

**United States Military Thinking on War in the Age of Postmodern  
Conflict**

**Analyse de guerre vue des forces armées américaines à l'ère de  
conflit post-moderne**

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by

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This dissertation is dedicated to my wife, Phornphan, and my children, Konrad and Halina, for their long-suffering patience and unwavering support, without which I would have long ago abandoned this journey, and to the memory of my friend and mentor Patricia McCormick.

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## Abstract

The beginning of this inquiry proceeded from the assumption that the character of war is changing, attributable primarily to the ongoing Information Technology Revolution. Based on that assumption, this dissertation explored whether the US military adjusted its conception of war over the past three decades (1991-2022) to adapt to the challenge of contemporary warfare. This question was relevant because Russia and China, both US adversaries, appear to have updated how they wage war in the Information Age. To answer the research question, this dissertation analyzed the content of joint doctrine over a 30-year period beginning in 1991 and ending in 2022. It looked at the language the US Joint Staff used in its descriptions of war with the expectation that, over time, joint doctrine would become more expansive in its description of war and how it accommodated information's expanded role in warfare. This dissertation also undertook a second, subordinate, yet supporting, research effort exploring the electives program offered by the US military's National Defense University (NDU) over the same 30-year period. This second effort looked for elective courses that presented expanded conceptions of warfare and enabled the military officers enrolled in these courses to engage in exploratory thinking beyond the application of joint doctrine. To help explain the evolution of thought in US joint doctrine, this dissertation used Thomas Kuhn's work on the emergence of new paradigms within the physical sciences and how they emerge and go on to overturn the earlier paradigm, destroying it in the process. Similarly, this dissertation drew on another scientist's work when looking at the NDU electives: Ludwik Fleck. Fleck's pioneering work on "thought collectives" and "thought styles" explained how knowledge is generated within scientific fields. This research was, and remains, unique in its use of joint doctrine to explain how the US military changed how it thought about war as a human activity. Employing concepts from Kuhn and Fleck, this dissertation provides context to that change.

## Résumé

Cette enquête est née de l'axiome que le caractère de la guerre s'évolue en grande partie à cause de la révolution des technologies de l'information. À partir de cette hypothèse, cette œuvre vise à déterminer si l'armée américaine avait adapté sa conception de la guerre pour répondre au défi de ce que l'on appelle la guerre contemporaine au cours de ces trois dernières décennies. Cette question est pertinente parce que la Russie et la Chine, deux adversaires des États-Unis, semblent avoir mis à jour leur façon de faire la guerre à l'ère de l'information. Pour répondre à la question de recherche, cette thèse analyse le contenu de la doctrine militaire américaine sur une période d'environ 30 ans de 1991 jusqu'en 2022. L'analyse s'est penchée sur le langage utilisé par l'état-major interarmées américain dans ses descriptions de la guerre. On anticipe qu'avec le temps, la doctrine militaire s'élargirait dans sa description de la guerre et qu'elle tiendrait compte du rôle agrandi de l'information dans la guerre. En deuxième temps, cette thèse a également entrepris un effort de recherche subordonné, mais qui renforce ce que l'on avait trouvé : explorer le programme des cours optionnels offert par la National Defense University (NDU) de l'armée américaine au cours de la même époque. Dans le cadre de cette deuxième interrogation, on s'est intéressé à des cours facultatifs offrant des conceptions plus compréhensives de la guerre et permettant aux officiers inscrits à ces cours de mener une réflexion exploratoire allant au-delà de la doctrine militaire américaine actuelle. Pour expliquer l'évolution de la pensée dans cette doctrine, cette thèse s'appuie sur les travaux de Thomas Kuhn sur l'émergence de nouveaux paradigmes dans les sciences physiques: comment ils émergent et finissent par renverser le paradigme précédent, le détruisant au passage. De même, cette thèse s'est appuyée sur les travaux d'un autre scientifique : Ludwik Fleck. Les travaux pionniers de Fleck sur les « collectifs de pensée » et les « styles de pensée » ont expliqué comment les connaissances sont générées dans les domaines scientifiques. Cette recherche se trouve unique pour deux raisons. D'abord, elle emploie la doctrine militaire pour expliquer comment l'armée américaine a changé sa façon de voir la guerre comme une activité humaine. En plus, cette thèse contextualise cette évolution en employant des concepts de Kuhn et de Fleck.

## Chapter 1 - Introduction

A strategic revolution may be underway, spawned by and reflecting the information revolution. Underestimating the extent of the ongoing revolution in military affairs and failing to understand its intricacies and second order effects can endanger American security.<sup>1</sup>

- Steven Metz, *Armed Conflict in the 21st Century* (2018)

This dissertation deals with the nature and character of contemporary war, how the US military understands and responds to war as a phenomenon, and how its understanding of war is reflected in its Professional Military Education (PME). The idea for this dissertation initially took shape between 2016 and 2017. During that period, the US military was actively engaged in and supporting significant combat operations in Afghanistan, Iraq, Syria, and the Horn of Africa, to name the most critical regions. In all three countries and the Horn, the opponents were irregular Islamic terrorist organizations such as the Taliban, the Islamic State of Iraq and Syria (ISIS) or Al-Shabab. Simultaneously, further national security challenges had emerged from the People's Republic of China, a rising global power and a resurgent Russia. Although these two countries constituted new challenges for the American military, they are traditional nation-state adversaries. China and Russia tended to operate below the threshold of armed conflict and use non-military elements of state power, such as their economies and ability to control and promulgate information to achieve political/military results traditionally associated with using force. Prime examples include Chinese encroachment along the so-called “nine-dash line” and their militarization of islets and atolls in the South China Sea.<sup>2</sup> Russia, for its part, employed the so-called “little green men” to bring about a *fait accompli* in Crimea in 2014 and its ongoing support to ethnic Russian separatists in the Donbas region of Ukraine.<sup>3</sup> Whether emanating from ISIS, the Taliban, or Russia, whether it occurred in the Middle East or the middle of the Pacific, all of these actions constitute irregular security challenges that have proven difficult for the US military to counter with traditional applications of military power. Correspondingly, there has been much discussion and scholarship in recent years focusing on the efficacy of the US

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<sup>1</sup> Steven Metz, *Armed Conflict in the 21<sup>st</sup> Century: The Information Revolution and Post-Modern Warfare* (New York: Nova Science Publishers, 2018): xxiv, accessed November 18, 2021, EBSCOhost e-book.

<sup>2</sup> The “nine-dash line” refers to China’s depiction of its claim “over the islands of the South China Sea and the adjacent waters;” one not recognized by the 1994 United Nations Convention on the Law of the Sea. Congressional Research Service, *China Primer: South China Sea Disputes* (CRS Report IF 10607), prepared by Ben Dolven, Susan V. Lawrence, and Ronald O’Rourke, updated February 2, 2021, accessed January 31, 2022, <https://crsreports.congress.gov/product/pdf/IF/IF10607>, 1.

<sup>3</sup> The term “little green men” refers specifically to Russian military personnel operating clandestinely without identifying insignia, to provide some level of official deniability. Mark Galeotti, “Hybrid War’ and ‘Little Green Men’: How It Works and How It Doesn’t,” in *Ukraine and Russia: People, Propaganda and Perspectives* eds. Agnieszka Pikulicka-Wilczewska and Richard Sakwa (Bristol: E-International Relations, 2015): 156-191, accessed January 31, 2022, <https://www.e-ir.info/2016/06/04/ukraine-and-russia-people-politics-propaganda-and-perspectives/>, 159-160.

military in the modern era and its ability to win wars.<sup>4</sup> Much of this discussion focuses on what is perceived as the limits of the US military power in the face of irregular challenges. Previously, irregular warfare was the purview of non-state actors. Increasingly, irregular warfare has also become part of the repertoire of “great power” competition.<sup>5</sup>

To clarify for this dissertation, competition “is a fundamental aspect of international relations and occurs naturally between actors within the system.”<sup>6</sup> All actors, state and non-state, compete with one another; even allies compete on some level. Violence is not always a component of competition, but it can be. At this point, competition becomes conflict. However, conflict does not automatically result in war. The international system routinely tolerates a certain amount of conflict without escalating into war. The threshold for armed conflict demarcates the boundary between conflict and war. This threshold is not fixed but is determined by circumstances. At their most basic, the relevant circumstances include the actors involved and their interests relative to one another. Within the contemporary international system states still decide to go to war based on the Thucydides’ timeless factors of fear, honor, and interest.<sup>7</sup>

In the aftermath of the US military’s controversial withdrawal from Afghanistan, the United States has to confront the fact that it, along with its allies, has been unable to achieve the desired policy goals of creating a viable, democratic Afghan state and the elimination or neutralizing of the Taliban, despite having fought the longest war in US history.<sup>8</sup> Over twenty years since the events of September 11th and after its initial ouster by US forces, the Taliban is back in power, and the NATO-supported Afghan government no longer exists. The US-led NATO alliance could not bring about a favorable outcome and no longer has a presence in that country despite the significant costs in blood and treasure. In the wake of Afghanistan, the US military renewed its focus on nation-state adversaries in traditional warfare to forestall the potential erosion of its military advantage.<sup>9</sup> However, near peer competitors such as Russia and China are challenging the US and its rules-based order around the globe employing both traditional military means and the non-traditional use of state power. Given the outsize role played by the US military in American foreign policy over the past several decades, this outcome has significant implications for US national security.<sup>10</sup>

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<sup>4</sup> Diego A. Ruiz Palmer, “Back to the Future? Russia’s Hybrid Warfare, Revolutions in Military Affairs, and Cold War Comparisons,” Research Paper, no. 120, *NATO Defense College* (2015), accessed September 22, 2021, <http://www.jstor.org/stable/resrep10267>.

<sup>5</sup> U.S. Department of Defense, *Summary of the 2018 National Defense Strategy of the United States of America* (Washington, D.C.: DoD, 2018): 2, accessed November 24, 2021, <https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>. The unclassified summary of the National Defense Strategy outlines the return of great power competition and how “every operating domain is contested.”

<sup>6</sup> Joint Chiefs of Staff, *Competition Continuum*, Joint Doctrine Note 1-19 (Washington, D.C.: Joint Chiefs of Staff, June 3, 2019), 1, accessed December 6, 2023, [https://www.jcs.mil/Portals/36/Documents/Doctrine/jdn\\_ig/jdn1\\_19.pdf?ver=2019-06-10-113311-233](https://www.jcs.mil/Portals/36/Documents/Doctrine/jdn_ig/jdn1_19.pdf?ver=2019-06-10-113311-233). The *Competition Continuum* mirrors Ken Waltz’s ideas about the international system. Waltz presented his ideas about the anarchical system in which states constantly strive against one another in varying degrees in *Man, the State, and War* (1959).

<sup>7</sup> Robert B. Strassler, ed., *The Landmark Thucydides* (New York: Simon and Schuster, 2008), 43.

<sup>8</sup> Eliot A. Cohen, “How Does One Process Defeat?” *The Atlantic*, July 29, 2021, accessed October 7, 2021, <https://www.theatlantic.com/ideas/archive/2021/07/how-do-you-reconcile-yourself-defeat/619596/>.

<sup>9</sup> The return to “great power competition” began several years before the American withdrawal from Afghanistan. A shift away from counterterrorism to more traditional great power competition is discernable in the US National Defense Strategy of 2018.

<sup>10</sup> U.S. Navy, *Advantage at Sea: Prevailing with All Domain Integrated Naval Power*, (Washington, D.C.: USPO) December 2020, 3, accessed October 7, 2021, <https://media.defense.gov/2020/dec/16/2002553074/-1/-1/0/triservicestrategy.pdf>.

## 1. Defining the Problem

The character of contemporary war has evolved. The method of warfare used to wage it has evolved alongside this change in character.<sup>11</sup> It is unclear whether the US military is adapting to these changes or maintaining its long-held preference for industrial or traditional warfare involving large standing armies and the use of highly lethal, technologically advanced weapon systems. The problem described above is not strictly military. Changes in the character of war have seen other elements of national power emerge and become increasingly effective surrogates for using force. In some cases, these different instruments have become more critical than traditional military power, particularly regarding information and information technology. No matter how limited it is in its scope or aims, contemporary war is more accurately characterized as a problem for which one should rightly recruit all elements of national power as part of a holistic approach to achieving national aims. However, since the end of the Second World War, the United States has long seen its military as the preferred tool of foreign policy, one that has often eclipsed other, more appropriate, tools of national power such as diplomacy. Scholars such as Rosa Brooks have created cogent arguments to this effect about the militarization of American foreign policy and the expansion of war beyond traditional boundaries.<sup>12</sup>

One might attribute this phenomenon to American perceptions about its military capability and its pursuit of technological overmatch as a central pillar of American military policy, which has been prevalent at least since the First Gulf War.<sup>13</sup> Despite changes in the character of war, the US military may be holding fast to the comparative advantage it derives from its advanced military technology and its professionally trained, all-volunteer force. This thought underpins this dissertation's research question, which asks whether, over time, the US military has changed how it thinks about war to keep pace with changes in the character of war. This question is intended to identify the tension between how the US military prefers to fight and the demands of contemporary warfare. By examining select US joint doctrine and elective course offerings from top-level professional military education, this dissertation provides evidence that the US military modified how it describes the phenomenon of war and, by extension, its approach to postmodern war.

Additionally, it is important to acknowledge that despite significant military capability, the US has had to accept that there are limits to what military power can achieve. Indeed, the US military was unable to "win" in Iraq or Afghanistan, if one defines winning as the elimination of the terrorist threat to the United States and the establishment of stable, functioning, and US-friendly governments in both countries. The US military has failed to meet the policy goal of achieving durable security in many regions where it has been employed. The fact that previous approaches to war were no longer practical indicates a paradigm shift has occurred. The conclusion is that the US military must change how it thinks about warfare and, by extension, how it operates if it is to optimize successful outcomes. A combination of both doing and thinking is needed to achieve success. Warfare

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<sup>11</sup> For the sake of clarity, this dissertation distinguishes between the terms war and warfare. "War" is the term that describes the phenomenon of violent, armed conflict between two or more opponents for political purpose. The term "warfare" refers to the activity or method of waging or "making" war.

<sup>12</sup> Rosa Brooks, *How Everything Became War and the Military Became Everything* (New York: Simon & Schuster, 2013), 8-9.

<sup>13</sup> Lawrence Freedman, "The Gulf War and the New World Order," *Survival* 33, no. 3 (1991): 202.

is not a binary or zero-sum endeavor in which one side wins and the other automatically loses. Given the bleak assessment of US military performance in the early twenty-first century, it is relevant to ask whether America's adversaries have been more (or less) successful in using their own militaries in novel or non-traditional ways to achieve foreign policy or security objectives. Taking a more expansive geopolitical view, the US employs its military to maintain the status quo of the rules-based order established in the aftermath of the Second World War; it contributes primarily through forward presence and security cooperation with allies and partners.<sup>14</sup> Would-be competitors like China and Russia employ military power to test that global order while staying below the level of armed conflict.

## 2. Grey Zone Conflict and Hybrid Warfare

The first indication that American adversaries were “doing something different” came from Russia in 2007. At that time, unnamed entities within the Russian Federation and other countries conducted a comprehensive denial of service attack that lasted over a month against Estonia.<sup>15</sup> Computer hackers targeted the Estonian government and financial institutions with a prolonged bot attack in retaliation for the latter having moved a Soviet-era war memorial of a Red Army soldier to a less prominent location in the capital, Tallinn. Although not the first use of cyberwarfare by one nation against another, it was noteworthy in that it was a prolonged, comprehensive denial of service attack against “one of the most wired societies in Europe,” designed to negatively impact, if not outright damage, the functionality and legitimacy of the Estonian government.<sup>16</sup> What was also notable about this attack, like most actions in cyberspace, was the difficulty in attributing the attack to any one actor or state, a task exacerbated by the Russian government's adroit use of plausible deniability.

One year later, in 2008, Russia launched an incursion into neighboring Georgia in what later became known as the Russo-Georgian War or the War over South Ossetia. Despite poor tactical performance and coordination, numerically superior Russian forces quickly overwhelmed their smaller opponents but deliberately stopped short of taking the entire country.<sup>17</sup> The stated purpose of Russia's military incursion into Georgia was to free the regions of Abkhazia and South Ossetia from Georgian control. Still, the more important message was the signal to the West that Russia would not countenance Georgia's inclusion into NATO.<sup>18</sup> Georgia shares a border with Russia and lies in what the latter considers its “near abroad.” What stands out in this conflict was Russia's willingness to use force against

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<sup>14</sup> Barak M. Seener, “The Godfather Wars,” *The American Interest*, last modified August 28, 2020, accessed January 31, 2020, <https://www.the-american-interest.com/2020/08/28/the-godfather-wars/>.

<sup>15</sup> Heather Harrison-Dinniss, *Cyber Warfare and the Laws of War* (New York: Cambridge University Press 2012), accessed October 8, 2021, ProQuest, 3, 15.

<sup>16</sup> *Ibid.*, 190.

<sup>17</sup> Bettina Renz, “Russian Military Reform: Prospects and Problems,” *RUSI Journal* 155, no. 1 (February 2010): 58–62. doi:10.1080/03071841003683476, 58.

<sup>18</sup> Andrei Illarionov, “The Russian Leadership's Preparation for War, 1999-2008,” in *The Guns of August 2008: Russia's War in Georgia*, eds. Svante E. Cornell and Frederick S. Starr (London: Taylor & Francis Group, 2009), accessed October 8, 2021, ProQuest Ebook Central, 68; and Erik J. Grossman, “Russia's Frozen Conflicts and the Donbas,” *Parameters* 48, no. 2 (2018): 54-56, accessed October 10, 2021, doi:10.55540/0031-1723.2944.

its neighbors, something it renounced as part of the Helsinki Final Act of 1975.<sup>19</sup> What also stands out is the importance Russia accorded to the information component of warfare as the Russian government grappled with its Georgian counterpart to determine whose version of “reality” would prevail both at home and internationally.<sup>20</sup> Also significant was Russia’s willingness to use “frozen” conflicts to achieve its aims without pursuing a final resolution, which might have prompted a more significant response from the international community.<sup>21</sup> The last two points are especially salient and are developed further as information operations and the ability to “freeze” a conflict without resolving it are recurrent aspects of recent Russian military operations.

The moves against Estonia and Georgia are best seen as Russia’s opening forays as a reinvigorated, major international power in the wake of the dissolution of the Soviet Union and the resultant chaos of the 1990s. Both instances indicate Russia’s renewed willingness to test the international order and use force, sometimes veiled and sometimes overtly, to coerce and compel. That said, Russia’s next actions in its “near aboard” would be far more unsettling to the West in general and the US military in particular. In 2014 Russia annexed the Crimean from Ukraine in a *coup de main* – a sudden, surprise attack. Later that same year, Russia expanded the conflict to include the ethnically Russian region of eastern Ukraine known as the Donbas. The Russo-Ukrainian war is still ongoing and is best known for Russia’s use of “little green men,” or Russian *Spetsnaz* (special forces) wearing uniforms sans insignia into Crimea and, later, eastern Ukraine in 2014. The world audience implicitly knew that these were Russian regulars who had crossed the border into Ukraine. Their equipment was generally new, unlike that usually fielded by local security forces or irregulars, and, in some cases, of a type known to be issued only to the Russian military.<sup>22</sup> The Russian government, including Vladimir Putin himself, denied these claims, insisting that such post-Soviet uniforms were ubiquitous throughout the region and did not constitute proof of Russian involvement.<sup>23</sup> The lack of insignia on these “little green men” and the very public denials by the Russian government created enough plausible deniability that the international community disagreed with intervening directly. At the same time, the West implemented economic sanctions to punish Russia in the short term. Russia’s official denial in the face of observable action by its military has become, and is expected to remain, a central component of how it employs its military; doing so generates just enough uncertainty among would-be international responders to make them hesitant to respond. This trepidation, in turn, creates the space required for Russia to act quickly and decisively to achieve its objectives without

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<sup>19</sup> Bettina Renz and Rod Thornton, “Russian Military Modernization: Cause, Course, and Consequences,” *Problems of Post-Communism* 59, no. 1 (January/February 2012): 45,53, accessed November 11, 2013, <http://dx.doi.org/10.2753/PPC1075-8216590104>; and Conference on Security and Co-Operation in Europe, *Final Act* (Helsinki: Organization for Security and Co-operation in Europe, August 1, 1975), 5. Renz and Thornton talk about Russia’s chronic insecurity and relatively weak military capability as drivers of its pre-emptive military action to offset its perceived vulnerability.

<sup>20</sup> Paul A. Goble, “Defining Victory and Defeat: The Information War Between Russia and Georgia,” in Cornell and Starr, 187, 189.

<sup>21</sup> Stephen Blank, “From Neglect to Duress: The West and the Georgian Crisis Before the 2008 War,” in Cornell and Starr, 104.

<sup>22</sup> Arto Pulkki, “Crimea has First-Line Troops in the Russian Armed Forces,” Suomen Sotilas (Finnish Soldier), March 3, 2014, accessed October 7, 2021, <http://www.suomensotilas.fi/krimilla-on-venajan-asevoimien-ensilinjan-joukkoja/>.

<sup>23</sup> Carl Schreck, “From 'Not Us' To 'Why Hide It?': How Russia Denied Its Crimea Invasion, Then Admitted It,” *Radio Free Europe*, February 26, 2019, accessed October 10, 2021, <https://www.rferl.org/a/from-not-us-to-why-hide-it-how-russia-denied-its-crimea-invasion-then-admitted-it/29791806.html>.



invoking an international armed response. Russia's seizure of Crimea in 2014 certainly reflected this approach. In February 2022, Putin again tried this tactic when he attempted to overwhelm Ukraine and seize Kyiv in a lightning attack. However, in 2022 Russia's "special military operation" failed, and the Russian military remains mired in what has become a war of attrition in Ukraine. The earlier the US or NATO can expose Russia's hand in any clandestine acts, the greater the likelihood of imposing costs and getting Russia to abandon its plans. This does not necessarily involve crossing a "red line" and triggering an armed response, although that is a distinct possibility for NATO members like the Baltic countries. From the Russian perspective, the underlying logic is that by the time the international community (or NATO) achieve consensus as to what took place, it will be too late for a military response. Russia's logic counts upon presenting the international community with a *fait accompli* – an action that, once it happens, cannot easily be undone and must, therefore, be accepted.<sup>24</sup> Crimea in 2014 and the ongoing Russo-Ukrainian War are convenient counterpoints to this tactic's rewards and potential dangers. Despite the two vastly different outcomes, Russia's manipulation and weaponization of information was a central component of both operations.<sup>25</sup>

Information has become an important weapon in contemporary warfare, and this trend shows no signs of abating in the future. The use of information sets conditions for subsequent military, political, or economic action. More frequently, deliberately curated information is used as a weapon on its own to influence the perceptions of a specific population with the aim of eroding confidence and legitimacy in a targeted individual, institution, country, or narrative.<sup>26</sup> This weaponization of information is especially true in the digital age. The access to, ease of promulgation and the prospect of reaching a vast audience offered by current information technology, and the deniability it offers in terms of attribution, makes it an attractive tool for both state and non-state actors. The weaponizing of information and the use of "frozen" conflicts are all part of a certain mode or style of warfare that has become known in US and Western military circles, alternatively as hybrid warfare or grey zone conflict. Although these are "loose" terms, they tend to be used interchangeably, which adds to the challenge of defining them precisely. The term "grey zone" describes the environment in which conflict occurs as one that is neither at peace, nor in a recognized state of war. It is ambiguous, and at least one of the actors is uncertain as to the situation. Frank Hoffman, a retired US Marine Corps lieutenant colonel, coined the term "hybrid warfare" in the early 2000s to explain what the US military was beginning to see as an evolving trend in contemporary warfare. War, it seemed, no longer conformed to neat distinctions of conflict such as regular vs. irregular, conventional vs. unconventional, and

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<sup>24</sup> Dan Altman, "By Fait Accompli, Not Coercion: How States Wrest Territory from Their Adversaries," *International Studies Quarterly* 61, no. 4 (2017): 882, accessed August 27, 2021, EBSCOhost, doi:10.1093/isq/sqx049.

<sup>25</sup> Anne Applebaum, "Ukraine and the Words that Lead to Mass Murder," *The Atlantic*, last modified April 25, 2022, accessed October 27, 2023, <https://www.theatlantic.com/magazine/archive/2022/06/ukraine-mass-murder-hate-speech-soviet/629629/>. For a primary source justifying the Russian February 2022 invasion see Petr Akopov, "The Beginning of Russian and the New World," *Militaryni*, last modified February 28, 2022, accessed December 24, 2022, <https://mil.in.ua/en/news/brave-new-world-of-putin-an-article-by-the-propaganda-publication-ria-novosti-which-was-to-be-published-after-the-occupation-of-ukraine/>.

<sup>26</sup> Andreas Krieg, *Subversion: The Strategic Weaponization of Narratives* (Washington, D.C.: Georgetown University Press, 2023), 2. Krieg focuses on using weaponized narratives to "(de)mobilize civil-societal activism in the information environment... to erode the sociopolitical consensus or the sociopolitical status quo."

declared vs. undeclared. Rather, adversaries had begun to select different “approaches as a sort of menu and select a combination of techniques or tactics appealing to them. . . .a combination of novel approaches – a merger of different modes and means of war.”<sup>27</sup> For Hoffman’s definition, the “hybridity” was confined to the military element and did not include other elements of power like information or the economy. Later, Western military circles would attribute this style of warfare, incorrectly as it turns out, as having been the brainchild of General Valery Vasilievich Gerasimov, Chief of the General Staff of the Russian military since 2012. While there are certainly similarities, the emergent idea of a new style of warfare that the Russians were researching was not only distinct, but came after Hoffman articulated his concept of hybrid warfare.<sup>28</sup>

In 2013 General Gerasimov published an article entitled “The Value of Science is in the Foresight: New Challenges Demand Rethinking the Forms and Methods of Carrying out Combat Operations” in the *Voyenno-Promyshlenny Kurier* (Military-Industrial Courier), a relatively well known forum for discussing and promulgating ideas related to military thought and science.<sup>29</sup> Misinterpreted throughout Western military circles as laying down the architecture or doctrine for hybrid warfare, Gerasimov was, in fact, responding to what he (and Russia writ large) viewed as NATO’s intervention and expansion into Russia’s historical sphere of influence at a time when it was at its weakest.<sup>30</sup> Deeply impacted by events such as the Arab Spring and the post-2000 “color” revolutions in the former Soviet republics had on the existing state apparatus, Gerasimov concluded that the rules of war had changed. The utility and effectiveness of nonmilitary means had evolved and, in many cases, now exceeded traditional tools of force in the former’s ability to achieve political and strategic goals.<sup>31</sup> The Russians developed this thinking into what the West often labels as “hybrid warfare,” but is best described using the Russian own term of “New Generation Warfare.”<sup>32</sup> The main thrust of the Russian argument is that, in the Information Age, non-military tools have become more effective than organized violence in achieving goals that formerly would have been attainable only through the use of force. NATO has incorporated the use of non-military tools into its definition of hybrid warfare and, thereby, expanded Hoffman’s concept of “hybridity” beyond the military element of power.<sup>33</sup>

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<sup>27</sup> James N. Mattis and Frank Hoffman, “Future Warfare: The Rise of Hybrid Wars,” *U.S. Naval Institute Proceedings* 131, no. 11 (November 2005): 18, accessed October 31, 2021, EBSCOhost, International Security & Counter Terrorism Reference Center.

<sup>28</sup> Charles K. Bartles, “Russia’s Indirect and Asymmetric Methods as a Response to the New Western Way of War,” *Special Operations Journal* 2, no. 1 (2016): 2, <https://doi.org/10.1080/23296151.2016.1134964>.

<sup>29</sup> Charles K. Bartles, “Getting Gerasimov Right,” *Military Review* 96, no. 1 (January 2016): 30, accessed September 30, 2021, [https://www.armyupress.army.mil/Portals/7/militaryreview/Archives/English/MilitaryReview\\_20160228\\_art009.pdf](https://www.armyupress.army.mil/Portals/7/militaryreview/Archives/English/MilitaryReview_20160228_art009.pdf).

<sup>30</sup> Ibid, 31-32.

<sup>31</sup> Valery Gerasimov, “The Value of Science is in the Foresight: New Challenges Demand Rethinking the Forms and Methods of Carrying out Combat Operations” *Military Review* (January – February 2016): 24, accessed October 12, 2021, [https://www.armyupress.army.mil/Portals/7/military-review/Archives/English/MilitaryReview\\_20160228\\_art008.pdf](https://www.armyupress.army.mil/Portals/7/military-review/Archives/English/MilitaryReview_20160228_art008.pdf). Initially published in *Military-Industrial Kurier*, 27 February 2013. Translated from Russian 21 June 2014 by Robert Coalson, editor, Central News, Radio Free Europe/Radio Liberty.

<sup>32</sup> Adamsky, Dmitry. “Cross-Domain Coercion: The Current Art of Russian Strategy,” *Proliferation Papers*, No. 54 (Paris: IFRI, 2015): 20, accessed Oct 7, 2021, <https://www.ifri.org/sites/default/files/atoms/files/pp54adamsky.pdf>.

<sup>33</sup> Tarik Solmaz, “Hybrid Warfare: One Term, Many Meanings,” *Small Wars Journal*, last modified February 25, 2022, Accessed April 17, 2024, <https://smallwarsjournal.com/jrnl/art/hybrid-warfare-one-term-many-meanings>. NATO uses Solmaz’s definition in its *Hybrid Threats and Hybrid Warfare Reference Curriculum* published in June 2024.

### 3. Two Chinese Colonels and Unrestricted Warfare

Like the Russians, the Chinese have their own concept for conducting contemporary warfare, which they call “hybrid warfare with Chinese characteristics.” The impetus for the Chinese concept can be traced directly to the Gulf War and the performance of Coalition (but primarily US forces) against the Iraqi Army.<sup>34</sup> As a result, two senior colonels within the People’s Liberation Army, Qiao Liang and Wang Xiangsui, published *Unrestricted Warfare* in 1999. This book begins with the conclusion that the Gulf War established the US military’s dominance within conventional warfare, a feat that the Chinese could not hope to match at the time. However, the US military’s success was such that it also forced a change in the character of war. What changed was the relative importance of information and cyber to warfare that began to rival the military instrument for utility and effectiveness.<sup>35</sup> Warfare was no longer restricted to the military element of power; all other elements, such as diplomacy, information, and the economy, supported it.<sup>36</sup> Qiao and Wang offered the idea that war is no longer constrained by convention or practice; it is unrestricted and could be leveraged or conducted through whatever relevant means will produce the desired result. Nothing was off limits in warfare, provided it satisfies the user’s risk calculus.

This concept may seem like Clausewitz’s concept of total war, but there are differences between the two. Total war speaks to the expansion of conflict in terms of its impact on the population and the unleashing of the maximum levels of violence. In contrast, unrestricted war has little to do with the level of violence employed or the degree to which the population is affected. The use of force may not even be involved in unrestricted warfare, especially if the Chinese employ what they call “non-war actions.”<sup>37</sup> Instead, it speaks to the expansion of warfare outside of the military to what have been viewed traditionally as non-military means.

Given that this Chinese concept of unrestricted warfare depends heavily on using non-military tools to achieve Beijing’s ends, one could opine that the “One Belt One Road” initiative might be an example of unrestricted warfare.<sup>38</sup> A central pillar of Chinese foreign policy at least since 2013, the stated purpose of the “One Belt One Road” (later simplified to the “Belt and Road Initiative” (BRI)) is to enhance “economic connectivity among dozens of countries along a land route it is calling the Silk Road Economic belt and a sea route it is calling the 21<sup>st</sup> Century Maritime Silk Road.”<sup>39</sup> The Chinese Communist Party advertises BRI as an economic tool for foreign development, but BRI’s benefits easily transcend the financial realm and have also generated diplomatic and military successes. What should be troubling to the international community is that Chinese direct investments that underpin

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<sup>34</sup> Qiao Liang and Wang Xiangsui, *Unrestricted Warfare*, trans by FBIS (Beijing: PLA Literature and Arts Publishing House, 1999), 4, and Robert J. Bunker, “Unrestricted Warfare: Review Essay I,” *Small Wars and Insurgencies* 11, no. 1 (Spring 2000): 114, accessed September 29, 2021, <https://www.tandfonline.com/doi/abs/10.1080/09592310008423265>.

<sup>35</sup> Qiao and Wang, 5.

<sup>36</sup> Ibid, 12. “Non-war actions may be the new factors constituting future warfare, we have to come up with a new name for this new form of war: Warfare which transcends all boundaries and limits, in short: unrestricted warfare.”

<sup>37</sup> Qiao and Wang, 12.

<sup>38</sup> Seth Jones, “Three Dangerous Men (with Seth Jones),” *Shield of the Republic* (podcast), hosts Eliot S. Cohen and Eric Edelman, accessed November 24, 2021, <https://shield.thebulwark.com/three-dangerous-men>. begin @ 00:13:12.

<sup>39</sup> U.S. Congressional Research Service, *China’s “One Belt, One Road”* (IF10273: Aug 6, 2015), by Susan Lawrence, accessed Oct 12, 2021, <https://crsreports.congress.gov/product/pdf/IF/IF10273>, 1.

BRI create the conditions for economic dependency and potential loss of sovereignty for the countries that receive this economic assistance. The loans are conditional on the work overwhelmingly undertaken by Chinese state-run firms, which give China considerable influence in those BRI-focused regions.<sup>40</sup> In addition, China has used the BRI as rationale for an expanded military presence in regions such as the Horn of Africa.<sup>41</sup> Establishing China's first overseas base is a case in point; China's initial commercial lease in Djibouti allowed for the creation of a People's Liberation Army Support Base in that country.<sup>42</sup>

In this light, BRI now appears less like an international economic partnership and more like an instance of unrestricted warfare, one in which the Chinese avoid direct confrontation and slowly work to a position of advantage but are careful to avoid triggering an adversary's response with armed force. Much like Russia, albeit with a different method, China's goal is to present the international community with a fait accompli that is too costly to be rolled back. Expressed in terms familiar to any student of Sun Tzu, "subjugating the enemy's army without fighting is the true pinnacle of excellence."<sup>43</sup> These Chinese actions and intentions, as well as those of Russia, illuminate the two countries' endeavors to gain an asymmetric advantage over potential adversaries (the most capable of which, across all "instruments of power," is still the United States).<sup>44</sup> These actions are likely the most compelling evidence yet of the current direction of warfare; one that marks a change in the character of war.

#### 4. The Nature and Character of War

Since the beginning of the 21<sup>st</sup> Century, military circles have debated whether Clausewitz's *On War* (1832) remains applicable to modern warfare.<sup>45</sup> Clausewitz wrote over two hundred years ago during the height of Napoleon's empire when his eponymous style of warfare was considered the pinnacle of military art. The world today is vastly different; war today is not the same as it once was, although people still die, and the lethality and damage potential of weapons continue to increase. Acknowledging this debate, *On War* offers a great deal of utility in providing a western framework from which to understand and interrogate war as a phenomenon. For this dissertation, Clausewitz remains useful, especially regarding his differentiation between the nature and character of war.

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<sup>40</sup> U.S. Congressional Research Service, *China's "One Belt, One Road" Initiative: Economic Issues* (IF10273; Jan 22, 2021), by Karen Sutter, accessed Oct 12, 2021, <https://crsreports.congress.gov/product/pdf/IF/IF10273>, 2.

<sup>41</sup> Michaël Tanchum, "China's new military base in Africa: What it means for Europe and America," *European Council on Foreign Relations*, last modified December 14, 2021, accessed October 29, 2023, <https://ecfr.eu/article/chinas-new-military-base-in-africa-what-it-means-for-europe-and-america/>. "Beijing's adroit interweaving of economic soft power and hard power has produced a symbiosis between the growing number of Chinese commercial enterprises across Africa and the proliferation of China's new security arrangements..."

<sup>42</sup> U.S. Congressional Research Service, *China's "One Belt, One Road" Initiative: Economic Issues*, 2.

<sup>43</sup> Sun Tzu, *The Art of War*, trans. Ralph D. Sawyer (Boulder: West View Press, 1994), 177.

<sup>44</sup> The "instruments of power" refers to the broad areas of power available to nation-states, such as DIME (Diplomatic, Information, Military, and Economic) or the more contemporary PMESII (Political, Military, Economic, Social, Information, and Infrastructure).

<sup>45</sup> The ongoing applicability of Carl von Clausewitz's work is illustrated in Alan Beyerchen's "Clausewitz, Nonlinearity, and the Unpredictability of War," in *International Security* 17, no. 3 (Winter 1992-93): 59-90; Bart Schuurman's "Clausewitz and the "New Wars" Scholars," in *The US Army War College Quarterly: Parameters* 40, no. 1 (Spring 2010): 89-100; and Colin M. Fleming's "New or Old Wars? Debating a Clausewitzian Future," in *Journal of Strategic Studies* 32, no. 2 (2009): 213-241.

In Book One of *On War*, Clausewitz describes war's three constituent elements that comprise its nature: violence, chance, and reason.<sup>46</sup> Known as Clausewitz's "trinity," the nature of war is composed of violence, which Clausewitz viewed as a "blind natural force," which he connected with three essentials. First came the people who animated war with "enmity," passion, and rage. The second element was the "play of chance and probability" that Clausewitz associated with the "clash of independent and opposing wills" and also attributed to the creativity and skill of the commander.<sup>47</sup> Last was the reason and the subordination of war to political purposes; reason fell under the government's or regent's purview.<sup>48</sup> As Clausewitz wrote, this is war's nature and describes the overall phenomenon. No matter when or where warfare manifests, these three elements will be present, ...or it is not war.<sup>49</sup>

In contemporary warfare, information and how multiple audiences perceive that information has become central to conflict. Along with this idea, offensive and defensive actions in the virtual realm of cyberspace are also necessary. The challenge for Western and, specifically, for the American military is how to fit these information-centric aspects of modern warfare into a traditional Clausewitzian definition of warfare. According to Clausewitz's definition of war's nature, violence is a central ingredient; without it, there can be no warfare. Yet, there is no doubt that cyberattacks do real damage on par with what a bombing raid against a factory district or some other provider of essential services would have achieved in past eras. Absent actual physical violence, there exists some cognitive dissonance as to whether a cyberattack or the deliberate manipulation of information constitutes an act of war. There is no accepted standard for evaluating "virtual violence" as a component of "real" war and assessing its effects.<sup>50</sup> Attribution is also a challenge in cyber and information warfare to a degree not seen when opposing forces clash in the physical realm. This explains the problem that the US has in confronting actors like China and Russia – actual violence or the threat thereof is central to establishing the existence of war or conflict. Without it, the US military is challenged to discern and respond to other conflict modes. From their actions across the continuum of conflict, it appears that many of America's adversaries, state and non-state, do not adhere to such a strict definition of warfare as does the United States.

