will become increasingly tactical in nature, and the portrayal of these events in the form of narrative will become a dominant form of operational art. Current conceptions of Multi-Domain Operations (MDO) and Large-Scale Combat Operations (LSCO) overemphasize the intrinsically tactical aspects of future warfare and do not address the contemporarily dominant form of operational art, which exploits information technology and postmodernism through the power of narrative. The US military must recognize the significance of the social change wrought by the internet and social media, and its effects on the character of war. Just as the Enlightenment brought “Levée en masse,” and the Industrial Revolution brought “Industrial warfare,” this new “Information Revolution” is shifting the character of war and placing information warfare at the forefront. In contemporary war, information is not simply a capability – it is the essence of strategy and operational art. As a result, Commanders and planners must view “the message” itself as the mission, and not just an enabler to tactical and operational-level missions.

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Abbreviations

ADM	Army Design Methodology
CCP	Chinese Communist Party
DIME	Diplomatic, Information, Military, Economic
IE	Information Environment
IRA	(Russian) Internet Research Agency
ISIS	Islamic State of Iraq and Syria
LSCO	Large-Scale Combat Operations
MDO	Multi-Domain Operations
NATO	North Atlantic Treaty Organization
PLA	(China's) People's Liberation Army

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Introduction

World War III is a guerilla information war with no division between military and civilian participation.

—Marshall McLuhan, *Culture is Our Business*

Truth in itself is rarely sufficient to make men act...The most powerful springs of action in men lie in his emotions.

—Carl Von Clausewitz, *On War*

Reactive Discourse and Fundamental Surprise

Since the well-publicized Russian influence operations during the 2016 US election, the national security community has undertaken a discourse on information warfare. Unfortunately, too much discussion centers around the shock of the seminal event in 2016, as opposed to the proximate causes and trends associated with the broader issue of information warfare. For example, the transcript of the 2018 US Senate Intelligence Community Hearing on “Foreign Influence Operations’ Use of Social Media Platforms,” lists the word “Russia” thirty-two times more than “information,” and “IRA,” Russia’s Internet Research Agency, eight more times than “influence,” despite influence being in the hearing’s title.¹ Analysis of this hearing reveals the reactive nature of the discourse on information warfare, as national security officials are still attempting to understand what exactly happened, and why.

In Zvi Lanir’s “Fundamental Surprises,” the author explores surprise and identifies two key types: situational and fundamental. Situational surprises are generally isolated to a single incident, and come about primarily because of a lack of data to warn decision-makers of the event. Conversely, fundamental surprises reveal more systemic issues, where sufficient

¹ “Open Hearing on Foreign Influence Operations’ Use of Social Media Platforms,” § US Senate Select Committee on Intelligence (2018), accessed 20 October 2020, <https://www.intelligence.senate.gov/hearings/open-hearing-foreign-influence-operations%E2%80%99-use-social-media-platforms-third-party-expert#>.

information for warning was available, but malfunctions in mindset prevent proper action to avoid the surprise.² Based on myriad media reports of malign Russian activity in the run-up to the 2016 election and the residual confusion surrounding the event, one can classify this event as a fundamental surprise that has yet to produce fundamental learning, or a cognitive reframe – a change of understanding.³

Recent events of similar magnitude and strategy, including China’s use of misinformation to sow panic regarding the COVID-19 pandemic, indicate a more holistic review of information warfare is necessary.⁴ For multiple reasons, the efficacy of information warfare is increasing at a significant rate. With that in mind, how does the US adopt a broader perspective to learn from these events and identify better strategies for the “information environment” (IE)?

As a result of the fundamental surprise, the US must think differently about contemporary information warfare. Lanir describes this as “fundamental thinking,” where one must “remove oneself from the time and place of the specific event that triggered the thinking process.”⁵ A significant barrier to change is the lack of consensus in terminology associated with information, and some refuse to adopt the term “information warfare.”⁶ Despite internal disagreements, current practitioners informally define information warfare as, “a strategy for the use and management of information to pursue a competitive advantage, including both offensive and

² Zvi Lanir, *Fundamental Surprises* (Ramat Aviv: Center for Strategic Studies University of Tel Aviv, 1983), 27.

³ Ellen Nakashima, “Russian Government Hackers Penetrated DNC, Stole Opposition Research on Trump,” *The Washington Post*, June 14, 2016, accessed 20 October 2020, https://www.washingtonpost.com/world/national-security/russian-government-hackers-penetrated-dnc-stole-opposition-research-on-trump/2016/06/14/cf006cb4-316e-11e6-8ff7-7b6c1998b7a0_story.html.

⁴ Edward Wong, “Chinese Agents Helped Spread Messages That Sowed Virus Panic in US, Officials Say,” *The New York Times*, April 22, 2020, accessed 20 October, 2020, <https://www.nytimes.com/2020/04/22/us/politics/coronavirus-china-disinformation.html>.

⁵ Lanir, 31.

⁶ Mark Pomerleau, “5 Questions with the Marine Corps’ Deputy Commandant for Information,” *C4ISRNET*, April 3, 2020, accessed 21 October 2020, <https://www.c4isrnet.com/information-warfare/2020/04/03/5-questions-with-the-marine-corps-deputy-commandant-for-information/>.

defensive operations.”⁷ While this definition is useful, it does not capture the contemporary essence of information. This monograph defines information warfare as *the use of words and/or actions to exploit symbols, stories, myths, and/or identities to alter attitudes and behaviors in a direction favorable to prescribed objectives.*

When thinking fundamentally, one must examine a wide range of topics to understand the true nature of the emerging phenomenon, and derive sustainable conceptions of contemporary information warfare. While this monograph will offer general recommendations, the primary purpose of this paper is to frame the problem in a way that encourages fundamental thinking about the nature of information. This paper will examine emergent trends that explain the efficacy of contemporary information warfare, particularly when employed against western societies.

Objective Reality, Polarization, and Social Media

Throughout history, societies and their governments have generally formed around shared values and beliefs, with shared constructions of reality serving as the basis for social organization. Individuals become socialized into these structures through education and social interactions, enabling the collective inculcation of the shared reality. The way societies function depends heavily upon the production, transmission, and consumption of information about the world around them. In *The Social Construction of Reality*, Peter Berger and Thomas Luckman explain this phenomenon through the concepts of objective reality and socialization. Interpretations of the external world become objective reality, or accepted truth, when recognized institutions embrace these interpretations.⁸ Additionally, when one internalizes these realities, they become socialized into the society.⁹ In recent years, socio-political commentators have

⁷ Congressional Research Service, “Defense Primer: Information Operations,” December 15, 2020.

⁸ Peter Berger and Thomas Luckmann, *The Social Construction of Reality: A Treatise in the Sociology of Knowledge* (New York: Doubleday, 1966), 60.

⁹ *Ibid.*, 131.

lamented this “post-truth” era. Unfortunately, that trope is often just a partisan rhetorical tool that disregards that everyone is susceptible to falsehoods regardless of ideology.¹⁰ This monograph asserts that the growth of postmodernist worldviews created conditions where this “post-truth world” could manifest, and the consequences thereof.¹¹

Currently, much of one’s socialization occurs digitally, and often without respect to geographic region. As information technology expands at its current rate, so will the rate in which virtual interactions influence socialization, in lieu of physical interactions. As information becomes easier to customize and consume, individuals attain more power to shape their own socialization through “echo chambers,” which is likely to exacerbate polarization and societal disunity.¹² The scope and scale of future disunity will directly impact the efficacy of future information warfare, as malign actors can exploit socio-political rifts to induce domestic chaos.

Hypothesis

The internet and social media have significantly affected society, and its affects are likely to expand.¹³ To conduct “fundamental thinking,” one then must examine what specifically is occurring in society, the reasons why, and how it impacts the character of war. This monograph

¹⁰ John Ehrenreich, “Why Are Conservatives More Susceptible to Believing Lies,” *Slate*, November 9, 2017, accessed 22 October 2020, <https://slate.com/technology/2017/11/why-conservatives-are-more-susceptible-to-believing-in-lies.html>.; Scott Barry Kaufman, “Liberals and Conservatives Are Both Susceptible to Fake News, but for Different Reasons,” *Scientific American*, February 14, 2019, accessed 22 October 2020, <https://blogs.scientificamerican.com/beautiful-minds/liberals-and-conservatives-are-both-susceptible-to-fake-news-but-for-different-reasons/>.

¹¹ In this piece, the author frames the issue from a partisan political perspective. This monograph seeks to avoid assigning partisan blame, and instead explore the philosophical role postmodernism plays in the rejection of truth. Notwithstanding the author’s partisan framing, his insights into postmodernism are valuable: Bob Brecher, “Is the Left Responsible For Post-Truth Politics?,” *Open Democracy*, September 8, 2020, accessed 22 October 2020, <https://www.opendemocracy.net/en/transformation/left-responsible-post-truth-politics/>.

¹² Recent works, including Cass Sunstein’s *#Republic: Divided Democracy in the Age of Social Media*, *InfoTopia: How Many Minds Produce Knowledge*, and Andrew Shapiro’s *The Control Revolution* discuss how the internet enables individuals to decide which information they consume, and the implications of that phenomenon.

¹³ Works including, P.W. Singer and Emerson Brookings’ *LikeWar: The Weaponization of Social Media*, and Nicholas Carr’s *The Shallows: What the Internet is Doing to Our Brains* examine the internet and social media’s impact on society.

will examine the question: What philosophical, psychological, and technological factors are influencing the efficacy of contemporary information warfare? What are the broader implications for the future character of competition and conflict?

Despite being relatively new technologies, there is a robust menu of academic works related to the internet and social media's impact on society.¹⁴ Military professionals must understand the internet's societal implications. The military must also adapt its theory of warfare for this new reality, where one can livestream battles on the other side of the world, instantly formulate opinions about those conflicts, and even communicate with the combatants with a handheld device in their pocket.

A common theme of academic works on social media's effects on society is the difficulty of distinguishing fact from fiction, and postmodern strategies seize upon this phenomenon. Although postmodern thought emerged prior to the advent of the internet, much of its early work envisioned a future marred by confusion and disagreement over objective reality.¹⁵ Rather than adjusting to the difficulty in ascertaining truth, postmodernists embrace a nihilistic approach, discouraging the mitigation of ambiguity and encouraging its exploitation.

The confluence of advancements in information technology and postmodernist philosophies that thrive on confusion have created conditions where contests of narrative are, by far, the dominant method of achieving political and military aims. More operationally and strategically significant actions in future conflict will occur in the "information environment" than elsewhere. Events in the physical domains will become increasingly tactical in nature, and the portrayal of these events in the form of narrative will become a dominant form of operational art. Current conceptions of Multi-Domain Operations (MDO) and Large-Scale Combat

¹⁴ This monograph will thoroughly examine the works from Sunstein, Carr, and Singer/Brooking, among others, which explore the internet's impact of society.

¹⁵ Foundational postmodern philosophical works, including Ludwig Wittgenstein's *Philosophical Investigations*, Jean-Francois Lyotard's *The Postmodern Condition*, and Jean Baudrillard's *Simulacra and Simulation*, each explore the difficulties of depicting reality through language and images.

Operations (LSCO) overemphasize the intrinsically tactical aspects of future warfare and do not address the contemporarily dominant form of operational art, which exploits information technology and postmodernism through the power of narrative. The US military must recognize the significance of the social change wrought by the internet and social media, and its effects on the character of war. Just as the Enlightenment brought *levée en masse*, and the Industrial Revolution brought “Industrial warfare,” the Information Revolution is revolutionizing the character of war and placing information warfare at the forefront. In contemporary war, information is not simply a capability – it is the essence of strategy and operational art. Therefore, Commanders and planners must view “the message” itself as the mission, and not just an enabler to tactical and operational-level missions.

In the information environment, status quo powers seeking to operate from a "moral high ground" must be consistent and transparent in applying their principles. If not, belligerents can easily point to any inconsistency, real or perceived, as a sign of hypocrisy and unworthiness of global leadership. Because there are multiple interpretations on any action and/or message, they will never obey the ideal of a single trajectory. Therefore, the US is at a strategic disadvantage in the information environment, as it is rhetorically easier to criticize global leadership than it is to actually exercise and tout one’s own global leadership. For example, the “Black Lives Matter” movement spurred worldwide protests, whereas public outcry over the genocide of Uighur Muslims in China has been scanty at best.¹⁶ This contrast shows the burden of narrative consistency placed upon actors devoted to the “moral high ground.”

¹⁶ Jen Kirby, “‘Black Lives Matter’ Has Become a Global Rallying Cry against Racism and Police Brutality,” *Vox*, June 12, 2020, accessed 24 October 2020, <https://www.vox.com/2020/6/12/21285244/black-lives-matter-global-protests-george-floyd-uk-belgium>.; Kate Lyons, “The World Knows What Is Happening to the Uighurs. Why Has It Been So Slow to Act?,” *The Guardian*, July 26, 2019, accessed 24 October 2020, <https://www.theguardian.com/world/2019/jul/27/the-world-knows-what-is-happening-to-the-uighurs-why-has-it-been-so-slow-to-act>.

US Military operations must possess narrative consistency to be strategically effective, lest our adversaries exploit any potential lines of argument against it. Postmodernism disrupts our ability to maintain narrative consistency, and the internet provides the venues for contesting our narrative(s). The US' current state of polarization and political division is not historically unique, except for the presence of social media and postmodern philosophies that can poison the well of socio-political discourse. With these inexpensive tools of information warfare available to US' adversaries, it begs the question of why they would not employ them as the primary means of achieving political ends.

Methodology

This monograph will rely on psychology, sociology, political science, philosophy, information technology, and military history, theory, and doctrine to answer the research question. Section one will examine the philosophies of modernism and postmodernism to explain contemporary difficulties in basic communication, and techniques by which postmodernists exploit linguistic ambiguities. Section two will review the human propensity to value narratives in lieu of hard data, and how that presents vulnerabilities in the information age. Section three will examine how the internet and social media has changed society and enhanced the efficacy of information warfare. The monograph will conclude by explaining the military utility of this work by applying all previous theories and concepts into existing military thought, and explain how the US military's conceptions of LSCO and MDO do not account for the efficacy of contemporary information warfare and what the military can do to improve.

Modern and Postmodern Perspectives on Information

It is conceivable that the nation-states will one day fight for control of information, just as they battled in the past for control over territory...

—Jean-Francois Lyotard, *The Postmodern Condition: A Report on Knowledge*

Modernism and The Pursuit of Truth

For centuries, the west has invested in an education system that emphasizes processes based on the scientific method, reason, and logic as the keys to human progress, development, and the identification of objective truth. The pursuit of universal truth served as the philosophical underpinning to western education. Modernism embraces the existence of universal truths and the pursuit of said truths for the betterment of humanity. Modernist ideas refined in the enlightenment led to the American and French revolutions of the 18th century and perceived successes of those movements propelled modernism's appeal throughout the west.¹⁷

The underlying message of modernism is eternally optimistic, as it assumes that human progress can arrive through knowledge and pursuit of universal truths. Everett Dolman describes modernism as “propelled on the belief that applied science could reveal the inner working of the universe, and through it, humanity could one day be delivered unto paradise.”¹⁸ Similarly, Mary Jo Hatch explains how enlightenment philosophy centered upon the belief that “reason would eventually free humankind from slavery and superstition.”¹⁹ This viewpoint constitutes a metanarrative of the world in which mankind is destined for improvement as long as it harnesses the nature of the universe. This metanarrative provides a potential for societal unity centered

¹⁷ William Bristow, “Enlightenment,” in *The Stanford Encyclopedia of Philosophy* (Stanford University, n.d.), accessed 26 October 2020, <https://plato.stanford.edu/archives/fall2017/entries/enlightenment/>.

¹⁸ Everett Dolman, *Pure Strategy: Power and Principle in the Space and Information Age* (London; New York: Frank Cass, 2005), 95.

¹⁹ Mary Jo Hatch, *Organization Theory: Modern, Symbolic, and Postmodern Perspectives*, 4th ed. (Oxford: Oxford University Press, 2018), 34.

around truth and individuals' rights and responsibilities.

The modernist metanarrative of human progress rests upon objectivist ontology, which asserts that “an external reality whose existence is independent of our knowledge of it; the world exists as an independent object waiting to be discovered.”²⁰ This assertion reveals the modernists' view on the relationship between ontology and epistemology, where existence consists of an “unshakable reality,” which human knowledge is perpetually pursuing.²¹ This framework can encourage a sense of togetherness in society where the world can work together under agreement on facts to improve quality of life. This improvement comes in large part through the arranging of society based on these agreed upon facts where anyone who disputes the consensus has the burden of proof to overturn the status quo, and paradigms can be updated based upon compelling evidence and logic.²² This process allows for sober discussions of reality based on a consensus view of facts and methods, where all parties share a common interest of progress towards truth.

The modernist tendency to view information as neatly categorized into narrow topic areas and clearly measurable as true or false presents a vulnerability in the information environment which calls for holistic thought.²³ Despite the dangerous predicates of postmodern philosophy, its relativist and nonlinear thought patterns represent conceptual benefits when thinking about contemporary information warfare. Postmodern thought also increases vulnerability to manipulation primarily because it ultimately encourages disunity, opportunism, and nihilism.

Postmodernism and Nihilistic Opportunism

Simplifying to the extreme, I define postmodern as incredulity toward metanarratives.

—Jean-Francois Lyotard, *The Postmodern Condition: A Report on Knowledge*

²⁰ Hatch, *Organization Theory: Modern, Symbolic, and Postmodern Perspectives*, 18.

²¹ *Ibid.*, 14.

²² Thomas Kuhn, *The Structure of Scientific Revolutions*, 3rd ed. (Chicago: University of Chicago Press, n.d.), 52–53.

²³ Jonathan Haidt, *The Righteous Mind: Why Good People Are Divided by Politics and Religion* (New York: Vintage Books, 2013), 112–14.

In the aftermath of World War II, some Western European intellectuals began to question the modernist metanarrative of human progress through pursuit of truth.²⁴ The fact that enlightenment-driven human progress had not yet advanced past a point where the atrocities of World War II could not occur, postmodern scholars concluded such metanarratives were just a vehicle for maintaining power.²⁵ While concerns regarding such destruction is well-founded, early postmodern work set forth a chain of reasoning that concludes with the rejection of any possibility of universal truth and a relegation to pure relativism.²⁶ Foundational postmodern works, including Lyotard's "Postmodern Condition," presciently forecast the epistemological difficulties of the information age, but their assertions, when taken to the extreme, advocate for a nihilistic exploitation of language's imperfections in pursuit of power.²⁷

Early postmodern thought earnestly attempts to explain the confusion of life in the initial phases of the information age.²⁸ However, postmodernism's eventual refusal to recognize the validity of empirical truth promoted thought tendencies that discourage unity, increasing vulnerability to information warfare. Although postmodernism began in the west, there is strong evidence of its global proliferation.²⁹ The expanding prevalence of postmodernist philosophies enhances the efficacy of contemporary information warfare because it sees language as the central means of legitimating power, conceives of everything as a political struggle, and values criticism over accomplishment.³⁰ Postmodernism promotes a cynical and nihilistic form of

²⁴ Christopher Butler, *Postmodernism: A Very Short Introduction* (Oxford: Oxford University Press, 2002), 13.

²⁵ *Ibid.*, 16.

²⁶ *Ibid.*, 16.

²⁷ This section will later describe how power can come from, and be maintained by access to and control of the dominant narrative.

²⁸ In Lyotard's *The Postmodern Condition: A Report on Knowledge*, the author does not outright advocate for pure postmodernist ideals but instead contends with implications of the "computerization of society."

²⁹ Ning Wang, "The Mapping of Chinese Postmodernity," *Duke University Press* (1997).

³⁰ In works by postmodern scholar Michel Foucault, including *Power/Knowledge*, and *The History of Sexuality*, he discusses how discourse in and of itself generates power.; The concept of deconstruction,

opportunism which focuses on dominating power relationships through the control of language and meaning creation for the purpose of achieving predetermined outcomes. Disruption through finding flexibility in narratives provides gaps for leverage and exploitation, and ultimately the manipulation of power structures and societal institutions.

Regardless of the breadth of one's vocabulary, words are finite in nature and cannot fully capture the essence of the messenger's idea, and this contributes to pervasive misunderstanding in human communication. In *Philosophical Investigations*, Ludwig Wittgenstein explores the problem of imprecision in language and his work serves as a foundational text for postmodernism.³¹ The assertion that language is imperfect and can never reflect complete reality is reasonable and logical, but extrapolations from that benign observation can lead one down the road toward nihilism. Postmodernists have by and large opted to focus on the fallibility of language as the basis for their linguistic ontology, which asserts "knowledge and knowing arise in and from language."³² The linguistic ontology led to the concept of the "linguistic turn," meaning the acceptance that "the world is made by, rather than mirrored in, language."³³ This philosophical assumption led to the rejection of truth's necessity, since absolute truth was unattainable through language. Because of the close relationship between ontology and epistemology, one can conclude the nihilistic postmodern view of existence influences a similar perspective on the nature of knowledge.