The character of war is not a static concept, but rather a malleable one that takes on the aspect of the age in which it occurs. In this case, war takes on the aspect of the Information Age. This is especially true for how the US and its adversaries understand warfare and prepare to conduct it in the future. To better understand the American perspective on war and how it evolved, one must examine its foundations in the outcome of Operation Desert Storm in 1991 – also known as the First Gulf War.

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<sup>46</sup> Carl von Clausewitz, *On War*, ed and trans. Michael Howard and Peter Paret, (Princeton: Princeton University Press, 1989), 89.

<sup>47</sup> US Marine Corps, *Warfighting*, MCDP 1 (Washington, D.C.: U.S. Marine Corps, 1997), 3.

<sup>48</sup> Clausewitz, *On War*, 89.

<sup>49</sup> Using Clausewitz's paradigm for war, the threshold involves physical contact and violence.

<sup>50</sup> A search for "virtual war" references violence in video games and its effect on humanity. Other results focus on "virtual warfare" in the vein of Jean Baudrillard's "The Gulf War Did Not Take Place" and contrast ideas of "virtual" with "traditional" war. There were no results comparing "virtual" violence, such as that which occurs from subversion or cyberattacks, with actual violence to determine when to respond with force or "go to war."

## 5. One Result, Two Conclusions: The First Gulf War, 1991

To explore how the contemporary US military understands and responds to war, it is necessary to start on February 28, 1991. That degree of precision is possible because on that date, coalition forces led by the United States ceased offensive ground operations against the Iraqi military, and both sides agreed to a ceasefire, ending what would become known as the First Gulf War. The event is important because it came after a four-day ground war in which the US military and its allies shattered the Iraqi Army and demonstrated to the world, in no uncertain terms, American superiority in conventional ground and air combat.<sup>51</sup> The US military, keen to shake off the specter of defeat in Vietnam, “which continued to prey on the American psyche more than 15 years after the fall of Saigon,” was all too aware of what it had achieved by force of arms.<sup>52</sup> The Iraqi Army under Saddam Hussein, the fourth largest army in the world at that time, tried to challenge the US military and suffered catastrophic consequences.<sup>53</sup> The United States also grasped the clear implication of what its forces had achieved: the US military was unmatched when it came to modern, conventional combat. Charles Krauthammer meant this when he referred to the period immediately after the Gulf War as “The Unipolar Moment.” America was “the only country with the military, diplomatic, political and economic assets to be a decisive player in any conflict in whatever part of the world it chooses to involve itself.”<sup>54</sup> Krauthammer’s pronouncement set the stage for the coming decades as the US and other countries tried to navigate the implications of unipolarity.

The US military posited that its achievement in the desert of Kuwait and Iraq had ushered in a Revolution in Military Affairs (RMA) – a change within the conduct of warfare so profound that all belligerents were forced to adopt it to compete, e.g., the development of the tank or blitzkrieg tactics.<sup>55</sup> This RMA was based on technology and focused on gathering better, more comprehensive intelligence than the enemy, attacking its C3I (command, control, computers, and intelligence) systems, fusing sensor-to-shooter data, and the “use of simulation to support operational decision making.”<sup>56</sup> This warfare approach focused on using technology and command and control systems to gather and then disseminate the

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<sup>51</sup> Patrick J. Cooney, “Tank Tracks,” *Armor PB-17-91-2*, March – April 1991, (Fort Knox: US Army Armor Center, 1991), accessed October 20, 2021, [https://www.benning.army.mil/Armor/eARMOR/content/issues/1991/MAR\\_APR/ArmorMarchApril1991web.pdf](https://www.benning.army.mil/Armor/eARMOR/content/issues/1991/MAR_APR/ArmorMarchApril1991web.pdf). In his opening letter to that month’s issue, the editor, Major Patrick Cooney, describes US military performance: “But for modern times, since the invention of the internal-combustion engine, we have a new standard for the ultimate victory. The 100-hour war has given us complete and irrefutable vindication of Air Land Battle tactics, techniques, and procedures; good and thorough training; application of technology to the battlefield; the use of combined arms; and -- most significantly, for the Armor Force -- the value of mobility, speed, firepower, and shock effect.”

<sup>52</sup> George C. Herring, “America and Vietnam: The Unending War,” *Foreign Affairs* 70, no. 5 (Winter 1991/1992): 104, accessed October 15, 2021, <https://doi.org/10.2307/20045006>; and Jenna Pitchford, “From One Gulf to Another: Reading Masculinity in American Narratives of the Persian Gulf and Iraq Wars,” *Literature Compass* 9, no. 5 (2012): 358, accessed October 25, 2021, <https://doi.org/10.1111/l.1741-4113.2012.00885.x>.

<sup>53</sup> William J. Perry, “Desert Storm and Deterrence,” *Foreign Policy* 70, no. 4 (Fall 1991): 67, accessed October 25, 2021, <https://doi.org/10.2307/20044914>.

<sup>54</sup> Charles Krauthammer, “The Unipolar Moment,” *Foreign Affairs* 70, no. 1, (1990/1991): 24, accessed October 6, 2017, <https://doi.org/10.2307/20044692>.

<sup>55</sup> James R. Fitzsimonds and Jan M. van Tol, “Revolutions in Military Affairs,” *Joint Forces Quarterly* (Spring 1994): 25, accessed May 25, 2018, <https://www.hsdl.org/?view&did=445534>.

<sup>56</sup> *Ibid.*, 27.

intelligence that would allow the US military to stay ahead of its opponents. Effects Based Operations, or EBO, was an airpower-centric corollary of the RMA that grew out of the Gulf War's successful air campaign.<sup>57</sup> EBO was predicated upon possessing, or being able to gain, a degree of intelligence about the enemy and its systems such that it would be possible to use precise kinetic strikes to bring about specific effects. In effect, "this concept promoted an attempt to control an enemy, as opposed to traditional warfighting strategies of attrition or annihilation."<sup>58</sup> EBO represented the apogee of what the US and UK hoped to achieve during the Second World War with their strategic bombing campaigns. Like Giulio Douhet's air power theory from the late 1920s, EBO offered the prospect of victory by driving the enemy to a specific desired outcome if only the correct targets were identified and struck.<sup>59</sup>

Network-centric war or "net-centric" warfare was a follow-on concept, more joint or multi-service in nature than EBO, under which the ideas of the post-Desert Storm RMA came together again in the late 1990s and early 2000s. Net-centric warfare was the brainchild of Navy Vice Admiral (Ret.) Arthur Cebrowski. His aim was to achieve a level of technologically enabled interconnectedness and battlespace awareness that would make it possible to overcome the friction of the battlefield and deliver a lightning defeat to the enemy.<sup>60</sup> In the decade after Desert Storm and through the attacks of September 11, 2001, or 9/11, this was the American military's vision of success until the indeterminate conflicts in Afghanistan and Iraq rendered it moot. The pursuit of net-centric warfare was the "transformation" that Secretary of Defense Donald Rumsfeld talked about; Admiral Cebrowski headed the Pentagon's Office of Force Transformation and oversaw implementing the concept just after the 9/11 attacks and through the US invasion of Afghanistan.<sup>61</sup>

Among America's competitors, the Chinese were the most noteworthy in their response to the purported RMA. Determining they could not hope to best the United States militarily, they looked for an asymmetric solution that would nullify American advantages in conventional arms. This was reflected in the previously discussed approaches contained in *Unrestricted Warfare* (1999). The Chinese identified the American preference for new technology, powerfully proclaiming that "lucid and incisive thinking... is not a strong point of the Americans, who are slaves to technology in their thinking."<sup>62</sup> Authors PLA Colonels Qiao and Wang espoused a much more expansive view of weapons, what they called "new concept weapons" that broadened the scope of both weaponry and warfare itself. The following passage from Chapter 2 of *Unrestricted Warfare* clearly illustrates a more expansive concept of what constitutes a weapon, one that then also transcends traditional notions of warfare:

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<sup>57</sup> Antulio J. Echevarria II, *War's Logic: Strategic Thought and the American Way of War* (New York: Cambridge University Press, 2021), 223.

<sup>58</sup> Richard B. Myers, "A Word from the Chairman," *Joint Forces Quarterly* 33 (Winter 2002-03): 5, accessed October 27, 2021, <https://ndupress.ndu.edu/portals/68/Documents/jfq/jfq-33.pdf>.

<sup>59</sup> Giulio Douhet, *The Command of the Air*, trans. Dino Ferrari (Maxwell AFB: Air University Press, 2019), 22.

<sup>60</sup> Antoine Bousquet, "Chaoplex Warfare or the Future of Military Organization," *International Affairs* 84, no. 5 (2008): 916, 927, accessed August 25, 2017, <https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1468-2346.2008.00746.x>; and George R. Lucas Jr., "Postmodern War," *Journal of Military Ethics* 9, no. 4 (2010): 290, accessed August 17, 2017, <https://doi.org/10.1080/15027570.2010.536399>.

<sup>61</sup> Donald H. Rumsfeld, "Transforming the Military," *Foreign Affairs* 81, no.3 (2002): 21-22, accessed October 25, 2021, <https://doi.org/10.2307/20033160>; and Lucas, 291.

<sup>62</sup> Qiao and Wang, 24.

Everything that can benefit mankind can also harm him. This is to say that there is nothing in the world today that cannot become a weapon, and this requires that our understanding of weapons must have an awareness that breaks through all boundaries. With technological developments being in the process of striving to increase the types of weapons, a breakthrough in our thinking can open up the domain of the weapons kingdom in one stroke. As we see it, a single man-made stock-market crash, a single computer virus invasion, or a single rumor or scandal that results in a fluctuation in the enemy country's exchange rates or exposes the leaders of an enemy country on the Internet all can be included in the ranks of new-concept weapons. ...With regard to the flood of new-concept weapons, technology is no longer the main factor, and the true underlying factor is a new concept regarding weapons.<sup>63</sup>

New concept weapons are one of the multiple ideas the Chinese put forward in *Unrestricted Warfare*. Unrestricted warfare is intended to overcome traditional perceptions of weapons and war to provide the Chinese options that negate the US military's comparative advantage in conventional warfare. This development of "new concept weapons" as the new asymmetric advantage signals that the world has entered an era of conflict where the character of war has changed, and the US military must adapt or risk failure in the future. Yet, the US military must better understand the character of contemporary conflict before it can respond or adapt to it.

## 6. The "New Wars" and Postmodern War

The character of war is constantly in flux. Similarly, the debate surrounding the character of conflict is, likewise, ongoing. This dissertation examines the changing nature of warfare and the surrounding debates from the 1990s onwards because, in this timeframe, the US military and others had digested and were beginning to act on the lessons of the Gulf War. The Revolution in Military Affairs and other related ideas, such as Effects Based Operations, were the topics *du jour* in military professional journals and found their way into the curricula of war colleges worldwide. This phenomenon was particularly acute in the United States, where the success of the First Gulf War held the promise that liberalism had prevailed as speculated by Francis Fukuyama in his article "The End of History?" (1989).<sup>64</sup> Krauthammer's "The Unipolar Moment" (1991) built upon this with the belief that America had reached the apogee of military innovation and secured its strategic position against all potential competitors for decades to come.<sup>65</sup> This idea of US military dominance

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<sup>63</sup> Ibid, 25.

<sup>64</sup> Francis Fukuyama, "The End of History?" *The National Interest*, no. 16 (Summer 1989): 3–18, accessed August 8, 2024., <http://www.jstor.org/stable/24027184>. Fukuyama presents the idea that the Soviet Union's breakup and the end of the Cold War proved the superiority of Western liberalism over other forms of government.

<sup>65</sup> Andrew Krepinevich, "Why No Transformation?" *Joint Forces Quarterly* (Autumn/Winter 1999-2000): 97, accessed January 25, 2022, <https://ndupress.ndu.edu/portals/68/Documents/jfq/jfq-23.pdf>. This article asserts that US military power "won the Cold War, emerged victorious in a lopsided campaign in the Persian Gulf, and became the preeminent military in the world." See also, Joel J. Sokolsky, *The Revolution in Military Affairs and the Future of Arms Control and Verification* (Ottawa: Department of Foreign Affairs and International Trade, 2001).



contributed to and was, in turn, fueled by several vital books that attempted to explain modern warfare's character and chart a course for the future. Specifically, the ideas and concepts in these works centered on explaining what made warfare in this era markedly different from wars of previous ages.

Foremost among these works was Mary Kaldor's *New & Old Wars: Organized Violence in a Global Era* (1999). Kaldor proposed that "during the 1980s and 1990s, a new type of organized violence had developed that was best described as 'new war.'"<sup>66</sup> Several other authors, in addition to Mary Kaldor, could rightly be brought to bear to fully develop this discussion of "new" versus "old" wars. Contemporaries of Kaldor include William S. Lind, who began writing on "Fourth Generation (4G) Warfare" as early as 1989; the Israeli academic Martin van Creveld and his *The Transformation of War* (1991); futurists Alvin & Heidi Toffler, who wrote *War and Anti-War* (1995), and retired U.S. Marine officer Thomas X. Hammes who wrote *The Sling and the Stone* (2006). Although many of these works appeared after the Gulf War, they all focused on trends in warfare that were already present before Desert Storm. Admittedly, the Gulf War and the international media attention it garnered brought these trends into the public eye. Mary Kaldor's *New & Old Wars* is the more appropriate starting point from this perspective. Kaldor, a British academic and Professor Emeritus of Global Governance at the London School of Economics and Political Science, argued that conflicts in the post-Cold War era fundamentally differed from those that preceded them. Her thinking, and those of the authors as mentioned earlier, was termed the "new wars" school of thought.

This school attributes changes, or malleability, in the character of contemporary war to the effects of globalization, which Kaldor explained as "the intensification of global interconnectedness – political, economic, military, and cultural."<sup>67</sup> Increased interconnectedness acted as the great equalizer in terms of the proliferation of technology, specifically weapons and communications technology. In a globalized world, states and other entities now have access to weaponry that has increased lethality and accuracy, which previously was unavailable. One of the different effects of globalization was that it increased the ability of non-state actors, such as terrorist groups and criminal organizations, to compete against states, especially fragile, less capable ones. Access to such weapons did not necessarily enable competition on equal terms with states, especially those in the West. Access to modern weapons made the conflicts more lethal and destructive for all involved parties: non-state actors fighting against one another, the state(s) in which the conflict occurred, and the affected civilian population. The ubiquity of communications and information technology also influenced the character of war. More reliable communications systems, often with a global reach, improved belligerents' ability to command, control, and coordinate actions while increasing the value of communications as a "tool of war."<sup>68</sup> The Information Technology Revolution, an essential aspect of globalization, increased the size of audiences that might have been unaware or untouched by conflict in previous eras; they now became spectators with at least some interest in the outcome, thereby broadening the

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<sup>66</sup> Mary Kaldor, *New & Old Wars: Organized Violence in a Global Era* (Stanford: Stanford University Press, 2001), 1. Kaldor's work has been revised several times since its first edition in 1999. Most recently, the third edition was released in 2013.

<sup>67</sup> Ibid, 3.

<sup>68</sup> Mary Kaldor, "In Defence of New Wars," *Stability: International Journal of Security and Development* 2, no. 1 (2013): 5, accessed October 30, 2021, DOI: <http://dx.doi.org/10.5334/sta.at>.

impact of warfare. According to Kaldor, the net effect of all these factors was that warfare became more destructive and less decisive.<sup>69</sup>

Here, the paradox of globalization comes into focus, “the intensifying interconnectedness is contradictory... involving both integration and fragmentation, homogenization and diversification, globalization and localization.”<sup>70</sup> The friction of these opposing effects frequently enhanced the relative power of non-state actors while decreasing that of traditional state actors. This shift in power dynamics is a defining characteristic of the “new wars,” marking the diminution of the state's monopoly on the use of organized violence. Warfare is no longer the sole purview of the state. As a result, the purpose and mode of warfare have shifted away from geopolitical considerations to some form of identity politics. This significant shift, brought about by globalization, is a crucial transformation.<sup>71</sup> Armed factions now wage war to gain or maintain leverage amongst a specific population ranging from local to national and transnational groups. Retired British General Rupert Smith captured this phenomenon of the “new wars” in his *The Utility of Force* (2005) when he refers to early 21<sup>st</sup> Century conflict as “war amongst the people.” Returning to Mary Kaldor, she raises a final point about how the “new wars” are financed. Globalization enabled other actors to pay for warfare independently, often through predatory financing techniques, instead of being funded by a large state economy. This use of creative, predatory financing amounts to the warring parties extorting and pillaging whatever remains of the local economy, often with surprising complexity, and extends to their exploitation of international aid and relief organizations that may happen to be present.<sup>72</sup> Kaldor refers to the totality of this phenomenon as the “globalized war economy.”<sup>73</sup> A similar effect is evident in terms of communications and the dissemination of information; the globally connected information environment has given actors down to the level of the individual the means to disseminate information and contest national narratives - a country's stated policy position or message on a specific issue – on an equal or quasi-equal footing. This parity or near-parity is essential because it undercuts nation-states' long-held advantages in their dealings with individual citizens and groups.

The effect that the information environment or, more precisely, that of pervasive, easily accessed information has had on warfare cannot be overstated. Not only Sean McFate but the “new wars” scholars highlight the centrality of information in contemporary warfare. Specifically critical to warfare today is the “weaponization” of information to either attain outright or support activities to achieve military and geopolitical objectives.<sup>74</sup> Now, there has always been an information component to warfare, whether that be the historical use of propaganda to influence opinion or the use of action to create a narrative for a specific end. Terrorism is a prime example of an action intended to communicate a message. In this case, the sowing of terror and uncertainty in a target population, and while terrorism has been used throughout history and certainly in the contemporary epoch, modern information technology has given terrorists and their actions greater reach and impact than ever before.

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<sup>69</sup> Kaldor, *Old & New Wars*, 8, and Kaldor, “In Defence of New Wars,”3.

<sup>70</sup> Kaldor, *Old & New Wars*, 3.

<sup>71</sup> *Ibid*, 6-7.

<sup>72</sup> *Ibid*, 110.

<sup>73</sup> *Ibid*, 90.

<sup>74</sup> P.W. Singer and Emerson T. Brooking, *Like War; the Weaponization of Social Media*, (New York: Houghton Mifflin, 2018), 8-9.

Advances in information technology made it possible to reach a global audience instantaneously. The easy availability of such technology enables anyone to access a “voice” previously only available to large organizations or nation-states. The modern information ecosystem is global and pervasive and contains various viewpoints. This deluge of information makes it increasingly difficult to separate fact from fiction. The battle between opposing narratives, accompanied by oft-conflicting information and misinformation, is constant and much of this effort revolves around molding individual and group perceptions. The scale and speed at which information influences and shapes audience perception makes its use today different from how information was previously used in warfare. This weaponization of information is the most distinctive change to the character of war and the one that will define conflict for the near future. It also heralds a departure of warfare from the modern into the postmodern era. In some circles, the invocation of the term “postmodern” is simply shorthand for a departure from the old into something new.<sup>75</sup> In using the term postmodern, this dissertation argues that there is a period after modernity, specifically as it applies to warfare, and it applies those tenets of postmodern philosophy that emphasize concepts like complexity, intersubjectivity, constructivism, and simulation.<sup>76</sup> Many scholars have made this same connection between changes in warfare and the Information Age and refer to having entered an age of postmodern warfare.<sup>77</sup> For this dissertation, postmodernity is linked to the Information Age and affects all aspects of human existence.

Jean Baudrillard’s *The Gulf War Did Not Take Place* (1995) presents a starting point to examine ideas of postmodernism and conflict. This book is a well-known example of postmodern thinking. It comprises three essays published in the newspaper *Libération* by the French postmodern philosopher before, during, and in the immediate aftermath of the 1991 Gulf War.<sup>78</sup> Baudrillard’s book aims to prove that the Gulf War was not war; it was a simulation. “[It] was instant history in the sense that the selected images which were broadcast worldwide provoked immediate responses and then became frozen into the accepted story of the war: high-tech weapons, ecological disaster, the liberation of Kuwait.”<sup>79</sup> Like so much of postmodernist thinking, *The Gulf War Did Not Take Place* questions the ontological origins of “what we think we know” to prompt a reimagining of the surrounding world. Baudrillard argues that “just as wealth is no longer measured by the ostentation of wealth but by the secret circulation of speculative capital, so war is not measured by being waged but by its speculative unfolding in an abstract, electronic and

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<sup>75</sup> Steven Best and Douglas Kellner, *The Postmodern Turn* (New York: The Guilford Press, 1997), 23.

<sup>76</sup> Ibid, 256-257.

<sup>77</sup> The following are two decades of examples of books and articles that connect postmodernism to contemporary war: Philip K. Lawrence, *Modernity and War: The Creed of Absolute Violence* (London: MacMillan Press Ltd, 1997); Charles H. Gray’s very well-known *Postmodern War* (New York: The Guilford Press, 1997); Douglas Kellner’s “Postmodern War in the Age of Bush II,” in *New Political Science* 24, no. 1 (2002): 57-72; Keith Dickson’s “War in (Another) Context: Postmodernism,” in the *Journal of Conflict Studies* 24, no. 2 (2004): 78-91; Sakari Ahvenainen’s “The Quincy Wright Model: Postmodern Warfare as a Fifth and Global Phase of Warfare,” from *Proceedings of the 15<sup>th</sup> European Conference on Cyber Warfare and Security* (Munich: Academic Conferences and Publishing International Ltd, 2016): 305-312; and Hans-Georg Ehrharts, “Postmodern Warfare and the Blurred Boundaries Between War and Peace,” *Defense & Security Analysis* 33, no. 3 (2017): 263-275.

<sup>78</sup> Jean Baudrillard, *The Gulf War Did Not Take Place*, trans. Paul Patton (Bloomington: Indiana University Press, 1995), 1.

<sup>79</sup> Baudrillard, 3.

informational space...<sup>80</sup> In writing this, he hints at information's real power as a force unto itself in the postmodern world.

Baudrillard used the Gulf War as an object and evaluated it through a postmodern lens; he wrote about the war as a mechanism to manipulate perception and illicit specific “feelings” about what happened. While his work opens the aperture in terms of war and postmodernism and resonates within the field of history, military history in particular, it does not provide enough of a foundation from which to develop a concept of postmodern war. This is not exclusively about evaluating war through a postmodern lens or a specific school of philosophy, although both apply to a certain extent. Instead, it is the idea that what makes postmodern war distinct from war in previous eras is coupling information and computing technologies with warfare to manipulate understanding. What audiences think may prove more important than the physical results of combat.

Writer and University of California – Santa Cruz lecturer Chris H. Gray articulated this point superbly in his book *Postmodern War: The New Politics of Conflict* (1997). Gray first defends his “postmodern” choice, comparing it with historians’ use of “modern.” The latter is used in conjunction with the rise of the nation-state. Therefore, anything after the 1500s is referred to as “modern.”<sup>81</sup> Second, he points out that there is “more similarity between the different descriptions of postmodern phenomena specifically and postmodernity, in general, to persuade me that there is something systematic happening in areas as diverse as art, literature, economics, philosophy, and war.”<sup>82</sup> Gray’s description of the central role information plays in postmodern war spans postmodernity as a phenomenon and links it to the transcendent role of information in the present. He writes that “as a weapon, as a myth, as a metaphor, as a force multiplier as an edge, as a trope, as a factor, and as an asset, information (and its handmaidens – computers to process it, multimedia to spread it, systems to represent it) has become the central sign of postmodernity. The importance of Gray’s point is that what he wrote about postmodernity is mirrored in the way human beings now make war. Information (once analyzed as intelligence) has always been important in war. Now it is the single most significant military factor...”<sup>83</sup> All of the uses to which one might bend information described in the preceding quote have one or more analogs in the different concepts of warfare already mentioned, whether it be Mary Kaldor’s “new wars,” China’s “unrestricted warfare,” Russia’s “new generation warfare,” or Frank Hoffman’s “hybrid warfare.” All these individual concepts have a place within the more significant phenomenon this dissertation labels as “postmodern war.”<sup>84</sup> The idea of postmodern war accurately marries postmodernism’s emphasis on information with information’s use as a weapon in itself, one that, in many cases, can achieve effects beyond what is possible through force alone. This weaponization of information is the most prominent distinguishing characteristic of contemporary war. Information, and the ability to manipulate it, is synonymous with power for those who possess and manipulate it in the Information Age. This point evokes Edward Luttwak’s distinction between power and force in *The Grand Strategy of the Roman Empire* (2016). Luttwak argued that Rome derived power not from its ability to have Roman

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<sup>80</sup> Baudrillard, 56.

<sup>81</sup> Chris H. Gray, *Postmodern War: The New Politics of Conflict* (New York: Guilford Press, 1997), 22.

<sup>82</sup> Ibid.

<sup>83</sup> Ibid.

<sup>84</sup> This term will be used throughout this dissertation to describe the complex character of war in the Information Age.

legions bring force to bear, but from its subjects' belief that it could.<sup>85</sup> Today, information works in a similar fashion, "not by causing effects directly [although it can] but by eliciting responses..."<sup>86</sup> In contrast, force is generally "governed by constraints on accumulation, use, transmission, and dispersion akin to the physical laws that condition mechanical force."<sup>87</sup> In this sense, the real power of information is exposed. Using Luttwak's ideas about power and force, information is power and has none of the Newtonian or mechanical limitations attributed to traditional military power.

This dissertation argues that the US military is aware of these changes wrought by information, but it is slow to move away from its preference for high technology industrial warfare. The US military sees this type of warfare as its comparative advantage vis-à-vis traditional nation-state adversaries. This preference for high intensity, traditional warfare waged using technologically advanced weapons systems is an artifact of a legacy paradigm. It is a paradigm the United States and the US military favors because it has excelled at it or perceives itself as having done so.<sup>88</sup> The high value accorded to the First Gulf War within the collective national consciousness indicates as much.<sup>89</sup> The argument here is that while the US military recognizes that a paradigm shift has taken place in the character of war, it has not necessarily entirely accepted these changes and responded to them.

## 7. There is a US Paradigm of Warfare. Are There Others?

The US prefers to wage industrialized warfare characterized by high technology weapons systems employed against its preferred opponents, highly discernable opponents, like other nation-states.<sup>90</sup> The emphasis on the lessons gleaned from the American experience in the First Gulf War only highlights this point. Although the post-9/11 War on Terror brought the US military into contact with unconventional forces such as the Taliban, al Qaeda, and forces of the Islamic State, the American response was remarkably consistent in that it favored the application of high technology and overwhelming violence.<sup>91</sup> This does not imply that the US did not learn from its experience and modulate how it fought in the two main theaters (Afghanistan and Iraq) and smaller ones, like Africa and the Philippines. Rather, the American preference remained one of bringing the enemy force to battle and

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<sup>85</sup> Edward N. Luttwak, *The Grand Strategy of the Roman Empire: From the First Century CE to the Third*, rev. ed. (Baltimore: Johns Hopkins University Press, 2016), 224.

<sup>86</sup> Ibid.

<sup>87</sup> Ibid.

<sup>88</sup> Chris Paparone, "How We Fight: A Critical Exploration of US Military Doctrine," *Organization* 24, no. 4 (2017): 523, accessed March 22, 2022, <https://doi.org/10.1177/1350508417693853>.

<sup>89</sup> Jones, "Three Dangerous Men," Seth Jones talks about the US preference to fight the war at which it thinks it's the most capable @ 00:16:19. Cohen talks about the "Curse of the First Gulf War" because it's the "war we want to fight" on several levels, and we (the US) "continually look for another First Gulf War to fight" @ 00:19:30.

<sup>90</sup> Keith L. Shimko, *The Iraq Wars and America's Military Revolution* (Cambridge: Cambridge University Press, 2010), 102, accessed November 12, 2021, EBSCOhost e-book.

<sup>91</sup> Steven Metz, *Armed Conflict in the 21<sup>st</sup> Century: the Information Revolution and Post-Modern Warfare* (New York: Nova Science Publishers, 2018), 76, accessed November 18, 2021, EBSCOhost e-book; and Shimko, 209.

then destroying them through the overwhelming application of firepower to achieve decisive victory.<sup>92</sup>

Examining a paradigm shift in American military thinking on war is one part of a broader discussion of whether there is a particular American way of war. If there is, what does it comprise? Russell F. Weigley's *The American Way of War* (1973) was published after the Vietnam War. It described the American way of war as being based on attrition for much of US history but then shifting to strategies favoring annihilation during and after the Civil War.<sup>93</sup> This book has been the *sine qua non* on the subject for many decades. In the wake of the wars in the Middle East, the debate has expanded to include a more nuanced treatment of America's extensive small wars experience, the First Gulf War, and the associated Revolution in Military Affairs.<sup>94</sup>

The US paradigm or "way of war" refers to the American military's historical approach to warfare and comprises preferences for certain types of conflicts and a preferred mode of fighting. This "way of war" goes well beyond the tactical and is better understood as a preferred mode of military operations irrespective of the domain in which they occur (i.e., ground, air, or naval). According to Weigley, America established a strong preference for campaigns of annihilation coming out of its own civil war. This trend remained through the First Gulf War. During this war, technologically advanced weapon and information systems brought on by the Revolution in Military Affairs further enabled the US military's preference for annihilation in pursuit of decisive victory. The result was the destruction of the Iraqi Army after a month-long air campaign followed by a 100-hour ground war.

To make the distinction between the two clear: America's "way of war" is a cultural and institutional pattern of preferred behavior in conflict, and the Revolution in Military Affairs represents paradigmatic change in how wars are fought. The latest RMA informs how the US wages war because its effects impact the very activity of warfare and are felt by combatants and non-combatants alike. Revolutions in Military Affairs deal with significant, evolutionary advances in how human beings wage warfare; the most impactful changes are often conceptual.<sup>95</sup> When they occur, RMAs upend conventional thinking about warfare and fighting well beyond the introduction of new tools. Frequently, how these tools come together prompts a reconceptualization of how to fight. The impact of information technologies on command, control, communications, and computers and how they came together with armor and aircraft in the First Gulf War was an RMA.<sup>96</sup> To synthesize the point, the US prefers a specific type of warfare that is distinctly American and enabled by the most recent RMA.

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<sup>92</sup> Harvey M. Sapolsky, Eugene Gholz, and Caitlin Talmadge, *US Defense Politics: The Origins of Security Policy*, 4<sup>th</sup> ed. (London: Routledge, Taylor & Francis Group, 2021), 21, accessed November 14, 2021, <https://doi.org/10.4324/9781003001751>, and Antulio J. Echevarria II, "An American Way of War or a Way of Battle?", *Articles & Editorials*, 291 (Carlisle: US Army War College Press, 2004), accessed April 23, 2018, [https://press.armywarcollege.edu/articles\\_editorials/291](https://press.armywarcollege.edu/articles_editorials/291).

<sup>93</sup> Brian McAllister Linn, "The American Way of War Debate: An Overview," *Historically Speaking* 11, no. 5 (2010): 22, accessed May 4, 2018, <https://muse.jhu.edu/article/405440>.

<sup>94</sup> Linn, 23. Authors such as Thomas Barnett, Arthur Cebrowski, and Max Boot (among others) wrote on the "New American Way of War." Antulio Echevarria has also provided significant contributions to this debate in numerous articles and books. His most relevant contribution for this discussion is that America possesses a "way of battle" focused on the tactical conduct of battles and campaigns but it does not sufficiently factor in strategic outcomes for it to qualify as a "way of war."

<sup>95</sup> Williamson Murray, "Thinking About Revolutions in Military Affairs," *Joint Forces Quarterly* (Summer 1997): 70, accessed January 20, 2022, <https://ndupress.ndu.edu/portals/68/Documents/jfq/jfq-16.pdf>.

<sup>96</sup> Shimko, 22-23, 213.

Other paradigms or contemporary warfare models exist and must be considered as well. This dissertation will focus heavily on how Russia and China view contemporary conflict because they are America's main competitors on the geopolitical stage. Additionally, this dissertation will also consider the case of Israel. It provides another example of a modern state other than the United States that wrestles with ongoing security threats against which it has employed its military with varying, but most suboptimal, degrees of effectiveness. The danger faced by the Israeli Defense Forces (IDF) is hybrid and comes from a mix of state and non-state actors, not dissimilar from the multi-faceted threat facing the US. The IDF's inability to achieve victory against Hezbollah in the Second Lebanon War in 2006, despite having tremendous superiority in conventional military terms, is comparable to the US military's inability to do the same against the Taliban in Afghanistan. Both are illustrative of modern conventional militaries' challenges when confronting adversaries, in this case, an Iranian-sponsored proxy, which leverages asymmetric advantages to prevent a decision on the battlefield or render it irrelevant if one is achieved.<sup>97</sup>

Israel's response has been to create a new strategic approach called the "Campaign Between Wars" to address its security challenges better. This approach seeks to modify Israel's traditional, binary paradigm of military action, one followed by most nation-states that prepared for war and then prosecuted it only when deemed necessary. The end of hostilities was followed by a post-conflict assessment and a reset to prepare for the next about of fighting. This strategic construct treated peace and war as the two main options. Even though the reality of Israeli military action allowed for more nuance and did acknowledge the "grey zone" between peace and war, this binary construct conditioned how the IDF, and by extension Israel, thought about the problem. The Campaign Between Wars acknowledges the "grey zone" and the fact that Israel's strategic problem is an ongoing condition for which no permanent solution exists to "solve" the problem. The best that can be achieved is to maintain the status quo or equilibrium, restoring it in the event of a crisis. The new approach is predicated on the "maintenance" of the strategic situation through "proactive, offensive actions based on extremely high-quality intelligence and clandestine efforts."<sup>98</sup>

The Israelis view conflict and competition as ongoing processes and activities that have replaced the traditional dichotomy of peace and war.<sup>99</sup> The IDF acknowledges the continuing nature of the security problems that confront nation states; there are no permanent solutions, and the durability of any solution largely depends on the prevailing conditions which are subject to change.<sup>100</sup> Acknowledging the centrality of information in postmodern warfare, the IDF heavily considers how military actions add and detract from the desired narrative. The goal is to enhance Israel's standing and legitimacy while undercutting the enemy's own standing. Information and perceptions of legitimacy impact every domain of warfare, not the least of which are the cyber and cognitive domains. Even

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<sup>97</sup> Avi Kober, "The Israel Defense Forces in the Second Lebanon War: Why the Poor Performance?" *Journal of Strategic Studies* 31, no. 1 (2008): 7-8, accessed October 1, 2021, <https://doi.org/10.1080/01402390701785211>.

<sup>98</sup> Gadi Eisenkot, and Gabi Siboni, "The Campaign between Wars: How Israel Rethought Its Strategy to Counter Iran's Malign Regional Influence," *Washington Institute for Near East Policy: Policy Watch* (September 2019): 2, accessed October 1, 2021, EBSCOhost, International Security & Counter Terrorism Reference Center.

<sup>99</sup> Ibid.

<sup>100</sup> Ibid.

with this cursory presentation of Israeli strategy, it is possible to discern the IDF's response to the challenge of postmodern warfare in the Information Age.<sup>101</sup>

## 8. On Paradigm Shifts & Learning - Kuhn, Fleck, and Hoffman

The assumption that the conduct of warfare has shifted or is the midst of a change, or paradigm shift, is central to this dissertation. The aim of this project is not to prove or disprove this assumption. The assumption itself is not novel, and as already discussed, it has been made by numerous authors, researchers, and practitioners within war studies, security studies, and the military.<sup>102</sup> Understanding how paradigm shifts occur is important because this concept helps explain and better understand the US military's response to the ongoing changing character of war.

This dissertation bases its theoretical perspective on Thomas Kuhn's *The Structure of Scientific Revolutions* (1962) to explain how new paradigms are created and replace earlier ones. This approach is supported by the work of Ludwik Fleck, a Polish physician and biologist, who wrote on the generation of new knowledge by small groups that he referred to as "thought collectives." American physicist and philosopher of science Thomas Kuhn first documented in the late 1950s and early 1960s how new knowledge displaces old knowledge within the hard sciences. A paradigm is a commonly held or accepted way of thinking. Viewed from a more scientific framework, Kuhn described paradigms as "universally recognized scientific achievements that for a time provide model problems and solutions to a community of practitioners."<sup>103</sup> He also described paradigms as the "body of accepted theory" in a particular field, such as Aristotle's *Physica* or Lavoisier's *Chemistry* (1789).<sup>104</sup>

Paradigms exert an organizing or unifying effect on whatever field or discipline they apply. To the practitioner, paradigms provide a common framework to interpret the world and act or make decisions. In science, paradigms represent widely, if not universally, accepted points of departure, often recognized as scientific "laws" or "axioms." These often serve as the basis for further experimentation and inquiry into the field. As people gather new knowledge, gaps appear in the established or prevailing paradigm. Kuhn referred to these as "anomalies."<sup>105</sup> As more and more anomalies arise in the prevailing paradigm, they expose contradictions and spawn further inquiry to reconcile them with the paradigm. Kuhn posited that these contradictions provided the grist for new thinking and theories that would eventually reach a point of acceptance that overturn and supplant the prevailing thinking on a particular topic, effectively destroying the previous paradigm. Kuhn termed this phenomenon to be a paradigm shift.<sup>106</sup>

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<sup>101</sup> The research and writing for this dissertation were completed before Hamas' October 7, 2023, attack against Israel. On one hand, this successfully executed a catastrophic attack against Israel constitutes a failure of the Campaign Between Wars as a strategy to prevent that very thing from happening. On the other hand, the IDF's strategic approach correctly gauged the importance of information and perception in contemporary warfare.

<sup>102</sup> Much of the "new wars" literature makes the claim that a paradigm shift has occurred in contemporary war. This dissertation will examine many of these works within the literature review, e.g., Kaldor, Qiao & Wang, and Gerasimov, among others.

<sup>103</sup> Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 3rd ed. (Chicago: The University of Chicago Press, 1996), x.

<sup>104</sup> *Ibid*, 10.

<sup>105</sup> *Ibid*, 52.

<sup>106</sup> *Ibid*, 6-7.