If one adopts the postmodern assumption that "nothing exists separately from its renderings" then there are little prospects for purity in knowledge.³⁴ From the linguistic

rooted in the works of Jacques Derrida, encourages the dissection of authoritative texts for the purpose of undermining them, in lieu of providing alternative arguments.; In *Postmodernism: A Very Short Introduction*, Butler discusses how postmodernism is used in a wide variety of contexts as a vehicle for commenting on and attempting to affect political power dynamics.

³¹ Ludwig Wittgenstein, *Philosophical Investigations* (New York: The Macmillan Company, 1953).

³² Hatch, *Organization Theory: Modern, Symbolic, and Postmodern Perspectives*, 16.

³³ *Ibid.*, 16.

ontological view that places language at the forefront comes reflexive epistemology, which asserts that knowledge is not related to reality and that “every knowledge claim is a power play.”³⁵ When taken to their conclusion, these assertions can justify the twisting of words for any predetermined outcome, thus encouraging nihilism and opportunism.³⁶

In *Complexity and Postmodernism*, Paul Cilliers attempts to rebut the assertion that postmodernism encourages nihilism. His argument centers upon Lyotard’s idea that “a self does not amount to much” outside of the individual’s placement within localized discourses of society which messages pass through. He describes the interactions of these discourses as “in constant interaction, battling with each other for territory, the provisional boundaries between them being the very stakes in the game.”³⁷ This rebuttal is incomplete though, as envisioning a world of groups competing via discourse does not negate the possibility that this world is inherently nihilistic. An “anything goes” mentality of nihilism can certainly exist, if not thrive, in a world characterized by competing discourses. Of note, prominent postmodern scholar Jean Baudrillard’s hallmark text, *Simulacra and Simulation* concludes with a chapter titled “On Nihilism,” where he proclaims, “I am a nihilist.”³⁸ Notwithstanding Baudrillard’s personal conclusions of postmodern thought, neither the implications of Cilliers’ assertion nor nihilism present positive outlooks for liberal democracies, as neither encourage national unity, and both enhance the efficacy of information warfare. When individuals adopt Cilliers’ vision of competing groups, it is likely they will view all activity as a form of political discourse as he calls the “stakes in the game.”

³⁴ Hatch, *Organization Theory: Modern, Symbolic, and Postmodern Perspectives*, 18.

³⁵ *Ibid.*, 16–18.

³⁶ The Merriam-Webster dictionary defines nihilism as “a viewpoint that traditional values and beliefs are unfounded and that existence is senseless and useless.” This monograph asserts that postmodernism encourages nihilism primarily due to its rejection of empiricism. This rejection leads to “nihilistic opportunism” which asserts that since traditional means of determining objective reality are purely means of maintaining power, one should exploit linguistic ambiguities to adjust power structures in a direction more favorable to your personal desires. Nihilistic opportunism values outcomes over processes.

³⁷ Paul Cilliers, *Complexity and Postmodernism* (London: Routledge, 1998), 116.

³⁸ Jean Baudrillard, *Simulacra and Simulation* (Ann Arbor, MI: University of Michigan Press, 1994), 160.

As information technology enables the formulation and insulation of groups based on political identity, postmodernists can open new discourse battlefields.³⁹ It is difficult nowadays to view a sporting event, attend a concert, or take part in other cultural practices without exposure to political messages. Politicizing otherwise non-political cultural events encourages increased disunity and polarization in society.⁴⁰ If the logical conclusions of one's philosophy are a world of discourse battles, one might as well take the battle every place possible. Christopher Butler describes postmodernists as those who tend "to see everything, from abstract painting to personal relationships, as political undertakings."⁴¹ Understanding that postmodernists tend to see this political fight occurring everywhere, individuals must then examine how they view the concept of power and how it is leveraged in this ubiquitous struggle between discourses.

In *Pure Strategy*, Dolman describes the concept of power as related to freedom of choice. "When one can make a choice, one has power. When one has no choice, he or she is powerless and succumbs to fatalism."⁴² To have choice, one must possess a reasonable amount of information in order to possess the capacity to select between multiple alternatives and therefore have power. Considering the postmodernist linguistic epistemology, one can begin to understand the conception of power as coming from language, which is inseparable from knowledge according to postmodernists.

"Incredulity towards metanarratives" as Lyotard puts it, comes from the notion that these metanarratives existed solely to maintain modernist power structures.⁴³ Hence, postmodernists focus much of their work on "the relationship between discourse and power."⁴⁴ Postmodernist

³⁹ Section three will explore this phenomenon in further detail.

⁴⁰ The Wall Street Journal Editorial Board, "The Politicization of Everything," *The Wall Street Journal*, September 24, 2017, accessed 2 November 2020, <https://www.wsj.com/articles/the-politicization-of-everything-1506291118>.

⁴¹ Butler, *Postmodernism: A Very Short Introduction*, 2.

⁴² Dolman, *Pure Strategy*, 42.

⁴³ Jean-Francois Lyotard, *The Postmodern Condition: A Report on Knowledge*, xxiv.

⁴⁴ Butler, *Postmodernism: A Very Short Introduction*, 44.

scholar Michel Foucault devoted much of his work to the study of this theory, specifically how prevailing discourses shape how particular groups of people can be viewed as social deviants.⁴⁵ According to Foucault, knowledge and power are tightly linked because specific information can coerce or persuade collective action.⁴⁶ Foucault would certainly agree with Cilliers' vision of discourse battles, as he said, "discourse transmits and produces power; it reinforces it, but also undermines and exposes it, renders it fragile and makes it possible to thwart."⁴⁷ This postmodernist viewpoint gives credence to the theory that information warfare is the dominant form of conflict and/or competition. Understanding that, one must examine the specific methods postmodernists use to exploit the ambiguity of language.

In *Philosophical Investigations*, Ludwig Wittgenstein explores the problem of linguistic imprecision and conceptualizes the notion of "language games." He describes language games as rules that guide conversational behavior depending on their context.⁴⁸ In discussing the use of words, Wittgenstein compares them to tools, saying, "the function of words are as diverse as the function of these objects."⁴⁹ This, combined with his conception of the language game, leads to his identification of "the rule-following paradox," where he asserts that "every action according to the rule is an interpretation." He argues that because rules are comprised of imprecise multi-use words, countless interpretations of specific rules are inevitable.⁵⁰ While this makes sense at face-value, the problem once again lies in the implications of the assumption, as this line of logic could justify any statement or action that runs counter to a broadly accepted rule. This occurred

⁴⁵ Hatch, *Organization Theory: Modern, Symbolic, and Postmodern Perspectives*, 51.

⁴⁶ Michel Foucault, *Power/Knowledge: Selected Interviews and Other Writings* (London: Pantheon, 1980), 134–135.

⁴⁷ Michel Foucault, *The History of Sexuality: The Will to Knowledge* (London: Penguin, 1998), 100–101.

⁴⁸ Wittgenstein, *Philosophical Investigations*, 5.

⁴⁹ *Ibid.*, 6.

⁵⁰ *Ibid.*, 81.

recently on social media, where some academics attempted to rationalize the notion that $2+2=5$.⁵¹ This line of thinking gives postmodernists freedom of maneuver in the information environment, as they feel unconstrained by socially constructed rules of language and can assert any wild claim and retroactively justify it through the ambiguity of interpretation. Just as postmodernists use this theory to opportunistically justify any claim, they can also use it to discredit any assertion as well.

If one analogizes postmodernist communication to warfare, offensive operations would center upon language games and the rule-following paradox. In turn, defensive operations would use similar principles to neutralize undesirable claims prior to initiating a counter-offensive. This manifests through the concept of deconstruction, where one dissects texts by their multiplicity of interpretations with the goal of undermining their authority.⁵² Jacques Derrida championed deconstruction and *différance*, which again emphasize the imprecision of language. Derrida explains *différance* as the idea that the meaning of words relies upon the usage of other words with their own elusive meanings.⁵³ In practice, a deconstructionist can exploit the ambiguities of any text or argument to undermine its authority in a specific context, even if the context is purely hypothetical. Postmodernist's exploitation of ambiguity transcends language by also exploring potential gaps in symbols, images, and simulations.

The popular film series *The Matrix* examines difficulties in ascertaining reality from simulation, where the main character becomes aware that the “normal life” he was leading was a mere illusion. The works of postmodernist scholar Jean Baudrillard, particularly *Simulacra and Simulation*, inspired much of the screenwriters' work on the films.⁵⁴ Baudrillard explains how the bombardment of symbols and simulations without clear origin has left life as a “procession of

⁵¹ Caroline Delbert, “Why Some People Think $2+2=5$,” *Popular Mechanics*, August 7, 2020, accessed 3 November 2020, <https://www.popularmechanics.com/science/math/a33547137/why-some-people-think-2-plus-2-equals-5/>.

⁵² Hatch, *Organization Theory: Modern, Symbolic, and Postmodern Perspectives*, 54.

⁵³ *Ibid.*, 55.

⁵⁴ *Ibid.*, 55.

simulacra.”⁵⁵ He explains the concept of a simulacra through a model of phasing in which images become increasingly disconnected from the supposed referent. He characterizes initial images as good appearances of “profound reality,” but as the images get recycled they lose their connection to reality until completely disconnected from the initial representation.⁵⁶ As images succeed in the phases of simulacra, our concept of reality gets warped, where according to Baudrillard, “when the real is no longer what it was, nostalgia assumes its full meaning.”⁵⁷

Baudrillard adapts his view of simulacra to contemporary conflict in his series of essays titled “The Gulf War Did Not Take Place,” where he argues that “war has entered a definitive crisis,” as deterrence eventually led to “self-deterrence” and the US became “paralyzed by its own strength.”⁵⁸ Despite the title, Baudrillard doesn’t argue against the actual existence of the Gulf War, but that one should not characterize it as a war. His argument hinges upon the point that actual, direct fighting did not occur, as the US military relied heavily upon airpower and long-range weapons to induce heavy Iraqi casualties, while the US experienced much less death. Additionally, he argues that pervasive media coverage of the conflict became a simulacrum that did not represent the totality of the circumstances.⁵⁹ This case represents how one can use postmodernist viewpoints to make compelling and potentially persuasive arguments concerning warfare.

The burgeoning philosophy of postmodernism presents a serious challenge in the information environment. Postmodernism is as much of a “condition” (per Lyotard’s title) as a worldview. It can develop in a person over time, as they become confused in the contemporary information environment. Many can have postmodern tendencies without being an outright

⁵⁵ Baudrillard, *Simulacra and Simulation*, 1.

⁵⁶ *Ibid.*, 6.

⁵⁷ *Ibid.*, 6.

⁵⁸ Jean Baudrillard, *The Gulf War Did Not Take Place* (Bloomington, IN: Indiana University Press, 1995), 24–25.

⁵⁹ *Ibid.*, 24–32.

postmodernist. This factor expands the rate in which postmodern ideas spread, thus increasing the efficacy of contemporary information warfare. If individuals adopt Cilliers' vision of "discourse battles," they can use postmodernist tactics of language games and deconstruction to gain footholds in the boundaries between discourses.⁶⁰

As posited, information warfare is *the use of words and/or actions to exploit symbols, stories, myths, and/or identities to alter attitudes and behaviors in a direction favorable to prescribed objectives*. This section demonstrates how postmodernists exploit linguistic ambiguities to gain rhetorical advantages. The expanding prevalence of such actions will impact the character of war in the information age. Postmodernism exploits the ambiguities of language to perpetuate an apathetic view of objective reality, and a nihilistic form of rhetorical opportunism. Contemporary operational artists must recognize postmodern information warfare methods and acknowledge the discourse battles that will invariably surround the physical battles of future warfare.

⁶⁰ Cilliers, *Complexity and Postmodernism*, 116.

Narrative as Contemporary Operational Art

The world is not run by those who are right. It is run by those who can convince others they are right.

—Jamshid Gharajedaghi, *Systems Thinking*

Bridging Language Games and Strategic Aims

Operational art, the process of “linking strategy and tactics through the arrangement of tactical actions in time, space, and purpose to achieve a strategic goal” manifests in information warfare through narrative construction.⁶¹ Narratives provide the bridge between tactical language games and strategic information warfare objectives. Postmodern operational artists arrange tactical information actions, including deconstruction and language games, into narratives that *alter attitudes and behaviors in a direction favorable to prescribed objectives*.

While formulating his theory of operational art, Russian Colonel Georgii Isserson examined historical trends from the Napoleonic era through World War I.⁶² He realized that “the operational art of the era turned out to be powerless for solving the new problems inherent in the nature of contemporary armed conflict,” largely because of new factors including evolving socio-political conditions.⁶³ This lesson holds value for present-day operational artists, where ubiquitous internet access and postmodernist attitudes towards truth shape the way people see the world. Military professionals must acknowledge the change in the environment, where the click of a button can alter prevailing narratives.

What is a Narrative?

In *The Cambridge Introduction to Narrative*, H. Porter Abbot defines narrative as “the

⁶¹ Wilson C. Blythe, “A History of Operational Art,” *Military Review*, December 2018, 47.

⁶² Georgii Isserson, *The Evolution of Operational Art* (Fort Leavenworth, KS: Combat Studies Institute Press, 2013), 7–38.

⁶³ *Ibid.*, 13, 38.

representation of an event or series of events.”⁶⁴ The complete depiction of reality is unattainable because of linguistic imprecision. This section will explore this epistemological ambiguity further as it relates to the construction of narratives. Narratives, as historian John Lewis Gaddis says, “simulate what transpired in the past,” rather than provide a complete account.⁶⁵

One must understand the difference between stories, narratives, and narrative discourse. Abbott defines stories as actual events, narratives as the events’ representation, and narrative discourse as the methods used in conveying stories, through familiar plot structures.⁶⁶ This aligns with Gaddis’ assertion of narratives being simulations. Despite their fallibility, narratives exist in ubiquity because narration is the “least bad” option available when attempting to retell events. Hayden White describes narrative as “a solution to a problem of general human concern, namely, the problem of how to translate knowing into telling.”⁶⁷ The word comes from the Latin terms *gnārus*, for “know” and *narrō*, for “tell.”⁶⁸ This etymology emphasizes narrative’s centrality to human knowledge.

Narrative is a form of operational art because it bridges specific tactics of language games with strategic objectives via the representation of events.⁶⁹ Narratives are powerful because they are the primary way humans make sense of the world.⁷⁰ Narrators can use specific techniques to influence human sensemaking, leveraging the fact that narratives are more psychologically satisfying than bland, unpackaged information.⁷¹ This section will explain how

⁶⁴ H. Porter Abbott, *The Cambridge Introduction to Narrative* (New York: Cambridge University Press, 2008), 13.

⁶⁵ John Lewis Gaddis, *The Landscape of History* (Oxford: Oxford University Press, 2002), 105.

⁶⁶ Abbott, *The Cambridge Introduction to Narrative*, 15.

⁶⁷ Hayden White, *The Content of the Form: Narrative Discourse and Historical Representation* (Baltimore: Johns Hopkins University Press, 1987), 1.

⁶⁸ *Ibid.*, 215.

⁶⁹ Lyotard, *The Postmodern Condition: A Report on Knowledge*, 20.

⁷⁰ Abbott, *The Cambridge Introduction to Narrative*, 3.

⁷¹ *Ibid.*, 3.

narratives can influence collective action and ultimately define “discourse battles.”

Making Sense of the World

A child’s need for stories is as fundamental as his need for food.

—Paul Auster, *The Invention of Solitude*

Multiple studies have shown the educational and developmental benefits of reading “bedtime stories” to children. Along with enhancing vocabulary, one study found that consistent bedtime stories improved children’s narrative ability, or their “retelling the sequence of goal-directed actions.”⁷² Much of the way people learn and retain information comes in the form of narrative. This is likely related to the fact that prior to the advent of written word, stories were the primary vehicle for transmitting knowledge. People tend to learn and retain information when one can categorize it within a larger context, therefore narrative is central to human sensemaking.

Klaus Krippendorff refers to sensemaking as a circular process that “may start with some initially incomprehensible sensation, which then proceeds to imagining hypothetical contexts for it and goes around a hermeneutic circle...and meanings are constructed until this process has converged to a sufficiently coherent understanding.”⁷³ In short, people conduct sensemaking by placing things within a narrative so they can develop relational understanding. Hayden White identifies the prevalence of narrative in humanity when he says questioning “the nature of narrative is to invite reflection on the very nature of culture, and possibly, even on the nature of humanity itself.”⁷⁴ Daniel Kahneman reinforces this, saying, “the confidence that individuals have in their beliefs depends mostly on the quality of the story they can tell about what they see, even if they see little.”⁷⁵ The extent of the human propensity toward narrative can be explained in

⁷² Joanna Blake and Nicholas Maiese, “No Fairytale...the Benefits of the Bedtime Story,” *The British Psychological Society* 21, no. 5 (May 2008), Accessed 1 December 2020, <https://thepsychologist.bps.org.uk/volume-21/edition-5/no-fairytalethe-benefits-bedtime-story>.

⁷³ Klaus Krippendorff, “On the Essential Contexts of Artifacts or on the Proposition That ‘Design Is Making Sense (Of Things),’” *Design Issues* 5, no. 2 (1989): 13.

⁷⁴ White, *The Content of the Form: Narrative Discourse and Historical Representation*, 1.

part by narrative's ability to connect entities through time and space.

As people attempt to understand the world, they must examine multiple occurrences across space and time. Narratives provide the best means of drawing connections between disparate events. In *The Landscape of History*, Gaddis explains that historical narratives enable rich understanding of events because of their *simultaneity*, or their ability to span time and/or space, describe distant occurrences, and adapt them into a broader theme.⁷⁶ Additionally, Abbott explains that “narrative is the principal way in which our species organizes its understanding of time.”⁷⁷ This powerful trait of narrative allows people to adapt otherwise confusing experiences into a perception of reality, misguided or not. As White says, narratives portray “an image of life that is and can only be imaginary.”⁷⁸ Narratives possess a significant degree of fallibility, as they attempt to provide order to an often order-less world, but they resonate with people significantly more than any other form of discourse. Specific narrative mechanics provide benefits to an operational artist in a world characterized by discourse battles.

Narrative Mechanics

All narratives are not created equal. For specific and sometimes elusive reasons, people consider certain narratives more compelling than others. Abbott refers to this as *narrativity*, or “the set of qualities marking a narrative.”⁷⁹ There is no consensus among narrative theorists regarding a list of qualities that guide one toward determining levels of narrativity. However, White offers an initial framework in the *Content of the Form* where he refers to “coherence, integrity, fullness, and closure” as key elements of narrativity.⁸⁰ White examines the value of

⁷⁵ Daniel Kahneman, *Thinking, Fast and Slow*, 1st edition (New York: Farrar, Straus and Giroux, 2013), 87.

⁷⁶ Gaddis, *The Landscape of History*, 24.

⁷⁷ Abbott, *The Cambridge Introduction to Narrative*, 3.

⁷⁸ White, *The Content of the Form: Narrative Discourse and Historical Representation*, 24.

⁷⁹ Abbott, *The Cambridge Introduction to Narrative*, 25.

⁸⁰ White, *The Content of the Form: Narrative Discourse and Historical Representation*, 24.

different forms of historical representation: the annals, the chronicles, and historical narratives; and he finds that narratives provide a fuller, more compelling account, but can be more inaccurate. White concludes that the aspects of narrativity best serve the purpose of “moralizing judgements.”⁸¹ Therefore, an operational artist who desires an audience to derive an intended conclusion from a narrative must lean upon White’s principles of narrativity.

Because of linguistic imprecision, and the fact that an observer cannot personally experience all aspects of an event, tangible evidence alone cannot constitute a narrative. In *Tropics of Discourse*, White explains that “the facts do not speak for themselves, but that the historian speaks for them, speaks on their behalf, and fashions the fragments of the past into a whole whose integrity is – in its representation.”⁸² The narrative constructor must order the available facts and fill in the gaps to fulfill White’s narrativity principles of coherence and fullness.

Narrative is the most efficient and most stimulating method of simplifying otherwise complex phenomena, as it provides a way of filtering and organizing uncontextualized data into a compelling plot. Some data is required for narrative construction, but the operational artist need not have “all” the data to complete their plotlines. Gaddis explains that historians achieve this by using “macro-generalizations to bridge such gaps in the evidence and to move the narrative forward.”⁸³ This process of gap-filling is relatable if it follows a familiar thread. Narratives allow one to simplify otherwise complex phenomena. Because people tend to possess proclivities toward narrative while constantly experiencing them, they have a series of “narrative formulas” in their memory that assist us in making sense of an otherwise disordered series of facts.⁸⁴ An effective operational artist can leverage these proclivities by emphasizing particular evidence that

⁸¹ White, *The Content of the Form: Narrative Discourse and Historical Representation*, 1–25.