Writing some three decades earlier than Kuhn, Ludwik Fleck explored how new ideas emerge and the role played by small groups or “thought collectives” dictating the direction and interpretation of “scientific facts” that lead to changing or maintaining perceptions across entire communities. Thought collectives (*die Denkgemeinschaften*) are communities of interest that operate within larger collective populations or within a field that, in Fleck’s terms, generate insights or “facts,” i.e., commonly held truths or thought styles (*die Denkstile*).<sup>107</sup> These thought styles build upon and can dictate or determine accepted “facts” within the larger group or collective; changing thought styles also contribute to new knowledge.<sup>108</sup> Of particular interest is Fleck’s observation that much of this scientific “progress” is determined by the social context of the collective and the larger society within which the work is being done, not necessarily by a rigorous process of evaluating empirical truth, as a layman might suppose.<sup>109</sup> Fleck’s concept of “thought collectives” explains both progress and innovation and the impetus toward preserving the status quo, depending on the prevailing circumstances.<sup>110</sup>

Kuhn and Fleck offer two complimentary models of knowledge generation within hard science. While these models are helpful for this study, there are differences between learning in scientific communities and learning that occurs within military organizations.<sup>111</sup> While both communities desire accuracy and correct results, the impetus to arrive at the correct answer is more significant in the military because of the potential cost of failure. There is an inescapable finality when the stakes involve loss of human life and national security. Within the military, there is also the requirement to learn quickly and informally. No amount of training and planning can completely capture actual combat requirements. Consequently, functional military organizations tend to do a lot of learning while engaged in combat operations.<sup>112</sup> All of this occurs within a rigid institutional context that is notably averse to change.<sup>113</sup> Given the huge price associated with failure and the irony that change is required in an institution that, at best, appears reluctant to embrace it and, at worst, is adverse to change, it should come as no surprise that there is a large body of work devoted to military learning and innovation.

Much of this historical literature focuses on specific instances in which the military was forced to innovate and learn in an ongoing conflict. The degree to which learning occurred or innovation was successful determined operational or strategic victory. These works invariably highlight the military’s well-known resistance to change as the main obstacle to be surmounted.<sup>114</sup> One example is military historians Williamson Murray and Allan

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<sup>107</sup> Ludwik Fleck, *Genesis and Development of a Scientific Fact*, ed. Thaddeus J. Trenn and Robert K. Merton, trans. Fred Bradley and Thaddeus Trenn (Chicago: University of Chicago Press, 1979), 39, 45, 47.

<sup>108</sup> *Ibid.*, 28-29, 64.

<sup>109</sup> Kenneth Weiss, “Ludwik Fleck and the Art-of-Fact,” *Evolutionary Anthropology* 12 (2003): 172, accessed October 1, 2021, <https://doi.org/10.1002/evan.10118>.

<sup>110</sup> Stig Brorson and Hanne Andersen, “Stabilizing and Changing Phenomenal Worlds: Ludwik Fleck and Thomas Kuhn on Scientific Literature,” *Journal for General Philosophy of Science* 32, no. 1 (2001): 110-111, accessed October 15, 2021, <https://link.springer.com/article/10.1023/A:1011236713841>.

<sup>111</sup> Ben Zweibelson, “Design Theory and the Military’s Understanding of Our Complex World,” *Small Wars Journal*, last modified August 7, 2011, accessed August 13, 2017, <https://apps.dtic.mil/sti/pdfs/ADA547529.pdf>, 1-2.

<sup>112</sup> Daniel Hughes, ed., *Moltke on the Art of War: Selected Writings* (New York: Ballantine Books, 1993), 92.

<sup>113</sup> Zweibelson, “Design Theory and the Military’s Understanding of Our Complex World,” 7.

<sup>114</sup> Williamson R. Murray and Allen R. Millet, eds., *Military Innovation in the Interwar Period* (Cambridge: Cambridge University Press, 1998), 312-313.

Millet's book, *Military Innovation in the Interwar Period* (1998).<sup>115</sup> It provides historical case studies and analyses of past and current change to examine the processes of military innovation. While instructive, such works do not give an encompassing model of learning or innovation comparable to what Kuhn and Fleck offer. Even Frank Hoffman's *Mars Adapting: Military Change during War* (2021), while extremely useful, lacks the universality of Kuhn and Fleck.

Hoffman offers a scholarly examination of military change that he presents on a continuum which ranges from simple adjustments defined as the "switching of extant organizational capabilities" to adaptation at the midpoint, which he describes as "...incorporat[ing] inputs from direct field experience into new doctrinal, organizational, and technological solutions."<sup>116</sup> Innovation constitutes the most extreme form of change. It occurs when "the force develops entirely new skills and shares them to support new missions, new values, and entirely new organizational competencies."<sup>117</sup> Hoffman focuses on the American military experience. His case studies use examples from the US military, although his lessons apply to other western militaries. He also reviews the literature surrounding military innovation and learning, but most valuable is his model and placement of it within the genre of military innovation. Hoffman identifies four traditional schools of military change: Interventionists, Institutionalists, Intra-Organizational Politics, and Interservice Competition. These approaches primarily derive from the field of political science and its approach to organizational change. The addition of Hoffman's recent scholarship ensures a complete overview of the thinking on learning and innovation in the military within the larger body of military literature. This inclusion also provides a modern (and American) adjunct to the scholarly works of Kuhn and Fleck.

## 9. Research Design

To assess whether the U.S. military has or has not modified its thinking about war and warfare in recent years, this dissertation examines US joint military doctrine and the curricula at joint military schools at the senior levels of officer professional military education. In both cases, the doctrine and curricula serve as a proxy to determine how the military, as an institution, thinks about warfare. In *The Roots of Military Doctrine* (2013), Dr. Aaron Jackson describes doctrine as "the most visible expression of a military's belief system."<sup>118</sup> This study goes further by accepting and building upon Jackson's point that a modern military uses doctrine to communicate its belief system. This dissertation posits that professional military education, particularly at the officer level, is an essential and semi-informal mechanism to communicate doctrine, values, and, most importantly, new ideas. The amount of time or number of courses devoted to transmitting a specific viewpoint, value, or concept indicates the degree to which the military values that knowledge and desires to pass it along to the broader organization. This is especially true in the case of institutions that

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<sup>115</sup> David W. Barno, "Military Adaptation in Complex Operations," *Prism* 1, no. 1 (12/2009): 27-36. Barno's article is another such example. Barno lays out a roadmap for how the US military got to where it is regarding contemporary warfare but offers no real prescriptions as to what it must do or the process for change.

<sup>116</sup> Frank G. Hoffman, *Mars Adapting: Military Changes during War* (Annapolis: Naval Institute Press 2021), 6-7.

<sup>117</sup> *Ibid.*

<sup>118</sup> Aaron P. Jackson, *The Roots of Military Doctrine: Change and Continuity in Understanding the Practice of Warfare* (Fort Leavenworth: Combat Studies Institute Press, 2013), 6.

educate senior officers who will serve as commanders and senior staff. The importance of curricula as a window into how the military thinks, what it values, and its receptiveness to new ideas should not be overlooked. Therefore, examining the curricula of institutions expected to teach and educate future generations of military officers is a valid indicator of the military's receptiveness to new ideas and concepts.

The central portion of this research effort focuses on higher-level doctrine from the U.S. Joint Staff for several reasons. First, joint doctrine provides a comprehensive view of doctrine within the Department of Defense; it does not favor any of the five, military services or necessarily provide a domain-specific (e.g., terrestrial, naval, cyber, or aerospace) viewpoint. As it stands, joint doctrine is accorded a high degree of importance within the U.S. military as the unifying element between all services and a factor that facilitates, if not outright enables, their ability to operate with one another. "Joint doctrine presents fundamental principles that guide the employment of US military forces in coordinated and integrated action toward a common objective. It promotes a common perspective from which to plan, train, and conduct military operations."<sup>119</sup> In this manner, joint doctrine acts as a unifying force and, as Aaron Jackson would argue, a repository for the US military's worldview.

Within this dissertation, there is also a supporting research effort focusing on joint officer professional military education (PME) at the senior field grade officer level, or what is identified as "war college" or "top-level school." This supporting effort centers on the National Defense University (NDU) and its electives program. NDU contains four resident colleges at Fort McNair, Washington, D.C.: the College for International Security Affairs (CISA), the College of Information and Cyberspace (CIC), the National War College (NWC), and the Dwight D. Eisenhower School for National Security and Resource Strategy (ES). This dissertation focuses on the NWC, the Eisenhower School, and the electives offered by NDU itself. While all four colleges educate future senior leaders for high-level leadership within the military and government, NWC and the Eisenhower School are the most prestigious colleges within NDU. Of the four colleges, these two also offer the greatest number of electives. The National War College is also informally known as the "Chairman's school" because of the number of graduates that go on to serve on the Joint Staff. It has the mandate to "educate future leaders of the Armed Forces, Department of State, and other civilian agencies for high-level policy, command and staff responsibilities by conducting a senior-level course of study in national security strategy." At the same time, "the Eisenhower School (ES) prepares select military officers and civilians for strategic leadership and success in developing national security strategy and in evaluating, marshalling, and managing resources in the execution of that strategy."<sup>120</sup> Both colleges expose their students to advanced joint doctrine, strategic-level problems, and the military-political interface to train senior 'strategic' leaders within the national security establishment.

These two institutions' professional populations are the post-battalion/squadron command lieutenant colonel/commanders (navy) and colonels/captains (navy), who typically have more than 15 years of service. These officers have established careers well beyond entry and are on the cusp of colonel-level command or becoming general officers. The student body comes from across the military services. It includes selected foreign

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<sup>119</sup> Joint Chiefs of Staff, *Doctrine for the Armed Forces of the United States*, 02 May 2007, Incorporating Change 1, 20 March 2009 (Washington, D.C.: Joint Chiefs of Staff, March 20, 2009), I-1.

<sup>120</sup> National Defense University, *Colleges*, accessed September 3, 2021, <https://www.ndu.edu/Academics/Colleges/>.

officers of the same or higher grade and civilian counterparts from the Department of Defense and the interagency. Education meets experience at this level of PME as all are experienced practitioners from their respective fields. The NWC and ES act as a “thought collective” *a la* Ludwik Fleck or test bed for emerging ideas and concepts.<sup>121</sup>

## 10. Research Method

The examination of doctrine and JPME course curriculum comprises a single case. Specifically, this effort resembles what Drs. Alexander George and Andrew Bennett described in their book, *Case Studies and Theory Development in the Social Sciences* (2005), as a disciplined configurative case study. A disciplined configurative case study uses “...established theories to explain a case. The emphasis may be on explaining a historically important case, or a study may use a case to exemplify a theory for pedagogical purposes.”<sup>122</sup> In this case, the established theories are Thomas Kuhn’s paradigm shift theory and Ludwik Fleck’s work on thought collectives and the establishment of new ideas in an already established discipline. To a lesser extent, this project also draws upon Frank Hoffman’s Organizational Learning Theory as adapted to military organizations in *Mars Adapting*.

Regarding data collection, this thesis employs a method known as the content analysis method. Dr. Steven Mariano, COL, USA (Ret.) used this method in his 2012 doctoral dissertation with the graduate program in War Studies at the Royal Military College of Canada that looked at the degree to which the US Army retained its experiences in Vietnam by measuring attitudes about small wars and the frequency with which articles on that topic appeared in Army magazines and professional journals.<sup>123</sup> Content analysis “is a systematic research method for analyzing textual information in a standardized way that allows evaluators to make inferences about that information.”<sup>124</sup> In other words, content analysis enables researchers to “summarize the formal content of written material.”<sup>125</sup> It achieves this goal by “coding” or classifying “many words of the text into fewer contact categories.”<sup>126</sup> Researchers can then apply standard statistical methods to analyze and judge the “categorical variable[s]” they collected.<sup>127</sup>

The data was collected across three chronological blocks to observe change over time and facilitate connection to specific events. As such, there is an early, middle, and late observation period. The study begins in February of 1991, at the end of the First Gulf War, and extends to just before 9/11 in 2001. This choice is deliberate because it encompasses the introduction of joint doctrine, the First Gulf War, and incorporating lessons learned from

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<sup>121</sup> This assessment is based on the author’s experience having attended the National War College during the 2013-2014 academic year as well as other anecdotal (but verifiable) information.

<sup>122</sup> Alexander L. George and Andrew Bennett, *Case Studies and Theory Development in the Social Sciences* (Cambridge: MIT Press, 2005), 75.

<sup>123</sup> Stephen J. Mariano, “Between the Pen and the Sword, The US Army and Small Wars: Individual and Institutional Attitudes, 1973-2012” (PhD diss., Royal Military College of Canada, June 2012), 4-5.

<sup>124</sup> United States General Accounting Office, *Content Analysis: A Methodology for Structuring and Analyzing Written Material* (Washington, D.C.: General Accounting Office, September 1996), 6.

<sup>125</sup> *Ibid.*, 7.

<sup>126</sup> R.P. Weber, *Basic Content Analysis*, 2nd ed. (Newbury Park: Sage, 1990), 12. Quoted in United States General Accounting Office, *Content Analysis: A Methodology for Structuring and Analyzing Written Material* (Washington, D.C.: General Accounting Office, September 1996), 6.

<sup>127</sup> U.S. GAO, *Content Analysis*, 6.

that war. This early period takes the US through Krauthammer's "unipolar moment." It is contemporary with the publication of Qiao and Liang's *Unrestricted Warfare* in 1999 – which captures the Chinese military's perspective on the effect of these same events on future war. The middle or second point of the examination runs from 2002 through 2012. While this dissertation focuses on nation-states as international actors, there is no intent to ignore the effect of the War on Terror on US military thinking. The last period of observation covers 2012 through 2022. This period is significant because it comprises the US withdrawal from Iraq and Afghanistan and the resumption of great power competition between the US, Russia, and China.

Mariano indicated in his research that other methods, such as interviews for data collection, are inadequate for this type of lengthy study because "no existing longitudinal survey covers the 40-year [or in this case a 31-year] period."<sup>128</sup> Content analysis is relatively unobtrusive, is suited to dealing with large volumes of material, and systematically deals with information.<sup>129</sup> On the other hand, content analysis can require significant resources and time to collect and examine data, and because it is inherently reductive, it may not provide the necessary nuance to formulate meaningful judgements about the collected data.<sup>130</sup> Understanding these disadvantages, content analysis remains the best choice for examining written work such as doctrine and NDU's elective program.

## 11. Organization

This dissertation is organized into nine chapters. This introductory chapter explains the research question and thesis and articulates the original contribution to learning that this dissertation provides to the field of War Studies. The literature review is the second chapter and will explore the literature surrounding the "new" wars and the topics of US strategic thought and doctrine. Chapter 3 presents' alternatives to the American military's approach to warfare and is divided into three sections. The first two sections focus on the Russian and Chinese perspectives as America's primary peer adversaries. The third section looks at the Israeli approach to warfare. Israel is relevant for two reasons: the Israeli Defense Force (IDF) is widely considered to be a modern, well-trained military confronting state and non-state threats. Much of the IDF's recent combat experience comes from fighting irregular Islamic violent extremist organizations financed by Iran, such as Hezbollah in Lebanon and Hamas in the West Bank. Given these similarities with the US military, the degree to which the Israeli response is similar or different is instructive. Chapter 4 covers the methodology and research design. It explains the choice to cover joint doctrine over other sources and the decision for content analysis as the method of choice. This chapter also describes the decision to forego other applicable research methods. Chapters 5, 6, and 7 analyze select joint doctrinal publications at three levels: keystone, capstone, and core doctrine. The research focuses on differences in how joint doctrine explains war and warfare as a phenomenon. The eighth chapter contains the research results from the NDU electives program across the three distinct periods. This research effort looks for elective courses, the purpose of which is to allow students to go beyond simply learning joint doctrine and

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<sup>128</sup> Mariano, *Between the Pen and the Sword*, 31.

<sup>129</sup> U.S. GAO, *Content Analysis*, 10.

<sup>130</sup> Mariano, "Between the Pen and the Sword," 32

concepts and engage in original or exploratory thinking about war. The final chapter offers concluding thoughts and recommends further research related to this dissertation.

## Chapter 2 - Literature Review

As the introductory chapter identified, this dissertation is unique in that it seeks to explore how the U.S. military conceptualizes or thinks about war at the present or near-present time during ongoing changes in the character of contemporary conflict. Moreover, this dissertation uses doctrine as the window to arrive at this determination. As one might expect, no specific body of literature within the field of War Studies matches the exact topic of this research. No one has written on war and warfare from the perspective of examining US doctrine for evidence of changes in the character of conflict. More frequently, other countries view US doctrine and its practical application as a catalyst for change that they undertake for their militaries or national security establishments.<sup>131</sup> This is precisely the case with China, although the relationship is admittedly adversarial, as it seeks to negate US military advantage by changing its approach to warfare. The influence of US doctrine is also seen in America's alliance partners, who work to keep pace with advances in US military thinking and technology.<sup>132</sup> US doctrine drives its NATO analog, mirroring US doctrinal concepts for alliance solidarity and interoperability.<sup>133</sup>

Doctrine evolves to keep pace with advances in war. This is true for American military doctrine as it is for any other country's military. Changes in doctrine arise in response to the emergence of new technologies on the battlefield or to overcome specific situational problems of geography or other non-technological constraints. Most frequently, elements of both come together to influence the evolution of doctrine. In a 1996 journal article, Raymond Franck and Gregory Hildebrandt outlined three broad choices available to rival militaries when confronted with the level of change encountered in an RMA or, as they term it, a military-technical revolution. From the standpoint of technology, militaries can evolve their doctrine to emulate, offset, or bypass a new technology or mode of warfare that their opponent possesses, and they do not.<sup>134</sup> Emulation is straightforward and involves copying or "mirror-imaging" the technological or doctrinal advance. Offsetting technologies

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<sup>131</sup> The creation of special operations commands in other countries as a best practice to command and control special operations forces is just one example of emulating US doctrine. Adam Svendsen, "Sharpening SOF Tools, Their Strategic Use and Direction," *Defense Studies* 14, no. 3 (July 2014): 284-309, accessed January 30, 2022, doi:10.1080/14702436.2014.890341, 285; and Krystian Piatkowski, "Polish Special Forces: In Search of a New Posture," *Journal of Slavic Military Studies* 11, no. 3 (1998): 105-127, accessed January 30, 2022, <https://doi.org.nduezproxy.idm.oclc.org/10.1080/13518049808430353>, 116.

<sup>132</sup> It is often difficult for NATO member countries to keep pace with American military technological advances due to their spending and allocation for defense. Charles Barry and Hans Bennendijk, "Widening Gaps in U.S. and European Defense Capabilities and Cooperation," *Transatlantic Current* no. 6, (July 2012) (National Defense University, Institute for National Strategic Studies): 2, accessed February 2, 2022, <https://apps.dtic.mil/sti/pdfs/ADA577669.pdf>. Also see Howard G. Coombs, "In the Wake of a Paradigm Shift: the Canadian Forces College and the Operational Level of War (1987-1996)" *Canadian Military Journal* 10, no. 2 (2010): 19-20, accessed Sept 30, 2021, <http://www.journal.forces.gc.ca/vol10/no2/doc/05-coombs-eng.pdf>. Coombs uses Ludwik Fleck concept of "thought collectives" and Thomas Kuhn's "paradigm shifts" to demonstrate how, in this case, US doctrine informs, impacts, and is impacted by Canadian military thought.

<sup>133</sup> Edward Lucas and Thomas Crosbie, "Evolution of Joint Warfare," in *Handbook of Military Sciences*, ed. Anders Sookermary (Cham: Springer, 2021), accessed August 30, 2023, [https://doi.org/10.1007/978-3-030-02866-4\\_21-1](https://doi.org/10.1007/978-3-030-02866-4_21-1), 8.

<sup>134</sup> Raymond E. Franck, Jr. and Gregory G. Hildebrandt, "Competitive Aspects of the Contemporary Military-Technical Revolution: Potential Military Rivals to the US," *Defense Analysis* 12, no. 2 (1996): 244, accessed January 31, 2022, <https://doi.org/10.1080/07430179608405696>.

or solutions involve the use of countermeasures that specifically seek to negate the rival's advantage, such as China's investment in anti-access area denial weapons to "offset" the US Navy's ability to project power and control the sea. On the other hand, "Bypassing responses involve developing new means of warfare to leapfrog the rival's capabilities, or methods of operations designed to avoid them."<sup>135</sup>

Incorporating a new technology into one's arsenal often prompts corresponding changes in the conduct of war. Such "doctrinal" changes are frequently most apparent at the tactical level and are in response to introducing a new piece of equipment on the battlefield.<sup>136</sup> They are best categorized as changes to tactics, techniques, and procedures. Actual doctrinal changes that affect the operational and strategic levels of warfare and come from the introduction of new technologies generally happen when a family of systems is introduced or when a particular piece of technology brings about revolutionary rather than evolutionary advancement, i.e., something beyond just being a faster, more lethal version of what came before. The modern aircraft carrier that emerged during World War II is a prime example. It was less the creation of a new type of capital ship than the evolution of a combined-arms system that "integrat[ed] technology, tactics, and human beings" and revolutionized naval warfare.<sup>137</sup>

Attempts to solve or overcome a specific military dilemma, such as those imposed by geography or limitations of tactics and technology, are a second source of frequent doctrinal changes. The classic examples of this within the Western military tradition are the development of *Stoßtrupp Taktik* (stormtrooper tactics) and later *Blitzkrieg*. Both of these innovations were intended to restore movement to the battlefield and overcome the positional warfare which typified the Western Front in the First World War – which itself was the product of technological advances (primarily in the accuracy and lethality of artillery) which impacted doctrine.<sup>138</sup> In the case of *Blitzkrieg* specifically, it was a form of warfare that combined doctrinal changes with critical technological advances across several interconnected technologies, including aircraft, vehicles, and communications, to name the most important.<sup>139</sup>

Another example is the evolution of US Army doctrine during the Cold War. Here, the US Army sought a solution to the problem of defending Western Europe within a constrained geographic space against the numerically superior forces of the Warsaw Pact. Efforts to solve the issue led to the development of the doctrinal concept of Active Defense and, later, AirLand Battle, codified in the late 1970s and early 1980s in successive iterations of the US Army's capstone doctrinal publication FM 100-5 *Operations*.<sup>140</sup> Like *Blitzkrieg*,

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<sup>135</sup> *Ibid.*

<sup>136</sup> John S. Thach, "The Thach Weave is Born," in *The Pacific War Remembered: An Oral History Collection*, ed. John T. Mason, Jr., (Annapolis: Naval Institute Press, 1986), 94-95. A good example of this is US naval aviation's tactical response to Japan's AM-62 "Zero" fighter during the early phases of World War II. The result was the "Thach Weave."

<sup>137</sup> Thomas Hone, "Replacing Battleships with Aircraft Carriers in the Pacific in World War II," *Naval War College Review* 66, no.1 (Winter 2013): 73, accessed February 2, 2022, <https://www.jstor.org/stable/26397352>.

<sup>138</sup> Karl-Heinz Frieser, *The Blitzkrieg Legend: The 1940 Campaign in the West*, (Annapolis: Naval Institute Press, 2012), 6-7.

<sup>139</sup> *Ibid.*, 339, 341-342.

<sup>140</sup> John L. Romjue, *From Active Defense to AirLand Battle: The Development of Army Doctrine 1973-1982*, (Fort Monroe, VA: U.S. Army Training and Doctrine Command, 1984), 1; and Stephen Robinson, *The Blind Strategist:*



Active Defense and Air Land Battle were concepts both influenced by and influencing technological and training advances, further solidifying the linkage between doctrine and technology.<sup>141</sup>

In this case, the difference is that this dissertation examines the US military's conception of warfare with the understanding that America's adversaries have expanded the scope of warfare to include elements previously considered to be beyond the scope of war or outside the purview of the military. In the process, the character of war has changed. It has become postmodern; contemporary war now possesses a much more significant information component than was the case in previous decades, one that tends to be audience-specific and certainly more subjective in its meaning. The US military's current concept of war continues to emphasize the centrality of the military instrument to wage short, high-intensity wars – the kind the US military prefers to fight. This conception is inadequate for the task of postmodern war. The dilemma facing the United States, and its military, goes well beyond the influence of technology on warfare and, by extension, doctrine. Although, technology certainly has a part to play in the American response to changes in the character of war.

This dissertation focuses on the phenomenological change in warfare and how the US military understands and depicts that change in its doctrine. No literature deals directly with this topic, although some works address it obliquely. This literature review borrows from several areas to assemble the material required to adequately develop the general knowledge of the subject. The three main areas explored in this review are literature relating to the “new wars,” literature dealing with American strategic thought, and finally, literature dealing with the role and development of American military doctrine.

## 1. Warfare Transformed

The term “new wars” is shorthand for the body of military and war literature that appeared in the 1990s and documented what was, at the time, thought to be a profound change in the character of war. Changes that rendered organized conflict fundamentally different from that of previous wars. Much of this literature is contemporaneous with the Gulf War and its aftermath when much of the scholarship focused on describing the associated Revolution in Military Affairs (RMA). Kaldor's *New & Old Wars: Organized Violence in a Global Era* (1999) was the most impactful, but it was by no means the first to identify the changes that were beginning to take place in the character of modern war. Several earlier works from the beginning of that decade provide insight into the thinking about the direction of war in the 1990s. It is essential to touch upon these works briefly because they represent a departure point regarding the thinking on warfare at that time. Moreover, they reinforce the idea that the character of war is constantly in flux, and they offer relevant insights to carry forward.

Israeli military historian Martin van Creveld produced the first significant work in the post-Gulf War period to grapple with changing trends in warfare. Van Creveld's *The Transformation of War* (1991) is important in that it appeared in the same year as the Gulf

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*John Boyd and the American Art of War* (Chatswood, NSW: Exisle Publishing, 2021), 52-53, 239. Also see Lucas and Crosbie, “Evolution of Joint Doctrine,” 7.

<sup>141</sup> Robert Scales, *Certain Victory: The U.S. Army in the Gulf War*, (Washington, D.C.: Potomac Books, 2006), 14.

War, but late enough that he was able to include that conflict in his analysis. The author points out that changes in warfare happen frequently. If one takes a long enough view, trends in warfare come full circle. It is not unheard of for past modes of behavior to reappear on the battlefield.<sup>142</sup> In *The Transformation of War* (1991), Martin van Creveld argued that the prospect of interstate warfare was becoming less likely, but this in no way meant that warfare was going away.<sup>143</sup> Again, van Creveld noted the relatively recent creation of the modern state within the long arc of history.<sup>144</sup> The transformation came with loosening the state's monopoly on warfare and what van Creveld referred to as the re-emergence of non-trinitarian warfare. This is warfare uncoupled from Clausewitz's ontological construct of war, which saw it as a combination of political purpose or policy, the military, and the people.<sup>145</sup> Interestingly and essential to this dissertation, van Creveld does not focus on information and information warfare to the degree one might expect, given its importance to the American victory in the Gulf War and the ever-increasing role it continues to play in warfare today.<sup>146</sup>

The second book from the period immediately following the Gulf War worthy of inclusion is Alvin and Heidi Toffler's *War and Anti-War* (1993). This book not only devotes significant coverage to the stunning victory of American arms and technology, highlighting them as harbingers of future conflict, but many of its predictions have borne themselves out in the three decades since its publication.<sup>147</sup> The Tofflers wrote about three main epochs, or "waves" of human history. While technological advancement influenced each of the three waves, technology was necessarily crucial as an end in itself. Throughout history, technology has been significant in how societies generated wealth, and wealth generation has been necessary for both progress and war-making. Technology animated human civilization and invariably led to the rise and fall of empires. Technology is directly related to how those same societies and empires made war.<sup>148</sup>

According to the Tofflers, the first epoch or wave of history saw agrarian societies that derived wealth from their ability to work the land.<sup>149</sup> The second wave was characterized by industrialization and culminated in the creation of the factory and industry as the means of production (and wealth generation).<sup>150</sup> The third and most recent wave is what we refer to today as the Information Age. Here, wealth generation or "dominance" is "based on the new ways in which... nations sell information and innovation, management, culture and pop culture, advanced technology, software, education, training, medical care, and financial and other services to the world."<sup>151</sup> Although each wave represents continual advancement and development over the preceding one, they coexist today, determined by cultural, wealth, and geographical factors. While this concept appears like Samuel Huntington's "clash of

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<sup>142</sup> Martin van Creveld, *The Transformation of War*, (New York: The Free Press, 1991), 192.

<sup>143</sup> Ibid, 2.

<sup>144</sup> Ibid, 192.

<sup>145</sup> Ibid, 124-126.

<sup>146</sup> Martin van Creveld, "The Transformation of War Revisited," *Small Wars and Insurgencies* 13, no. 2 (2002): 9, accessed February 17, 2022, <https://doi.org/10.1080/09592310208559177>.

<sup>147</sup> Alvin and Heidi Toffler, *War and Anti-War: Survival at the Dawn of the 21<sup>st</sup> Century* (New York: Little, Brown & Co., 1993), 80.

<sup>148</sup> Ibid, 3, 33.

<sup>149</sup> Ibid, 18.

<sup>150</sup> Ibid, 19.

<sup>151</sup> Ibid, 22.

civilizations” relating to globalization and the diffusion of culture, the Tofflers are distinct in taking a military-centric approach.<sup>152</sup>

*War and Anti-War* accurately describes the centrality of information in the modern world, mainly how the creation of knowledge can generate wealth and confer military advantage.<sup>153</sup> Even though the information environment was in a nascent form in 1993 compared with where it is 30 years later, the Tofflers described how humans were already tailoring information for consumption by specific populations in near real-time to influence perceptions and outcomes.<sup>154</sup> Human beings have always manipulated information for their own ends. What makes the third wave of history unique is humanity’s ability to do so on a global scale for multiple audiences in near real-time. Alvin and Heidi Toffler pinpoint the crux of modern marketing and the information component of postmodern warfare, a point that establishes the relevance of *War and Anti-War*.<sup>155</sup>

In keeping with the theme of transformative concepts of warfare, two additional concepts must be introduced to render a complete treatment of the topic. Those two models are Fourth Generation Warfare (4GW), articulated by retired Marine Corps Colonel Thomas X. Hammes in *The Sling and the Stone* (2006), and Frank Hoffman’s hybrid warfare concept introduced in 2007. Hammes expanded upon the idea of 4GW that originated with William S. Lind’s conceptualization of the “generations of warfare.”<sup>156</sup> Hammes views 4GW as having evolved directly out of the insurgencies and wars for national liberation post-1945.<sup>157</sup> What would now be called irregular conflicts, 4GW “uses all available networks – political, economic, social, and military – to convince the enemy’s political decision makers that their strategic goals are either unachievable or too costly for the perceived benefit.”<sup>158</sup>

In a similar vein, Frank Hoffman, writing at that time for the Potomac Institute for Policy, an American national security think tank in 2007, articulated what he saw as an emerging form of warfare, one that “incorporate[d] a range of different modes of warfare, including conventional capabilities, irregular tactics and formations, terrorist acts including indiscriminate violence and coercion, and criminal disorder.”<sup>159</sup> Hoffman devotes a chapter to the origins and development of hybrid warfare, setting up and working through preceding and competing concepts such as Kaldor’s “new wars,” 4GW, compound wars and Chinese unrestricted warfare.<sup>160</sup> Hoffman concluded that these competing concepts would all converge “into multi-modal or Hybrid Wars.”<sup>161</sup> According to Hoffman, “hybrid” captures both the organization and means of the practitioners of this warfare. Organizationally, they may have a hierarchical political structure coupled with decentralized cells or networked

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<sup>152</sup> John W. Jandora, “War and Culture: A Neglected Relation,” *Armed Forces & Society* 25, no. 4 (Summer 1999): 541, accessed on February 16, 2022, <https://doi.org/10.1177/0095327X9902500402>.

<sup>153</sup> Alvin and Heidi Toffler, 69.

<sup>154</sup> *Ibid.*, 171.

<sup>155</sup> Alvin and Heidi Toffler, 69, 171.

<sup>156</sup> William S. Lind, Keith Nightengale, John F. Schmitt, Joseph W. Sutton, and Gary I. Wilson, “The Changing Face of War: Into the Fourth Generation,” *Marine Corps Gazette* 73, no. 10 (October 1989): 23, accessed June 16, 2021, ProQuest ID 206338817.

<sup>157</sup> Thomas X. Hammes, *The Sling and the Stone: On War in the 21st Century*, (St Paul: Zenith Press, 2006), viii-ix, x-xi.

<sup>158</sup> *Ibid.*, 2.

<sup>159</sup> Frank Hoffman, *Conflict in the 21st Century: The Rise of Hybrid Wars*, (Arlington: Potomac Institute, 2007), 14.

<sup>160</sup> *Ibid.*, 30.

<sup>161</sup> *Ibid.*, 28.

tactical units. Their means will also be hybrid in form and application.”<sup>162</sup> This meant blending high and low technology and blurring boundaries between regular and irregular techniques.<sup>163</sup> However, Hoffman considered the overlap with criminal networks, or criminality in general, as the factor that make hybrid warfare especially disruptive.<sup>164</sup> “Criminal activity is used to sustain the hybrid force or to facilitate the disorder and disruption of the target nation.”<sup>165</sup> Although he did not necessarily intend this interpretation, one might argue that Hoffman’s point about criminality reached its apogee in authoritarian kleptocracies like Russia and North Korea that flout international norms and rule of law.

The works listed in this section, from the unique perspectives of the authors, focused on the transformative changes reshaping the character of contemporary war. From van Creveld to the Tofflers and including T.X. Hammes and Frank Hoffman, although the last two are separated from the former by more than a decade, one detects a consistent sentiment throughout that contemporary war is different from “traditional” state-on-state war. This difference can be summarized as being driven by technology, information, and the breakdown or blurring of boundaries that formerly governed, or more accurately, constrained, organized conflict. Moreover, there is also a common conclusion that the West and its militaries are not configured or capable of meeting these challenges without change.<sup>166</sup> One final point must be made regarding the term “hybrid war.” First articulated by Frank Hoffman in 2007, it has since become the preferred term for most examples of contemporary conflict, especially when one of the belligerents is a non-state actor. It has risen above several other contenders, such as “grey zone conflict” or the more generic “competition” or “great power competition.” A group of authors who wrote about what they termed the “new wars.” preceded “hybrid war” by at least a decade. Foremost among these was Mary Kaldor, a British professor of International Relations at the London School of Economics.

## 2. Mary Kaldor and the “New Wars”

Mary Kaldor’s *New & Old Wars* appeared in 1999. The conduct of the Gulf War impacted the thesis of this book less than the subsequent events of the mid-1990s, like the UN intervention in Somalia, the break-up of former Yugoslavia, and the Rwandan Genocide.<sup>167</sup> The two most essential elements of Kaldor’s argument build upon the idea that

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<sup>162</sup> Ibid, 28.

<sup>163</sup> Ibid, 28.

<sup>164</sup> Ibid, 29.

<sup>165</sup> Ibid, 29.

<sup>166</sup> Hammes, *The Sling and the Stone*, 289, 291; Hoffman, *Conflict in the 21st Century*, 58-59; Toffler, *War and Anti-War*, 199-200, 219; and Van Creveld, *The Transformation of War*, 225-226.

<sup>167</sup> Kaldor, *New & Old Wars*, 3. See also Bart Schuurman “Clausewitz and the ‘New Wars’ Scholars,” *Parameters* 40, no. 1 (Spring 2010): 90. Kaldor argues that states are no longer the primary actors in war, having been replaced by “group[s] identified in terms of ethnicity, religion, or tribe” and that such forces rarely fight each other in a decisive encounter. Kaldor believes that contemporary conflicts no longer revolve around attaining a specific military victory but that they are matters of political mobilization through violence, which has led to civilians becoming the main targets. Sometimes, objectives are absent, and combatants are inspired to maintain a state of conflict because it provides them with lucrative economic benefits. Kaldor hypothesizes that these new wars speed up the processes of state disintegration that gave rise to them in the first place. In short, she argues that the end of the Cold War saw the demise of interstate war in favor of a new type of conflict characterized by civil strife.

war is no longer the exclusive purview of the nation-state. First, Kaldor maintains that these “new” wars are no longer fought for military victory. Instead, such conflicts have become ends in themselves; they are used by the warlords that use them to generate revenue and prey on the surrounding civilian population. Warring factions are more prone to prey upon civilians and see them not as a group to be defended but as a resource to be exploited. Second, information has become the critical tool in instigating, shaping, and perpetuating these wars, made possible only because information technology has enabled global penetration. This ubiquitous communications environment is the most salient characteristic of the Information Age. These two characteristics, notwithstanding the loss of the nation-state’s monopoly on large-scale organized violence, have had the most significant influence on contemporary war, profoundly distinguishing it from the “old wars” of the past.

There are other authors who fall under the broad label of “new wars” literature and advance the idea that war has expanded beyond the state. This group recognizes that information possesses dual power as a venue for conflict and a potent weapon of war. Herfried Münkler addresses both in his book *The New Wars* (2002). He places the “destatization” or privatization of military force within the broader arc of history.<sup>168</sup> Münkler uses the Thirty Years War as a case study to illustrate both the rise of the Westphalian state and state-controlled militaries and present them as more of a historical outlier than today’s perspective and the vast body of military history would indicate. Sean McFate, a senior fellow with the Atlantic Council, follows this thinking with his more recent *The New Rules of War* (2019). McFate views the privatization of warfare, the expanding presence of mercenaries, and that of private military companies on the modern battlefield as less of an anomaly than a return to an older, pre-Westphalian historical continuity like Münkler.<sup>169</sup>

Münkler also addresses the role of information and the information space as an important aspect of the “new wars.” However, he does not deal with information or the information domain directly. Instead, he approaches it using the media and the asymmetric advantage it can confer to a weaker opponent, often a non-state actor, in a conflict against a stronger opponent.<sup>170</sup> Münkler outlines exactly how terrorist organizations, or other actors, can employ media to gain advantage:

The media that repeatedly shows such [terrorist] attacks, greatly amplifying events of slight military importance in themselves, ensure that... the radically asymmetrical strategy of the new terrorist wars is given a special bonus. In asymmetrical warfare, the media becomes the means of conducting war. Those who cannot attack conventional forces of a certain state with any chance of success seek to disseminate images in which the consequences of acts of violence are made directly visible. A sense of horror is produced through recorded images, not only of violence against soldiers but also of violence used by the regular armed forces (for example, attacks on trains, housing or non-military factories and, most especially, the killing of women and children). Pictures of the latter kind, whether genuine or falsified, are meant to shake the good conscience underpinning the enemy’s political will – the confidence (justified or unjustified) that violence is being used for a just

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<sup>168</sup> Münkler, *The New Wars*, 3.

<sup>169</sup> McFate, *The New Rules of War*, 126-127.