⁸² Hayden White, *Tropics of Discourse: Essays in Cultural Criticism* (Baltimore: Johns Hopkins University Press, 1978), 125.

⁸³ Gaddis, *The Landscape of History*, 106.

⁸⁴ Abbott, *The Cambridge Introduction to Narrative*, 8.

supports an information warfare objective and deemphasizing those that do not.

When constructing a narrative, one must decide how much emphasis to place on certain events, preferably based on how much detail is available concerning the event, and how much the event jives with the underlying message. Abbott explains this through the concept of constituent and supplementary events. Constituent events “are necessary for the story to be the story it is,” while supplementary events “are not necessary for the story.”⁸⁵ This technique is pervasive in political media and social media management, where events that support a desired narrative are amplified and those that do not are neutralized.⁸⁶ Gaddis describes how narrative constructors navigate this process like tailors who look at what they have to cover and select the best option among the wide range of materials available.⁸⁷ The amplification of convenient events increases their narrativity and appeal because of people’s propensity to seek out causal relationships.

Largely because of the western education system’s emphasis on the scientific method, westerners tend to look for tangible causal links to explain phenomena, even when they may not clearly exist.⁸⁸ Western proclivity toward causal relationships enables the construction of clean, sequential narratives. Using White’s principles of narrativity, one can assert that X event directly caused Y outcome, even if the ground truth of a case is not that clear. This is rampant in political media, where the juxtaposition of two events can imply causation regardless of evidence, thus advancing a constructed narrative.⁸⁹ Abbott expounds upon this by saying, “the sequencing of narrative works on us so suggestively that we often don’t need the explicit assignment of cause to

⁸⁵ Abbott, *The Cambridge Introduction to Narrative*, 22–23.

⁸⁶ The Wall Street Journal Editorial Board, “Twitter’s ‘Living’ Censorship,” *The Wall Street Journal*, November 1, 2020, accessed 1 December 2020, <https://www.wsj.com/articles/twitters-living-censorship-11604263210>.

⁸⁷ Gaddis, *The Landscape of History*, 107.

⁸⁸ Abbott, *The Cambridge Introduction to Narrative*, 43.

⁸⁹ Niv Elis, “Dow Breaks 30,000 for First Time as Biden Transition Ramps Up,” *The Hill*, November 24, 2020, accessed 25 November 2020, <https://thehill.com/policy/finance/527350-dow-breaks-30000-for-first-time-as-biden-transition-ramps-up>.

be encouraged to think causally.”⁹⁰ Our desire to identify causation drives us toward perceptions of normalcy because a world with unambiguous and linear causality is more appealing than a chaotic and nonlinear world.

“Understanding is a process of rendering the unfamiliar, or the “uncanny” in Freud’s sense of that term, familiar.”⁹¹ In *Tropics of Discourse*, White explains how tropes work to establish new conceptions of normalcy as a “movement from one notion of the way things are related to another.”⁹² There is a reason why popular sayings, or tropes, dominate conversations, and White asserts this is because “understanding can only be tropological in nature.”⁹³ Lyotard says “consider the form of popular sayings, proverbs, and maxims: they are like splinters of potential narratives.”⁹⁴ This signals to an operational artist that consistency and repetition can enhance narrativity in its own right because if people constantly hear a trope, they are likely to eventually believe it, or at least accept it as a norm of discourse, and even repeat the trope.

In *The Seven Pillars of Wisdom*, T.E. Lawrence describes his efforts to lead an Arab revolt against the Ottoman empire during World War I. He reaches a turning point in the fight when he recognizes the Arabs fought as a human-centered force, while the Ottoman Turks fought as a tech-centric force. This enabled Lawrence to formulate a narrative that galvanized his Arab counterparts, and served as the foundation for his successful “war of detachment” strategy.⁹⁵ The Arabs knew they were technologically inferior to the Turks, but their cultural pride and unity led them to believe they could win in the long run. This represents the use of a cultural narrative to rouse a fighting force toward a common goal. Abbott describes this as “masterplot,” or a story “we tell over and over in myriad forms and that connect vitally with our deepest values, wishes,

⁹⁰ Abbott, *The Cambridge Introduction to Narrative*, 42.

⁹¹ White, *Tropics of Discourse: Essays in Cultural Criticism*, 5.

⁹² *Ibid.*, 2.

⁹³ *Ibid.*, 5.

⁹⁴ Lyotard, *The Postmodern Condition: A Report on Knowledge*, 22.

⁹⁵ T.E. Lawrence, *Seven Pillars of Wisdom* (Middlesex, England: Penguin Books, 1962), 193–202.

and fears.”⁹⁶ There are specific themes that paint the character of life in a particular culture, and that culture’s masterplots are “a kind of cultural glue that holds societies together.”⁹⁷ Specific events, if properly amplified, can activate masterplots, and inspire collective action. The inspiration of collective action gets at the essence of discourse battles, or what some may call “contests of narrative.”

Contests of Narrative

In Cilliers’ explanation of discourse battles, he refers to the boundaries between discourses as the “stakes in the game.”⁹⁸ The essential goal is to sway neutral or undecided parties toward one’s favored discourse, or narrative. To describe contests of narrative, Abbott discusses criminal trials, where defense counsel and prosecution construct narratives based on evidence with the goal of convincing the jury to agree with their account.⁹⁹ While criminal trials provide a good framework for understanding narrative contests, they are also tightly regulated, as opposed to more chaotic examples.¹⁰⁰ In response to the COVID-19 pandemic, which originated in China, the Chinese Communist Party (CCP) has undertaken a nuanced approach to the narrative contest. When competing in Southeast Asian discourses, the CCP takes a conciliatory tone and amplifies narratives that support the notion of a benevolent China that handles the pandemic effectively. Conversely, the CCP takes a more aggressive approach toward the US and Europe, by amplifying narratives that discredit those governments’ handling of the virus.¹⁰¹ This effort clearly shows that the CCP seeks to gain ground in Southeast Asian discourses, by

⁹⁶ Abbott, *The Cambridge Introduction to Narrative*, 46.

⁹⁷ *Ibid.*, 47.

⁹⁸ Cilliers, *Complexity and Postmodernism*, 116.

⁹⁹ Abbott, *The Cambridge Introduction to Narrative*, 175–91.

¹⁰⁰ *Ibid.*, 190.

¹⁰¹ Audreye Wong, “COVID-19 and China’s Information Diplomacy in Southeast Asia,” *The Brookings Institute*, September 3, 2020, accessed 3 December 2020, <https://www.brookings.edu/blog/order-from-chaos/2020/09/03/covid-19-and-chinas-information-diplomacy-in-southeast-asia/>.

attempting to convince those audiences to prefer pro-CCP narratives versus pro-Western narratives. Another complex factor of narrative contests, depending on one's leverage in the information environment, sowing doubt in an opponent's narrative can be as effective as persuading others toward your own.

In March 2018, Russian agents attempted to poison a former Russian spy in the United Kingdom. The operation failed and British officials immediately began collecting evidence of Russia's malfeasance. Before the Brits could publish a coherent narrative, Russia used social media to spread dozens of dubious alternative explanations for the poisoning to obfuscate the issue and confuse the west long enough to deter an effective response.¹⁰² In this instance, Russia had no designs of convincing people of their absurd stories, but instead sought to muddy the waters and bring otherwise convincing evidence into question to level the playing field in the narrative contest. Abbott defines these techniques as "shadow stories," which require minimal evidence and aim to simply to make the audience doubt the clarity of the prevailing narrative.¹⁰³ These examples highlight the contemporary power of narrative and the myriad ways in which an operational artist can use them to bridge information warfare tactics and strategy.

This section examined how narrative resonates, techniques for narrative construction, and recent examples of narrative contestation. The depiction of events in the form of narrative is contemporary operational art because it provides the vehicle for exploiting imprecision in language and the elusiveness of truth to gain footholds in the boundaries between discourses. As Lyotard says, the narrative form "lends itself to a great variety of language games."¹⁰⁴ Narrative is "an instrument of power," as Abbott says.¹⁰⁵ Military professionals must be cognizant of

¹⁰² Joby Warrick and Anton Troianovski, "Agents of Doubt: How a Powerful Russian Propaganda Machine Chips Away at Western Notions of Truth," *The Washington Post*, December 10, 2018, accessed 3 December 2020, <https://www.washingtonpost.com/graphics/2018/world/national-security/russian-propaganda-skripal-salisbury/>.

¹⁰³ Abbott, *The Cambridge Introduction to Narrative*, 182.

¹⁰⁴ Lyotard, *The Postmodern Condition: A Report on Knowledge*, 20.

¹⁰⁵ Abbott, *The Cambridge Introduction to Narrative*, 40.

narrative's power, because it "can be used to deliver false information; it can be used to keep us in darkness and even encourage us to do things we should not do."¹⁰⁶ While the expanding prevalence of postmodern philosophies enhances the power of narrative, one must also consider the role of the internet and social media in contemporary narrative contests.

¹⁰⁶ Abbott, *The Cambridge Introduction to Narrative*, 12.

The Impact of the Internet

When it was proclaimed that the Library contained all books, the first impression was one of extravagant happiness. All men felt themselves to be the masters of an intact and secret treasure. There was no personal or world problem whose elegant solution did not exist in some hexagon. The universe was justified, the universe suddenly usurped the unlimited dimensions of hope...As was natural, this inordinate hope was followed by an excessive depression. The certitude that some shelf in some hexagon held precious books and that these precious books were inaccessible, seemed almost intolerable.

—Jorge Luis Borges, *The Library of Babel*

In Jorge Luis Borges' short story, *The Library of Babel*, he describes a near infinite library that contains all possible books with all possible combinations of a 22-character language within a given length. When the citizens gained awareness of this library, they experienced overwhelming happiness because they knew that this library contained the answers to all of life's toughest questions and all they had to do was find the books. This happiness slowly gave way to confusion, then depression, when the citizens found the vast majority of the books were indecipherable nonsense and despite years of searching, they faced considerably low odds of finding any useful information.¹⁰⁷ This is an allegory for life in the information age and the allure of "big data." What is most interesting about Borges' story is that he presciently wrote it in 1941, long before the internet.