<sup>170</sup> *Ibid*, 28-29.

cause. ...The transformation of war reporting into a means of warfare has probably been the most important step in the asymmetrization of war, the one which has made it possible to circumvent the military asymmetries of the 'new world order' – not through a restoration of symmetry, of course, but through the single-minded development of new asymmetries, such as those characterizing the new terrorist wars.<sup>171</sup>

The follow-on point is that using information and media to achieve advantage is no longer a tactic exclusive to terrorist or insurgent groups. This practice is now widely used by other states and has become a prime component of postmodern warfare. It figures prominently, for instance, in Russia's concept of New Generation Warfare.<sup>172</sup> Again, Sean McFate's treatment of information and its use in postmodern war pairs well with Herfried Münkler's preceding quote. McFate goes on to develop what he believes are the unique characteristics of warfare in the Information Age. Specifically, he talks about the superior impact information can have over traditional kinetic weapons in today's environment and the importance of targeting and manipulating perception within specific audiences.<sup>173</sup>

### 3. The Postmodern Connection

Another German researcher, Hans-Georg Ehrhart, a Senior Research Fellow at the Institute for Peace Research and Security Policy at the University of Hamburg, wrote several articles on the concept of postmodern war. His article "*Postmoderne Kriegsführung: In der Grauzone zwischen Begrenzung und Entgrenzung kollektiver Gewalt*" (2016) in *Sicherheit und Frieden* provides an excellent breakdown of the characteristics of postmodern war. Ehrhart defines postmodern war as containing multiple asymmetries. In application, postmodern war is characterized (above all) by risk transfer policies and information use. However, it does not rule out or prevent "traditional" strength-on-strength force applications.<sup>174</sup> Information, networking, indirect and covert approaches, and new technologies are the latest tools of postmodern war.<sup>175</sup> How the belligerents combine these tools sets the conditions for postmodern wars to be highly variable; they can include proxies and so-called "small wars" between state and non-state actors but also encompass indirect and irregular approaches among/between state actors.<sup>176</sup> The attention Ehrhart pays to how US military doctrine explains postmodern warfare in terms of different "types" of warfare (e.g.,

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<sup>171</sup> Ibid, 111.

<sup>172</sup> Adamsky, "*Cross-Domain Coercion*," 26-27.

<sup>173</sup> McFate, *The New Rules of War*, 198, 221. For example, McFate writes that "plausible deniability is [often] more decisive than firepower" and that "violence has its place in armed politics but there are many languages of power..."

<sup>174</sup> Hans-Georg Ehrhart, "Postmoderne Kriegsführung: In der Grauzone zwischen Begrenzung und Entgrenzung kollektiver Gewalt," *Sicherheit und Frieden* (S+F) 34, no. 2 (2016): 99-101. An English version of this article also appears as "Postmodern Warfare and the Blurred Boundaries Between War and Peace," *Defense & Security Analysis* 33, no. 3 (2017): 263-275, accessed October 29, 2019, <https://doi.org/10.1080/14751798.2017.1351156>.

<sup>175</sup> Chapter 1 settled upon the term "postmodern war" to describe the current character of conflict. In this context, "postmodernism" conveys the importance of information to war in the present age. Information is malleable in the same manner as identity; there is no longer one "truth." When used effectively, information can create, subvert, and destroy in both the physical and virtual worlds.

<sup>176</sup> Ibid, 98.

counterinsurgency, unconventional warfare, information war, etc.) helps place postmodern war within an ontological construct.<sup>177</sup> Ehrhart identifies the paradox of postmodern war, what he refers to as the “problematic dialectic.”<sup>178</sup> Attempts to delimit conflict and violence by using non-military tools such as information or commerce to stay below the armed response threshold often produce the opposite effect. “Militarizing” the tools of civil society or using them to attain military-like objectives, like gaining control of territory, expands the ambiguity of the grey zone and sets conditions for escalation that can be taken within it (including the use of force).

Ehrhart also provides a straightforward explanation of why he chose the term postmodern to describe the character of contemporary war. Ehrhart’s reasoning is two-fold. First, the term typically marks the end of an epoch and the beginning of another one. Still, it is favored when no specific term has yet emerged for the new age simply because insufficient time has passed to arrive at a commonly accepted name.<sup>179</sup> Second, postmodernism is connected with attributes of rationality, the abolition of order and truth, an “anything goes” mentality marked by diversity, a plurality of styles and forms of expression, and the “end of the meta-narrative.”<sup>180</sup> What Ehrhart offers is more nuance, but a rationale similar to Chris Hables Gray, the first author to explore and develop the connection between war and postmodernity in his *Postmodern War: The New Politics of Conflict* (1997). Gray, like Ehrhart, talked about the importance and multiple uses for information “as a weapon, as a myth, as a metaphor, as a force multiplier, as an edge, as a trope, as a factor, and as an asset...”<sup>181</sup> What Gray did, that Ehrhart did not, was to make explicit the relationship between information and information technology, such as computers and multimedia, that imbued war with a uniquely postmodern quality and made information the most important aspect of contemporary conflict.<sup>182</sup>

The most complete treatment of the linkage between postmodernity and contemporary war is found in Keith Dickson’s “War in (Another) New Context: Postmodernism” (2004). Dickson, a retired Army Special Forces colonel and professor of military studies, held that in postmodern war, “images and simulations are sometimes just as important as actual events because they become events in themselves.”<sup>183</sup> In the modern information environment, “information continuously grows and becomes more interactive...,” shaping identities which “often results in unanticipated associations of people and ideas and leads to constantly shifting (and often contradictory) opinions.”<sup>184</sup> “The power to define what is known in postmodern society – to shape the structure of identities and change points of reference in favor of one side or the other – is decisive” and “serve[s] to support the goals and outcomes sought by the employment of military force” in postmodern or contemporary war.<sup>185</sup> In the passage below, Dickson expands upon the role that discourse and identity play as it pertains to “war and combat”:

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<sup>177</sup> Ibid, 99-101.

<sup>178</sup> Ibid, 102.

<sup>179</sup> Ibid, 98.

<sup>180</sup> Ibid, 98.

<sup>181</sup> Gray, *Postmodern War*, 22.

<sup>182</sup> Ibid. 22.

<sup>183</sup> Keith D. Dickson, “War in (Another) New Context: Postmodernism,” *Journal of Conflict Studies* 24, no .2, (2004): 78-91, 82.

<sup>184</sup> Ibid, 82.

<sup>185</sup> Ibid, 88.

The complex interaction of discourses created by the vast increase in the flow and access to information challenges the logic of modernity. The role of virtual communities, local narratives, and levels of reality in creating and re-creating new identities is at the heart of postmodernism. It reflects how war and combat will be perceived. Global communications networks transcend the identities and loyalties bound in nation-states; the shifting ethnic, religious, regional, or imagined identities created as a result negate the state's monopoly on the use of violence.<sup>186</sup>

Dickson's article is valuable because it clearly articulates this linkage between the malleability of identity and meaning that lies at the heart of postmodernity and the information-centric aspect of contemporary warfare.

#### 4. American Strategic Thought: Clausewitz & Jomini as Foundational Pillars

To answer whether the US military has updated its notion of war and incorporated those changes into its PME institutions, one must first establish the US military's conceptualization of war. This requires an exploration of US strategic thinking over time to identify its various themes and their direction and intensity. In the preceding chapter, the initial discussion on war used the writing of Prussian military theorist Carl von Clausewitz to distinguish between the nature and the character of war. While still relevant to discussions on warfare, Clausewitz is by no means the sole influence on US military thinking. In fact, given the publication of *On War* in 1832, Clausewitz's rise to prominence within US military circles is relatively recent.<sup>187</sup> For much of the US military's history, the more significant influence on how the American military thought about and conducted warfare appeared from the lesser-known Swiss-born Antoine-Henri Jomini.<sup>188</sup>

The practical contemporary to the more theoretical Clausewitz, Jomini examined the campaigns of Frederick the Great and those of Napoleon and distilled out of them certain warfare principles that, when applied, were more likely than not to result in success.<sup>189</sup> Jomini's "principles" were "prescriptions for strategic choices" that grew out of Napoleonic warfare. They emphasized concepts, the most well-known of which are "lines of operation, both interior and exterior, as well as zones of operation and theaters of war."<sup>190</sup> In military theory, Antoine Jomini is best known for his two-volume *Précis de l'art de la guerre* (1838), which contains Jomini's collected thoughts on making war in the 18th Century. In seeking to

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<sup>186</sup> Ibid, 87.

<sup>187</sup> Christopher Bassford, "Clausewitz in America Today," *ClausewitzStudies.org*, accessed March 8, 2022, <https://www.clausewitzstudies.org/hold2/Bassford-ClausewitzInAmericaToday2010a.pdf>, 1-2. American military historian Christopher Bassford writes that while Clausewitz and *On War* have been known in America since the 1890s, they only came to prominence and were incorporated into professional military education in 1976 after the Vietnam War.

<sup>188</sup> Mark T. Calhoun, "Clausewitz and Jomini: Contrasting Intellectual Frameworks in Military Theory," *Army History*, no. 80 (Summer 2011): 22-37, accessed March 3, 2022, <http://www.jstor.org/stable/26296157>, 35-36.

<sup>189</sup> Richard A. Preston, Alex Roland, and Sydney F. Wise, *Men in Arms: A History of Warfare and Its Interrelationships with Western Society*, 5<sup>th</sup> ed., (Stamford: Thomson Learning, 2001), 181-182.

<sup>190</sup> John Shy, "Jomini," in *Makers of Modern Strategy: From Machiavelli to the Nuclear Age*, ed. Peter Paret, (Princeton: Princeton University Press, 1986), 167-169.



provide general truths about war, Jomini has aged well. Despite being two hundred years old, his work remains a valuable foundation for military practitioners.

This has undoubtedly been the case in the United States. Edward Mead Earle's 1943 classic compendium of American strategic thought, *Makers of Modern Strategy*, contains a chapter on Jomini, as do both follow-on editions of the same work.<sup>191</sup> Historians Crane Brinton, Gordon Craig, and Felix Gilbert collaborated on the chapter for the 1943 edition. They concluded that Jomini's contribution lies less in his theories of war but in his articulation of general concepts of planning and strategy that underpin military operations regardless of technological advances.<sup>192</sup> In Peter Paret's 1986 edition of *Makers of Modern Strategy*, historian John Shy has a well-regarded chapter on Antoine Jomini. Shy attributes the allure and enduring appeal that Jomini still holds for modern militaries to the latter's promise that select principles, when properly understood and applied, will assure success.<sup>193</sup> This is a claim from which even the US military is not exempt – the most current version of the joint publication *Operations* (2018) contains twelve "principles" of joint operations rooted in the nine principles of war derived from Jomini.<sup>194</sup>

Jomini's influence is hard to dismiss and expunge; the appeal comes from its prescriptive nature and because the writing can be viewed as more doctrinal than theoretical. According to retired colonel and historian Richard Swain, Jomini's avowed purpose was to produce a handbook or manual for warfare.<sup>195</sup> Therein also lies its main criticisms. The first is that Jomini is a reductionist. War, especially modern war, is too complex to be reduced into principles or maxims that fit every situation.<sup>196</sup> Second, Jomini insisted that military operations could be separated from war's political purpose rather than looking at warfare as inseparable from its political purpose, like Clausewitz.<sup>197</sup> Even with the limitations mentioned above, Jomini's work still possesses utility, especially to students new to the profession of arms, because it lends itself to dissecting the actions of armies in battle in an understandable, structured manner. Moreover, Jomini's influence can be seen in US doctrine alongside Clausewitz's. However, the former operates more implicitly, and without the same

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<sup>191</sup> Although not included in this dissertation, *The New Makers of Modern Strategy: From the Ancient World to the Digital Age* is the most recent edition of the compendium begun by Edward Mead Earle. Edited by Hal Brands and published in 2023, it contains a chapter on Jomini written by American historian Antulio J. Echevarria. Echevarria follows in the footsteps of previous Jomini scholars, addressing Jomini's contribution as a military historian, adding depth to a discussion of Jomini's attempt at theory, the limitations thereof, and providing a sober assessment of the Swiss general's contribution to military science.

<sup>192</sup> Crane Brinton, Gordon A. Craig, and Felix Gilbert, "Jomini," in *Makers of Modern Strategy*, ed. Edward Mead Earle (Princeton: Princeton University Press, 1943), 92.

<sup>193</sup> *Ibid.*, 184.

<sup>194</sup> Joint Chiefs of Staff, *Operations*, JP 3-0, 17 January 2017 Incorporating Change 1 22 October 2018 (Washington, D.C.: Joint Chiefs of Staff, 2018), accessed March 5, 2022, [https://irp.fas.org/doddir/dod/ip3\\_0.pdf](https://irp.fas.org/doddir/dod/ip3_0.pdf), ix.

<sup>195</sup> Richard M. Swain, "'The Hedgehog and the Fox': Jomini, Clausewitz, and History," *Naval War College Review* 43, no. 4 (Autumn 1990): 100, accessed March 5, 2022, <https://www.jstor.org/stable/44638488>. To this point, Bassford considers Jomini's main contribution to be "the way we [western militaries] write practical doctrine," from Christopher Bassford, "Jomini and Clausewitz: Their Interaction," *ClausewitzStudies.org*, accessed March 8, 2022, <https://www.clausewitzstudies.org/readings/Bassford/Jomini/JOMINIX.htm>.

<sup>196</sup> Calhoun, 36.

<sup>197</sup> Swain, 102.

name recognition.<sup>198</sup> For today's practitioners and researchers, the flaw in Jomini's work is that it does not provide a flexible theoretical construct to understand emerging forms of warfare, such as postmodern war. Jomini's ideas are most valuable when rooted in the physical realm and lose much of their utility when applied to virtual or abstract warfare forms. Clausewitz is preferred for this type of usage and provides a better theoretical vantage point to understand warfare in all its myriad and changing forms.

In Book One of *On War*, Clausewitz lays out his thesis and describes war's constituent elements or the three elements that comprise its nature: violence, chance, and reason. Known as Clausewitz's "trinity," the nature of war is composed of violence, which Clausewitz viewed as a "blind natural force" and which he connected with the people who animated war with "enmity," passion, and rage. The second element is the "play of chance and probability" that Clausewitz associated with the "clash of independent and opposing wills" and attributed to the creativity and skill of the commander.<sup>199</sup> The final element was the reason and war's subordination to political purposes. Reason fell under the purview of the government or regent.<sup>200</sup> These three elements constitute, according to Clausewitz, war's nature and describe the overall phenomenon. No matter when or where warfare manifests, these three elements will be present and constitute war's immutable nature.

Although Clausewitz's *On War* and his associated theory are not the topic of this dissertation, the dichotomy of war's immutable nature and its "chameleon-like" character is a foundational assumption. Therefore, it is necessary and worthwhile to mention that the idea of war's immutable nature does not go unchallenged in the literature. Anders Bollman and Søren Sjøgren, who are both affiliated with the Royal Danish Defence College, take a contrary position in "Rethinking Clausewitz's Chameleon: Is it Time for Western Militaries to Abandon the Idea of War's Immutable Nature?" The two Danish researchers characterize war's unchanging nature alongside its malleable character as the "dual ontology of war." The first aspect of the dual ontology is Clausewitz's trinity, and the second is the variability that comes from its variable character.

Bollman and Sjøgren maintain that the dual ontology is not true to Clausewitz's writing or intention, even as they acknowledge most military practitioners subscribe to it.<sup>201</sup> As their evidence, they believe that people misinterpret Clausewitz's dialectic and compare absolute war, which only exists in theory, with war as it occurs in the real world.<sup>202</sup> In their interpretation, Clausewitz employed the Hegelian dialectic to develop war's paradoxes in the real world and did not intend a direct comparison.<sup>203</sup> Second, Bollman and Sjøgren center on the "chameleon analogy" of war's character as having many manifestations. Delving into Clausewitz's original text, Bollman and Sjøgren point out that Clausewitz described war as

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<sup>198</sup> Bassford, "Jomini and Clausewitz: Their Interaction." Also, Antulio J. Echevarria II, *Reconsidering the American Way of War: US Military Practice from the Revolution to Afghanistan* (Washington, D.C.: Georgetown University Press, 2015), 51-52.

<sup>199</sup> US Marine Corps, *Warfighting*, MCDP 1 (Washington, D.C.: U.S. Marine Corps, 1997), 3.

<sup>200</sup> Carl von Clausewitz, *On War*, ed. and trans. by Michael Howard and Peter Paret (Princeton: Princeton Univ. Press, 1989), 89.

<sup>201</sup> Anders Theis Bollman and Søren Sjøgren, "Rethinking Clausewitz's Chameleon: Is it Time for Western Militaries to Abandon the Idea of War's Immutable Nature?" in *Military Politics: New Perspectives*, ed. by Thomas Crosbie (New York: Berghahn Books, 2023), 52. The main recommendation is that postmodern "assemblage" theory offers a more useful way to think about war than is possible under the dual ontology.

<sup>202</sup> *Ibid*, 53.

<sup>203</sup> *Ibid*, 54

being “more than [underline added for emphasis] a true chameleon,” and go on to say that “...in each concrete case it changes its nature somewhat.”<sup>204</sup> “It [war] is diverse in itself because of the strange trinity, and second, it is diverse in its expression.”<sup>205</sup> Their point is that Clausewitz should not be read dogmatically; his explanation of war contains elements of change and stability.

Accepting that the nature of war is mutable possesses a particular attractiveness. Namely, it opens the aperture for a definition of war that accommodates actions in the cyber and other virtual domains that may lack physical violence but can still produce real damage and tangible effects. Rosa Brooks, a former Pentagon lawyer and current law professor at Georgetown University, takes this view and argues in *Foreign Policy* that we should not let adherence to convention stand in the way of either practicality or reality. Taking a constructivist view, she argues that “we” decide what constitutes war and what does not; it can both constrain and enable action.<sup>206</sup> As Brooks identifies in her article that, until recently, the “we” who decide what constitutes war has typically been the Westphalian state.

Having explored a different interpretation of Clausewitz, his dual ontology, and the notion that war’s nature is immutable, this dissertation accepts the conventional interpretation that war simultaneously possesses an immutable nature and a variable character. Although a less conventional reading of Clausewitz addresses some of the paradoxes of postmodern conflict, such as cyberwar, most of the field of War Studies and the profession of arms accept Clausewitz’s dual ontology. Following suit in this regard maintains focus on answering the research question. Having looked at the literature relating to Jomini and Clausewitz, the next step is to examine the influence these two classical military theorists exert on American strategic thought and the American way of war.

In *War’s Logic: Strategic Thought and the American Way of War* (2021), Antulio Echevarria charts continuity and discord in how the US military thinks about warfare. He succinctly describes Clausewitz’s trinity: “war’s nature is viewed as unchanging because those forces, though dynamic and variable, are always present, even if minimally.”<sup>207</sup> Clausewitz stated that the trinity is war’s grammar “but not its [own] logic.”<sup>208</sup> That logic comes from politics and “the political life,” from which war is inextricably linked, which gives the latter purpose as “a continuation of political intercourse, with the addition of other means.”<sup>209</sup>

The argument is that if it were possible to divorce war from its purpose or any of the other two components, it would no longer be war. Violence without overarching direction from the state or other political entities is organized violence, but it is not necessarily war. This nod to “other political actors” acknowledges that the Westphalian nation-state is no longer the *sine qua non* among actors in the international system – a theme Mary Kaldor and others already addressed in the “new wars” literature, and which is echoed by Sean McFate in *The New Rules of War* (2019). A mob may revert to or use violence outright, and while that violence may have an immediate aim, it is generally not directed by a

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<sup>204</sup> Bollman and Sjogren, 55; and Clausewitz, *On War*, 89. It must be noted that the 1984 Paret and Howard version translates this quote as “War is more than a true chameleon that slightly adapts its characteristics to the given case.”

<sup>205</sup> Ibid, 55.

<sup>206</sup> Rosa Brooks, “Fighting Words,” *Foreign Policy*, February 4, 2014, accessed September 4, 2023, <https://foreignpolicy.com/2014/02/04/fighting-words/>.

<sup>207</sup> Echevarria, *War’s Logic*, 2.

<sup>208</sup> Clausewitz, *On War*, 605.

<sup>209</sup> Ibid.

higher political purpose or will. Its direction and its object are more immediate. Absent the friction or chaos characterized by clashing with an active enemy, yet again, war reverts to being the application of force. And, at the risk of being repetitive, absent violence – there is no war.

While there is constancy to the nature of war, this is not the case with war's manifestation; its characteristics are unique and will conform to the age, conditions, and locale in which the war occurs. This truism also holds for the Information Age and accords with the Tofflers' statement about the linkage between wealth creation and war-making in any given period. While it is possible to inflict damage in the cyber and information realms, it is not directly equitable with physical damage or loss of life. Nonetheless, it causes damage. Damage that in the age of ubiquitous communication, information, and cryptocurrencies can be used to create very "real" losses that can lead to strategic success or failure. This is especially true as it bolsters or erodes the will to fight within target populations.<sup>210</sup>

In Book One of *On War*, Clausewitz called war "a true chameleon," saying it "adapts its characteristics to the given case."<sup>211</sup> He wrote this because the combatants determine the characteristics of a particular war, how they are equipped and how they fight, their respective cultures, and where and when the combat occurs. Thus, Clausewitz said, "every age had its own kind of war, its own limiting conditions, and its own peculiar preconceptions."<sup>212</sup> Well known for his multiple works on strategy and warfare, Colin Gray made a similar but more expansive point, noting that "in any particular period, a society has a particular system of war which has at least as much political and social content as it has technological."<sup>213</sup> Considering these comments within the context of war as a uniquely human activity, it is no surprise that organized conflict takes on and reflects so much of humanity.

## 5. Charting the Long Arc of American Strategic Thought

As the two large wellsprings of thought on war and its conduct, Jomini and Clausewitz contributed much to the US military's conception of warfare and strategic thought and how it teaches the subject. However, to only consider these two pillars of Western military thought leaves no room for anything else that might represent a uniquely American contribution to warfare. No examination of US strategic thought would be complete without examining the work of Dr. Antulio Echevarria. What war studies scholars such as Sir Michael Howard, Hew Strachan, and Colin Gray have done to advance the understanding of warfare and strategy formulation within western militaries, Echevarria has done with a specific focus on the United States and its armed forces. A West Point-educated, former US Army officer and the current editor-in-chief of the US Army War College Press, Echevarria has produced a significant body of work, much of which deals with uncovering the origins and charting the course of how the US military thinks about warfare and strategy.

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<sup>210</sup> Cassandra Brooker, "The Effectiveness of Influence Activities in Information Warfare," Australian Army Occasional Paper No. 8, (Canberra: Australian Army Research Centre, 2021), 119. Brooker discusses the weaponization of information and the damage and disorder that "iWar" can achieve.

<sup>211</sup> Clausewitz, *On War*, 89.

<sup>212</sup> *Ibid*, 593.

<sup>213</sup> Colin S. Gray, *Explorations in Strategy* (London: Praeger, 1996), 239.

Much of Echevarria's work centers wholly or tangentially on examining whether there is such a thing as an American way of war. By his admission, Echevarria approaches the topic from this direction to confront the outsize influence still exerted by Russell Weigley's *The American Way of War* (1973).<sup>214</sup> According to Echevarria, Weigley defined the American "way of war" as "the 'habits of mind' that appeared to be shaping modern American strategic thinking," which is not the same as how the American military wages war.<sup>215</sup> Echevarria's particular approach focused on the latter, answering the question by looking at the actions of the American military in conflict. Through numerous articles and books spanning two decades, it is possible to chart the evolution of Echevarria's thought and summarize his main points.

In 2004, while still on active duty with the US Army, Echevarria authored a 1100-word article for the US Army War College asserting that the American military possessed a way of battle, not a way of war. He reasoned that the US military had historically viewed waging war as "an *alternative* to bargaining, rather than part of an ongoing bargaining process, as in the Clausewitzian view."<sup>216</sup> Consequently, winning battles became an end in itself, disconnected from the larger conflict and the aim of concluding it on favorable terms or, as Echevarria phrases it, "the gritty work of turning military victory into strategic success."<sup>217</sup> When he wrote this in the early 2000s, the Department of Defense was transforming the US military to realize the post-Desert Storm RMA and create a more agile, connected, and lethal force. Echevarria viewed the RMA as falling victim to the same "way of battle" described earlier. Many of the RMA's innovations were capability-centric, focused on "winning battles in the information age," and did little to link military action to strategic outcomes.<sup>218</sup>

Echevarria took on Weigley's assessment of how America fights in two books. In the first, *Reconsidering the American Way of War* (2015), Echevarria derived his observations from American strategic and operational practice during the conflict, i.e., how the US waged war instead of how it thought about war, which was the tact taken by Weigley.<sup>219</sup> Echevarria overturned the perception that America's use of its military has historically been both apolitical and "astrategic," lacking coherence in both realms. Closely examining America's wars and military actions from the Revolutionary War through Afghanistan, Echevarria established that political concerns, most often domestic ones, exerted significant influence on the trajectory of military action – sometimes to the detriment of strategy. Second, he addressed the claim that the American military was astrategic. In Weigley's assessment, the US military has one strategic modality that fluctuates between a strategy of annihilation or attrition.<sup>220</sup> Echevarria concludes that "rather than being astrategic, American military practice drew from a great number of military strategies," often pursuing different approaches within a single conflict depending on location, particular theater of war, and how

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<sup>214</sup> Antulio J. Echevarria II, *Reconsidering the American Way of War*, 26-27. Echevarria also points out that Brian Linn overturned many of Weigley's conclusions in his 2002 critique, but such is the stature of *The American Way of War* that it remains the departure point from which every scholarly and professional discussion on the topic begins.

<sup>215</sup> *Ibid.*, 11.

<sup>216</sup> Antulio J. Echevarria II, "An American Way of War or a Way of Battle?" *Articles & Editorials* 291 (2004), 1: accessed March 13, 2022, [https://press.armywarcollege.edu/articles\\_editorials/291](https://press.armywarcollege.edu/articles_editorials/291).

<sup>217</sup> *Ibid.*, 1.

<sup>218</sup> *Ibid.*

<sup>219</sup> Echevarria, *Reconsidering the American Way of War*, 176.

<sup>220</sup> *Ibid.*, 166.

the conflict evolved.<sup>221</sup> Most interesting for this dissertation is Echevarria's assessment of American operational practice, in which he directly references Thomas Kuhn's theory of paradigm shifts. In Echevarria's assessment, "American operational practice saw few genuine Kuhnian paradigm shifts to revolutionary ways of thinking. Rather, what took place was more akin to paradigm "tiering." Like layers of sediment, earlier paradigms were partially covered by newer ones but were never physically displaced.<sup>222</sup>

Echevarria again referenced Kuhn in his second book, *War's Logic: Strategic Thought and the American Way of War* (2021). In this book, Echevarria took direct aim at Weigley's work and mirrored the latter's approach in examining how America thought about warfare over time. In *War's Logic*, Echevarria looks at twelve prominent American military thinkers and theorists ranging from A.T. Mahan through John Warden and categorizes their work according to four paradigms of war that Echevarria maintains have "underpinned US strategic thinking in the twentieth century."<sup>223</sup> He labels these paradigms - traditional, modern, materialist, and political."<sup>224</sup> Concerning Kuhnian paradigms, similar to the observation in his first book, Echevarria notes that the four paradigms show little evidence of having "shifted" over time. In Echevarria's estimation, the closest thing to a Kuhnian revolution came when the traditional model, which held that war was an extension of human nature, contacted the modern model. The latter built upon the traditional model by adding Clausewitz's ideas about the role of chance and uncertainty in warfare.<sup>225</sup> Echevarria holds that "Kuhn's theory of paradigm shifts is useful, nonetheless, for illustrating what has not happened in the American way of thinking about war."<sup>226</sup> Namely, no Kuhnian paradigm shift in military thought has overturned the earlier paradigm.

Echevarria's work stands out amongst the literature and has significantly advanced the view of American strategic thought. Across his two books, Echevarria presents a complex and nuanced picture of the development of how America fights its wars and how it thinks about warfare. In developing this complexity, he links American thought and actions to broader warfare trends in Europe during the same time. This in no way diminishes the American contribution to warfare, but it does place ideas about its uniqueness or exceptionalism in the proper context. Echevarria achieves this by considering the political pressures and the "various sociocultural contexts" that were resident when the various scholars and theorists were writing.<sup>227</sup> This places these works in their time and provides insight into the operative influences and forces; it also works to avoid "the narrowly focused, 'tunnel' histories typical of Weigley's day."<sup>228</sup> Echevarria is essential reading to understand how America has waged war and, most notably for this dissertation, how it thinks about the phenomenon of war.

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<sup>221</sup> Ibid, 165, 167.

<sup>222</sup> Ibid, 171-172.

<sup>223</sup> Echevarria, *War's Logic*, 3.

<sup>224</sup> Ibid.

<sup>225</sup> Ibid, 3-4.

<sup>226</sup> Ibid, 5.

<sup>227</sup> Ibid, 1.

<sup>228</sup> Ibid.

## 6. Linking Technology and Warfare

Before departing from US strategic thought and the American way of war, technology's role in the American way of war must be addressed to treat the latter thoroughly. In Chapter 1, there was the assertion that the US military prefers technology and technological solutions regarding how it is equipped and prefers to fight. Thomas Mahnken examined this relationship in *Technology and the American Way of War* (2008). A research professor at Johns Hopkins' School of Advanced International Studies (SAIS) who also served as the Deputy Assistant Secretary of Defense for Policy Planning (2006-2009), Mahnken's research revealed the US military's preference for technological solutions. In his words, "no nation in recent history has placed greater emphasis upon the role of technology in planning and waging war than the United States."<sup>229</sup> Specifically, during the Cold War, the US military considered technological superiority a "comparative advantage" and a means to offset the quantitative advantage of the Soviet Union and the Warsaw Pact forces.<sup>230</sup> However, technology itself is not a panacea; throughout his book, Mahnken acknowledged that "technology is only as effective as the strategy it serves" and is no substitute for "flawed strategy" or policy.<sup>231</sup>

In *Technology and the American Way of War*, Mahnken broke out two apparent technological revolutions for the US military after 1945: the first occurred in the 1950s during the advent of the "nuclear revolution," and the second, still ongoing, is the Information Age that began in the 1990s.<sup>232</sup> Interestingly, Mahnken questioned whether the First Gulf War and the following decades produced a true RMA, especially considering his view that the nuclear revolution was more profound from a change standpoint.<sup>233</sup> He left this as an unsettled question based on the ongoing impact of information technology on daily life – both individually and globally – but conceded that this has changed the character of war.<sup>234</sup>

Also relevant to this dissertation is Mahnken's juxtaposing of technology against US strategic and service cultures, which accords with the position that a distinctly American strategic culture animates the US military in pursuit of a mode of warfare driven by technology and an industrial means of production. Having established the preference for technology early in his argument, Mahnken goes on to characterize US strategic culture as having "a strong and long-standing predilection for waging war for unlimited political objectives, ... [being] uncomfortable with wars for limited political aims" which would appear to coincide with the use of technology to expand the aperture of policy and battlefield options.<sup>235</sup> Looking through the narrower lens of service culture, Mahnken develops the culture and preferences for each of the US Military Services in the manner of Carl Builder's seminal work on the subject: *The Masks of War* (1989). Mahnken concludes that, despite a clear preference for technology and technologically based solutions, "the [military] services shaped technology far more than technology shaped the services," which were mostly

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<sup>229</sup> Thomas G. Mahnken, *Technology and the American Way of War* (New York: Columbia University Press, 2008), 9.

<sup>230</sup> Ibid, 5.

<sup>231</sup> Ibid, 227.

<sup>232</sup> Ibid, 11.

<sup>233</sup> Ibid, 222.

<sup>234</sup> Ibid, 223.

<sup>235</sup> Ibid, 4.

“resilient in the face of technological threats.”<sup>236</sup> This last point is essential in demonstrating that technology's influence has limits despite its prominent, if not outsized, role in the American way of war. Service culture and identity are resilient and remain potent factors in organizational decision-making and action.

Given the American preference for technology, especially when it comes to military hardware, examining the relationship between the prevailing technology of the age and the character of war at the time is in order. Martin van Creveld takes this tact in his book *Technology and War* (1989), which charts the linkage between technology and warfare. He concludes that the former (technology) “completely permeates . . . and governs” the latter (warfare and conflict).<sup>237</sup> Antoine Bousquet, a Reader in International Relations at Birkbeck College, University of London, expanded upon this line of thinking and added more nuance in *The Scientific Way of Warfare* (2009). He included not only technology but the general role of science in shaping how humanity thinks, organizes society, engages with the world, and, finally, makes war. In some ways, Bousquet's *The Scientific Way of Warfare* indirectly critiques modernity and warfare. He makes it clear that how humanity thought at points in history influenced how it waged war. At least since the Enlightenment, man's thinking was marked by what Bousquet refers to as “technoscience,” which resulted in “an ever tighter symbiotic bond between these two fields [science and technology].”<sup>238</sup> Understanding that the character of war is malleable, that it takes on the aspect of the age in which it occurs, is paramount. This is especially true for how the US and its adversaries understand warfare in the contemporary space and prepare to conduct it in the future. Having established the link between technological progress and war, the next step is to explore the events shaping the US military's understanding of modern warfare and its adversaries in the first few decades of the new millennium. To accomplish this demands an exploration of US military doctrine and the literature surrounding it.

## 7. The Role of Doctrine

The existing literature on military doctrine, US doctrine in particular, is examined as part of this literature review since answering the questions posed by this dissertation deals with understanding the role played by doctrine within military organizations. The point of departure from which to begin this specific review is Barry Posen's *The Sources of Military Doctrine* (1984), which remains one of the authoritative sources on the subject, despite its having been published over three decades ago. His book examines “the bureaucratic, “power political,” technological, and geographic influences that shape the grand strategies and military doctrines of states” to explain “how military doctrine takes shape and figures in grand strategy.”<sup>239</sup>

*The Sources of Military Doctrine*, with its focus on broad forces that affect the creation and direction of doctrine within states, situates itself squarely within the field of International Relations, much more so than within either History or War Studies. As such, Posen takes a view of doctrine that goes beyond the body of (generally) written work and

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<sup>236</sup> Ibid, 11.

<sup>237</sup> Martin van Creveld, *Technology and War: From 2000 B.C to the Present* (New York: The Free Press, 1989), 1.

<sup>238</sup> Antoine Bousquet, *The Scientific Way of Warfare: Order and Chaos on the Battlefields of Modernity* (London: Hurst, 2009), 16.

<sup>239</sup> Barry R. Posen, *The Sources of Military Doctrine: France, Britain, and Germany Between the World Wars* (Ithaca: Cornell University Press, 1984), 7.



publications that a military organization uses to codify thinking and behavior relative to military operations. Posen defines doctrine as “the subcomponent of grand strategy that deals explicitly with military means” and answers questions of “what means shall be employed?” and how?<sup>240</sup> His book is also unique in that it employs two well-known International Relations theories, Graham Allison’s organization theory and Kenneth Waltz’s balance of power theory, to analyze French, German, and British doctrine of the Interwar period.<sup>241</sup> While noteworthy, applying international relations theory to doctrine does not advance this dissertation. What is relevant is Posen’s characterization of doctrine and its purposes in his first chapter, “The Importance of Military Doctrine.”

Doctrine, using Posen’s conception, “reflects the judgments of professional military officers, and to a lesser but important extent civilian leaders, about what is and is not militarily possible and necessary.”<sup>242</sup> Not surprisingly, there is a direct correlation between a military’s doctrine and the force that it trains, organizes, and equips to execute operations.<sup>243</sup> In more recent work, Posen also characterized doctrine as a means to manage uncertainty within military organizations.<sup>244</sup> He identifies that doctrine speaks to multiple audiences simultaneously and generally aligns along four main axes or tasks: informing high-level strategic direction, communicating the military’s expectations of service and contribution to the broader society, providing operational and battlefield guidance to military leaders, and internally confirming an organization’s *raison d’être* to itself and its constituent members.<sup>245</sup>

Posen’s interpretation of doctrine compliments that of Australian defense researcher Aaron Jackson, introduced in Chapter 1. In his monograph for the US Army’s Combined Arms Center, *The Roots of Doctrine* (2013), Jackson referred to doctrine as “the most visible expression of a military’s belief system.”<sup>246</sup> In a similar fashion, sociologist and retired US Army colonel, Chris Paparone refers to doctrine as a form of institutional “sensemaking” to achieve “predictable reliability in war.”<sup>247</sup> Although Posen and Jackson approach the topic from different directions, both agree on doctrine as a repository of accepted thinking within an organization about what is considered accurate and valid concerning war and war-making. Jackson takes a more ontological and epistemological approach specific to America. Posen explores the role of military doctrine in a state within an anarchic international system and applies it to the cases of France, Britain, and Germany.

Posen looks at doctrine as being either offensive, defense, or deterrence oriented. This also speaks to Posen’s more expansive view of doctrine as it nests within military and grand strategy. What is more salient and valuable is the linkage Posen makes to what he refers to as “strategic” or high-level joint doctrine as a tool for civil-military integration, i.e., he identifies the utility (and necessity) of communicating military actions and capability to policymakers and civilian leadership such that the latter can make an informed assessment on the use of the military instrument to achieve political objectives.<sup>248</sup> Similarly, Posen

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<sup>240</sup> Ibid, 13.

<sup>241</sup> Ibid, 7.

<sup>242</sup> Ibid, 14.

<sup>243</sup> Ibid.

<sup>244</sup> Barry R. Posen, “Foreword: Military Doctrine and the Management of Uncertainty,” *The Journal of Strategic Studies* 39, no. 2 (2016): 160, accessed August 30, 2023, <http://dx.doi.org/10.1080/01402390.2015.1115042>.

<sup>245</sup> Ibid.

<sup>246</sup> Jackson, 6.

<sup>247</sup> Paparone, “How We Fight,” 518.

<sup>248</sup> Posen, 25.

addresses the relationship of doctrine to innovation. He sees military innovation or its absence as having a direct bearing on national security and deciding military engagements in terms of victory or defeat. Posen also connects innovation and civil-military integration; because geography, composition of military forces, and technology are constantly changing factors in warfare, innovation is necessary to ensure that a state's military can achieve the political ends for which they are employed.<sup>249</sup> What Posen offers in *The Sources of Military Doctrine* is a solid explanation of how military doctrine affects behavior within a state. Doctrine impacts how political leadership and the military think about and prepare for war. This speaks to the effect doctrine exerts in setting and managing expectations for what the military can achieve. Posen characterized doctrine's role as "managing uncertainty," with combat operations against the enemy being the ultimate expression.<sup>250</sup> This phenomenon also occurs within the international system as multiple states interact simultaneously. Military doctrine influences allies and adversaries as much as it contributes or detracts from perceptions of military capability and competence.

As mentioned, Jackson's *The Roots of Doctrine* (2013) is especially useful because of its focus on American military doctrine and the application of ontological and epistemological lenses to evaluate the topic. Probing the nature of knowledge, Jackson provides a taxonomy of US doctrine by type, breaking it down into four categories or "schools of doctrinal ontology" he refers to them: the technical manual, the tactical manual, the operational manual, and the military strategic manual.<sup>251</sup> Focusing as it does on joint doctrine, this dissertation concentrates upon the more conceptual and abstract military strategic and, to a lesser extent, operational manuals to examine the US conception of warfare over the more practitioner-oriented technical and tactical manuals.<sup>252</sup> Specifically regarding the military strategic school, Jackson identifies it as "constitut[ing] an open and accessible declaration of institutional strategy" and a "mechanism for disseminating theoretically derived concepts that prompt intellectual engagement."<sup>253</sup> Accepting Jackson's last point on high-level doctrine specifically validates examining joint doctrine as a reliable indicator of potential change in how the US military thinks.

From the epistemological perspective, Jackson's *The Roots of Doctrine* references the concept of "thought collectives" described by Austrian scientist Ludwik Fleck to explain how US doctrine influences the military doctrine of close allies like the Canada and the United Kingdom and back to the US.<sup>254</sup> Jackson also uses Thomas Kuhn's theory of paradigms and paradigm shifts, which states that doctrine "constitutes an institutional discourse... reflective of the dominant modes of military thinking during various epochs."<sup>255</sup> Continuing in the Kuhnian vein, Jackson maintains that each "school" constitutes its own paradigm.<sup>256</sup> Periodically, each paradigm experiences a "crisis" as new, emergent thinking challenges it, sometimes leading to a "revolution" or paradigm shift that produces a new way

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<sup>249</sup> Ibid, 29-30.

<sup>250</sup> Posen, "Foreword: Military Doctrine and the Management of Uncertainty," 172-173.

<sup>251</sup> Jackson, 11, 88.

<sup>252</sup> Ibid, 31. Aaron Jackson identifies that most joint doctrine tends to fall within the two schools of operational or military strategic doctrine.

<sup>253</sup> Ibid. 31-32.

<sup>254</sup> Ibid, 26-27.

<sup>255</sup> Ibid, 87.

<sup>256</sup> Ibid, 88.

of thinking.<sup>257</sup> At this juncture, according to Thomas Kuhn, the new paradigm eradicates and completely replaces the old.

In this case, Jackson borrows the idea from Bousquet's *The Scientific Way of Warfare* that old paradigms of conflict or warfare can continue to exist alongside new regimes without being eradicated.<sup>258</sup> This calls to mind images from Afghanistan in 2001 of US special forces on horseback, much like mounted infantry from the 18<sup>th</sup> Century. Bousquet cites the perpetuation of "intensive drilling of recruits which was so central to Frederick the Great's clockwork army," which persists as an enduring relic of an old paradigm of war centered on the massed musket fire of closely bunched groups of soldiers.<sup>259</sup> Similarly, Jackson writes that each of the four ontological doctrinal schools continues to exist alongside the others.<sup>260</sup> Each of the four schools continues to endure even though some more recent schools emerged due to "crisis" and then "revolution" within earlier paradigms.

Jackson, writing in 2013, postulates that, even now, a paradigm shift is underway within doctrinal schools. This particular shift is away from a positivist approach, which is rational and objective, to one that is anti-positivist or more relative and subjective.<sup>261</sup> The emergence of this more recent paradigm corresponds to challenges that conventional militaries experienced as they struggled to effectively combat non-state actors (e.g., insurgent and violent extremist organizations.)<sup>262</sup> In response, doctrine writers "looked for new solutions to military problems;" there was also a rise in anti-positivist approaches, which employed aspects of chaos and complexity theory as well as other "metaphysical factors such as culture, chance, and human will."<sup>263</sup> The anti-positivist approach was influenced by the conclusion that conventional militaries and, by extension, conventional military approaches were insufficient to non-standard threats and Sir Rupert Smith's "war amongst the people" articulated in his book, *The Utility of Force* (2007).<sup>264</sup> While Jackson concedes that this paradigm shift is still ongoing and might not be permanent, it is an essential component in validating this dissertation's method of inquiry. Jackson proves that changes in doctrine constitute evidence of changes in military thinking. Second, Jackson's identification of a paradigm shift is contemporary with the change in the character of war this study examines. Finally, the anti-positivist approach Jackson identifies, which emphasizes relativism and subjectivity, corresponds with the same qualities present in the definition of postmodern war this dissertation also advances.

## 8. Relevance to the Field of War Studies

This research project is relevant to the field of War Studies for several reasons. Foremost among these is that the US military is experiencing an incomplete paradigm shift. This dissertation examines whether US military doctrine is adapting to the current

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<sup>257</sup> Ibid.

<sup>258</sup> Bousquet, *The Scientific Way of Warfare*, 238.

<sup>259</sup> Ibid.

<sup>260</sup> Jackson, 88.

<sup>261</sup> Ibid, 65.

<sup>262</sup> Ibid, 70.

<sup>263</sup> Ibid, 71, 89.

<sup>264</sup> Ibid, 57, 71 and Rupert Smith, *The Utility of Force: The Art of War in the Modern World* (New York: Knopf, 2007), xiii.

conditions of postmodern war as it documents the changes themselves. Although not explicitly joint doctrine, the return of interstate competition to high-level US strategic policy documents after a decades-long focus on countering violent extremism is a recent example of such a shift. In 2018, Secretary of Defense James Mattis released the National Defense Strategy (NDS), which the Chairman of the Joint Chiefs followed several months later with the National Military Strategy (NMS). This classified companion document articulates how the US military will execute the guidance in the NDS. At face value, these two documents discuss how the Department of Defense is shifting its strategic focus away from the counterterrorism fight and back to what would be considered more traditional great power competition, with the focal point being the People's Republic of China and Russia.<sup>265</sup> The more profound significance is the sea change that these documents communicate to agencies within the US government and signal to US allies and adversaries alike that America's strategic focus has changed. The NDS and NMS directly mention the changing character of war but do not go into detail about how that character is changing other than to say that technological advances are driving it.<sup>266</sup> From the perspective of this dissertation, the value of the NDS and NMS over the short-term is the recognition that a change in the character of war is afoot and less that the change is captured accurately. It is one thing to identify a strategic shift and amend policy; it is another matter to update how the US military fights in response to a revised threat. Such shifts often take years to bear fruit, although war (both hot and cold) tends to accelerate the process. By examining joint doctrine, it may be possible to understand if the US military is revising its warfighting doctrine to respond to these changes.

Other studies and literature have examined US doctrine at the service and joint level. Much of this has centered on doctrine's role as a repository of institutional knowledge for a particular issue or style of warfare. For example, the Army and Marine Corps *Field Manual 3-24 Counterinsurgency* (2006) was created out of necessity during the War on Terror. The short publication timeline illustrates the previous point about war as a driver of change. The heated institutional surrounding the doctrine is indicative of the US military's rocky relationship with counterinsurgency doctrine and operations.<sup>267</sup> A few authors examining the evolution of American strategic thought over time have made the connection between strategy and doctrine. Antulio Echevarria falls squarely into this category. Others, such as political scientist Keith Shimko, in *The Iraq Wars and America's Military Revolution* (2010), have examined the US military, its organization, operations, and, to a lesser extent, doctrine through the lens of the most recent Revolution in Military Affairs to determine the degree to which the RMA has or has not been realized.

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<sup>265</sup> Joint Chiefs of Staff, *Description of the National Military Strategy 2018* (Washington, D.C.: Government Printing Office, 2018), accessed August 22, 2018, <https://www.jcs.mil/Media/News/News-Display/Article/1903669/description-of-the-2018-national-military-strategy-released/>, 2, 6.

<sup>266</sup> US Department of Defense, *Summary of the 2018 National Defense Strategy of the United States of America* (Washington, D.C.: Government Printing Office, 2018), accessed November 24, 2021, <https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>, 3. The NDS posits, "New commercial technology will change society and, ultimately, the character of war." It must be noted that this project did not have access to the classified versions of the NMS or the Chairman's classified guidance on the implementation of the NDS.

<sup>267</sup> Fred Kaplan, *The Insurgents: David Petraeus and the Plot to Change the American Way of War* (New York: Simon & Shuster, 2013), 215-216. The COIN debate also figures prominently in Colonel (Ret.) Gian Gentile's *Wrong Turn: America's Deadly Embrace of Counterinsurgency* (New York: New Press, 2013), and figures in Frank Hoffman's *Mars Adapting* (2021) as well as Aaron Jackson's *The Roots of Doctrine* (2013).

To date, mainstream research has not explicitly looked at the evolution of US joint doctrine to better understand the phenomenon of warfare and its changing character. This project does exactly that, in real or near real-time, as the paradigm shift is still underway. The result allows an assessment of whether the US military is learning at the institutional level to wage postmodern war in the Information Age. Frequently, such studies occur post-conflict after significant time has passed, allowing better evaluation of efficacy and performance. This dissertation evaluated thirty years beginning in the early 1990s. Postmodern war has been extant throughout this entire period of observation and continues to evolve. There have been many instances of competition short of war between the United States, China, and Russia during this period, all of which employ the real, virtual, hybrid, and proxy techniques of postmodern warfare. None of these instances of competition, however sharp, have escalated into a direct, major conflict involving the three powers.

## 9. Relevance to Defense Policy

Providing for the nation's defense is the U.S. military's *raison d'être*. In this realm of national security, success is determined by the military's ability to adequately anticipate the military challenges that will confront the nation and, forestalling that, by its ability to adapt quickly once those challenges arise. By extension, this same reasoning applies to a defense policy that guides and explains the actions of the American military. Unfortunately, the dilemmas posed by national security have no permanent solution, especially in the case of the U.S., with its myriad interests and international commitments. As Colin Gray states, "the pursuit of national security must be assumed to be a journey without end in the great stream of time."<sup>268</sup> The military must be in a near-constant state of anticipating and planning against potential threats. In Barry Posen's words, they are "trying to manage uncertainty."<sup>269</sup> Because of the difficulty in predicting the future and the effort in planning for every contingency, military organizations often settle into patterns of preferred actions and responses, especially when these measures meet with initial success. The U.S. military is no different: high technology and industrial warfare are the US military's preferred modes of warfare. From this project's standpoint, contemporary war's character has changed and continues to evolve to such a degree that it merits a fundamental reappraisal. To successfully compete with, or at least to deter, potential adversaries, the American military must identify and keep pace with these changes or hazard strategic failure.

This research effort is relevant not because it identifies a new threat to the United States or advances the thought that the character of contemporary war has changed. However, it is undoubtedly reinforcing the latter claim. Other scholars and defense professionals have already done much of this work; this research effort draws from those sources. The relevance of this project lies in what it reveals about the U.S. military's willingness to accept these changes and learn in the age of rapidly evolving postmodern conflict. This effort has limitations, mainly because it focuses exclusively on joint doctrine and does not examine any doctrine from the individual U.S. Military Services. The services have long been engines of innovation in their own right, e.g., the U.S. Marine Corps and amphibious warfare doctrine in the 1930s. Harvey Sapolsky, U. S. defense politics expert and

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<sup>268</sup> Gray, *Defense Planning for National Security*, 29.

<sup>269</sup> Posen, "Foreword: Military Doctrine and the Management of Uncertainty," 160.

professor emeritus at MIT, supports the notion that interservice competition remains a net positive for US national security.<sup>270</sup> Higher-level doctrine is an appropriate focus for this study because it is at the joint level where the use of other elements of national power to achieve national objectives is most likely to occur. It is also the level at which one expects doctrine to reflect such thinking.

Finally, this research provides a clear idea of how the American military understands its role in contemporary or postmodern warfare, i.e., war in the Information Age, how that understanding has evolved over the past three decades, and how discussion of those changes can be found in the US PME at the highest levels. As one potential avenue, this project highlights what US adversaries have done regarding their approaches to contemporary warfare. Russia, China, and indeed the Islamic State all appear to have accepted that “the role of nonmilitary means of achieving political and strategic goals has grown” and has become, in many cases, “just as terribly destructive as a bloody war, but in which no blood is actually shed.”<sup>271</sup> This statement does not imply that force has lost its utility; it is merely that the Information Age has produced other options. If anything, Russia’s invasion of Ukraine in February 2022 demonstrates that there is still a willingness to use conventional military force, however imperfectly it might be applied.

Although it is not the primary aim of this research to recommend that the U.S. military follow our adversaries down a specific path, this study contributes to the overall discussion that the U.S. must be deliberate in how it approaches postmodern warfare. This means how the US military uses doctrine to explain its approach to joint warfare to future generations of military professionals and policymakers. By examining the American military’s doctrinal response to changes in the character of war, this dissertation affords insight into how the US military, as an institution, responds to change. By extension, it also explains how the US military views itself. This last point about the military’s “sense of self” is of significant interest in government policy circles because it speaks to the military’s role as a tool of government and its role in society. In the American case, this addresses the military’s relationship with civil authority, but more specifically, its relationship with other governmental departments within the Interagency. Asking rhetorically, is the military always the *primus inter pares* or is another governmental department better situated to lead actions that directly impact U.S. national security where conflict transcends the boundaries of what is traditionally considered “war”?

Answering this question calls to mind the argument put forth by Rosa Brooks in *How Everything Became War and the Military Became Everything* (2016). A lawyer by training and current law professor at Georgetown University, Brooks argues that the U.S. military has transgressed its historical boundaries within the state, laying claim and asserting expertise in areas such as diplomacy and information that more closely align with other instruments of national power. However, in this case, the U.S. military is not using these other instruments to the same effect as our adversaries.<sup>272</sup> In the United States, the military has become the

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<sup>270</sup> Sapolsky, *US Defense Policy*, 42.

<sup>271</sup> Gerasimov, “The Value of Science in Prediction,” 24; and Qiao and Wang, *Unrestricted Warfare*, 51.

<sup>272</sup> This assertion is best made by comparing recent testimony to the U.S. Congress’s Senate Armed Services Committee on the subjects of “All Arms Warfare in the 21st Century” and “Russian Influence and Unconventional Warfare Operations in the “Grey Zone”: Lessons from Ukraine” that took place on March 15 and 29, 2017, respectively. For more, see: <https://www.armed-services.senate.gov/hearings/17-03-15-all-arms-warfare-in-the-21st-century> and <https://www.armed->

preferred policy tool, eclipsing the other elements of national power. The military becomes the “go-to” solution in situations where other tools would be more appropriate and yield better outcomes.

## Conclusion

This review presents a current state of the literature from research subjects within the larger field of War Studies that are most relevant to answering the dissertation’s research question, which asks how the U.S. military conceptualizes war amid ongoing changes in the character of contemporary conflict through the lens of joint doctrine and PME. To answer the question, this dissertation draws from several different subject areas within the larger field, including the “new wars” literature, strategy and, specifically, American strategic thought and doctrine. The review establishes the state of the literature within War Studies. It makes it possible to proceed from a departure point based on the existing research of other scholars in addition to identifying potential research gaps.

The “new wars” literature in which the Toffler’s *War and Anti-War* (1993) is included, although it precedes Mary Kaldor’s *New Wars & Old Wars* (1999) by six years, establishes the information-centric character of contemporary war. Equally important is the erosion of the nation-states’ monopoly on making war. This is a central point of Kaldor’s work and Herfried Münkler’s *The New Wars* (2003), which directly addresses what he refers to as the destatization of conflict. Münkler compares contemporary conflict to the conditions before and during the Thirty Years War when mercenaries (*die Landesknechte*) and militias were commonplace. Sean McFate reinforces and further develops both themes, the focus on information and the increased presence of private military contractors on the battlefield, in his recent *The New Rules of War* (2019). Last, the “new” wars literature, most notably the work of Charles Hables Gray, Hans-Georg Ehrhart, and Keith Dickson, clearly identifies the linkage between conflict and postmodernity, mainly because of the importance of the information component. This connection validates the choice of postmodern conflict as the preferred term of art for contemporary war.

From the literature on strategic thought and the American way of war, this review closely examines the body of work compiled by Antulio Echevarria, among others. His recent scholarship validates the Jominian and Clausewitzian tendencies in American strategic thought and how they continue to affect its direction. Echevarria's attention to Russell Weigley’s *The American Way of War* (1973) is instrumental in placing that work in time and advancing thinking on the eponymous topic. By proving that the United States does not wage war in the absence of strategic and domestic political considerations, Echevarria enables a more complex and nuanced understanding of how America employs force. Echevarria’s conclusions about how the United States waged war in the past, interpreted optimistically, also indicate that the US military can learn. However, that thought is tempered by Echevarria’s observations that a true Kuhnian paradigm shift in American strategic thinking has always been lacking. Yet, the potential for such a shift offers hope for advancing how the US military thinks about, teaches about, and conducts war.

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[services.senate.gov/hearings/17-03-29-russian-influence-and-unconventional-warfare-operations-in-the-grey-zone-lessons-from-ukraine](https://services.senate.gov/hearings/17-03-29-russian-influence-and-unconventional-warfare-operations-in-the-grey-zone-lessons-from-ukraine).

The last element in this literature review examines what has been written on military doctrine. Here, the most significant insight from the literature is the multi-faceted role doctrine plays within the military and even unto the wider policy circles of government, not the least of which is its function regarding the assimilation and transfer of knowledge within the military. Australian researcher Aaron Jackson addresses this in *The Roots of Military Doctrine* (2013). He furnishes a taxonomy that delineates four “schools” of doctrine that follow the levels of war. Barry Posen takes a different tact in *The Sources of Military Doctrine* (1984). First, he takes a broader view of doctrine, and second, he focuses on how doctrine influences the behavior of the military and the military’s relationship with policy and policymakers. The impact of doctrine on policy and policymakers is germane to this dissertation; it positions doctrine as a tool to inform policy decisions on the use of and the response to force in the future.



## Chapter 3 - Alternative Views

The previous chapter reviewed the literature surrounding the character of contemporary war, the American conception of war, and the relationship of doctrine to both. This chapter builds upon that work to explore alternative perspectives on warfare – most notably those of America’s principal competitors: Russia and the People’s Republic of China. These two nation-states possess large-standing militaries, each with a long tradition of thinking about war and how to wage it. The Russian military and the Peoples Liberation Army garner the majority focus of this chapter. This, in part, because past US government administrations considered Russia and China to be the most prominent threats to US national security based on the latter’s revanchist and aggressive actions and the US desire to preserve the current international order. As a result, the two countries are significant drivers of US military thinking and defense spending.

In addition to Russia and China, this chapter also considers the case of Israel and its approach to postmodern war as an alternative. The Israeli Defense Force’s (IDF) approach to warfare offers a non-American perspective of a smaller military with much experience dealing with complex security challenges involving state and non-state adversaries. The value of including alternative viewpoints, like that of the IDF, is to show that there is no single perspective or solution to the challenge of contemporary conflict or postmodern warfare. International actors, whether states or non-state actors, address their security and military challenges in unique ways driven by geographic and economic constraints and informed by their distinctive cultural and historical experiences. Often, these different perspectives on war and the threat one country poses to the other are mutually constitutive; each side may well consider the other to be the originator of an action or idea to which the opponent must respond.

This classic security dilemma from international relations theory drives defense policy and military rationale worldwide.<sup>273</sup> It takes on the schema of measure – countermeasure – counter-countermeasure. Regardless of which actor originated an action, the other entities or parties will take steps to counter that act and gain advantage themselves. Whether it is two opposing states or two opposing blocs, the constituents influence each other in a way that would not occur without competition or a perceived threat. This phenomenon is not unlike Clausewitz’s “clash of independent wills,” which is part of his definition of war. Russia and the US maneuver against one another for advantage in the international arena but mostly do so below the level of armed conflict in what is described as great power competition. The telltale marks of the security dilemma are evident regarding the type of competition taking place below the level of armed conflict and known as hybrid warfare. In the context of the US and Russia, it is difficult to say with surety which country acted first and should be considered to have pioneered hybrid warfare. Both countries attribute its emergence to the other.<sup>274</sup> The literature demonstrates that there are challenges in attributing hybrid warfare to one side or the other. The fact that the US and Russia

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<sup>273</sup> John H. Herz, "Idealist Internationalism and the Security Dilemma," *World Politics* 2, no. 2 (January 1950): 157, accessed November 13, 2014, <https://doi.org/10.2307/2009187>.

<sup>274</sup> Michael Kofman and Matthew Rojansky, "A Closer Look at Russia’s ‘Hybrid War,’” *Kennan Cable* no. 7, (April 2015) Kennan Institute, accessed March 13, 2022, <https://www.wilsoncenter.org/publication/kennan-cable-no7-closer-look-russias-hybrid-war>, 2.

influence one another discursively complicates understanding how Russia's approach to contemporary warfare evolved, especially if one looks to identify a definitive intellectual origin.

A similar relationship exists between the United States and China, where each influences the other's thinking about war and strives to gain an advantage. This interplay differs from the action-counteraction dynamic because the military interaction between the two countries in the Western Pacific occurs primarily in the air and at sea. Unlike the land, these two domains are not ready arenas for hybrid warfare. Regarding the United States and China, the focus is on each side's approach to warfare as it translates into practical strategy and whether the approach will prove successful. China's requirement to neutralize American aircraft carriers as a central pillar of US power projection in the Pacific is a prime example of measure-countermeasure. The PLA's proposed solution is its Anti-access Area Denial (A2AD) concept, built around a robust long-range missile and hypersonic weapon capability. Going back several decades to the 1990s, the American military's performance during the first Gulf War provided the impetus behind Qiao and Wang's *Unrestricted Warfare* (1999). Here, the US prosecuted a military campaign in the Middle East that was not oriented against China. Yet, it drove the latter's response in an unambiguous example of the security dilemma from the realist school of IR theory.<sup>275</sup> The research in this section examines the interaction between the two sides and the conclusion of that interchange versus the security dilemma itself.

This chapter demonstrates that there are different approaches to warfare. No single approach is fit for all circumstances. That said, much of the rest of the world looks to emulate the United States as a model for approaching warfare, regardless of whether they can replicate American capability or capacity. This is not to say that the American approach is the only viable one; it is certainly not. How a nation-state or organization approaches the problem of warfare depends on the circumstances of geography and historical experience, to name the most obvious. These factors and how they combine can produce a variety of alternatives. The Ukrainian military provides an example in real-time. Although the Ukrainian military receives a great deal of western military aid to support its cause, it employs that weaponry in a manner distinctly suited to its circumstances. Since February 2022, it has been engaged in continuous, large-scale combat with Russia, while working at the institutional level to blend its background as a conscript-based, former Warsaw Pact military with a western approach that favors individual initiative and maneuver.<sup>276</sup> That the Ukrainian military is doing this without control of the airspace, considered a prerequisite by the US military, makes this feat all the more impressive. It also adds emphasis to the initial point that there is no single "correct" approach. What works for the US military is not easily transferable to its allies and might, in fact, prove appropriate. The presentation of alternative approaches in this chapter is intended to demonstrate that "novel" or alternative solutions can be effective. For instance, several cases explored herein understand conflict or "war" as more expansive and complex than the American approach which tends to be binary. This is

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<sup>275</sup> Herz, "Idealist Internationalism and the Security Dilemma," 157.

<sup>276</sup> Mick Ryan, "How Ukraine Can Win a Long War," *Foreign Affairs*, last modified August 30, 2023, accessed September 11, 2024, <https://www.foreignaffairs.com/ukraine/win-long-war-strategy-counteroffensive>.

especially true regarding doctrine, where the binary option of war or peace is the most common offering.<sup>277</sup>

## 1. The Russian Approach to Contemporary War

Understanding how one's adversary thinks is always a tricky proposition, especially when that adversary comes from a different culture, speaks a different language, and has different organizational preferences.<sup>278</sup> There is also a difference between how a government or organization acts and what it purports to think and vice versa. Action can be separate and distinct from intent. While actions may indicate thinking and intent, the relationship between the two is necessarily imperfect and can reflect a certain dissonance. It can be advantageous to conceal, obfuscate, or otherwise deceive an adversary about one's intent or ultimate objective. In its dealings with other countries, Russia has a long tradition of political and military deception or *maskirovka* that it has employed during peace and war.<sup>279</sup> There is also subversion as a tool to gain advantage, and the Russians are no stranger to its use.<sup>280</sup> As the introduction mentions, countries or organizations in competition influence one another's thinking and actions. This is the departure point for examining how Russia thinks about warfare. Much of the discussion in the West about how Russia approaches contemporary warfare has centered on building out the "Gerasimov doctrine," the brainchild of Chief of the Russian General Staff Valery Gerasimov. From 2013 through at least the next five years, the "Gerasimov doctrine" encapsulated the Russian approach to what is known throughout the West as hybrid warfare. First identified in the literature review, the West and American military made more out of the "Gerasimov doctrine" than was warranted in discussing the Russian concept of hybrid warfare or what the Russian military referred to as New Generation Warfare or New Type Warfare.

In the wake of Russia's 2014 seizure of Crimea, and certainly since its February 2022 invasion of Ukraine, there has been a veritable explosion of new scholarship on the subject. The point is now accepted that the "Gerasimov Doctrine" is not and was never formal Russian doctrine. This comes from the work done by the individual who first coined the phrase: Mark Galeotti. Galeotti, a Russia specialist and senior fellow at the Royal United Services Institute, takes credit (or, more accurately, has assumed the blame) for labelling it as doctrine. By his admission, he regrets the initial attribution to Gerasimov and has taken pains to revise his statement.<sup>281</sup> In modifying his stance, Galeotti states that Gerasimov's article in

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<sup>277</sup> The US military is expanding its binary definition of war, albeit slowly, to include competition as distinct from armed conflict. In March 2018, the Joint Chiefs released *The Joint Concept for Integrated Campaigning*. "The heart of the concept is the fundamental insight that the Joint Force plays an essential role in securing and achieving national aims in conditions sometimes regarded as outside of the military sphere: competition below the threshold of armed conflict ..."

<sup>278</sup> Oscar Jonsson, *The Russian Understanding of War: Blurring the Line Between War and Peace* (Washington, D.C.: Georgetown University Press, 2019), 8.

<sup>279</sup> Timothy Thomas, "Russia's Reflexive Control Theory and the Military," *The Journal of Slavic Military Studies* 17 (2004): 239, accessed February 14, 2017, Taylor & Francis, DOI:10.1080/13518040490450529.

<sup>280</sup> Mark Galeotti, *The Weaponisation of Everything: A Field Guide to the New Way of War* (New Haven: Yale University Press, 2022), 166.

<sup>281</sup> Mark Galeotti, "I'm Sorry for Creating the 'Gerasimov Doctrine,'" *Foreign Policy*, March 5, 2018, accessed May 18, 2022, <https://foreignpolicy.com/2018/03/05/im-sorry-for-creating-the-gerasimov-doctrine/>. Also,

*the Military Industrial Courier*, “The Value of Science is in the Foresight,” and the speech from which it was derived, is best understood as Gerasimov’s commentary about the evolving character of contemporary war.<sup>282</sup> More specifically, Gerasimov’s statements reflect the Russian military’s perception of how the West, which tends to be shorthand for the United States and NATO, is currently waging war against Russia and other regimes the US opposes. It also reflects how Russia plans to compete against the West without crossing the threshold of armed conflict unless doing so is advantageous for Russia.<sup>283</sup> Like any new strategic concept in the West, Gerasimov’s article and the source speech are part of a robust professional discussion within the Russian military regarding the future of warfare and what that means for Russia.<sup>284</sup>

Acknowledging that Gerasimov’s article falls within a broader institutional debate within the Russian military, it is significant because it represents general trends in Russian thinking on the future direction of warfare. Gerasimov explains that Russia sees the West, particularly the United States, as having become adept at non-contact or indirect warfare that produces instability and eventual overthrow of the sitting government in otherwise stable regimes.<sup>285</sup> Initially conceived by Russian military theorist Vladimir Slipchenko at the turn of the millennium, non-contact warfare refers to what the US military calls precision warfare and is characterized by the use of precision-guided munitions (PGMs). During a 2004 lecture, Slipchenko clarified that this new war generation entails even greater use of PGMs. Information has become “a destructive weapon just like a bayonet, bullet, or projectile” and is, therefore, part of non-contact warfare.<sup>286</sup> Gerasimov places US actions within the context of war from the Russian perspective by invoking non-contact warfare. Regarding the “color revolutions,” Gerasimov refers to the popular uprisings in states within the former Soviet sphere, like the Rose Revolution in Georgia in 2003 and the Orange Revolution in Ukraine in 2004. These uprisings occurred in formerly communist or authoritarian countries where popular movements, most pro-democracy, overthrew the status quo, authoritarian or legacy communist regimes. Both Americans and Europeans vocally supported the spread of democracy in these countries where American and European-based non-governmental organizations (NGOs) also happened to be operating.<sup>287</sup> From the Russian perspective, these two elements indicated an American hand orchestrating events. The fact that Russia’s

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Mark Galeotti, “The Gerasimov Doctrine,” *Berlin Policy Journal* April 28, 2020, accessed May 18, 2022, <https://berlinpolicyjournal.com/the-gerasimov-doctrine/>.

<sup>282</sup> Mark Galeotti, “The Mythical ‘Gerasimov Doctrine’ and the Language of Threat,” *Critical Studies in Security* 2018, accessed May 18, 2022, <https://doi.org/10.1080/21624887.2018.1441623>, 1,4.

<sup>283</sup> Mark Galeotti, *Russian Political Warfare: Moving Beyond the Hybrid* (E-Book) (New York: Routledge, 2019), 26-27.

<sup>284</sup> Timothy Thomas, “The Evolving Nature of Russia’s Way of War,” *Military Review* (July/August 2017): 34-35, accessed May 5, 2018, <https://www.armyupress.army.mil/Journals/Military-Review/English-Edition-Archives/July-August-2017/Thomas-Russias-Way-of-War/>. See also Katri Pynnöniemi and Minna Jokela, “Perceptions of Hybrid War in Russia: Means, Targets and Objectives Identified in the Russian Debate,” *Cambridge Review of International Affairs* 33, no. 6: 828-845, accessed May 18, 2022, <https://doi.org/10.1080/09557571.2020.1787949>.

<sup>285</sup> Gerasimov, “The Value of Science is in the Foresight,” 24. Also Timothy Thomas, *Thinking Like a Russian Officer: Basic Factors and Contemporary Thinking on the Nature of War*, (Fort Leavenworth: Foreign Military Studies Office, 2016), 18.

<sup>286</sup> Makhmut A. Gareev and Vladimir Slipchenko, *Future War* (Leavenworth: Foreign Military Studies Office, 2007), 33.

<sup>287</sup> Charles Bartles, “Russia’s Indirect and Asymmetric Methods as a Response to the New Western Way of War,” *Special Operations Journal* 2, no. 1 (2016): 4, accessed March 18, 2019, DOI: 10.1080/23296151.2016.1134964.

political elite easily envision a similar phenomenon happening in Russia, where Western NGOs have been operating since the 1990s, only exacerbates this perception.<sup>288</sup>

Russia sees the “color revolutions” as a new type of warfare that the United States and, to a lesser extent, the West use against it. It is “non-contact war” made possible by the global penetration of information and communications technology. In their speeches and professional journals, Russian political and military leaders refer to color revolutions variously as “color revolution technology,” “color revolution war,” or “technology of ‘controlled chaos,’” among other terms.<sup>289</sup> Seen from this perspective, the “hybrid” or irregular campaign executed in Crimea and Ukraine in 2014 is Russia’s version of what the West and the United States have done in Eastern Europe and parts of the Arab world. This mindset prevails even though the “color revolutions” were not deliberate US foreign policy tools intended to bring about regime change. However, it is understandable if this distinction rings hollow. The US did support the “color revolutions” because they aligned with broader foreign policy goals of supporting democracy and self-determination around the world.

Russia created or, more accurately, reverse-engineered what the West has come to know as Russian “hybrid warfare.” This statement is based on Russia’s perception of Western methods. Michael Kofman, program director in Russia studies at the Center for Naval Analyses, commented on Russia’s effort to imitate this erroneous perception of Western behavior saying, “it’s very hard to imitate that which never was.”<sup>290</sup> Therefore, it is no surprise that there is no specific use of the term hybrid warfare (*gibridnaya voyna*) that refers to Russian irregular warfare, AND that it is not conceptually linked to the US and other NATO member militaries.<sup>291</sup> Russian thinking on “hybrid warfare” continues to be tied to what it thinks the “West” is doing, but Russia and the West – specifically the US and NATO – do not understand the concept in the same way.

In discussing “hybrid warfare,” NATO and the US military hew closely to Frank Hoffman’s initial description of the hybrid war concept, which involves a mix of regular and irregular warfare forms but is still squarely within the military arena.<sup>292</sup> The Russian approach extends beyond the military sphere and into the political, economic, and information. “Russian *gibridnaya voyna* revolves around broader ideas and ‘involves all spheres of public life: politics, economy, social development, culture.’”<sup>293</sup> The Russian view is more expansive than Hoffman’s conception of regular versus irregular or conventional versus unconventional in that the Russian understanding combines military and non-military means to achieve the “hybrid” effect. So conceived, *gibridnaya voyna* has more in common with traditional concepts of political warfare, such as what George Kennan, the famed Russian hand, articulated in 1948. Early in the Cold War, Kennan proposed that the US engage in

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<sup>288</sup> Kent DeBenedictus, *Russian “Hybrid Warfare” and the Annexation of Crimea: The Modern Application of Soviet Political Warfare* (London: I.B. Tauris, 2022), 32. Also Jonsson, *The Russian Understanding of War*, 126, 149.

<sup>289</sup> Jonsson, *The Russian Understanding of War*, 141.

<sup>290</sup> Michael Kofman and Kent DeBenedictus, “From Little Green Men to Tanks Outside of Kyiv,” *Irregular Warfare Podcast* 55, (hosted by Laura Jones and Kyle Atwell), June 17, 2022, accessed June 17, 2022, <https://mwi.usma.edu/from-little-green-men-to-tanks-outside-kyiv-irregular-warfare-in-ukraine-since-2014/>, (begin at 10:20).

<sup>291</sup> Ofer Fridman, “Hybrid Warfare or *Gibridnaya Voyna*?” *RUSI Journal* 162, no. 1 (April 2017): 42, accessed June 18, 2021, <https://doi.org/10.1080/03071847.2016.1253370>.

<sup>292</sup> Hoffman, “The Rise of the Hybrid Wars,” 14.

<sup>293</sup> Fridman, “Hybrid Warfare or *Gibridnaya Voyna*?” 43. Also, Dmitry Adamsky, “Cross-Domain Coercion: The Current Art of Russian Strategy,” 23.

political warfare, which he defined as “the employment of all the means at a nation’s command, short of war, to achieve its objectives.”<sup>294</sup> Kennan saw political warfare as a necessary and viable method of competing with the expansionist Soviet Union without necessarily risking atomic warfare.<sup>295</sup>

In his 2021 article, “Whose Hybrid Warfare? How ‘the Hybrid Warfare’ Concept Shapes Russian Discourse, Military, and Political Practice,” Maxim Suchkov of the Moscow State Institute of International Relations takes a more nuanced view. He acknowledges that no concept evolves in isolation. Suchkov describes the mutually constitutive character of the relationship between Russia and the West as it relates to hybrid warfare.<sup>296</sup> Individuals, organizations, and states often look to borrow or adapt what brings success to their competitors, whether that is a tactic, capability, or specific weapons system. Imitation or adoption sometimes fails to produce the same results because it is understood or replicated imperfectly. Russian military experts Michael Kofman and Kent DeBenedictus, in a 2022 podcast with West Point’s Modern Warfare Institute, and Mark Galeotti corroborate this point in his book *Russian Political Warfare: Moving Beyond the Hybrid* (2019).<sup>297</sup> All agree that “Moscow genuinely believes it is working to try and catch up in developing state-wrecking and coercive capabilities acquired and honed by the West.”<sup>298</sup>

Suchkov clearly delineates between Russian hybrid warfare (*gibridnaya voyna*) and what many Russian scholars call “New Generation Warfare” (NGW) or *Voyni Novogo Pokoleniya*. *Gibridnaya voyna* refers specifically to what the Russian military views as Western hybrid actions and elicits a defensive, inward focus.<sup>299</sup> Borrowing from Dmitry Adamsky’s work on NGW, Suchkov describes the latter as focusing outward and employing a combination of military and non-military instruments across domains to achieve the desired outcome.<sup>300</sup> Suchkov differentiates NGW from Western “hybrid warfare” and *gibridnaya voyna* while connecting it to an older tradition of Soviet and Russian strategic thinking that “relies on Russia’s historical tradition that envisions war as a competition of societies rather than a clash of militaries.”<sup>301</sup>

Russia’s annexation of Crimea in 2014 was a watershed event in terms of NATO’s interest in Russian military thinking and doctrinal evolution. While failing to predict the move was a failure of the American and European intelligence services, the failure sparked a renewed (and steady) interest in the Russian military, its capability and how it thought about warfare. Analyzing the Russian military had become a dying field after the Cold War; this

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<sup>294</sup> George F. Kennan, “The Inauguration of Organized Political Warfare” [Redacted Version], April 30, 1948, *The Wilson Center Digital Archive*, 1, accessed June 14, 2022, <https://digitalarchive.wilsoncenter.org/document/114320>.

<sup>295</sup> Ibid. For a contrary view that the term political warfare lacks precision, see Frank Hoffman, “On Not-So-New Warfare: Political Warfare vs Hybrid Threats,” *War on the Rocks*, July 28, 2014, accessed June 12, 2022: <https://warontherocks.com/2014/07/on-not-so-new-warfare-political-warfare-vs-hybrid-threats/>.

<sup>296</sup> Maxim A. Suchkov, “Whose Hybrid Warfare? How ‘the Hybrid Warfare’ Concept Shapes Russian Discourse, Military, and Political Practice,” *Small Wars & Insurgencies* 32, no. 3 (2021): 416, accessed June 23, 2022, <https://doi.org/10.1080/09592318.2021.1887434>.

<sup>297</sup> Kofman and DeBenedictus, “From Little Green Men to Tanks Outside of Kyiv,” (begin at 07:49); and Galeotti, *Russian Political Warfare*, 18.

<sup>298</sup> Galeotti, *Russian Political Warfare*, 18.

<sup>299</sup> Suchkov, “Whose Hybrid Warfare?” 416.