The internet and social media significantly increase the efficacy of contemporary information warfare not only because information can be distributed faster and wider, but also because it incentivizes individuals to make snap-judgements, creates states of "information overload," and enables people to self-organize into information "echo-chambers." As an increasing share of our lives take place online, it is likely that an increasing share of warfare will occur, or be influenced by the internet.¹⁰⁸ Throughout history, new information technologies have

¹⁰⁷ Jorge Luis Borges, "The Library of Babel," in *Labyrinths: Selected Stories and Other Writings* (New York: New Directions Publishing, 1962), 54–55.

¹⁰⁸ Gary Henderson, "How Much Time Does the Average Person Spend on Social Media?," *Digital Marketing*, August 24, 2020, accessed 15 December 2020, <https://www.digitalmarketing.org/blog/how-much-time-does-the-average-person-spend-on-social-media>.

contributed to significant socio-political changes. However, the internet is unique in the sense that it simultaneously allows global point-to-point communication and global “point-to-many” communication.¹⁰⁹ The internet’s expanding influence on western life is significantly affecting mental habits, empowering individuals to shape the information environment, and enabling the formulation of interest groups, irrespective of geography, that polarize against one another and rapidly spread information that only support group preferences.

How Information Technology Changed the World

It would not have been possible for us to take power or to use it in the ways we have without the radio.

—Joseph Goebbels

Prior to the advent of the written word, stories and parables were the primary vehicle for sharing information. There is strong evidence suggesting the authors of epics, including *Iliad* and *Odyssey* did not initially write them down, but musically composed them to enable memorization, allowing redistribution through singing.¹¹⁰ However, the invention of the alphabet and written word enabled information to accurately transcend time and space without relying upon human memory.¹¹¹ In describing the influence the written word had on civilization, James Gleick says, “the written word – the persistent word, was a prerequisite for conscious thought. It was the trigger for a wholesale, irreversible change in the human psyche.”¹¹² The invention of the written word represented the first significant breakthrough in information “technology,” enabling subsequent inventions that enabled substantial socio-political changes across the span of history.

One of the key factors considered in one’s identity is their national origin. Nation-states

¹⁰⁹ P.W. Singer & Emerson T. Brooking, *LikeWar: The Weaponization of Social Media* (Houghton Mifflin Harcourt, 2018), 35.

¹¹⁰ James Gleick, *The Information: A History, A Theory, A Flood* (New York: Pantheon Book, 2011), 34.

¹¹¹ *Ibid.*, 31.

¹¹² *Ibid.*, 37.

are relatively new political entities, yet they are a dominant factor in shaping culture. In *Imagined Communities*, Benedict Anderson examines the origins of national identity. Anderson argues that the advent of the printing press and the subsequent monetization of books and newspapers led to the formulation of national identities.¹¹³ Anderson asserts that this technological development “made it possible for rapidly growing numbers of people to think about themselves, and to relate themselves to others, in profoundly new ways.”¹¹⁴ Anderson later describes how Martin Luther exploited printing press technology to spread his 95 theses across Germany in less than 15 days, preventing the Catholic Church from censoring his work.¹¹⁵

Through the hindsight of history, one can ascertain the role information technology had in shaping world events. The newness of the internet makes it difficult to know what socio-political changes will come from this significant development in information technology. Some initial research indicates the changes are altering behaviors and attitudes of individuals, groups, and society at large. The military must study these changes, as they will certainly factor into the future character of war.

The Internet’s Impact on Individuals’ Attitudes and Behaviors

When everything is handed to you, it’s only worth as much as the time put in.

—Miranda Lambert, *Automatic*

Amid his scholarly work, renowned philosopher Friedrich Nietzsche fell severely ill, to the point where he could not focus on a page and write with his hand. During this time in the 1880s, typewriters were moving into the mainstream, so Nietzsche opted to purchase one so he could continue publishing his works. He experienced immediate results and was back to writing with minimal issue.¹¹⁶ After reading some of his typewriter-based works, a close friend of his

¹¹³ Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism*, 2nd ed. (London: Verso, 1991), 35–37.

¹¹⁴ *Ibid.*, 36.

¹¹⁵ *Ibid.*, 39.

noticed his writing style had changed, becoming “tighter, more telegraphic.”¹¹⁷ In response, Nietzsche concluded, “our writing equipment takes part in the forming of our thoughts.”¹¹⁸ If a typewriter, simple compared to contemporary technology, could induce a noticeable change in Nietzsche’s mind, it is fair to assess the internet can do the same.

In *The Shallows*, Nicholas Carr examines the psychological impacts of the internet. He begins by discussing Marshall McLuhan’s famous quote, “the medium is the message.” According to Carr, the introduction of any new information medium has spurred on debates over the content shared on the media, with one side praising the “democratization” of information and the other concerned over the “dumbing down” of society.¹¹⁹ This debate is playing out in present day, where those concerned about social media censorship have migrated to alternative platforms, while others deride the move as encouraging “echo chambers.”¹²⁰ Carr says this debate is important, but misses the initial point McLuhan was making. Carr asserts “in the long run a medium’s content matters less than the medium itself in influencing how we think and act.”¹²¹ The internet is significantly different from previous methods of consuming information, and incentivizes different mental behaviors.

Prior to the internet, most information came via print, television, or radio. These media share similar characteristics of consumption, where one generally focuses on one topic at a time. Mediums “supply the stuff of thought, but they also shape the process of thought,” says Carr.¹²²

¹¹⁶ Nicholas Carr, *The Shallows: What the Internet Is Doing to Our Brains* (New York: W. W. Norton & Company, 2010), 17–18.

¹¹⁷ *Ibid.*, 18.

¹¹⁸ *Ibid.*, 19.

¹¹⁹ *Ibid.*, 2.

¹²⁰ Li Cohen, “Why Some Americans Are Trading in Mainstream Social Networks for Ones That Tout ‘Freedom of Speech,’” *CBS News*, December 1, 2020, accessed 17 December 2020, <https://www.cbsnews.com/news/americans-trade-in-their-mainstream-social-networks-for-ones-that-tout-freedom-of-speech/>.

¹²¹ Carr, *The Shallows: What the Internet Is Doing to Our Brains*, 3.

¹²² *Ibid.*, 6.

Hence, Carr laments that the internet “is chipping away my capacity for concentration and contemplation.”¹²³ This phenomenon has even manifested an acronym popularly used on social media, “TL;DR,” for “too long; didn’t read.”¹²⁴ This increases information warfare vulnerabilities, as pithy, uncontextualized narratives can manipulate thought processes, in lieu of nuanced, holistic arguments. Carr argues “the imaginative mind of the Renaissance, the rational mind of the Enlightenment, the inventive mind of the Industrial Revolution, even the subversive mind of Modernism...may soon be yesterday’s mind.”¹²⁵

In *Thinking Fast and Slow*, psychologist Daniel Kahneman explores two broad methods of thought, which he calls “system 1 and system 2.” He says “system 1 operates automatically and quickly, with little or no effort and no sense of voluntary control.”¹²⁶ Conversely, system 2 is more deliberate and activates when concentrating on complex problems.¹²⁷ Kahneman takes care to emphasize the importance, as well as the strengths and weaknesses of each system. Since system 2 requires a higher degree of focus, our brains employ system 1 to efficiently apply mental energy.¹²⁸ Unfortunately, system 1 is particularly vulnerable to biases and “focuses on existing evidence and ignores absent evidence.”¹²⁹ This presents a significant challenge when attempting to mitigate information warfare narratives, as the internet’s characteristics encourages perpetual system 1 thought. To this point, Carr says “it’s possible to think deeply while surfing the net, just as it’s possible to think shallowly while reading a book, but that’s not the type of thinking the technology encourages and rewards.”¹³⁰ Just as the internet incentivizes lazy mental

¹²³ Carr, *The Shallows: What the Internet Is Doing to Our Brains*, 6.

¹²⁴ Alex Williams, “TL;DR,” in *Merriam-Webster English Dictionary*, n.d., accessed 18 December 2020, <https://www.merriam-webster.com/dictionary/TL;DR>.

¹²⁵ Carr, *The Shallows: What the Internet Is Doing to Our Brains*, 10.

¹²⁶ Kahneman, *Thinking, Fast and Slow*, 20.

¹²⁷ *Ibid.*, 21.

¹²⁸ *Ibid.*, 25.

¹²⁹ *Ibid.*, 105.

habits, it also creates conditions where individuals possess more power.

In July 2020, malicious actors hacked a series of twitter accounts from high profile personalities, including Barack Obama, Bill Gates, Elon Musk, and Kanye West, and posted misleading tweets to scam people out of money.¹³¹ Upon hearing these initial reports, one could reflexively assess that such an action had to be done by a nation-state. In fact, a teenager in Florida committed the crime with minimal external assistance. One cybersecurity expert proclaimed that “this is a great case study showing how technology democratizes the ability to commit serious criminal acts.”¹³² This case demonstrates how the internet places more power in the hands of individuals. Cybercrime represents just one area in which individuals gain power on the internet. Because any individual can publish information for near-global and near-real time consumption, people can gain outsized influence and present as key nodes to target for manipulation.

One of the more curious facts about business in contemporary times is that some people get paid exorbitant amounts of money for promoting products on social media. These “Social Media Influencers” essentially act as freelance information age advertisers and monetize their large followings by simply endorsing a product, with some netting over \$100,000 for each post.¹³³ This interesting phenomenon demonstrates the power of social media and the potential for certain well-positioned individuals to influence vast swaths of people. While this is particularly lucrative for some influencers, it represents a potential vulnerability in the information environment. The confluence of increased individual vulnerability to system 1 biases

¹³⁰ Carr, *The Shallows: What the Internet Is Doing to Our Brains*, 116.

¹³¹ David Fischer and Frank Bajak, “Florida Teen Arrested as Mastermind of Twitter Hack,” *The Associated Press*, August 1, 2020, accessed 20 December 2020, <https://apnews.com/article/ap-top-news-technology-florida-bitcoin-joe-biden>.

¹³² *Ibid.*

¹³³ Chavie Lieber, “How and Why Do Influencers Make So Much Money? The Head of an Influencer Agency Explains,” *Vox*, n.d., accessed 21 December 2020, <https://www.vox.com/the-goods/2018/11/28/18116875/influencer-marketing-social-media-engagement-instagram-youtube>.

and increased individual influence on the information environment has broader societal implications, including the growth of “echo chambers,” ideological polarization, and enhanced difficulty in ascertaining truth.

The Internet’s Impact on Society

Prior to the internet, people had relatively few choices for information sources. During the Vietnam War, millions of Americans got their news from *CBS Evening News* correspondent, Walter Cronkite. At one particularly grim stage of the war, Cronkite proclaimed, “the Vietnam War was never going to be the victory the politicians and generals had promised.” In response, President Lyndon Johnson reportedly told his staff, “if I’ve lost Cronkite, I’ve lost Middle America.”¹³⁴ This narrow media landscape has gone by the wayside, and now, any well-positioned individual with a smartphone and a social media account can report on major news. This occurred during the US raid to kill Osama Bin Laden, where a Pakistani civilian began tweeting complaints about the noise caused by helicopters in the area, and he unknowingly became the first to publish information about the raid.¹³⁵ This phenomenon has led to a vast increase in information sources, creating an “architecture of control,” where individuals are in charge of the information they consume.¹³⁶

In *#Republic: Divided Democracy in the Age of Social Media*, Cass Sunstein examines the implications of people’s ability to curate the information they consume. He explains how *homophily*, the desire to “connect with and bond with people who are like them,” along with the expansion of information options, increases the prevalence of “echo chambers.”¹³⁷ If someone is uncomfortable with particular information and prefers other types of information, one can easily

¹³⁴ Singer & Brooking, *LikeWar: The Weaponization of Social Media*, 34.

¹³⁵ *Ibid.*, 53–54.

¹³⁶ Cass Sunstein, *#Republic: Divided Democracy in the Age of Social Media* (Princeton, NJ: Princeton University Press, 2017), 1.

¹³⁷ *Ibid.*, 1–2.

manipulate their feed to ensure they only get information favorable to pre-existing beliefs. Social media algorithms enhance self-insulation, by collecting data on user behavior, amplifying content users prefer, and hiding content they dislike.¹³⁸ The teaming of individual preferences with advanced processing technologies creates conditions where society becomes filled with balkanized echo chambers that exist based on ideological identity. As the individual behavior and technological reinforcement progresses, malign actors can easily identify and target these echo chambers for manipulation.

With this advancement in information technology comes a shift in group identity. As identified by Benedict Anderson, the growth of information sharing fosters people's desire to "relate themselves to others."¹³⁹ Just as Anderson identified the printing press' role in shaping national identity, the internet appears to be shaping political group identity. Human's natural tendency to identify their "in-group" and "out-group" appears to be manifesting along partisan lines.¹⁴⁰ Sunstein describes this as "partyism," and suggests it exceeds racism in prevalence. He cites separate studies between 1960 and 2010, that showed how the number of people who would be displeased by their child entering an interracial marriage decreased, while the number who would be displeased by their child entering an "inter-partisan" marriage increased.¹⁴¹ This level of polarization enhances the efficacy of information warfare, as one's beliefs are evident by the information they consume, making targeting that much easier. This directly relates to "Magruder's Principle," which military deception doctrine explains, "it is generally easier to induce the deception target to maintain a preexisting belief than to deceive the deception target for the purpose of changing that belief."¹⁴² Information warfare practitioners can exploit

¹³⁸ Sunstein, *#Republic: Divided Democracy in the Age of Social Media*, 3–4.

¹³⁹ Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism*, 36.

¹⁴⁰ Dominic Tierney, "Does America Need an Enemy?," *The National Interest*, November 2016, 53.

¹⁴¹ Sunstein, *#Republic: Divided Democracy in the Age of Social Media*, 10.

¹⁴² US Department of the Army, Field Manual (FM) 3-13.4, *Army Support to Military Deception*

Magruder’s Principle inside of a digital echo chamber, and make a compelling narrative “go viral.”

In August 2020, Minneapolis Police, still reeling from the death of George Floyd, pursued and cornered a murder suspect, who then committed suicide. Before the Police Department could publish a coherent narrative, dubious narratives circulated on social media blaming the Police for the death. Riots immediately ensued and some demonstrators persisted even after seeing the video footage of the suspect shooting himself.¹⁴³ This incident represents what Sunstein calls a “social cascade,” where “information, even false information, can be spread to hundreds, thousands, or even millions by the simple press of a button.”¹⁴⁴ As highlighted, no single person can have a completely accurate account of an event. Sunstein echoes this by saying, “for the vast majority of your beliefs, you really don’t have direct information. You rely on the statements or actions of trusted others.”¹⁴⁵ The reason he refers to this as a “social cascade” is because the spreading of the information, regardless of its veracity, is an inherently social event.

Online behavior is vulnerable to system 1, biased thinking. Such thought also tends to give way to logical fallacies. In describing how information can cascade, Sunstein says that “if one person sees that five, ten, a hundred, or a thousand people are inclined to say or do something, there is a tendency to think that each and every individual has made an independent decision to say or do it.”¹⁴⁶ This directly relates to the logical fallacy of *Appeal to Popularity*, which “falsely assumes that anything favored by a large group is desirable.”¹⁴⁷ Although this is a

(Washington DC: Government Publishing Office, 2019), 1-8.

¹⁴³ Amy Forliti and Jeff Baenen, “Misinformation, Police Mistrust Stir Unrest in Minneapolis,” *The Associated Press*, August 28, 2020, accessed 2 January 2021, <https://apnews.com/article/0f83ff2105567c9da602c930a8951e56>.

¹⁴⁴ Sunstein, *#Republic: Divided Democracy in the Age of Social Media*, 98.

¹⁴⁵ *Ibid.*, 98.

¹⁴⁶ *Ibid.*, 99.

¹⁴⁷ Neil Brown and Stuart Keely, *Asking the Right Questions: A Guide to Critical Thinking* (Upper Saddle River, NJ: Pearson/Prentice Hall, 2007), 89.

logical fallacy, the social nature of online information sharing disincentivizes going against the group, as people often “go along with the crowd in order to maintain the good opinion of others.”¹⁴⁸ Thus, Sunstein concludes that social factors including groupthink and need for “in-group” approval play a significant role in the cascading of information, or “going viral.”¹⁴⁹ This social approval manifests on social media by way of “likes,” “retweets,” or other forms of digital endorsement. Operational artists must understand the social factors that drive the spread of information, particularly when that information is false.

A team of researchers examined a data set of information cascades on twitter and they found that, on average, false stories traveled six times faster than truthful stories.¹⁵⁰ The researchers concluded that a dominant factor in whether a tweet cascades is whether it is perceived as novel, and false information is more likely to be novel.¹⁵¹ This is likely because false narratives are constructed with the goal of eliciting reactions and a narrative that seems unique and “believable enough” will certainly do so. This theory reinforces Sunstein’s view that information sharing is social in nature, as the researchers highlighted that such false, yet people share novel information to convey that they are “in the know” or possesses “inside information.”¹⁵²

Among the first malign actors to fully exploit information cascades was the “Islamic State,” or ISIS. In *LikeWar*, the authors describe ISIS’ realization of how to spread narratives, “why shoulder all the hard work of spreading your message when you could count on others to do it for you?”¹⁵³ The viral spread of their war narratives traveled like wildfire, gripping many with

¹⁴⁸ Sunstein, *#Republic: Divided Democracy in the Age of Social Media*, 100.

¹⁴⁹ *Ibid.*, 100–104.

¹⁵⁰ Soroush Vosoughi, “The Spread of True and False News Online,” *Science Magazine*, March 2018, 3.

¹⁵¹ *Ibid.*, 5.

¹⁵² *Ibid.*, 4.

¹⁵³ Singer, & Brooking, *LikeWar: The Weaponization of Social Media*, 152.

a sense of fear that ISIS had global reach. In doing so, ISIS came to realize another powerful reality of war in the information age, that “reality is no match for perception. As long as most observers believed that ISIS was winning, it was winning.”¹⁵⁴ Operational artists must recognize the importance of the social change wrought by the internet, and understand that it has significant implications for the future character of war.

¹⁵⁴ Singer, & Brooking, *LikeWar: The Weaponization of Social Media*, 153.

Significance / Conclusion

The information space opens wide asymmetrical possibilities for reducing the fighting potential of the enemy.

—Valery Gerasimov, Chief of the General Staff, Russian Armed Forces

When discussing the outcome of the Vietnam War, many emphasize US tactical victories, and conclusive strategic defeat. This discourse is quick to point towards the US' inability to link tactical actions with strategic ends, but is lacking in reasons why.¹⁵⁵ In a lecture to the Marine Corps' Command and Staff College, military theorist John Boyd suggested the notion that the US won every battle is a misnomer by saying, "I know one battle we didn't win... We lost the battle in the home front. When I bring that up, they only think of the physical battle."¹⁵⁶ One can reasonably argue that the moral battle, "on the home front" was lost in large part because of narratives constructed in the aftermath of the Tet offensive, commonly recognized as a tactical US victory but also a strategic defeat.¹⁵⁷ Contemporary US Army doctrine, driven by a focus on LSCO and MDO, fails to account for such moral factors that are pervasive in the information age.

As Clausewitz says, "Moral elements are among the most important in war. They constitute the spirit that permeates war as a whole."¹⁵⁸ If a society exists in a state of confusion, it

¹⁵⁵ Much of this prevailing discourse on Vietnam perpetuates the American fixation upon tactics over strategy. One would be well served to take the trope "inability to link tactical actions with strategic ends" and flip it on its head. So instead think about why the US could not "actuate strategic ends with the tactical actions." When thinking about war, one should think big-to-small, or strategic-operational-tactical. Unfortunately, our tropological understanding of Vietnam and other strategic blunders encourages the inverse. Consider the popular analogy of "the jar of life" where one must fit rocks, pebbles, and sand into a jar. Tactically-centric thought is akin to filling up the jar with sand, leaving no room for the rocks and pebbles.

¹⁵⁶ John Boyd, "Discourse on Winning and Losing" (Marine Corps University, Quantico, VA, May 1989), 43.

¹⁵⁷ William Hammond, "The Tet Offensive and the News Media: Some Thoughts on the Effects of News Reporting," *Army History* 70 (2009): 7.

¹⁵⁸ Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1984), 184.

will surely affect their ability to generate combat power. Clausewitz certainly envisioned this when he described his “paradoxical trinity,” consisting of the people, the army, and the government. Clausewitz deftly recognized the need to balance the enmity of the people, the role of chance and risk in military operations, and government policy.¹⁵⁹ Based on the factors of postmodernism, the power of narrative, and the internet’s ability to exploit each, the US military must reexamine the balance within Clausewitz’ trinity, since moral factors can be manipulated with the push of button. Considering the world of “discourse battles,” one can recall Sun Tzu’s timeless quote, “the supreme art of war is to subdue the enemy without fighting.”¹⁶⁰ Given that the US’ adversaries understand this axiom, the US national security community must re-orient to ensure we do not become prematurely subdued.