<sup>300</sup> Adamsky, “Cross-Domain Coercion: The Current Art of Russian Strategy,” 23.

<sup>301</sup> Suchkov, “Whose Hybrid Warfare?” 431.

perspective became even more acute through the War on Terror.<sup>302</sup> The level of effort devoted to thinking about and studying Russia reflected President Barack Obama's 2016 comments, painting Russia essentially as a second-rate power.<sup>303</sup> This relative lack of emphasis before 2014 set the stage for renewed interest in the wake of Russia's advances against Ukraine and also explains why much of the material was perceived as "new", e.g., the "Gerasimov Doctrine." More recent scholarship places recent Russian thinking on hybrid warfare and New Generation Warfare within the broad corpus of Russian military thought.<sup>304</sup> In doing so, it identifies elements of continuity with the past. It highlights how and why the Russian military has evolved its thinking to gain an advantage over potential adversaries, the foremost of which remain the United States and NATO.

Three relevant points come from examining the most recent American and Russian literature from 2017 onward. The first is the point that Russian military thought does include a concept of "hybrid warfare," although one can argue that Russia's conception of hybrid warfare came from what it perceived the West to be doing. The answer is more complicated, primarily as the term "hybrid warfare" has grown in the West, and its application has become increasingly broad (i.e., everything is seen as hybrid warfare). It [hybrid warfare] has lost whatever precision it may have originally had.<sup>305</sup> Michael Kofman captures the phenomenon, saying that "the term [hybrid warfare] now covers every type of discernible Russian activity from propaganda to conventional warfare, and most that exists in between. What exactly does Russian hybrid warfare do, and how does it work? The short answer in the Russia-watcher community is everything."<sup>306</sup> The same phenomenon is at work on the Russian side of the equation to the extent that in 2019, the Russian military curtailed or at least constrained the use of the term.<sup>307</sup> Regardless, this reinforces the point of mutual constitution; Russian and American or Western interpretations of hybrid warfare cross-pollinate and influence one another to the point of being discursive.

Ofer Fridman, a senior lecturer in War Studies at King's College, London, expands on Suchkov's previous point that Russian military thinking currently supports at least two, if not more, variations of thinking on hybrid warfare. The one is internally oriented and speaks to what Russia sees as Western efforts at subverting the Russian state: this is *gibridnaya vojna*. The second is externally oriented, *vojni novogo pokoleniya*, or what was previously introduced as Russia's New Generation Warfare, or NGW. Russia can undoubtedly employ both to achieve its objectives. From a practical perspective, *gibridnaya vojna* is best considered a strategic shaping action or part of what Russia views as the ongoing "struggle" between Russia and

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<sup>302</sup> Christopher Dougherty, Gian Gentile, Michael Kofman, Dara Massicot, "What the Experts Got Wrong (and Right) About Russian Military Power," *War on the Rocks* (Podcast), (hosted by Ryan Evans) May 30, 2022; accessed June 3, 2022, <https://warontherocks.com/2022/05/what-the-experts-got-wrong-and-right-about-russian-military-power/>.

<sup>303</sup> Barack Obama, *Press Conference by the President*, December 16, 2016, accessed July 5, 2022, <https://obamawhitehouse.archives.gov/the-press-office/2016/12/16/press-conference-president>.

<sup>304</sup> The link between contemporary Russian thinking on warfare to Soviet military thought is a theme that comes up repeatedly in previously mentioned sources such as Mark Galeotti's *Russian Political Warfare* (2019), Oscar Jonsson's *The Russian Understanding of War* (2019), Kent DeBenedictus' *Russian "Hybrid Warfare" and the Annexation of Crimea* (2022), and the articles by Timothy Thomas among others.

<sup>305</sup> Michael Kofman, "Hybrid Warfare and Other Dark Arts," *War on the Rocks* (Blog), March 11, 2016, accessed June 29, 2022, <https://warontherocks.com/2016/03/russian-hybrid-warfare-and-other-dark-arts/>.

<sup>306</sup> *Ibid.*

<sup>307</sup> Suchkov, "Whose Hybrid Warfare?" 416, and Michael Kofman, "From Little Green Men to Tanks Outside of Kyiv," (begin @ 7:20).

NATO.<sup>308</sup> NGW, by contrast, includes everything in the former with the addition that conventional military force is critical to the latter – all other non-military actions or activities facilitate that end.<sup>309</sup> Janis Berzins of the Latvian National Defense University supports this view but quickly adds that Russian NGW is the unique product of Russia’s military thought and its observations of western military operations over the past 30 years.<sup>310</sup> This uniqueness underscores the distinctiveness of Russian military thought. Berzins says that NGW is cognitively focused and emphasizes information and psychological operations designed to minimize, but not eliminate, the use of conventional military power.<sup>311</sup> To complete the comparison, Suchkov submits both *gibridnaya voyna* and NGW to interpretation under a Clausewitzian paradigm and determines that the former is not necessarily war in all cases, whereas New Generation War almost certainly is.<sup>312</sup> The determining factor is the use of conventional military force.

Second, there is a connection between hybrid warfare and the long-running themes of subversion and information warfare that run through Russian and Soviet military thought, irrespective of how one parses the former term. Subversion and the weaponization of information have figured prominently in the Russian military and state calculus since the earliest days of the Soviet Union, whether oriented externally to destabilize other states or to counter internally what was deemed revolutionary ideological subversion.<sup>313</sup> This historical continuity underscores the weight of tradition in Russian military thinking. The information and communications technology revolution has only increased Russia's emphasis on information and its weaponization.<sup>314</sup> The Russians consider these events, especially the color revolutions, to be deliberate Western plots to weaken Russia. This contributes to a Russian perception of an omnipresent external threat. This paranoia existed within the Soviet Union, where it was referred to as “counter-revolution” or “ideological subversion,” and it persists to this day within Putin’s Russia.<sup>315</sup>

That said, what Russia does today with information and other non-military tools is not simply a regurgitation of old Soviet methods. Kent DeBenedictus and Oscar Jonsson are

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<sup>308</sup> Ofer Fridman, *Russian “Hybrid Warfare”: Resurgence and Politicisation* (London: Hurst & Company, 2018), 132-133.

<sup>309</sup> Ibid, 129-131; and Galeotti, *Russian Political Warfare*, 43-45.

<sup>310</sup> Janis Berzins, “The Theory and Practice of New Generation Warfare: The Case of Ukraine and Syria,” *The Journal of Slavic Military Studies* 33, no. 3 (2020): 356, accessed May 24, 2022.

<sup>311</sup> Janis Berzins, “Russian New Generation Warfare is not Hybrid Warfare,” in *The War in Ukraine: Lessons for Europe*, eds. Artis Pabriks and Andis Kudors (Riga: The Centre for East European Policy Studies, University of Latvia Press, 2015), 45.

<sup>312</sup> Suchkov, “Whose Hybrid Warfare?” 431. There is no consensus on whether every application of Russian hybrid warfare constitutes war, some applications are better categorized as competition. See Mason Clark, *Russian Hybrid Warfare, Military Learning and the Future of War Series* (September 2020), *Institute for the Study of War*, accessed March 21, 2022, <https://understandingwar.org/sites/default/files/Russian%20Hybrid%20Warfare%20ISW%20Report%202020.pdf>, 16-17.

<sup>313</sup> DeBenedictus, *Russian “Hybrid Warfare” and the Annexation of Crimea*, 18. Here I want to recognize the writing of Evgeny Messner and his concept of “subversion war” or *myatezhe voyna*. According to many of the authors cited here, Messner profoundly influenced Russian military thinking especially regarding hybrid warfare. Fully developing Messner’s work is outside the scope of this dissertation. Suffice it to say that Messner, a White Russian officer who fought against the Soviets, thought and wrote meaningfully about future war from the 1920s into the mid-1970s. Although the Soviet Union officially banned his works, they were known during Soviet times.

<sup>314</sup> Jonsson, *The Russian Understanding of War*, 4, 94.

<sup>315</sup> DeBenedictus, *Russian Hybrid War and the Annexation of Crimea*, 18. This sentence is not intended to diminish Russia’s legitimate security concerns, just to identify that a level of paranoia is present in the Russian psyche.



affiliated with the War Studies Department at King's College, London, and both have written about Russian military thought and hybrid warfare. DeBenedictus and Jonsson reiterate that hybrid warfare traces its roots back to the Soviet era and is neither novel nor new.<sup>316</sup> Writing in the 1930s, Georgii Isserson is a Soviet-era military theorist who railed against linear thinking in warfare and advocated for a concept of operational breakthrough. He held that the force of the blow, not its speed or frequency, was the critical factor in returning maneuver and depth to warfare.<sup>317</sup> Isserson is essential to this section on hybrid warfare in that he represents a problem solver looking to overcome what was, at the time, an intractable problem – defense as the superior form of warfare on the battlefields of the First World War. Aleksandr Svechin is another significant Russian military theorist who wrote in the mid-1920s and was executed during Stalin's purges of the Red Army in the late 1930s. Clausewitz's *On War* informed his work on strategy, and Svechin advocated war's subordination to political objectives.<sup>318</sup> Skeptical of prescriptive rules for strategy and principles of war, he wrote that “a particular strategic policy must be devised for every war; each war is a special case, which requires its particular logic rather than any kind of stereotype or pattern.”<sup>319</sup> The Russian government rehabilitated Svechin and his writing in the late 1950s, but it is only since the 1980s that the Russian military has become familiar with his work and ideas.<sup>320</sup> Gerasimov quotes Svechin in his article, “The Value of Science is in the Foresight,” to point out that one must continually study war because every manifestation is unique.<sup>321</sup>

An exile from the Russian Revolution, Evgeny Messner is the theorist whose work has been the most influential. He wrote after the Second World War, and his intellectual fingerprints can be found in many places in Russia's contemporary strategic thought.<sup>322</sup> Messner's most impactful work appeared in the late 1950s and focused on subversion and what we now consider political warfare. Messner writes specifically about war post-1945 becoming a matter of degrading the soul of the enemy and protecting one's own from similar degradation.<sup>323</sup> As part of his examination of contemporary war, Messner identified activities or methods of warfare now associated with hybrid warfare. These include “half-war” as a form of proxy warfare, the use of terror and subversion, and “aggressive diplomacy,” which he explains as “an enforced form of diplomacy, just as a half-war is a weak form of war.”<sup>324</sup> What Messner does exceptionally well with his depiction of half-war and aggressive diplomacy is to lay out, in broad outlines, the activities state and non-state

<sup>316</sup> DeBenedictus, *Russian “Hybrid Warfare,”* 207-208; and Jonsson, *The Russian Understanding of War*, 33, 152.

<sup>317</sup> Georgii S. Isserson, *The Evolution of Operational Art*, trans. Bruce W. Menning (Fort Leavenworth: Combat Studies Institute Press, 2013) 109.

<sup>318</sup> Aleksander A. Svechin, *Strategy*, ed. Kent D. Lee, trans. Mary Albon et al. (Minneapolis: East View Information Services, 1992), 106-107.

<sup>319</sup> *Ibid.*, 80.

<sup>320</sup> Beatrice Heuser and Paul O'Neill, “Episode 5: Alexander Svechin: Soviet Strategic Thought,” *Talking Strategy*, RUSI Podcasts, November 15, 2022, accessed September 18, 2023, <https://www.rusi.org/podcasts/talking-strategy/episode-5-alexander-svechin-soviet-strategic-thought>, (begin @ 12:29).

<sup>321</sup> Heuser and O'Neill, (begin @ 14:24).

<sup>322</sup> Adam Klus, “*Myatezh Voina*: The Russian Grandfather of Western Hybrid Warfare,” *Small Wars Journal*, last modified July 10, 2016, accessed June 26, 2022, <https://smallwarsjournal.com/jrnl/art/myatezh-voina-the-russian-grandfather-of-western-hybrid-warfare>; and Fridman, Russian “Hybrid Warfare”, 72-73.

<sup>323</sup> Evgeny Messner, “The Face of Contemporary War,” in *Strategiya: The Foundations of the Russian Art of Strategy*, ed. and trans. Ofer Fridman (Oxford: Oxford University Press, 2021), 240.

<sup>324</sup> Messner, 248.

actors routinely undertake between the poles of peace and war – what is now referred to as a competition. Many years before the Information Technology Revolution, Messner nonetheless demonstrates a nascent understanding of how information will impact future war when he writes about the “strategic battles of ideas” and the enemy’s internal politics as another means to damage and harm them.<sup>325</sup> Messner’s thinking about the evolution of war culminates in his concept of “subversion-war” or *myatezhe voyna*, which aims to erode an adversary’s political legitimacy using psychological and spiritual vectors to attack. However, all means to achieve this end are permissible.<sup>326</sup> While other Russian military thinkers could be included as a matter of continuity, the intent in introducing Isserson, Svechin, and Messner is to demonstrate the degree to which *gibridnaya voyna* and New Generation Warfare are not *sui generis* phenomena. Instead, they are firmly rooted in Russia’s past.

Contemporary Russian military thought differs from its antecedents in its importance to the information and non-military elements, especially about traditional military means. The requirement for “a four-to-one correlation of non-military to military methods” is a frequently quoted statement attributed to General Gerasimov.<sup>327</sup> His quote not only drives home the changes in the character of contemporary conflict but places those changes outside the traditional sphere of the military. The importance of non-military methods is apparent in any examination of contemporary Russian military thought, especially the writings of Colonel Sergei G. Chekinov and Lieutenant General Sergei A. Bogdanov. These two officers formed a writing team that produced several noteworthy articles on hybrid war, New Generation Warfare, and future war that appeared in several Russian military journals between 2010 and 2017.<sup>328</sup> Chekinov and Bogdanov’s work attracted a following in the West that pronounced them “...the fathers of the conceptualization of non-military indirect means and methods in Russian contemporary military thinking.”<sup>329</sup> In “The Nature and Content of a New-Generation War,” their best-known piece on New Generation Warfare, Chekinov and Bogdanov identify the leading role to be played by non-military means.

Interstate differences preceding new-generation warfare will be resolved by relying on a combination of political, economic, scientific, engineering, religious, cultural, information, and humanitarian capabilities of a country to integrate it into a peaceful environment, develop its diversified relationships that promote trust and cooperation, scale down military confrontation, and put up barriers to power politics. These nonmilitary actions will help less and remove military hazards and threats by opponents entering into peaceful treaties and taking other amicable steps. Nonmilitary measures serve to reduce the possibility for the aggressor to engage in hostile activities against other countries, give it an unflattering image in public opinion, make sensational denunciations of its aggressive plans, and so on. Beyond a

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<sup>325</sup> Ibid, 265-267.

<sup>326</sup> Fridman, *Russian “Hybrid Warfare,”* 69, 70.

<sup>327</sup> Gerasimov, “The Value of Science is in the Foresight,” 28.

<sup>328</sup> Timothy Thomas, “The Chekinov-Bogdanov Commentaries of 2010-2017: What Did They Teach Us about Russia’s New Way of War?” *The MITRE Corporation*, 2020, accessed May 24, 2022, <https://apps.dtic.mil/sti/pdfs/AD1141587.pdf>, 2.

<sup>329</sup> Fridman, *Russian “Hybrid Warfare,”* 136.

shadow of a doubt, the aggressive side will be first to use nonmilitary actions and measures as it plans to attack its victim in a new-generation war. With powerful information technologies at its disposal, the **aggressor will make an effort to involve all public institutions in the country it intends to attack...**” [Emphasis in original]<sup>330</sup>

The passage yields several conclusions. First, it underscores the broad utility and importance that Chekinov and Bogdanov accord to non-military means in contemporary warfare. Second, it reveals the all-encompassing nature of NGW, which will necessarily involve 'all public institutions' in the target country. Many, if not all, of the non-military actions described above, would occur before the outbreak of actual hostilities as preparatory or shaping actions. Chekinov and Bogdanov hint at a future conflict where the traditional boundaries between peace and war have eroded. Hostile acts are omnipresent, although violence may be absent. It is also possible that all these oppositional actions occur below the threshold of violence, meeting neither traditional conceptualizations of war nor peace.

More tangibly, Ofer Fridman identifies that Chekinov and Bogdanov's work is the first to distinguish between Russian hybrid warfare, *gibridnaya voyna* and New Generation Warfare. While both hybrid methods extensively use nonmilitary elements to achieve the desired outcome, the nonmilitary elements are the main effort and stand-alone in *gibridnaya voyna*. In New Generation Warfare, the nonmilitary elements support eventual military action and are employed to set conditions for decisive military action. Russian military forces or the threat thereof is, or can be, a component of *gibridnaya voyna*, but in this construct, there is no overt use of military force; that is the distinction with NGW. Fridman describes the difference more precisely, writing that “in new-generation warfare these [nonmilitary] methods are intended to prepare the ground for subsequent military actions, while in *gibridnaya voyna* they are used for a stand-alone, non-violent political confrontation.”<sup>331</sup> They accept that one form of “hybrid” warfare, in this case NGW, supports military action. At the same time, the other (*gibridnaya voyna*) is not and is considered a political confrontation. Thus, one must conclude that the Russian military thinks the former is war and the latter is something else. The fact remains that *gibridnaya voyna* is the Russian term for hybrid warfare, thus it is not [necessarily] war.<sup>332</sup>

Retired US Army Lieutenant Colonel Timothy Thomas, an analyst at Fort Leavenworth's Foreign Military Studies Office, has produced numerous articles on current Russian military thought, including several explicitly focusing on the work of Chekinov and Bogdanov. Thomas also reinforces that however new the West may perceive the Russian military's current thoughts on war, those thoughts still bear substantial linkage with traditional Russian military thinking.<sup>333</sup> The traditional themes focus on the correlation of forces and means, the role of nuclear weapons, and “the forms and methods for the employment of forces.”<sup>334</sup> The one salient piece of new information Thomas introduces is a change in naming convention that appears in the Russian professional military literature

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<sup>330</sup> Sergei G. Chekinov and Sergei A. Bogdanov, “The Nature and Content of a New-Generation War,” *Military Thought* 4, no. 1 (2013): 16-17, accessed October 14, 2021, [Eastview Information Services](#).

<sup>331</sup> Fridman, *Russian “Hybrid Warfare,”* 136.

<sup>332</sup> *Ibid.*

<sup>333</sup> Thomas, *Thinking Like a Russian Officer*, 6-8; and Thomas, “The Evolving Nature of Russia's Way of War,” 35.

<sup>334</sup> *Ibid.*, 8-9.

whereby the term New Generation War disappears and is replaced with “New Type War.” Whether or not this name change is substantive or merely reflects, as Thomas indicates, a move by the authors to bring their work into line with the naming convention used by Chief of the General Staff Gerasimov is unknown.<sup>335</sup> Closely examining the two concepts does not yield any tremendous semantic or substantive difference between the two.

What is significant is that Chekinov and Bogdanov do not consider New Type War to be true “war.” In their 2017 *Military Thought* article, “The Essence and Content of the Evolving Notion of War in the 21<sup>st</sup> Century,” the pair comments on the changes evident in postmodern war or, to use their terminology, New Type War:

In modern conditions, the essence and content of war have, therefore, drastically changed; warfare has spread beyond the spheres of the material and physical (nation, state, armed forces, geographical environment) and entered the sphere of the virtual – information and cognition. The impact is exerted not only and not so much on the physical shell of war subjects (individuals, armies, states) as on the sphere of the spirit, psychology, mentality.<sup>336</sup>

Thomas points out that “clear boundaries between military and peaceful methods have disappeared. New-type war is not perceived as war.”<sup>337</sup> This last point is interesting because these debates took place within Russian military journals, and many of these journals contain articles that focus on the increasing effectiveness of nonmilitary over military means, sometimes excluding the latter entirely, to achieve what can only be recognized as a “military” outcome.

Chekinov and Bogdanov acknowledge this dilemma and the debate on whether nonmilitary means to attain military objectives still qualify as war. They state, “precisely for this reason, we have been witnessing an extensive debate about the need to revise the essence and content of war necessitated by the appearance of views that not only the role of military capabilities of warfare have been diminishing, but that these are no longer any good for achieving relevant objectives.”<sup>338</sup> Chekinov and Bogdanov write that a New Type of War remains war, as Clausewitz defines it, with violence and force as integral components. Lacking these, they argue that it is not war, which is in line with Clausewitz’s “dual ontology,” wherein war has a fixed nature and variable character.<sup>339</sup>

The practice of wars in the last few decades shows that in any war both military and nonmilitary methods of struggle are used. The importance and specific weight of nonmilitary measures, the organizational and technological potential of their efficient employment has increased sharply. Nonmilitary forms of struggle, especially informational ones, significantly impact the nature of armed struggle as well. However, the main specifics of war are

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<sup>335</sup> Timothy Thomas, “The Chekinov-Bogdanov Commentaries of 2010-2017,” 13.

<sup>336</sup> Sergei G. Chekinov and Sergei A. Bogdanov, “The Essence and Content of the Evolving Notion of War in the 21<sup>st</sup> Century,” *Military Thought* 26, no. 1 (2017): 84, accessed May 24, 2022, [Eastview Information Services](#).

<sup>337</sup> Timothy Thomas, “The Chekinov-Bogdanov Commentaries of 2010-2017,” 14.

<sup>338</sup> Chekinov and Bogdanov, “The Essence and Content of the Evolving Notion of War,” 84.

<sup>339</sup> Timothy Thomas, “The Chekinov-Bogdanov Commentaries of 2010-2017,” 14; and Bollman and Sjøgren, “Rethinking Clausewitz’s Chameleon,” 48.

made up of resort to armed force, violent actions. As for politico-diplomatic, informational, economic, and other measures and methods of influencing the opponent, they are of crucial importance in the business of averting conflicts and wars.<sup>340</sup>

Using a definition of war in which violence and force are prerequisites, the Russian position on what activities comprise “war” appears clear.

In practice, the distinction is not so clear. The challenge lies not so much in one’s ability to distinguish war from what it is not war. The challenge lies in effectively distinguishing peace from war in the era of renewed interstate competition. This comes at a time when “peace” comprises an ongoing “struggle” among countries in which states and organizations employ non-military means with the potential for outsized destabilizing effects. In the Information Age, nonmilitary means can now achieve ends that have, hitherto, only been accessible using military force – effectively blurring the line between peace and war.

States can create (and be subject to) the condition, or at least the perception, of being in perpetual conflict. The line between peace and war has never been as starkly demarcated as reason would seem to indicate – with the Cold War between NATO and the Warsaw Pact as the *exemplum optimum*. Nonetheless, using nonmilitary and other tools short of armed conflict to achieve strategic objectives muddies the distinction between the ordinary intercourse of nations (peace) and a state of active hostilities (war). This is especially true when one considers that nonmilitary tools must often be employed pre-emptively because their effects are latent. It takes significant planning and substantial lead time to produce effects. Such tools must be in place and ready for use well in advance of any decision to employ hard military power.<sup>341</sup> This is especially true when the state views itself as the weaker party, surrounded by encroaching and potentially hostile neighbors. It must be ready to respond immediately, exactly how Russia sees its position relative to NATO and the US.<sup>342</sup>

In addition to feeling surrounded, Russian strategic calculus is informed by several pillars of logic that emphasize indirect approaches and asymmetries. Fridman captures this line of reasoning when he paraphrases Chekinov and Bogdanov’s writing in *Russian Hybrid Warfare: Resurgence and Politicisation* (2018). Fridman writes:

Russia should resort to indirect non-military means and methods as part of its strategy. They [Chekinov and Bogdanov] give three main reasons for doing so. The first is the fact that the geopolitical environment at the end of the twentieth and beginning of the twenty-first century has been developing in a way that makes non-military actions a more preferable tool in inter-state confrontations, especially when the confrontation is between nuclear powers fearful of the danger of escalation once direct military actions have been used. The second is their belief that the West did not stop its non-military,

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<sup>340</sup> Chekinov and Bogdanov, “The Essence and Content of the Evolving Notion of War,” 85.

<sup>341</sup> Chekinov and Bogdanov, “The Nature and Content of a New-Generation War,” 20. In the Russian construct, non-military (and other tools of subversion) set conditions for the employment of military force.

<sup>342</sup> Fridman, *Russian “Hybrid Warfare,”* 135.

indirect offensive against Russia in the post-Cold War period. Finally, the third reason is that, since the struggle between Russia and the West is asymmetric (where Russia is the weaker actor), these indirect (asymmetric) activities will serve to compensate for Russia's weaknesses.<sup>343</sup>

Russia's understanding of the strategic environment is not dissimilar to that of the Soviet Union during the Cold War. The potential for nuclear war tempers direct confrontation with the United States and drives competition into other areas. In this case, Russia prefers to pursue indirect and asymmetric advantages that the West has come to understand as hybrid warfare. The central challenge is the blurred line between peace and war.

Two other factors also bear mentioning as both contribute to Russia's outlook that it is "at war" with NATO and the West. And if Russia is not quite "at war," then it certainly casts its default relationship with the West in terms that are closer to competition or "struggle" than peaceful relations between states. The two factors that bear on this are Vladimir Putin's mindset and that of critical senior members of his cabinet, as well as the organization of Russia's national security apparatus.<sup>344</sup> Putin certainly has an adversarial mindset vis-à-vis the West, for which copious evidence exists.<sup>345</sup> Prominent Russia experts like Sergey Radchenko and Fiona Hill assess that Putin is carrying out what he views as a battle of world views in which Russia is the great bastion of traditional conservatism struggling against a hypocritical US-led world order in an otherwise unravelling and aberrant world.<sup>346</sup> Reinforcing the point is Putin's attribution of the color revolutions and Arab Spring as deliberate acts perpetrated by the US and the West that will also be employed against Russia.<sup>347</sup>

In this discussion of the Russian approach to contemporary war, the comprehensive organization of Russia's national security apparatus requires more explanation. Putin's authoritarian government has created structures concentrating all levers of state power to maximize both internal control and external action.<sup>348</sup> Just below Putin's presidential administration is the Russian National Security Council or National Security Secretariat, which provides what the US would call a "whole of government approach." Not a decision-

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<sup>343</sup> Ibid.

<sup>344</sup> Mark Galeotti, "Putinism-Patrushevism," *In Moscow's Shadows* 74 (Podcast), July 31, 2022, accessed August 2, 2022, <https://www.buzzsprout.com/1026985/11055773-in-moscow-s-shadows-74-putinism-patrushevism>, (begin at 08:30).

<sup>345</sup> Mark Galeotti, "Controlling Chaos: How Russia Manages its Political War in Europe," *Policy Brief 228, European Council on Foreign Relations* (August 2017), accessed July 17, 2022, <https://ecfr.eu/archive/page/-/ECFR228-CONTROLLING-CHAOS1.pdf>, 2.

<sup>346</sup> The themes of Putin's motivation and political philosophy can be found in the following articles. Sergey Radchenko, "What Drives Vladimir Putin?" *Engelsbergs Ideas*, last modified August 9, 2022, accessed July 5, 2022, <https://engelsbergideas.com/essays/what-drives-vladimir-putin/>; Fiona Hill and Angela Stent, "The World Putin Wants: How Distortions About the Past Feed Delusions About the Future," *Foreign Affairs* 101, No. 5 (September/October 2022): 108-122, accessed September 15, 2024, EBSCOhost; and Michael Luchesse, "A real Russian heart: Aleksandr Dugin, Vladimir Putin and the dangerous new Russian ideology," *Engelsbergs Ideas*, last modified August 23, 2023, accessed September 15, 2024, <https://engelsbergideas.com/essays/aleksandr-dugin-vladimir-putin-and-the-new-russian-ideology/>.

<sup>347</sup> Mark Galeotti, "Russian Perceptions of Conflict with Discussion of War in Ukraine," *Oxford Changing Character of War Lunchtime Seminar* (Podcast), March 22, 2022, accessed March 24, 2022, <http://www.ccw.ox.ac.uk/past-events/2022/3/22/russian-perceptions-of-conflict-with-discussion-of-war-in-ukraine>, (begin @ 10:15).

<sup>348</sup> Clark, "Russian Hybrid Warfare," 19.

making body, it is intended as a forum to discuss policy options and coordinate all elements of state power in support of the ongoing geopolitical confrontation with the West, which can be traced back to the founding of the Soviet Union and its Communist International or COMINTERN.<sup>349</sup> Because this body consolidates all elements of state power and because it sees the threat as omnipresent, what the security secretariat succeeds in doing is casting everything as conflict.

Mark Galeotti made this observation in a podcast he did in March 2022 for Oxford University's Changing Character of War Centre. Released shortly after Russia invaded Ukraine in February, the subject of the podcast was "Russian Perceptions of Conflict with Discussion of War in Ukraine." Galeotti focused on Russia's National Defense Control Center, created in 2014 to oversee the Crimea operation, which represents a command philosophy that brings together information and is "a way of coordinating different arms of the Russian government" in a manner that reduces the separation between executive, military, and civil institutions familiar in Western democracies.<sup>350</sup> Such a structure directly facilitates the erosion of institutional silos between military and civil power. "Every element of the state apparatus and society as a whole can be... conscripted" to support the state, and the security secretariat and National Defense Control Center are intended to facilitate and enact control, especially regarding the information and data services.<sup>351</sup> While this makes sense and functions within the Russian context because it concentrates power, it also reinforces and enables a mindset where everything is viewed as a conflict.<sup>352</sup> This is especially true when the preferred mode of conflict is *gibridnaya voyna*, or a form of political warfare that emphasizes non-military tools in their own right or sets conditions to support the eventual use of conventional military power.

The last point is that Russia's understanding and pursuit of hybrid warfare have erased the distinction between peace and war. This outlook makes sense if the world is nothing more than a never-ending series of struggles and threats.<sup>353</sup> The Russian military does not understand *gibridnaya voyna* as war in its doctrine because there is no violence or physical force. Yet, Russian professional military journals contain numerous discussions in which the authors put forward alternative conceptions that acknowledge the potency of weaponizing information and other non-military tools as well as the potential for violence outside of the physical realm.<sup>354</sup> In *The Russian Understanding of War* (2018), Oscar Jonsson concludes outright that the Russian understanding of war "has broadened to include nonviolent means of information-psychological warfare and color revolutions, which are now seen to be so effective that they are equivalent to violence..."<sup>355</sup> This is not an isolated

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<sup>349</sup> Mark Galeotti, "Russia's Security Council: Where Policy, Personality, and Process Meet," *Marshall Center Security Insight*, no. 41 (October 2019), accessed July 17, 2022, <https://www.marshallcenter.org/en/publications/security-insights/russias-security-council-where-policy-personality-and-process-meet-0>; Galeotti, "Controlling Chaos," 3, 5; and Jonsson, *The Russian Understanding of War*, 27.

<sup>350</sup> Galeotti, "Russian Perceptions of Conflict with Discussion of War in Ukraine," (begin @ 09:25).

<sup>351</sup> Ibid, (begin @ 15:00).

<sup>352</sup> Galeotti, "Russian Perceptions of Conflict," (begin @ 30:00).

<sup>353</sup> Markus Göransson, "Understanding Russian Thinking on *Gibridnaya Voyna*" in *Hybrid Warfare: Security and Asymmetric Conflict in International Relations*, by Mikael Weissmann, Niklas Nilsson, Björn Palmertz and Per Thunholm, (London: I.B. Tauris, 2021): 83–94, accessed September 11, 2021, Bloomsbury Collections, 85.

<sup>354</sup> Jonsson, *The Russian Understanding of War*, 119 and 123; and Fridman, *Russian "Hybrid Warfare"*, 93, 98.

<sup>355</sup> Ibid, 152.

opinion but one upheld by other scholars already referenced herein, including Mark Galeotti, Timothy Thomas, and Charles Bartles.<sup>356</sup> Jonsson does not expect the Russian military to publicly adjust its definition of war to include non-military elements.<sup>357</sup> To do so would carry too many negative implications regarding international norms and put the US and NATO on notice that a state of conflict exists. There is more to be gained from operating in ambiguity – which is the crux of hybrid warfare.

From reading both Oscar Jonsson and Ofer Fridman, it is possible to conclude that the Russians have experienced just as much difficulty as the US military in coming to grips with whether postmodern warfare with its significant nonmilitary toolkit qualifies as warfare in the Clausewitzian sense. Just as the US and the West have been challenged to name the phenomenon that is not peace but indeed not war, so have the Russians. For every moniker the West has created to describe this manifestation of postmodern war, whether that be grey zone conflict, great power competition, competition below the level of armed conflict or even Kennan's old moniker of political warfare, it appears that the Russians have struggled equally with New Generation War or New Type War not to mention noncontact warfare and Evgeny Messner's subversion-war. Nothing evolves in isolation.

## 2. Hybrid Warfare with Chinese Characteristics

The challenge that the People's Republic of China (PRC) poses to the United States and the West is like the preceding case but bears some significant differences. Russia and China are each nuclear-armed state actors with tightly controlled authoritarian systems. Vladimir Vladimirovich Putin, as President of the Russian Federation, and Xi Jinping, as General Secretary of the Chinese Communist Party, are both autocrats who altered the regulations and laws governing term limits to remain in power (presumably for life) in their respective countries. In addition, the Russian Federation and the PRC are revanchist powers; each looks to make good a wrong or alter what they see as an unfair international system. For Russia, this means reclaiming territory lost during the break-up of the Soviet Union. The frozen conflicts in the Caucasus and Transnistria, the 2008 invasion of Georgia, the 2014 annexation of Crimea, and the follow-on 2022 war with Ukraine all stand as examples. For the PRC, this means realizing the long-held desire to reincorporate Taiwan into its territorial and political fold and, more recently, gain international recognition of the South China Sea and the so-called "Nine Dash Line" as territorial waters. Since at least 2014, the PRC has been working to normalize this claim by expanding the physical territory of the reefs and islets throughout the South China Sea, as it also militarizes them. Both Putin and Xi and their countries view the United States as their primary adversary, whether because of the American role as the leading power in NATO or as the guarantor of the current international system.

While there are multiple points of commonality, there are also significant differences between the Russian Federation and the PRC. First, the two states are heading in different

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<sup>356</sup> Flemming Splidsboel Hansen, "When Russia Wages War in the Cognitive Domain," *The Journal of Slavic Military Studies* 34, no. 2 (2021): 185-186, accessed June 3, 2022, <https://doi.org/10.1080/13518046.2021.1990562>; also appears in Mark Galeotti, *The Weaponisation of Everything*, 209; in Thomas, "The Chekinov-Bogdanov Commentaries of 2010-2017," 13-14; and in Charles K. Bartles, "Getting Gerasimov Right," *Military Review* (January-February 2016): 34, accessed September 30, 2021, ProQuest.

<sup>357</sup> Jonsson, *The Russian Understanding of War*, 154.



economic directions. Russia is a declining power economically and territorially. The Russian economy, the 11th largest in the world, is petroleum and mineral-based. It is expected to contract in the wake of Western sanctions levied because of Russia's 2022 invasion of Ukraine.<sup>358</sup> The PRC, in contrast, currently possesses the world's second-largest economy with an expectation that it will surpass the United States sometime within the next decade.<sup>359</sup> Given its economic position, China has opted to use economic development, investment, and information as its preferred means of extending influence and achieving goals.<sup>360</sup> Not above using its People's Liberation Army and Navy to signal intent to other states, China has generally stopped short of direct military confrontation with adversaries.<sup>361</sup> Although it overtly advocates for an alternative to the US-led international order, which it presumably hopes to lead, China has continued to work within existing international structures rather than seek dynamic change.<sup>362</sup>

China, like Russia, possesses a long and rich military tradition. It possesses an even longer tradition of thinking about war. To place this in perspective, Sun Tzu, the famous general and strategist of China's Warring States period, put down his thoughts on war over 2500 years ago, at a point predating the first proto-Russian state by about one thousand years.<sup>363</sup> Yet, it is striking that the amount of Chinese military articles translated into English pales compared with the volume of translated material from Russian and the Russian military, even considering the relative drop-off in interest in Russia during the War on Terror. While there is still a lack of current literature from Chinese professional military journals comparable to the US Army War College's *Parameters* or the US Naval Institute's *Proceedings*, scholars and military professionals have noted and are addressing this gap. Until the need is addressed, Western scholars must rely on official releases from the Chinese Communist Party or its subsidiary organizations, the People's Liberation Army, and, as the least preferred, official Western sources such as think tanks, the US Department of Defense, or the Congressional Research Service.<sup>364</sup>

This lack of primary sources explains the outsized emphasis US scholars, in particular, place upon Qiao and Wang's *Unrestricted Warfare* (1999) as a source from which to make assessments about the direction of Chinese military thought. *Unrestricted Warfare* forms part of the intellectual foundation for this dissertation and can be considered China's intellectual response to the US military's impressive performance during the First Gulf War

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<sup>358</sup> Gerard DiPippo, "Strangling the Bear? The Sanctions on Russia after Four Months," *Center for Strategic & International Studies*, June 22, 2022, accessed July 1, 2022, <https://www.csis.org/analysis/strangling-bear-sanctions-russia-after-four-months>.

<sup>359</sup> Ralph Jennings, "China's Economy Could Overtake US Economy by 2030," *Voice of America*, January 04, 2022, accessed August 3, 2022, <https://www.voanews.com/a/chinas-economy-could-overtake-us-economy-by-2030/6380892.html>.

<sup>360</sup> Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2021*, accessed July 8, 2022, <https://media.defense.gov/2021/Nov/03/2002885874/-1/-1/0/2021-CMPR-FINAL.PDF>, 23.

<sup>361</sup> The notable exception has been the Sino-Indian border disputes from 2017-2022.

<sup>362</sup> Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2021*, 1.

<sup>363</sup> "Kievan Rus'," *Wikipedia*, last modified July 18, 2022, accessed July 18, 2022, [https://en.wikipedia.org/wiki/Kievan\\_Rus%27](https://en.wikipedia.org/wiki/Kievan_Rus%27).

<sup>364</sup> Anthony H. Cordesman, "Updated Report: Chinese Strategy and Military Forces in 2021," *Center for Strategic & International Studies*, last modified August 3, 2021, accessed June 16, 2022, <https://www.csis.org/analysis/updated-report-chinese-strategy-and-military-forces-2021>.

in 1991. In this light, *Unrestricted Warfare* is an alternative to the high intensity, industrial warfare favored by the US. The work offered a path for China to gain a comparative advantage in a future confrontation with the US based on asymmetries, knowing that the former would not be able to challenge the US in a conventional military confrontation. *Unrestricted Warfare* presaged information as both a means and a domain for waging warfare; it was among several of what the Chinese called “new concept” weapons.<sup>365</sup>

Using a combination of the few Chinese primary sources available in English as well as a combination of US government, military, and other scholarly materials, it is possible to conclude that the ideas expressed by Qiao and Wang in *Unrestricted Warfare* remain present in Chinese military thinking about war and its view of “hybrid warfare with Chinese characteristics.” First, the Chinese continue to acknowledge the value of information and information dominance as a prerequisite for success on the modern battlefield. Regarding information, *Unrestricted Warfare* recognized that media [i.e., information] was an integral component of the American victory over Iraq in 1991 and has “become an immediate and integral part of warfare, and no longer merely provides information coming from the battlefield.”<sup>366</sup> From the perspective of the Chinese military, information is something to be wielded as a weapon in the cognitive domain to influence target populations before, during, and after actual combat.<sup>367</sup> The Chinese see and refer to this as an “informatized” war.<sup>368</sup> There is also a technological aspect to using information in warfare, which the US military would refer to as battlefield or situational awareness. Modern or “world class” militaries, as the Chinese military literature terms them, must also be able to conduct “intelligentized” war which utilizes artificial intelligence and other advanced technologies such as quantum computing “to improve the speed and quality of information processing by reducing battlefield uncertainty and providing decision-making advantage over potential adversaries.”<sup>369</sup> Fighting an “intelligentized” war also entails actions in the cognitive domain whereby strategic objectives “...can be achieved through direct action on enemy cognition” either individually or collectively.<sup>370</sup>

How China conceptualizes and leverages information is also evident in its most recent concept of information warfare, known as the “three warfares.” This idea results from Chinese conclusions on conflict based on observations of US military operations over the past several decades, including the Gulf War, Kosovo, and the Iraq War.<sup>371</sup> Having studied the actions and experience of the US military, the Chinese military has assessed that

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<sup>365</sup> Qiao and Wang, *Unrestricted Warfare*, 25.

<sup>366</sup> Qiao and Wang, *Unrestricted Warfare*, 74-76.

<sup>367</sup> China Aerospace Studies Institute, *In Their Own Words: Science of Military Strategy 2020* (Montgomery: Air University, 2022), accessed July 10, 2022, <https://www.airuniversity.af.edu/CASI/Display/Article/2913216/in-their-own-words-2020-science-of-military-strategy/>, 182-183. Note: *Science of Military Strategy* is not PLA doctrine per se, though it is a bellwether on Chinese military thought. For more, see Marcus Clay and Roderick Lee, “Unmasking the Devil in the Chinese Details: A Study Note on the *Science of Military Strategy 2020*,” *China Aerospace Studies Institute* (January 2022) accessed July 18, 2022, [2022-01-24 SMS 2020 in Perspective.pdf \(af.edu\)](https://www.airuniversity.af.edu/CASI/Display/Article/2913216/in-their-own-words-2020-science-of-military-strategy/).

<sup>368</sup> China Aerospace Studies Institute, *In Their Own Words: Science of Military Strategy 2020*, 35-36.

<sup>369</sup> Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2021*, 24, 89.

<sup>370</sup> Koichiro Takagi, “The Future of China’s Cognitive Warfare: Lessons from the War in Ukraine,” *War on the Rocks*, July 22, 2022, accessed July 24, 2022, <https://warontherocks.com/2022/07/the-future-of-chinas-cognitive-warfare-lessons-from-the-war-in-ukraine/>.

<sup>371</sup> Sangkuk Lee, “China’s ‘Three Warfares’: Origins, Applications, and Organizations,” *Journal of Strategic Studies* 37, no. 2 (2014): 200, 202, accessed July 17, 2020, <https://doi.org/10.1080/01402390.2013.870071>.

the ability to wield, manipulate, and disseminate information was often more effective than traditional military tools. In this way, the PLA's conclusion is similar to the Russian military's regarding the importance of information. The three warfares first appeared in 2003 in the *People's Liberation Army Political Work Regulations* and comprised psychological warfare (*xinli zhan*), public opinion warfare (*yulun zhan*), and legal warfare (*yalu zhan*).<sup>372</sup> Much the same as the Western militaries use psychological warfare, the Chinese employ it “to undermine an enemy's ability to conduct combat operations through operations aimed at deterring, shocking, and demoralizing enemy military personnel and supporting civilian populations.”<sup>373</sup> Public opinion warfare is intended to influence target populations through “domestic and international public opinion to build support for China's military actions and dissuade an adversary from pursuing actions contrary to China's interests.”<sup>374</sup> Last, legal warfare employs “international and domestic law to claim the legal high ground or assert Chinese interests” to create freedom of maneuver for China, deny it to an opponent, or build international and domestic support for Chinese actions.<sup>375</sup> In a monograph on Chinese information warfare, Larry Wortzel of the US Army War College details how the concept of three warfares serves China's ends: “These three forms of political or information warfare can be performed in unison or separately, bringing into harmony the PLA's actions, the intent of the Communist Party, and the goals of the senior party leadership.”<sup>376</sup> What is noteworthy about this statement is how it captures the importance that the CCP and PLA place on the battle of competing narratives and the use of information as a weapon. Most significant in Wortzel's statement is his characterization of the three warfares as political warfare.

The Chinese Communist Party and the People's Liberation Army do label the three warfares as information warfare.<sup>377</sup> However, from a Western perspective, the three warfares is better understood as Kennanesque political warfare because the application uses non-military tools operating below the threshold of armed conflict. Conducted in this manner, China's information warfare enables it to effectively straddle the line between peace and a state of war or active hostilities, which provides deniability and maneuverability. Psychological warfare, public opinion warfare, and legal warfare all deal with diverse types of influencing, building, or overturning individual and group perceptions. Such measures can be used alone to produce a position of relative advantage or to support or enhance the application of force. In the PLA's publications on military-political work, Chinese military strategists discuss bundling the three warfares with actions taking place in the political, cultural, and diplomatic spaces (among others) to achieve what they refer to as “soft strikes” or “soft killing” to control the psyche of the adversary's population.<sup>378</sup> Regardless of the method employed, a truism of information operations is their inherent latency. Information

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<sup>372</sup> Stefan Halper, “China: The Three Warfares,” *Report for the Office of Net Assessment, US Department of Defense* (2013), accessed July 20, 2020, <https://www.iwp.edu/wp-content/uploads/2019/05/201810171-HalperChinaThreeWarfares.pdf>, 27-28.

<sup>373</sup> *Ibid.*, 28.

<sup>374</sup> *Ibid.*

<sup>375</sup> *Ibid.*

<sup>376</sup> Larry M. Wortzel, “The Chinese People's Liberation Army and Information Warfare,” *Monographs, Books, and Publications* 506 (Carlisle: US Army War College Press, 2014), accessed July 10, 2020, <https://press.armywarcollege.edu/monographs/506>, 30.

<sup>377</sup> Timothy A. Walton, “China's Three Warfares,” *Delex Special Report 3* (Herndon: Delex Systems, 2012), 4.

<sup>378</sup> China Aerospace Studies Institute, *In Their Own Words: Science of Military Strategy* 2020, 242; and Lee, “China's ‘Three Warfares,’” 205.

operations or actions in the information domain require significant lead times to prepare or implement before they produce the desired results.

This long lead time necessitates that China initiate these measures well before any actual hostilities or that the three warfares become ongoing activities, the intensity of which can be raised or lowered before the desired effect. Amrita Jash, a research fellow with India's Centre for Land Warfare Studies in New Delhi, describes the three warfares as China's bid to "win without fighting." Jash directly reinforces the point that the three warfares represent a form of political warfare.<sup>379</sup> More importantly, she links it to more extended themes within the Chinese military tradition, such as Sun Tzu, who emphasized the importance of deception, subterfuge, and subduing the enemy without fighting.<sup>380</sup> China's observation of Putin's failed bid to subdue Ukraine in a *coup de main* almost certainly reinforces this assessment; operating within the "grey zone" is more advantageous and holds less risk than overt military action.<sup>381</sup> Again, implementing these measures requires preparation in anticipation of actual hostilities and adopting a mindset wherein one is always looking for an advantage over potential adversaries. The *Science of Military Strategy* (2020) clearly articulates the PLA's view on the role of information in war and its ability to create a favorable environment. It discusses accessing public opinion as "...a multiplier of political influence, mental lethality, and military deterrence. It is a war action with special power."<sup>382</sup> The Chinese view speaks first to a more expansive view of conflict than typically held in the West, which clouds the conventional distinction between peace and war. Comments from senior PLA leadership that "information attacks do not distinguish between peacetime and wartime" validate such a conclusion.<sup>383</sup>

Dr. Ong Wei Chong, head of the National Security Studies Programme at Singapore's Nanyang Technological University, characterizes China's approach to hybrid warfare as "a multi-dimensional one that is premised on the constant search for strategic advantage."<sup>384</sup> Like Amrita Jash, Ong makes the point that China's approach to hybrid warfare is distinctly Chinese in outlook, where "relative advantage is more important than immediate battlefield victories."<sup>385</sup> Ong goes on to say that "though the tools are of the information age, the idea of using network warfare to control information flows, disrupt an opponent, influence the situation and put the PLA in a position of distinct relative advantage harkens back to the concept of Shi in Sun Zi's *The Art of War*."<sup>386</sup> Not relying exclusively on ancient Chinese history, Ong links contemporary Chinese hybrid warfare with Mao's People's War.<sup>387</sup> He does so not in the sense that today's PLA is conducting a Maoist

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<sup>379</sup> Amrita Jash, "Fight and Win Without Waging a War: How China Fights Hybrid Warfare," *CLAWS Journal* (Winter 2019): 103, accessed June 28, 2022, <https://ojs.indrastra.com/index.php/clawsjournal/article/view/74>.

<sup>380</sup> Ibid, 99-101.

<sup>381</sup> Tobias Burgers and Scott N. Romaniuk, "China's Real Takeaway From the War in Ukraine: Grey Zone Conflict Is Best," *The Diplomat*, last modified October 6, 2022, accessed October 14, 2022, [China's Real Takeaway From the War in Ukraine: Grey Zone Conflict Is Best – The Diplomat](https://www.diplomat.com/article/china-real-takeaway-from-the-war-in-ukraine-grey-zone-conflict-is-best-the-diplomat).

<sup>382</sup> China Aerospace Studies Institute, *In Their Own Words: Science of Military Strategy 2020*, 240.

<sup>383</sup> John Costello, "Chinese Views on the Information "Center of Gravity:" Space, Cyber and Electronic Warfare," *China Brief* 15, no. 8 (April 16, 2015), accessed July 23, 2022, <https://jamestown.org/program/chinese-views-on-the-information-center-of-gravity-space-cyber-and-electronic-warfare/>.

<sup>384</sup> Weichong Ong, "The Rise of Hybrid Actors in the Asia-Pacific," *The Pacific Review* 31, no. 6 (2018): 750-751, accessed June 28, 2022, <https://doi.org/10.1080/09512748.2018.1513549>.

<sup>385</sup> Ibid, 741.

<sup>386</sup> Ibid, 747.

<sup>387</sup> Ibid, 748.

guerrilla war in the information domain, but rather that other parts of the Chinese civil society augment and support the military and the state to realize external goals. In the case of hybrid warfare, the “people” refer to the use of information “militias” or non-PLA actors outside of the latter’s command structure that engages in information warfare activities in support of strategic and operational objectives.<sup>388</sup> To operationalize and effectively execute its conception of hybrid warfare, the Chinese Communist Party has changed the organizational relationships between the PLA and other organs within the Chinese state.<sup>389</sup> From the idea of form following function, it would not be unrealistic to conclude that these organizational changes exacerbate rather than alleviate a mindset of ongoing or constant struggle on the part of China. This thought is not dissimilar from Mark Galeotti's observations about Russia and its National Defense Management Center.<sup>390</sup>

This section explored China’s response to the challenge of postmodern warfare. Whether that solution is distinctly Chinese is open to debate in much the same vein that scholars continue to argue the uniqueness of the Chinese way of war at the macro-level.<sup>391</sup> Like any strategic approach, the Chinese version contains recognizable and distinct aspects. Like the Russians, the Chinese possess a more expansive view of conflict. Whether that is a function of culture, or their form of government can also be debated, but it is beyond the scope of this research. What is clear is that the three warfares and “intelligentized” war are China’s attempts to wage war in the Information Age effectively. Based on its assessment of the Russo-Ukrainian warfare, it would not be surprising if China places increased emphasis on the three warfares and other non-military actions in the future to keep competition in the grey zone and avoid a “hot” war.

### 3. Israel and the Campaign Between Wars

Israel is an outlier in the company of the two other nations examined in this chapter. Gaining its independence in 1948, it is the youngest and smallest nation-state in terms of population and size of its military. It has no tradition of empire/colonialism from which to draw that informs its aspirations and decision-making. It possesses a keen sense of national survival because of its position in the Middle East, how it became a nation, and the many conflicts it has waged with the foes surrounding it. Israel also tends to hold its strategy and intentions close in stark contrast to how the US, Russia, and, increasingly, China promulgate their strategic documents and concepts to message allies and opponents.<sup>392</sup> What Israel has made clear throughout its history is its willingness to uphold its territorial sovereignty and the safety of its citizens, often ruthlessly, if it perceives a threat to either.<sup>393</sup>

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<sup>388</sup> Ibid.

<sup>389</sup> Sangkuk Lee, “China’s ‘Three Warfares’: Origins, Applications, and Organizations,” 209-210.

<sup>390</sup> Mark Galeotti, “Russian Perceptions of Conflict,” (begin @ 16:45).

<sup>391</sup> Andrew Scobell, “The Chinese Way of War,” in *The Evolution of Operational Art: From Napoleon to the Present*, eds. John Andreas Olsen and Martin van Creveld (Oxford: Oxford University Press, 2010), 215.

<sup>392</sup> Stuart A. Cohen, *Israel and its Army: From Cohesion to Confusion* (New York: Taylor & Francis, 2008), 35-36, Adobe PDF eBook. Also, Meir Finkel, “IDF Strategy Documents, 2002-2018: On Processes, Chiefs of Staff, and the IDF,” *Strategic Assessment* 23, no.4 (October 2020): 3-17, accessed July 25, 2022, <https://strategicassessment.inss.org.il/wp-content/uploads/2020/11/IDF-Strategy-Documents.pdf>, 7.

<sup>393</sup> Israel Defense Force, *Deterring Terror: How Israel Confronts the Next Generation of Threats*, trans. by Susan Rosenberg, (Cambridge: Belfer Center for Science and International Affairs, August 2016), accessed July 25,

Historically, Israel has achieved this outcome using its military and intelligence services. The Israel Defense Force comprises a small force and is easily the most capable military in the region. The Israeli intelligence services, likewise, have a well-earned reputation for effectiveness. From its founding through at least the early 2000s, military confrontation between Israel and its Arab neighbors tended to favor the former. From its position as a small country with its back to the Mediterranean Sea, Israel approached war favoring preemptive strikes and, where this was not politically feasible, waging short, sharp conflicts to drive the enemy from Israeli territory as quickly as possible.<sup>394</sup> The IDF maintained long-term security through raids and, later, precision airstrikes designed to inflict damage on the enemy as well as demonstrate Israel's willingness to escalate if required.<sup>395</sup> The relative competence and capability of the IDF and the fact that Israel controlled the timing and tempo of these operations enabled it to effectively manage the risk of escalation and spillover during this period.

Israel's calculus changed profoundly during the Second Lebanon War in 2006, where the IDF found itself increasingly drawn into a morass against dug-in and well-equipped elements of Hezbollah, a non-state terror group. The IDF was unable to reach a military decision. The result was a strategic stalemate, but the IDF suffered more damage, especially in terms of societal prestige and confidence, than Hezbollah forces.<sup>396</sup> In truth, the result should not have come as a shock. The effectiveness of the IDF's cross-border incursions into neighboring countries had been eroding since the mid-1990s, partly due to a change in Israeli attitudes toward its casualties.<sup>397</sup> The reduced effectiveness of the IDF and Israel's inability to bring about a military decision reflects the "new wars" phenomenon outlined in Chapter 2, where the military element is hard-pressed to make a lasting decision. Conflict tends to drag on indeterminately. Given this context, how has Israel responded to Hoffman's "hybrid wars"?

One would not consider Israel to be a pioneer in hybrid warfare. Yet, the IDF has invariably faced opponents that employ hybrid techniques and approaches against it. The salience of this last point increases considering that Israel's most active opponents are non-state, militant organizations that control territory and provide state-like services, such as Hamas and Hezbollah, or those that serve as proxies for state adversaries such as Iran, which is also the case with Hezbollah.<sup>398</sup> These organizations recognize the need to use asymmetric advantages against Israel because they cannot compete on an equal footing and expect success. This is especially true of Hezbollah, which occupies a unique space within Lebanese

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2022, [Israeli Defense Forces' Defense Doctrine - English Translation | Belfer Center for Science and International Affairs](#), 3.

<sup>394</sup> Gabi Siboni, Yuval Bazak, and Gal Perl Finkel, "The Development of Security-Military Thinking in the IDF," *Strategic Assessment* 21, no. 1 (April 2018): 8, accessed July 17, 2022, [https://www.inss.org.il/wp-content/uploads/2018/05/adkan21.1ENG\\_3.pdf](https://www.inss.org.il/wp-content/uploads/2018/05/adkan21.1ENG_3.pdf).

<sup>395</sup> Eran Ortal, "The Fly on the Elephant's Back: The Campaign Between Wars in Israel's Security Doctrine," *Strategic Assessment* 24, no. 2, (April 2021): 110, accessed July 28, 2022, <https://strategicassessment.inss.org.il/en/articles/the-fly-on-the-elephants-back-the-campaign-between-wars-in-israels-security-doctrine/>.

<sup>396</sup> Cohen, *Israel and its Army*, ix-x.

<sup>397</sup> Avi Kober, "From Heroic to Post-Heroic Warfare: Israel's Way of War in Asymmetrical Conflicts," *Armed Forces & Society* 41, no. 1 (2015): 105, accessed November 11, 2021, <https://doi.org/10.1177/0095327X13498224>.

<sup>398</sup> "What is Hamas?" *Council on Foreign Relations*, last modified August 17, 2021, accessed July 28, 2022, <https://www.cfr.org/backgrounder/what-hamas>; and "What is Hezbollah?" *Council on Foreign Relations*, last modified May 25, 2022, accessed July 28, 2022, <https://www.cfr.org/backgrounder/what-hezbollah>.

society; it is simultaneously a distributor of social services, a political actor, and a military organization.<sup>399</sup> Employing a mix of conventional and unconventional military power in regular and irregular ways, they are inherently hybrid and closely conform to Frank Hoffman's definition of hybrid wars as a "range of different modes of warfare" employed by one side or the other within the same conflict.<sup>400</sup> In this sense, the type of hybrid warfare that the Israelis describe does not leverage non-military tools to the degree that they are present in Russian and Chinese discussions on the topic, especially those from the information domain.<sup>401</sup> This is not to say that the information component of warfare is absent. It simply points out that the Israeli sources did not emphasize non-military tools to the same degree and certainly not in a standalone capacity.

In the wake of the Second Lebanon War, Israel and the IDF undertook a great deal of critical examination to understand and then correct the latter's performance or, more precisely, its inability to deliver results commensurate with the Israeli state and citizens' expectations.<sup>402</sup> This realization prompted a change in the IDF's operational approach that has come to be known as the Campaign Between Wars (CBW), a concept of integrated, low-intensity, pre-emptive warfare.<sup>403</sup> *Deterring Terror: How Israel Confronts the Next Generation of Threats* (2016), the English translation of the IDF's official strategy, describes CBW as routine military actions undertaken "to maintain and enhance the achievements of the previous campaign in a series of secondary goals and objectives designed to prevent war."<sup>404</sup> As the title implies, the CBW is not war but rather part of routine military activities "to maintain security, deter the enemy from operating against Israel, and to delay the next confrontation."<sup>405</sup> According to Lieutenant General Gadi Eisenkot, IDF Chief of Staff from 2015 to 2019, the CBW has three goals:

1. Delay war and deter enemies by constantly weakening their force buildup processes and damaging their assets and capabilities.
2. Enhance Israel's legitimacy for using force while damaging the enemy's legitimacy, in part by exposing clandestine military activities that violate international law.
3. Create optimal conditions for the IDF if war finally does come.<sup>406</sup>

The strategic logic underpinning the CBW seeks to manage the status quo to favor Israel while minimizing the risk of unintended escalation. As articulated in *Deterring Terror*, CBW is

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<sup>399</sup> Shimon Naveh, "Interview with BG (Ret.) Shimon Naveh. November 1, 2007," *Operational Leadership Experiences* (Fort Leavenworth: Combat Studies Institute, 2007), 5.

<sup>400</sup> Hoffman, "The Rise of the Hybrid Wars," 14.

<sup>401</sup> For the Russian perspective see Fridman, "Hybrid Warfare or Gibrinaya Voyna?" 43. For the Chinese perspective see China Aerospace Studies Institute, *Science of Military Strategy 2020*, 240.

<sup>402</sup> Russell W. Glenn, *All Glory is Fleeting: Insights from the Second Lebanon War* (Santa Monica: RAND, 2012), accessed July 27, 2022, <https://www.jstor.org/stable/10.7249/j.ctt3fh003>, 15-16. Also, Avi Kober, "The Israel Defense Forces in the Second Lebanon War: Why the Poor Performance?" *Journal of Strategic Studies* 31, no. 1 (2008): 5-6, accessed March 12, 2022, <https://doi.org/10.1080/01402390701785211>.

<sup>403</sup> Gadi Eisenkot and Gabi Siboni, "The Campaign Between Wars: How Israel Rethought Its Strategy to Counter Iran's Malign Regional Influence," *Washington Institute for Near East Policy* (September 4, 2019), accessed October 1, 2021, EBSCOhost, International Security & Counter Terrorism Reference Center.

<sup>404</sup> Israel Defense Force, *Deterring Terror: How Israel Confronts the Next Generation of Threats*, 25.

<sup>405</sup> *Ibid.*, 23.

<sup>406</sup> Eisenkot and Siboni, "The Campaign Between Wars."

intended as a multidisciplinary concept that includes economic, legal, media, and political tools employed alongside or in support of the military “based on a single strategic rationale.”<sup>407</sup>

Because it employs multiple elements of national power and seeks to avoid armed conflict, Israel’s CBW qualifies as a hybrid approach and is easily recognizable by Western, Russian, and Chinese practitioners. Covert and clandestine activities figure prominently for actions beyond Israel’s borders to damage the enemy, create freedom of maneuver, and minimize attribution.<sup>408</sup> Like Russia’s *gibridnaya voyna*, the CBW emphasizes using “public perception, economic, and legal areas as part of the effort to reduce the enemy’s capabilities and legitimacy” while enhancing those of Israel.<sup>409</sup> Like the other hybrid approaches, the CBW is intended to manage competition on a routine or ongoing basis, “under the war threshold,” instead of being a blueprint for how to wage war – a fact indicative of a more nuanced or complex view of war and conflict.<sup>410</sup> The CBW differs from the Russian and Chinese approaches in the degree to which the latter two emphasize the stand-alone use of information in doctrine and practice. This difference is to be expected when one considers Israel’s small size and its military culture, which is rooted in the survival of the Israeli state, not grand operational concepts.<sup>411</sup> Accordingly, the IDF favors “a pragmatic and empirical approach to the application of military force.”<sup>412</sup>

This difference also explains the tension within Israeli professional journals reviewed for this section. In several, there appears to be a nostalgia, if not a pining, for the “old” IDF before the second Intifada in 2000. This nostalgia manifests as a critique of many aspects of the military as an institution, some of which were well-founded and some not.<sup>413</sup> But much of the discontent emanated from a shift in the threat facing Israel, which shifted away from high-intensity combat to low-intensity “new war” that the IDF had no choice but to confront.<sup>414</sup> The perception was that the “old” IDF prioritized reaching a battlefield decision and did not try to avoid the losses in men and materiel required.<sup>415</sup> In the CBW, the IDF pursues a style of warfare that has it engage in conflicts, the results of which have no bearing on Israel’s survival.<sup>416</sup> These discretionary conflicts emphasize technology while seeking to minimize casualties – a situation not dissimilar from the American military

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<sup>407</sup> IDF, *Deterring Terror*, 26.

<sup>408</sup> *Ibid.*, 26-27.

<sup>409</sup> *Ibid.*, 27.

<sup>410</sup> Amos Yadlin and Assaf Orion, “The Campaign Between the Wars: Faster, Higher, Fiercer?” *Institute for National Security Studies* (2019), accessed July 24, 2022, <http://www.jstor.com/stable/resrep19363>, 2; and IDF, *Deterring Terror*, 13.

<sup>411</sup> Martin van Creveld, *The Sword and the Olive: A Critical History of the Israeli Defense Force* (New York: Public Affairs, 2002), 311, Adobe PDF eBook.

<sup>412</sup> Cohen, *Israel and its Army*, 36.

<sup>413</sup> Avi Kober, “The Rise and Fall of Israeli Operational Art, 1948–2008.” in *The Evolution of Operational Art: From Napoleon to the Present*, eds. John Andreas Olsen and Martin van Creveld (Oxford: Oxford University Press, 2010), 215. Kober talks about the anti-intellectualism of the Israeli military and “its failure to become a learning institution.”

<sup>414</sup> Kober, “The Rise and Fall of Israeli Operational Art,” 178-179.

<sup>415</sup> Ron Tira, “Israel’s Second War Doctrine,” *Strategic Assessment* 19, no. 2 (July 2016): 144, 155, accessed July 29, 2022, <https://strategicassessment.inss.org.il/wp-content/uploads/antq/fe-566341227.pdf>; Siboni, Bazak, and Finkel, “The Development of Security-Military Thinking in the IDF,” 8; and Ortal, “The Fly on the Elephant’s Back,” 109.

<sup>416</sup> Kober, “From Heroic to Post-Heroic Warfare,” 98.



experience of the last 25 years. Israeli strategic planner and scholar Avi Kober likened this shift in IDF thinking to Edward Luttwak's concept of "post-heroic warfare," which leverages technology to win wars while minimizing friendly casualties.<sup>417</sup> In this "small but smart" configuration, the IDF pursued a competitive advantage based on a smaller force equipped with more effective weapons systems to reduce vulnerability and increase lethality.<sup>418</sup> The main observation from Kober and Luttwak's critique is that, in treating the use of organized violence (aka war) as routine, it is no longer decisive. [The inability to achieve a decision in modern conflict is a recurrent theme in contemporary war studies literature with examples such as Rupert Smith's *The Utility of Force* (2008) and *War from the Ground Up* (2012), among others.] The CBW bleeds over into how the IDF makes war – with damaging effects.<sup>419</sup> Regardless, the Campaign between Wars constitutes Israel's approach to hybrid warfare as a counter to the panoply of asymmetric threats it faces.

## Conclusion

Examining how Russia, China, and Israel approach contemporary warfare as an alternative to the US is beneficial. It suggests that there is no single approach to warfare and that one should not automatically assume American or Western methods to be superior. The assumption that each approach fits a state's particular circumstances and is suited to the intended purpose is implicit in each approach. This means that the approach holds a reasonable chance of delivering success. That all three states have their hybrid approach distinct from the others proves Michael Kofman's point that the term "hybrid warfare" lacks precision and has become so "tortured" that it accommodates a broad diversity of understanding as to what constitutes "hybridity."<sup>420</sup> The difference between Frank Hoffman's original definition of hybrid warfare and its mix of conventional and unconventional forces and tactics has already been compared to Russia's understanding of the same, which "combines different types of power projection."<sup>421</sup> In addition, Russia and the West each significantly influenced the other's understanding and development of hybrid warfare. Notwithstanding the lack of precision inherent in the term, significant points of commonality exist across the three approaches that deserve mentioning.

Examining Russian and Chinese writing on their approach to contemporary warfare reveals a much more expansive and nuanced view of conflict than the traditional binary expression of peace or war. Russia and China both acknowledge a state of war corresponding to the Western view in which belligerents engage one another in combat. The difference is that they also accommodate a view of ongoing struggle/competition that uses information and other non-military elements of national power against opponents to achieve desired outcomes absent active hostilities between the parties. Coming to grips with this

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<sup>417</sup> Ibid.

<sup>418</sup> Avi Kober, *Practical Soldiers: Israel's Military Thought and Its Formative Factors* (Leiden: Brill, 2015), 99, accessed September 19, 2023, ProQuest Ebook Central.

<sup>419</sup> Oren Barak, Amit Sheniak, and Assaf Shapira, "The Shift to Defence in Israel's Hybrid Military Strategy," *Journal of Strategic Studies* (June 2020): 18-19, accessed July 9, 2022, <https://doi.org/10.1080/01402390.2020.1770090>; Ortal, "The Fly on the Elephant's Back," 109; and Tira, "Israel's Second War Doctrine," 155-156.

<sup>420</sup> Kofman, "Russian Hybrid Warfare and Other Dark Arts," *War On the Rocks*, March 11, 2016, accessed May 20, 2022, <https://warontherocks.com/2016/03/russian-hybrid-warfare-and-other-dark-arts/>.

<sup>421</sup> Kofman and Rojansky, "A Closer Look at Russia's 'Hybrid War,'" 2.

state of “not quite war” has challenged the US and the West. An echo of this can be seen in Israel, which has a modern military that shares a philosophy of combined arms and maneuver warfare with its American and NATO counterparts. While admittedly hybrid, the IDF’s Campaign between Wars is still overwhelmingly military in application and does not emphasize the non-military or information component to the same degree as the Russians and Chinese. Using terms within international relations and security studies literature, such as competition, grey zone conflict, competition below the threshold of armed conflict, and great power conflict, to describe Russia and China's hybrid operations proves this point.<sup>422</sup>

In postmodern war, the means of conflict necessitates a more expansive view of warfare that is more akin to perpetual conflict than a binary state of either peace or war. The application of hybrid warfare, especially as the Russians and Chinese understand it, has much in common with the older concept of political warfare. George Kennan described political warfare as “the logical application of Clausewitz’s doctrine in time of peace.”<sup>423</sup> Whether purposeful or not, Kennan’s 1948 description reveals the irony of a mode of war waged during peacetime. What has changed is the outsized role of information in today’s globalized and interconnected societies. Information has a much more significant impact than in previous eras, and its weaponization ability has also increased. Much of this information resides and is generated in the virtual space. This virtual quality, coupled with the ease of access due to the proliferation of information technology, gives information speed of transmission, penetration, and increased potential for damage. The nature of information in today’s information environment makes hybrid warfare much more potent than preceding forms of political warfare.

One final point must be made on the erosion of the boundary between peace and war: the boundary between peace and war is essentially a matter of perspective. This is to say that each actor has its own idea as to the width of the grey zone between peace and war in which it can exercise freedom of action while maintaining acceptable risk. Geography, culture, and historical experience continue to inform and influence how wide the grey zone might be. The Russian and Chinese historical experience can be seen in their more expansive view of conflict and the oversized role each accords to information that harkens back to the importance of ideology in the communist era. Placing this observation within the context of postmodern war and the Information Age, it is hardly surprising that both Russia and China have again expanded the scope of conflict, if not outright war, into areas of peaceful intercourse between nations. This contrasts with Israel’s emphasis on the role of traditional military tools over non-military ones in its conception of hybrid warfare. This speaks to the role played by the IDF as the final guarantor of state survival. The three cases examined here provide insight into how each state addresses the challenge of postmodern war and how each understands the ambiguous boundaries between peace and war. Appreciating these differences is especially important as humanity continues to reckon with what it means to wage war in the Information Age.

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<sup>422</sup> Javier Jordan, "International Competition Below the Threshold of War: Toward a Theory of Gray Zone Conflict." *Journal of Strategic Security* 14, no. 1 (2020): 1, accessed August 3, 2022, <https://doi.org/10.5038/1944-0472.14.1.1836>.

<sup>423</sup> Kennan, “The Inauguration of Organized Political Warfare,” 1.

## Chapter 4 - Methodology: Doctrine and Classroom

This chapter explains the methodology encompassing the research conducted in this dissertation. The research focuses on whether the US military has changed how it conceives the character of war during the Information Age. Indications of change will be sought within US joint doctrine and the curriculum within the National Defence University course offerings, the highest level of US professional military education. The results will assist in determining whether the US military has departed from what it perceives to be its comparative advantage of technology-driven industrial warfare to a form of postmodern warfare more suited to the conditions of the Information Age.

This shift from industrial warfare to a different form of warfare needs exploration. The former mode is the US military's preferred paradigm, and it is unwilling to depart from it.<sup>424</sup> Beyond being change-averse, the US Military Services are reluctant to abandon or alter their fighting style because industrial warfare conforms to a "vision" or conception of what warfare "should" look like.<sup>425</sup> Second, the US military is proficient at conducting this form of warfare relative to its opponents. Its ability to employ joint forces that overwhelm resistance from less capable adversaries, as in the initial stages of Operation Iraqi Freedom in 2003, is unparalleled by near-peer competitors like China and Russia. Industrial warfare is the comparative advantage of American forces *vis-à-vis* potential opponents.

This chapter explains the methodology used in this dissertation to ensure rigour in answering the research question. This includes addressing the assumptions and decisions made during the research and providing insight into the thought processes informing it. As with any choice, opting for one methodology over others carries advantages and disadvantages. Therefore, addressing the limitations of the chosen method and the corresponding research product is an essential component of this chapter. In addition, this chapter addresses three primary topics: research design, methodology limitations, and other potential methods. First, the research design covers the overarching philosophy, type, strategy, and data collection and analysis methods. The following section focuses on limitations and biases, addressing the shortcomings of the selected process. The third and final section explores the potential viability of other methods and the rationale and critical decisions that led to discarding them.

### 1. Research Design

From an epistemological perspective, post-positivism best describes this dissertation's research approach. Post-positivism comprises aspects of positivist and interpretivist viewpoints; it attempts to balance positivism's empirical nature, sometimes seen

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<sup>424</sup> Jacquelyn Schneider, "Does Technology Win Wars?" *Foreign Affairs*, March 3, 2023, accessed March 9, 2023, <https://www.foreignaffairs.com/ukraine/does-technology-win-wars>.

<sup>425</sup> Tarak Barkawi and Shane Brighton, "Powers of War: Fighting, Knowledge, and Critique" *International Political Sociology* 5, no. 2 (2011):134-135; accessed October 1, 2021, <https://doi.org/10.1111/j.1749-5687.2011.00125.x>. This note references Barkawi's idea about the "historicity" of a particular war or instance of combat and "its ordering effects on thought and knowledge about war."

as more scientific, with individual or group perspectives' role in determining meaning.<sup>426</sup> Positivism holds that “absolute truth” can be revealed and is firmly rooted in quantitative methods associated with the “hard” or natural sciences. Post-positivism rejects this proposition, positing that human beings hold biases that influence their worldview.<sup>427</sup> These biases affect human interpretation at the individual and group levels. For example, Thomas Kuhn’s theory on the nature of scientific revolutions is post-positivist. It embodies a clash of different paradigms championed by individuals and groups of individuals who interpret knowledge differently from one another.<sup>428</sup> While Kuhn’s clash of paradigms as a typological theory is developed later in this chapter, the main point is that interpretation determines meaning. Post-positivism treats knowledge as observable and measurable while acknowledging perspective’s importance. Applying this idea to the examination of joint doctrine, the focus is then on the description and explanation of the phenomenon of war over time as interpreted by the US Joint Staff and its doctrine writers. Variations over time as to how US joint doctrine explains the phenomenon of war indicate a change in the US military’s understanding of the same. Change is best described in three ways: expansion, contraction, or status quo. Having identified post-positivism as the epistemological approach, the next step is characterizing the reasoning or logic used to ensure the validity of the research argument.

The two most basic forms of logical reasoning are deduction and induction. Deductive reasoning or deductive inferences move from the “general to the particular,” whereas inductive reasoning proceeds opposite from the “particular to the general.”<sup>429</sup> Scholars evaluate deductive inferences in terms of their logical validity and “soundness,” not whether they are objectively true.<sup>430</sup> “A deductive argument is one in which it is claimed that the premises provide a guarantee of the truth of the conclusion.”<sup>431</sup> Deductive inferences can be valid if the premises logically support them without necessarily being true. Although untrue, such inferences are nonetheless logical. “What alone makes an indirect [or deductive] inference valid is not that its premises and conclusions are true, but that the truth of the premises has the truth of the conclusion as a necessary consequence.”<sup>432</sup> A conclusion is proper if the logic is valid and if a relationship or connection exists between the inferences and conclusion that is, itself, true.<sup>433</sup> Deductive reasoning “hold[s] together the logical lattices

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<sup>426</sup> Abdul Hameed Panhwar, Sanaullah Ansari, and Asif Ali Shah, “Post-positivism: An Effective Paradigm for Social and Educational Research,” *International Research Journal of Art & Humanities* 45, no. 45 (2017): 253-254, accessed October 2, 2020, EBSCO host.

<sup>427</sup> Panhwar, Ansari, and Ali Shah, “Post-positivism: An Effective Paradigm for Social and Educational Research,” 255.

<sup>428</sup> D.C. Phillips, *The Expanded Social Scientist’s Bestiary: A Guide to Fabled Threats to, and Defenses of, Naturalistic Social Science* (Lanham: Rowman & Littlefield Publishers, Inc., 2000), 111-112. This note acknowledges the role of Karl Popper and Thomas Kuhn in overturning positivism, specifically logical positivism, which paved the way for post-positivism.

<sup>429</sup> Alexander Pfänder, *Logic*, trans. Donald Ferrari (Berlin/Boston: De Gruyter, Inc., 2013), accessed October 2, 2022, ProQuest Ebook Central, 395.

<sup>430</sup> Lewis Vaughn, *The Power of Critical Thinking: Effective Reasoning about Ordinary and Extraordinary Claims*, 2nd ed. (New York: Oxford University Press, 2008), 279.

<sup>431</sup> Timothy Crews-Anderson, *Critical Thinking and Informal Logic* (Penrith: Humanities-Ebooks, LLP, 2007), <http://ebookcentral.proquest.com/lib/vmi/detail.action?docID=3306069>, 19.

<sup>432</sup> Pfänder, *Logic*, 328.

<sup>433</sup> Ibid.

of mathematics, computer science, and other theoretical or abstract disciplines.”<sup>434</sup> Because of its dependence upon logical validity, deduction aligns with positivism and empiricism much more than with an interpretivist or constructivist approach.