Information warfare is *the use of words and/or actions to exploit symbols, stories, myths, and/or identities to alter attitudes and behaviors in a direction favorable to prescribed objectives*. Postmodernist techniques of language games and deconstruction enable exploitation of perceived friction between cultural artifacts, narratives provide the bridge between the prescribed objectives and the artifact’s exploitation, and the internet is the primary medium. Based on observations from the conflict in Iraq/Syria, some defense officials are advocating for an approach branded as “weaponized truth.”¹⁶¹ This approach, while admirable, is overly-idealistic, and fails to account for the power of narrative and the speed in which falsities spread as compared to truths. While this monograph does not support a US information strategy centered upon falsehoods, “truth-telling” alone is also not an information strategy. “Truth in itself is rarely sufficient to make men act,” as Clausewitz says.¹⁶² Contests of narrative are the dominant venue for achieving strategic

¹⁵⁹ Clausewitz, *On War*, 89.

¹⁶⁰ Sun Tzu, *The Art of War* (Mineola, NY: Dover Publications, 2002), 49.

¹⁶¹ Mark Pomerleau, “‘Weaponized Truth:’ How the US Military Plans to Compete in the Crowded Information Space,” *C4ISRNET*, October 16, 2020, accessed 3 January 2021, <https://www.c4isrnet.com/show-reporter/ausa/2020/10/16/weaponized-truth-how-the-us-military-plans-to-compete-in-the-crowded-information-space/>.

¹⁶² Clausewitz, *On War*, 112.

aims, and the US must actively compete with its own narratives.

In “The Value of Science is in the Foresight,” Russian General Staff Chief Valery Gerasimov speaks of “blurring the lines between the states of war and peace” and how “long-distance, contactless actions against the enemy are becoming the main means of achieving combat and operational goals.”¹⁶³ While he references capabilities necessary to actuate this vision of contemporary conflict, he focuses upon the information environment, stating “it is necessary to perfect activities in the information space, including the defense of our own objects.”¹⁶⁴ Russia’s emphasis on information warfare is not new, as they have long drawn upon the power of divisive masterplots to poison the well of American socio-political discourse.¹⁶⁵ However, Russia’s operational approach to information warfare is not limited to US domestic discourse, but also seeks to damage NATO forces’ credibility in Russia’s near-abroad. Recently, Russia has taken incidents involving NATO forces out of context and constructing misleading, yet compelling narratives about such to attempt to drive Eastern European public sentiment against them. This includes allegations of German Soldiers raping Lithuanian civilians, and a US Stryker running over a child on a bicycle.¹⁶⁶ Responding to such reports undoubtedly consumes a lot of attention and energy from commanders at echelon, and it would be foolish to believe such techniques would not be employed in a future conflict with Russia.

In contrast to Russia, China has been less aggressive militarily in pursuit of their political objectives. Nevertheless, China holds views like Russia regarding the magnitude in which information warfare and other non-kinetic means can enable the achievement of strategic aims.

¹⁶³ Valery Gerasimov, “The Value of Science Is in the Foresight,” *Military Review*, no. Jan-Feb (2016): 24.

¹⁶⁴ *Ibid.*, 27.

¹⁶⁵ Philip Ewing, “Russians Targeted US Racial Divisions Long Before 2016 and Black Lives Matter,” *NPR*, October 30, 2017, accessed 4 January 2021, <https://www.npr.org/2017/10/30/560042987/russians-targeted-u-s-racial-divisions-long-before-2016-and-black-lives-matter>.

¹⁶⁶ Andrius Sytas, “Lithuania Sees Fake News Attempt to Discredit NATO Exercises,” *Reuters*, June 13, 2018.

The CCP's strategic guidance to China's People's Liberation Army (PLA) is to win "Informatized Local Wars," in recognition of "information both as a domain in which war occurs and as the central means to wage military conflict."¹⁶⁷ Based on this, the PLA theorizes that, in future war, one side "will be able to attain victory in war without massively annihilating the enemy's vital strengths."¹⁶⁸ In practice, PLA doctrine discusses engagement in the "cognitive space" of war, where their "three warfares" are employed: public opinion warfare, psychological warfare, and legal warfare.¹⁶⁹ China's has prioritized its efforts in the cognitive space throughout the COVID-19 pandemic, where the CCP employed a "troll army" to suppress any negative information regarding the initial outbreak in China.¹⁷⁰ The CCP exploited this ambiguity and then used ideological and economic leverage to incentivize western media outlets to report mostly negative information about western governments' handling of the pandemic.¹⁷¹ China also exploited such economic leverage to prevent otherwise outspoken professional athletes from commenting on the Uighur genocide and other atrocities in China.¹⁷² Military planners must recognize the leverage China has while fighting "public opinion warfare," and how it can impact future conflict.

China's current strategic thinking believes "combat space is shrinking" and "war space is expanding."¹⁷³ Russia agrees, with Gerasimov observing the "blurring the lines between the

¹⁶⁷ Edmund Burke et al., "People's Liberation Army Operational Concepts" (Arlington, VA: RAND Corporation, 2020), 5.

¹⁶⁸ Ibid., 8.

¹⁶⁹ Ibid., 15.

¹⁷⁰ Raymond Zhong, Paul Mozur, and Aaron Krolik, "Leaked Documents Show How China's Army of Paid Internet Trolls Help Censor the Coronavirus," *ProPublica*, December 19, 2020, accessed 5 January 2021, <https://www.propublica.org/article/leaked-documents-show-how-chinas-army-of-paid-internet-trolls-helped-censor-the-coronavirus>.

¹⁷¹ Helle Dale, "Western Media Falls into China's Propaganda Trap" (The Heritage Foundation, April 1, 2020), accessed 5 January 2021, <https://www.heritage.org/asia/commentary/western-media-falls-chinas-propaganda-trap>.

¹⁷² James Durso, "The Uighurs, China, and the Lucrative Hypocrisy of LeBron James and the NBA," *The Hill*, October 24, 2019, accessed 5 January 2021, <https://thehill.com/opinion/civil-rights/467295-uighurs-china-and-the-lucrative-hypocrisy-of-lebron-james-nba>.

states of war and peace.”¹⁷⁴ This theory of contemporary conflict implies avoidance of conventional military conflict, and a prioritization of competition across the spectrum of conflict. Despite this, the US Army has opted to prioritize conventional military concepts, including LSCO and MDO.

In 2004, Antulio Echavarría published an article titled “Toward an American Way of War.” In it, he argues that the US lacks a “way of war,” because the American obsession with crushing military victory being a prerequisite for success does not comply with the Clausewitzian view of military actions supporting diplomatic bargaining and clearly defined political aims. He instead asserts the façade of the American “way of war” is but a “way of battle.”¹⁷⁵ The classical American tradition of focusing on overwhelming victory in battle has, in part, contributed to the current state of information warfare efficacy. French Scholar Hervé Coutau-Bégarie has called this the “cult of decisive force.”¹⁷⁶ Focusing on LSCO and MDO perpetuates vulnerabilities in the information environment and enables US adversaries’ freedom of maneuver in future conflicts. As such, the US must reconceptualize how it views the instruments of power (DIME – Diplomatic, Information, Military, Economic), into a more holistic model that accounts for the power of narrative in the information age.

¹⁷³ Burke et al., “People’s Liberation Army Operational Concepts,” 12–13.

¹⁷⁴ Gerasimov, “The Value of Science Is in the Foresight,” 24.

¹⁷⁵ Antulio J. Echavarría II, “Toward an American Way of War,” *US Army War College, Strategic Studies Institute*, March 2004, 1.

¹⁷⁶ Michael Shurkin, “Kill the Homothetic Army: General Guy Hubin’s Vision of the Future Battlefield,” *War on the Rocks* (blog), February 4, 2021, accessed 6 February 2021, <https://warontherocks.com/2021/02/kill-the-homothetic-army-gen-guy-hubins-vision-of-the-future-battlefield/>.

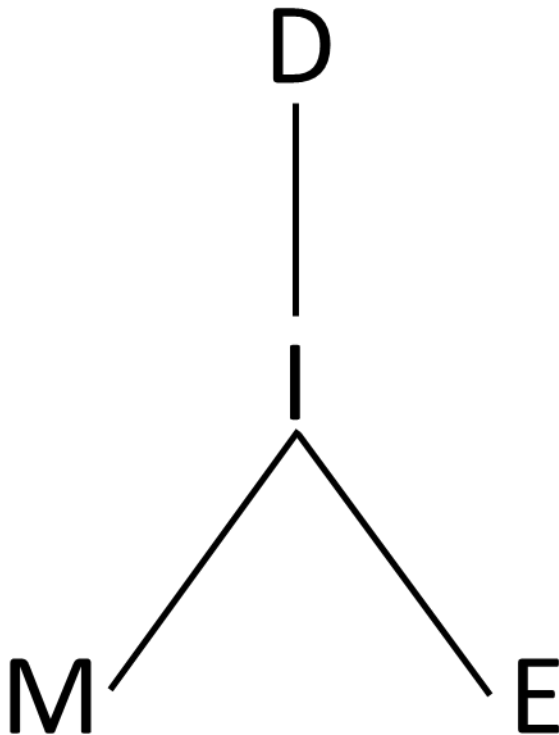


Figure 1: DIME Reconceptualization. *Source:* MAJ Brad Wellsandt

DIME Reconceptualization (Figure 1) is not about information supremacy, but information consistency. The framework of DIME as currently understood encourages stovepiping and linear thinking. All instruments of national power have interplay with one another, and strategists should view them holistically. The information instrument of power is the natural conduit between the other instruments. If the actions of the diplomatic, military, and/or economic instruments in a specific context do not possess internal, and external, narrative consistency, they will struggle to achieve strategic objectives, as belligerents have the rhetorical advantage of simply pointing at hypocrisies, real or perceived. Placing information at the center of the model does not intend to inflate its importance over the others. Instead, when attempting to link any two instruments together, information must be the linchpin between them.

The expanding prevalence of postmodernist philosophies, combined with the influence of social media, have created conditions where contests of narrative are the dominant method of achieving political aims. The formation of narratives explaining events in the physical domains will be a critical form of operational art. Current conceptions of MDO and LSCO perpetuate the American “way of battle” and do not address the significant social changes wrought by information technology and postmodernism.

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