Induction proceeds from specific inferences to general conclusions. Timothy Crews-Anderson, author of *Critical Thinking and Informal Logic* (2007), described an inductive argument as one “...in which it is claimed that the premises provide reasons supporting the probable truth of the conclusion.”<sup>435</sup> Arguments are rated as strong or weak, and truth is not guaranteed. Although unable to deliver certainty or “truth,” as with a valid deductive argument, inductive solid arguments have high levels of probability such that they are “more likely to be true than not” to be true.<sup>436</sup> Inductive arguments are “truth seeking”, in contrast to “truth preserving” and make it possible to go “beyond the evidence” from what is known to what is not known.<sup>437</sup> This dissertation utilizes inductive reasoning as the logical basis for its argument. Going from the particular to the general, empirical changes in the language US joint doctrine uses to describe the phenomenon of war over time (the individual) indicate that the US military has changed [or not changed] its conception of warfare (the general). This inductive argument shows that change in particular instances reliably or probably explains changes in the general phenomenon. For example, a change in doctrine can indicate a more significant change in how the US military thinks about warfare. Having addressed the use of inductive reasoning to get at the substance or “what” is changing, the focus now shifts to “why” change is occurring. To explain the “why,” it is necessary to use abductive reasoning.

Abductive reasoning is a type of inference comparable to deduction and induction. Douglas N. Walton, distinguished research fellow at the University of Windsor, Ontario’s Centre for Research in Reasoning, Argumentation, and Rhetoric, characterizes abduction as the “inference to the best explanation,” one that is “...reason[ed] from data to a hypothesis that explains the data.”<sup>438</sup> According to Walton, an excellent abductive inference is considered “weighty” and “often associated with the kind of reasoning used in the construction of hypotheses in the discovery stage of scientific evidence.”<sup>439</sup> Of the three types of inferences, abduction provides the least certainty. However, what it lacks in logical certainty, it makes up for in providing a ready and plausible explanation that can be overturned or amended with more significant data collection or a more compelling hypothesis.<sup>440</sup> Despite these limitations, such explanations serve as a springboard from which researchers make educated assumptions. Taking this one step further, these assumptions, once validated, result in great leaps forward and advance knowledge.

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<sup>434</sup> Lewis Vaughn, *The Power of Critical Thinking: Effective Reasoning about Ordinary and Extraordinary Claims*, 2nd ed. (New York: Oxford University Press, 2008), 279.

<sup>435</sup> Crews-Anderson, *Critical Thinking and Informal Logic*, 20.

<sup>436</sup> Vaughn, *The Power of Critical Thinking*, 279.

<sup>437</sup> Jonathan St. B. T. Evans and David E. Over, “Reasoning to and from Belief: Deduction and Induction Are Still Distinct,” *Thinking & Reasoning* 19, no. 3 (2013): 267-286, accessed October 10, 2022, <http://dx.doi.org/10.1080/13546783.2012.745450>, 268; and Vaughn, *The Power of Critical Thinking*, 279.

<sup>438</sup> Douglas Walton, *Abductive Reasoning* (Tuscaloosa: University of Alabama Press, 2005), ProQuest Ebook Central, xiii.

<sup>439</sup> *Ibid.*, 3-4.

<sup>440</sup> Douglas Walton, Chris Reed, Fabrizio Macagno, *Argumentation Schemes* (Cambridge: Cambridge University Press, 2008), 170-171.

This dissertation makes an abductive inference that Thomas Kuhn's paradigm shift theory and Ludwik Fleck's concept of "thought collectives" best explain how the US military's conception of war is changing. These two hypotheses are operative simultaneously and apply to change differently, a difference explained later in greater detail. These two theories provide the best explanation as to "how" the phenomenon of change is taking place within the US military. Here, the study builds upon the underlying assumption that the US military is in the middle of a paradigm shift and, using an abductive inference, employs the thinking of Kuhn and Fleck to move the argument forward and give it depth.

## 2. Kuhn, Fleck, & Hoffman

As previously introduced in Chapter 1, Thomas Kuhn was an American philosopher of science, widely considered one of the field's most influential contributors.<sup>441</sup> He is credited with redefining how scholars view the philosophy and history of science.<sup>442</sup> His book, *The Structure of Scientific Revolutions* (1962), explains the creation of new natural science paradigms and how these new theories replace earlier explanations. Paradigms are not restricted to science and are helpful for the unifying perspective they exert on a particular subject, irrespective of the field. These viewpoints provide a common framework to perceive and make sense of the world and serve as a foundation for action. From Kuhn's perspective, a paradigm related to a particular field is most useful when it inspires experiments that add more specific knowledge or understanding, closes gaps between theory and practice, and resolves ambiguities or paradoxes relating to the paradigm itself.<sup>443</sup> Over time, knowledge and understanding spread to the limits of what the paradigm can accommodate or explain without contradiction or ambiguity. When the paradigm can no longer sufficiently explain or make sense of the world, it precipitates a crisis that must be resolved.<sup>444</sup> For Kuhn, this crisis fosters other scientific theories that attempt to bridge the gap and resolve inconsistencies or inadequacies (what he calls "anomalies") between the old paradigm and the current state of understanding. Crises spawn new theories that test but do not eliminate the current paradigm. Eventually, one or several of these theories reach a critical point and coalesce with acceptance and advocacy within the larger field. According to Kuhn, the new theory or theories replace the old paradigm at this juncture, destroying it, and becoming the new, prevailing paradigm.

Theoretical adjustment constitutes a shift in paradigms. However, to be accurate, Kuhn uses the word "revolution" to describe what occurs. He draws several comparisons with politics and political revolutions to make his point, comparing the insufficiency of the governing paradigm with that of an inept government and the discontent it breeds.<sup>445</sup> Kuhn vividly describes how "political revolutions aim to change political institutions in ways that

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<sup>441</sup> Lawrence Van Gelder, "Thomas Kuhn, 73; Devised Science Paradigm," *The New York Times*, June 19, 1996, sec. U.S., accessed October 15, 2022, <https://www.nytimes.com/1996/06/19/us/thomas-kuhn-73-devised-science-paradigm.html>.

<sup>442</sup> Alexander Bird, "Thomas Kuhn," *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta, Spring 2022 (Metaphysics Research Lab, Stanford University, 2022), accessed October 15, 2022, <https://plato.stanford.edu/archives/spr2022/entries/homas-kuhn/>.

<sup>443</sup> Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 3rd ed. (Chicago: The University of Chicago Press, 1996), 25-27.

<sup>444</sup> *Ibid.*, 74-75.

<sup>445</sup> *Ibid.*, 92-93.

those institutions themselves prohibit.”<sup>446</sup> He completes the metaphor by saying that “like the choice between competing political institutions, that between competing paradigms proves to be a choice between incompatible modes of community life.”<sup>447</sup> Kuhn’s research focused on change within the natural sciences. Still, his concept of paradigm shift has since been applied to explain change in myriad other disciplines, from sociology to nursing and even religious education.<sup>448</sup>

Kuhn’s concept of paradigm shifts helps explain how a new idea or theory emerges, slowly gains momentum within a community of interest, and then reaches a critical mass, at which point it shatters and replaces the older mode of thought. One aspect of Kuhn’s theory that is particularly pertinent to this study is the resistance that arises in defense of the reigning paradigm despite its insufficiencies *vis-à-vis* the new one. This happens before the paradigm shift is complete and may be likened to a “doubling down” of the old guard as they seek to maintain it. Kuhn writes that scientists confronted with an anomaly “will devise numerous articulations and ad hoc modifications of their theory in order to eliminate [or reconcile] any apparent conflict.”<sup>449</sup>

Applied to the subject of this thesis, Kuhn’s approach would suggest that a paradigm shift is ongoing: the Information Age has reduced the effectiveness of traditional methods of warfare. Yet, the US military is holding fast to modern, industrial warfare as its preferred method of warfare. The fact that the US military is responding in such a manner in the face of apparent changes in the character of contemporary war speaks to the strength that prevailing paradigms can exert. But new paradigms do not simply appear out of thin air. They arise because humans generate new knowledge and develop new ways of thinking. How, then, is “new” knowledge generated? Polish-born microbiologist Ludwik Fleck and his work on thought collectives supply the explanation used within this research.

Fleck’s work postulates that societal and cultural influences on groups of like-minded and like-thinking individuals are responsible for creating new knowledge. Before Fleck’s hypothesis, people acknowledged the influence of sociological factors such as religion and culture on human thinking and decision-making but believed that science was independent of such influences.<sup>450</sup> Logic, not human emotion or the whims of society, dictated the course of scientific advancement. Ludwik Fleck postulated that some other factor, beyond pure logic and the scientific method, influenced the creation of new knowledge.

Fleck’s work on the philosophy of science predates that of Thomas Kuhn by at least three decades. His one key text in the field is *Entstehung und Entwicklung einer wissenschaftlichen Tatsache: Einführung in die Lehre vom Denkstil und Denkkollektiv* (1935). Largely unnoticed at the time of publication, *Entstehung und Entwicklung* was translated into English

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<sup>446</sup> Ibid, 93-94.

<sup>447</sup> Ibid.

<sup>448</sup> A Google search for “Kuhnian paradigm shift in other disciplines” revealed multiple offerings across several disciplines. Ben Fine’s “Economics Imperialism and the New Development Economics as Kuhnian Paradigm Shift?” in *World Development* 30, no. 12 (2002); Gerald L. Peterson’s “Historical Self-Understanding in the Social Sciences: the Use of Thomas Kuhn in Psychology” in *Journal for the Theory of Social Behaviour* 11, no. 1 (1981); and Liam Gearon’s “Paradigm Shift in Religious Education: a Reply to Jackson, or Why Religious Education Goes to War.” *Journal of Beliefs & Values* 39, no. 3 (2018).

<sup>449</sup> Kuhn, 78.

<sup>450</sup> Wojciech Sady, “Ludwik Fleck – Thought Collectives and Thought Styles” in *Polish Philosophers of Science and Nature in the 20th Century*, Wladyslaw Krajewski ed. (New York: Rodopi, 2001): 197, Brill Ebook.

and appeared in 1979 as *Genesis and Development of a Scientific Fact*.<sup>451</sup> Fleck's enduring contribution to the philosophy of science is his concept of "thought collectives" (*die Denkkollektive*) and "thought styles" (*die Denkstile*).<sup>452</sup> For Fleck, the thought collective and its corresponding way of thinking created new knowledge and generated new "facts." Fleck based his conclusions upon the socio-cultural process he observed within the scientific community that culminated in the discovery of the Wasserman reaction, a test for syphilis based on the presence of specific antibodies.<sup>453</sup>

Fleck postulated that new knowledge did not simply appear spontaneously. Instead, it resulted from discrete collectives working on a specific problem and the influence of prevailing social customs and conditions. According to Fleck, the customs of the individual, family, extended family, region, society, etc., exerted a profound influence, setting the conditions under which human beings think and learn. Fleck preferred the term "cognition," over thinking and learning, stipulating that cognition is better described as "the act of ascertaining," i.e., the ability to make connections and establish cause.<sup>454</sup> According to Fleck, cognition has three main components: the individual, the collective, and objective reality. The last component, "objective reality," did not refer to reality per se; it was the aim or "that which is known" by the collective.<sup>455</sup> Individuals compose the collective and fall under its "prevailing thought style, which almost always exerts an absolutely compulsive force upon [their] thinking and with which it is not possible to be at variance."<sup>456</sup> From these quotes, it is clear that Fleck's understanding of objective reality is determined by the collective, which overlaps with constructivism and the collective process of determining meaning.

Fleck placed tremendous emphasis on the impact of the collective, be it a small group or the whole of society, upon the individual. He wrote, "cognition is the most socially-conditioned activity of man, and knowledge is the paramount social creation... without social conditioning no cognition is even possible."<sup>457</sup> "Any kind of learning is connected with some form of tradition and society, and word and customs already suffice to form a collective bond."<sup>458</sup> The collective was responsible for generating new thoughts and knowledge even though history might attribute scientific advances to specific individuals.<sup>459</sup> The concept of the thought collective (*das Denkkollektiv*) is "a community of persons mutually exchanging ideas or maintaining intellectual interaction; ...it provides the special 'carrier' for the historical development of any field of thought, as well as for the given stock of knowledge and level of culture" which is the thought style (*der Denkstil*) – the "system of beliefs common to members of a given thought collective."<sup>460</sup>

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<sup>451</sup> Ibid.

<sup>452</sup> Wojciech Sady, "Ludwik Fleck," in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta, Winter 2021 (Metaphysics Research Lab, Stanford University, 2021), <https://plato.stanford.edu/archives/win2021/entries/fleck/>.

<sup>453</sup> Sady, "Ludwik Fleck – Thought Collectives and Thought Styles," 197.

<sup>454</sup> Fleck, *Genesis and Development of a Scientific Fact*, 40.

<sup>455</sup> Ibid.

<sup>456</sup> Ibid, 41.

<sup>457</sup> Ibid, 42-43.

<sup>458</sup> Ibid, 42.

<sup>459</sup> Ibid, 22, 41. Fleck indicates his preference for collaboration, cooperation, and the iterative nature of learning in this passage: "Only through organized cooperative research, supported by popular knowledge and continuing over several generations, might a unified picture emerge..."

<sup>460</sup> Fleck, *Genesis and Development of a Scientific Fact*, 39; and Sady, "Ludwik Fleck – Thought Collectives and Thought Styles," 198.



Thought collectives, as Fleck describes them in *Entstehung und Entwicklung*, are malleable and have no proscribed structure. However, they generally possess a binary membership that breaks down as esoteric (expert) and exoteric (layperson).<sup>461</sup> Fleck likens the relationship of experts and laypeople within a collective to that of “the elite to the masses.”<sup>462</sup> In cases where the elites wield more significant influence, the collective is generally viewed as more “authoritarian” and the thinking more rigid and conservative. Where laypeople have more critical influence, it is said to be more “democratic” and have higher levels of progress and tolerance for innovation. This point is relevant because it explains the Joint Staff’s role in creating and promulgating doctrine. It also describes how a large institution like the Department of Defense endorses or sanctions innovation. Here, as the highest level or as an “elite” within the DoD organizational hierarchy, the Joint Staff determines what is and is not “accepted” knowledge.

Having established that Fleck wrote *Entstehen und Entwicklung* (1935) three decades before Thomas Kuhn’s *The Structure of Scientific Revolutions* (1962), it is unrealistic to expect that Fleck would have accounted for paradigms or their shifts. However, this does not mean that the two theories are incompatible. The contrary is true. Kuhn clarifies that he had read Fleck’s work ten years before publishing *The Structure of Scientific Revolutions* and was familiar with Fleck’s ideas. Kuhn built upon Fleck’s ideas or, at a minimum, borrowed from them. Fleck’s arc or life cycle of a comprehensive theory can easily be understood in terms similar to what is now recognized as a Kuhnian paradigm. When Fleck wrote that “every age has its own dominant conceptions [a paradigm] as well as remnants of past ones and rudiments of those of the future,” one might easily think that thought had come from Kuhn.<sup>463</sup> It is similar to Thomas Kuhn’s description of how paradigms exist for a time, are challenged with exceptions, and then are imperilled by contradictions that become more numerous and complex over time. Fleck also wrote that “every comprehensive theory goes through a classical stage, when only those facts are recognized which conform to it exactly, and then through a stage with complications, when the exceptions begin to come forward.”<sup>464</sup> The overlap between the two authors’ ideas is not mere coincidence. Kuhn built upon Fleck’s work.

Wojciech Sady, a Polish philosopher of science and authority on Ludwik Fleck, examined the latter’s work for mention of something akin to Kuhnian paradigm shifts and scientific revolution. Sady found mention of revolutions or paradigm shifts absent in Fleck’s work, although the concepts are not incompatible as has already been demonstrated. Sady found that Fleck talks about the effect of new knowledge generation on the words and statements used to explain them. “Old” and “new” statements tend to use the exact words, but the words have different meanings when they are applied to the “new” versus “old” context.<sup>465</sup> We make this shift in understanding implicitly. It is not that new knowledge has rendered them false, “but rather we talk in a different way about different things.”<sup>466</sup> The fact that the same language is now a carrier for new meaning acknowledges the existence of a new paradigm.

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<sup>461</sup> Fleck, *Genesis and Development of a Scientific Fact*, 102-103, 105.

<sup>462</sup> *Ibid.*, 105-106.

<sup>463</sup> *Ibid.*, 28.

<sup>464</sup> *Ibid.*, 29.

<sup>465</sup> Sady, “Ludwik Fleck – Thought Collectives and Thought Styles,” 202.

<sup>466</sup> *Ibid.*

It is no stretch of logic to conclude that Fleck's concept of thought collectives and thought styles accommodates Kuhn's ideas about the scientific revolution outright. Thomas Kuhn penned the foreword to the English translation of the *Entstehen und Entwicklung*. Kuhn commented that Fleck "saw in the history of science what I was myself finding there."<sup>467</sup> Kuhn's ideas about scientific revolutions using paradigms provide a broad conceptual *chapeau* under which Fleck's thought collectives and thought styles nest as the generators of new facts and knowledge. They create and add to the total body of scientific knowledge, eventually creating new paradigms that, shifting seamlessly to Kuhn's theory, overthrow old ones.

In addition to Thomas Kuhn and Ludwick Fleck, it is necessary to consider Frank Hoffman's work on how western militaries learn. Hoffman provides a valuable theoretical source that explains how the US military altered how it thought about the expression of war. Hoffman's book *Mars Adapting: Military Change During War* (2021) fits into the wider genre of military innovation, specifically focusing on "wartime learning and adaption."<sup>468</sup> *Mars Adapting* is also significant because it represents recent scholarship.<sup>469</sup> Hoffman's book lists four approaches or modes of military change worth exploring. As Hoffman refers to them, these approaches have applications to military change. To understand Hoffman's message, it is worthwhile to review each approach he identifies: the Interventionist approach, the Institutional approach, Intra-Organizational Politics, and the Interservice Competition approach.

First, the Interventionist school championed by Barry Posen supports "the externally directed, top down-driven school of military innovation."<sup>470</sup> This school assumes that the military is incapable of change from within; change must be imposed from the outside. Second, the Institutional school "contends that leaders (principals) delegate authority to experts and authorities whom they supervise to conduct activities or provide services."<sup>471</sup> Hoffman associates the work of political scientist Deborah Avant as representative of the institutionalists. They leverage Principal Agent Theory and see civil-military relations as one of, if not the, most significant determinants of change. The third school is Intra-Organizational Politics, championed by Stephen Rosen. It is predicated on the emergence of visionary leadership within the senior strata of an organization that offers a "new theory of victory" that creates "an ideological struggle within a particular service. ...Major innovation results primarily when a new theory of victory results in an intraservice

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<sup>467</sup> Thomas Kuhn, "Foreword" in Ludwick Fleck, *Genesis and Development of a Scientific Fact*, ed. Thaddeus J. Trenn and Robert K. Merton, trans. Fred Bradley and Thaddeus Trenn (Chicago: University of Chicago Press, 1979), viii.

<sup>468</sup> Hoffman, *Mars Adapting*, 13.

<sup>469</sup> *Mars Adapting* is both more recent than, for example, Williamson Murray and Allan Millet's *Military Innovation in the Interwar Period* (1998) and more focused on learning and adaptation during wartime. Much of the last decade of scholarship focused on US military adaptation specific to counterinsurgency in Iraq and Afghanistan. Conrad Crane's *Cassandra in Oz* (2016), Chad Serena's *A Revolution in Military Adaptation: The US Army in the Iraq War* (2011), and David Barno and Nora Bensahel's *Under Fire: How Militaries Change in Wartime* (2020) all fall in this category. Last, Hoffman's *Mars Adapting* focuses exclusively on the US military whereas other books on military innovation tend to cover a broader cross section of other countries' militaries and historical periods, e.g., Williamson Murray's *Military Adaptation in War* (2011).

<sup>470</sup> Hoffman, *Mars Adapting*, 19.

<sup>471</sup> *Ibid*, 21.

ideological struggle.”<sup>472</sup> This school is driven primarily by competition within the individual military services rather than by the enemy. Hoffman’s final innovation theory is Interservice Competition, and he identifies defense policy expert Harvey Sapolsky as its primary advocate. “Competition is the primary source for innovative ideas that enable one organization to stake a claim to missions or resources absorbed by others less efficiently or effectively.”<sup>473</sup> Having articulated the four broad traditional explanations of change and innovation within military organizations, Hoffman puts forth his model, which adapts organizational learning theory to the military.

Based on sociological and economic theory, Hoffman’s organizational learning theory “sees organizations as rational and profit-seeking players, interacting against others in a competitive environment, where constant evaluation of products and service and continuous change are required to survive and prosper.”<sup>474</sup> Hoffman views the US military services as “organizations that are competing for survival and prosperity in contested environments,” his approach allows for a more complex and nuanced attribution of behavior than is possible applying the traditional schools of military innovation (i.e., the Interventionists, Institutionalists, Intra-Organizational Politics, and Interservice Competition approaches).<sup>475</sup> In examining adaptation, Hoffman identifies systems scientist Peter Senge and his *The Fifth Discipline* (2006) as the primary advocate for organizational learning. Hoffman provides an excellent definition of why he chose this method.

Organizational Learning Theory offers insights into major issues raised about military innovation and adaptation. First, it defines the general process by which knowledge is shifted from new information to increased organizational capacity. Organizational learning is more than merely collecting information; it is ‘the capacity (or processes) within an organization to maintain or improve performance based on experience.’ This includes the creation of new knowledge and capability, the sharing of this knowledge, and its storage and institutionalization in an organization’s memory and culture.<sup>476</sup>

Interestingly, Hoffman does not mention Fleck’s or the better-known Kuhn’s work as a *leitmotif* or intellectual backdrop in discussing knowledge creation and sharing.<sup>477</sup> Hoffman’s application of organizational learning theory to the military presents a more complex model than Kuhn or Fleck. Despite that, when one examines these three approaches, organizational learning theory is the better choice in cases where the overriding interest is “how” innovation or learning occurred instead of whether it happened. The American case studies

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<sup>472</sup> Hoffman, *Mars Adapting*, 23-24. Hoffman specifically uses the term “intraservice” to capture ideological struggles internal to a particular military service. An example would be the U.S. Marine Corps and the internal debate over its future role (i.e., remaining “State Department Troops” or building an amphibious assault capability) that took place during the Interwar Period between the world wars.

<sup>473</sup> Ibid, 25.

<sup>474</sup> Ibid, 26-27.

<sup>475</sup> Ibid, 26-27.

<sup>476</sup> Ibid, 28.

<sup>477</sup> Echevarria, *War’s Logic*, 5. In this book, Echevarria makes explicit use of Kuhnian thinking. To wit, he identifies four paradigms of war within US strategic thought, and he talks about the absence of paradigm shifts in how the US military conceives of strategy. “. . . Kuhn’s theory of paradigm shifts is useful, nonetheless, for illustrating what has not happened in the American way of thinking about war.”

of *Mars Adapting* support this assertion and demonstrate learning and innovation or the failure to do so over time with a detailed focus on how it occurred in each case study.

Despite the advantages of Hoffman's organizational learning model in comparison to those of Kuhn and Fleck, it is the least preferred for use within this research. From the standpoint of abductive reasoning, the paradigm shift explanation of change offered by Kuhn is the most applicable in proving that the US military has accepted and begun to respond to a paradigmatic shift in the character of war. The principal value of Thomas Kuhn is to show that change took place (in broad terms) within an established field or population, especially revolutionary change. That change is often resisted (for various reasons) in defense of an outmoded paradigm. The value of Fleck's concept of thought collectives and thought styles is to highlight how, under certain circumstances, thinking can either be advanced or held back by the collective. If the research question were more oriented on answering the causative aspects of innovation and what took place or how the US military moved from one paradigm to the next, Hoffman's approach would be preferred. As it stands, this research question focused on detecting that a change took place and is less focused on the exact method or course of change. Consequently, this research draws more on Fleck's theory to explain and detail how new knowledge is generated, incorporated into, and utilized by groups and organizations. In this case, the focus group is the US military.

### 3. Research Strategy: Why Examine Doctrine?

Doctrine is an expression of institutional beliefs encompassing preferred methods of operation and can extend to espousing a particular worldview.<sup>478</sup> Scrutinizing doctrine over time allows one to determine if the US military's thinking on war has changed. Specifically, this study looks for changes to the description of war and warfare in US joint doctrine from the early 1990s until the present (2022). This range begins with the US military victory over Iraq, a conventional nation-state adversary, in the Persian Gulf War. The *Pax Americana* gives way in the mid-1990s to an extended period of increased complexity and uncertain utility regarding military employment. Non-traditional, "other than war activities" like peacekeeping and nation-building activities, often opposed by religious or identity-driven non-state actors, characterized this period through the terrorist attacks of September 11, 2001. For two decades after that, the US military waged a global counterterrorism campaign against these violent extremist organizations in what became the War on Terror. Toward the end of the new millennium's second decade, state-on-state competition re-emerged as the most pressing threat to international security. However, this incarnation was shaped by the complex information environment, which made it qualitatively different from previous periods of greater power competition.

The underlying rationale directing the focus onto doctrine proceeds from Aaron Jackson's monograph, *The Roots of Military Doctrine: Change and Continuity in Understanding the Practice of Warfare* (2013). Jackson concluded that modern militaries use doctrine to

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<sup>478</sup> Joint Chiefs of Staff, *Joint Doctrine Publications*, accessed August 30, 2021, <https://www.jcs.mil/Doctrine/Joint-Documents/Pubs/#:~:text=Joint%20Doctrine%20Publications&text=Joint%20doctrine%20presents%20fundamental%20principles,train%2C%20and%20conduct%20military%20operations>. From the Joint Staff, the function of joint doctrine is to present "fundamental principles that guide the employment of US military forces in coordinated and integrated action toward a common objective. It promotes a common perspective from which to plan, train, and conduct military operations."

promulgate and reinforce their belief systems and world views, at least as far as those views apply to what constitutes warfare and how to conduct military operations. This statement formed the basis for the thought that joint doctrine can be used to gauge how, or more precisely what, the US military thinks about war as a phenomenon and its character.

The highest level of military doctrine within the US military, joint doctrine, is the focal point of this study. By statute, it is the preeminent level of doctrine within the US military and acts as a unifying element between the military services regarding thought and action. Joint doctrine is the most critical factor in enabling the services to plan and operate together effectively.<sup>479</sup> Focusing on doctrine at the joint level avoids dealing with varied service-specific organizational cultures often found within the doctrine of the individual military services.

For example, the U.S. Navy has a reputation for not valuing doctrine, one driven by an almost reverential approach to sea control *à la* Alfred Thayer Mahan.<sup>480</sup> The Navy's organizational culture is primarily conditioned by the distinctly naval tradition of "sea time" and the reinforcing practice of near-constant operational deployments.<sup>481</sup> It prizes operational experience to a degree not seen in land-based services and views doctrine and doctrine writing as unnecessary constraining and of limited utility.<sup>482</sup> Similarly, the U.S. Air Force has an organizational culture that views everything in terms of how it impacts its ability to operate in the air and space domains.<sup>483</sup> Not only does Air Force doctrine tend to reflect the mystique of what it calls "air-mindedness," but it also tends to possess a platform-centric orientation that reflects the importance of aircraft—one not altogether dissimilar from the Navy's preoccupation with ships.<sup>484</sup>

The U.S. Army and the Marine Corps have unique organizational cultures, producing doctrine oriented toward their distinctive roles. For the Army, this means large, terrestrial operations, a focus on campaigns, and the integrated employment of all the tools of modern warfare. Much of the Marine Corps' doctrine is likewise oriented on land operations. Still, it emphasizes doctrine related to amphibious and littoral operations and the combined arms coordination central to the Marine Air Ground Taskforce. Regardless, there are more similarities than differences between the Army and Marine Corps, driven primarily

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<sup>479</sup> For a balanced perspective on the value of "jointness" see Sapolsky, Gholz, and Talmadge's *US Defense Politics: The Origins of Security Policy* (2021). Sapolsky et al explores the tension between interservice competition which has historically favored innovation and the need for unified action amongst the services which can lead to ossification and change-resistance.

<sup>480</sup> Henry L. Stimson and McGeorge Bundy, *On Active Service in Peace and War* (New York: Harper, 1947), 506. Stimson used to complain about "the peculiar psychology of the Navy Department, which frequently seemed to retire from the realm of logic into a dim religious world in which Neptune was god, Mahan his prophet, and the U.S. Navy the only true church." Thomas Buell, "Of Ships and the Men Who Sail Them" *The Washington Post*, August 3, 1986, <https://www.washingtonpost.com/archive/entertainment/books/1986/08/03/of-ships-and-the-men-who-sail-them/3090b6c8-5d75-42f2-b617-ff6c1f29a0a5/>

<sup>481</sup> Peter D. Haynes, "American Culture, Military Services' Cultures, and Military Strategy" (Master's Thesis, Naval Postgraduate School, December 1998), 62-63, 65-66, accessed October 6, 2017, <http://www.dtic.mil/get-tr-doc/pdf?AD=ADA359941>.

<sup>482</sup> *Ibid.*, 65-66.

<sup>483</sup> This study does not break out the U.S. Space Force as distinct from the U.S. Air Force, although the former was established as a separate service in 2019. The U.S. Space Force falls under the Department of the Air Force and is too new to have a recognized and distinct service culture.

<sup>484</sup> Headquarters, U.S. Air Force, *Basic Doctrine*, Air Force Manual 1-1 (Vol. 1) (Washington, D.C.: U.S. Government Printing Office, 2015), 33.

by the fact that both services campaign primarily on land and the complexities of modern land warfare.

Of the three physical domains of land, air, and water, land has almost always been the most important in conflict. *Terra firma* is where most of humankind lives and where the outcome of a conflict is historically decided. Historical naval and air battles, even the most decisive, are vital in as much as they enabled or prevented access to a particular landmass. To summarize British naval theorist Julian Corbett, the other domains, such as maritime and air, although important, are only a means to support achieving a decision on land.<sup>485</sup> In his monograph *Defense Planning for National Security* (2014), Colin Gray points out that despite the relatively recent importance of alternative domains like space and cyber, the terrestrial domain will remain the most important because “our humanity restricts us to territorial residency.”<sup>486</sup> More simply stated, human beings, especially those who occupy positions of power and make policy, live on land and seek to control (or maintain control of) territory. Gray made the point more eloquently, remarking that “the sea, like the air and like space, has strategic meaning only about where the human race lives, the land.”<sup>487</sup> Even recognizing the continued importance of land warfare, limiting the study to U.S. Army and Marine Corps doctrine does not facilitate the vantage points, both operational and strategic, needed to gain a more expansive view of warfare. Such a perspective is required to address the research question. Joint doctrine is the logical place to look for expanded conceptions of warfare, especially ones that incorporate other elements of national power beyond purely military means. Moreover, it is the case that joint doctrine is compulsory. The Goldwater Nichols Defense Reorganization Act of 1986 mandated joint doctrine and assigned responsibility for it to the Chairman of the Joint Chiefs.<sup>488</sup> Given the volume of joint doctrine available, this study examines doctrine dealing with war's character and nature. Aaron Jackson identifies four “schools” of doctrine in his monograph: the technical manual, the tactical manual, the operational manual, and the military strategic manual.<sup>489</sup> This work concentrates on these last two “schools,” the operational and military strategic. According to Jackson, only these last two engage the “bigger picture” of war. The operational and strategic levels of war also include the need to cooperate and work as a joint force, which eclipses service parochialism. Operational manuals tend to be very explicit regarding the phenomenon of war, whereas the military strategic manual adopts a more inquisitive approach to the nature and character of war.<sup>490</sup> It is within these two categories of doctrine that evidence of changes in how the U.S. military views the phenomenon of war is found.

The Joint Staff produces a hierarchy of publications (see Figure 4.1). As of 2022, the highest level of publication is the capstone series, of which there is just one: *Joint Publication 1, Doctrine for the Armed Forces of the United States*. This publication is broken down into Volume 1, Joint Warfighting, and Volume 2, *The Joint Force*. The keystone series is the next level of publications in the joint hierarchy. Keystone publications are organized along

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<sup>485</sup> Julian Corbett, *Some Principles of Maritime Strategy* (Urbana, Illinois: Project Gutenberg, 2005), 16, accessed December 6, 2017, [http://www.gutenberg.org/files/15076/15076-h/15076-h.htm#Page\\_91](http://www.gutenberg.org/files/15076/15076-h/15076-h.htm#Page_91).

<sup>486</sup> Gray, *Defense Planning for National Security*, 33.

<sup>487</sup> Colin S. Gray, “Influence from the Sea: Naval Power and World Order.” Address before the SACLAN'T Maritime Seminar, The Role of NATO Maritime Forces in the 1990s, June 17-18, 1993, 2.

<sup>488</sup> Goldwater-Nichols Department of Defense Reorganization Act of 1986, Public Law 99-433, 99<sup>th</sup> Congress, (October 1, 1986), §153.a.5.

<sup>489</sup> Jackson, *The Roots of Military Doctrine*, 3-4.

<sup>490</sup> *Ibid*, 11.

traditional Napoleonic staff functions and cover Joint Personnel Support (JP 1-0), Joint Intelligence (JP 2-0), Joint Campaigns and Operations (JP 3-0), Joint Logistics (JP 4-0), and so on through the remaining staff functions of planning and communications. Below the keystone publications are the core doctrine series. Publications at this level deal with specific

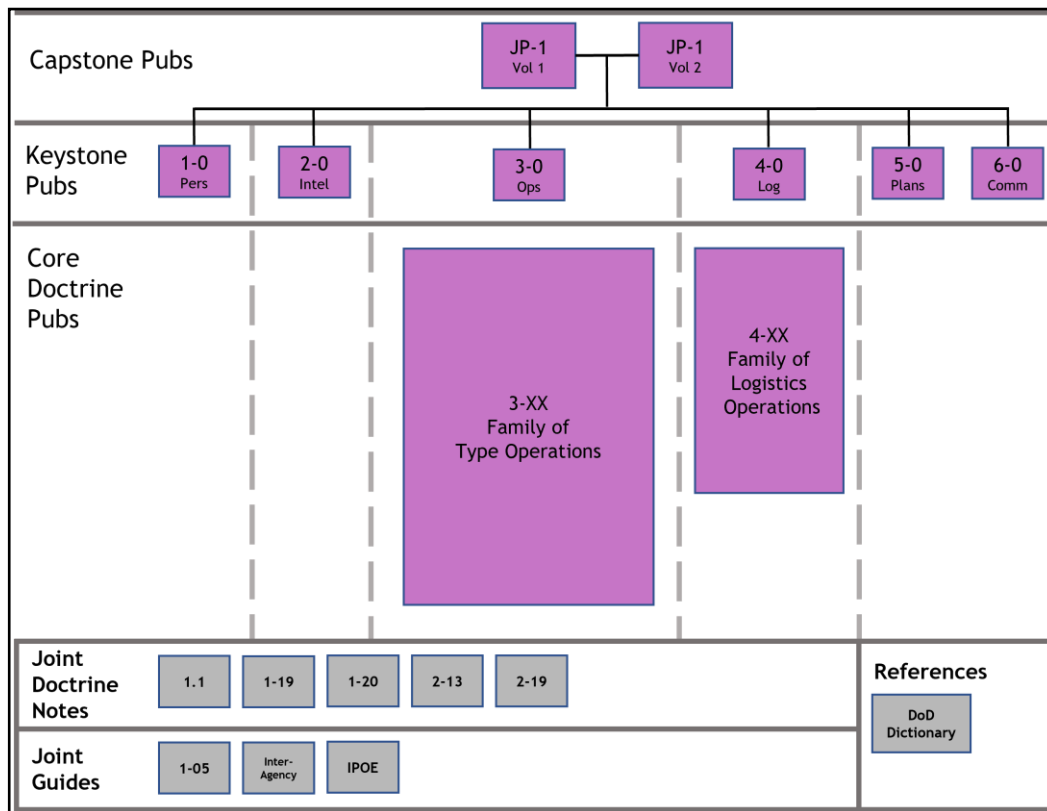


Figure 4.1. Joint Doctrine Hierarchy adapted from Joint Chiefs of Staff, “Joint Doctrine Hierarchy” (August 23, 2022), *Joint Chiefs of Staff*, accessed November 11, 2022, <http://www.jcs.mil/Doctrine>.

types of operations, the overwhelming majority of which fall under the staff functions of operations and logistics. Examples include *Close Air Support* (JP 3-09.3), *Foreign Internal Defense* (JP 3-22), *Joint Health Services* (JP 4-02), and *Joint Mobilization Planning* (JP 4-05). The comprehensive list includes 52 core doctrine publications within the Joint Doctrine Hierarchy.<sup>491</sup> In addition to what was already mentioned, a reference series, joint doctrine notes, and joint guides complete the family of joint publications.

The reference series, a crucial component of the joint doctrine hierarchy, contains several publications designed to define terminology, standardize a common lexicon, and explain the process of joint doctrine development. These publications play a significant role in ensuring a unified understanding and application of joint doctrine across the military.<sup>492</sup>

<sup>491</sup> Joint Chiefs of Staff, “Joint Doctrine Hierarchy” (August 23, 2022), *Joint Chiefs of Staff*, accessed November 11, 2022, <http://www.jcs.mil/Doctrine>.

<sup>492</sup> Joint Chiefs of Staff, “Joint Publications Reference Series,” *Joint Chiefs of Staff*, accessed November 11, 2022, <https://www.jcs.mil/Doctrine/Joint-Doctrine-Pubs/Reference-Series/>.

The most familiar and widely used publication in the reference series is the *DOD Dictionary of Military and Associated Terms*. This comprehensive dictionary serves as a key resource for understanding and interpreting military terminology and is an essential tool for all military personnel.

“A joint doctrine note is a pre-doctrinal publication that presents common fundamental guidance and is part of the initiation stage of the joint doctrine development process.”<sup>493</sup> Joint guides are the final type of doctrinal publication and are a vehicle for the Joint Staff to provide “fundamental guidance” to the Joint Force.<sup>494</sup> The last three publications speak to the completeness of the Joint Staff’s doctrine and related products. However, none of these products figure prominently in the research chapters of this dissertation beyond where they serve as references.

#### 4. Top-level Professional Military Education

In addition to considering joint doctrine, officer professional military education (PME) is another indicator of change in understanding warfare. This research focuses on joint officer education at the senior field grade officer level, Navy captains and commanders or colonel and lieutenant colonels, who would attend what is typically identified within the construct of professional military education as the “war college” or “Top Level School.” This means that the PME portion of this research concentrates on the National Defense University (NDU). Unlike the service war colleges, which emphasize their own doctrine and unique service roles, NDU focuses exclusively on joint professional military education and strategy formulation. More specifically, the focus will be on its two premier colleges: the National War College (NWC) and the Dwight D. Eisenhower School for National Security and Resource Strategy. These two are the flagship institutions within NDU; both have the mission of educating future leaders within the military and government.

The National War College is informally known as the ‘Chairman’s school’ because of the number of graduates that serve on the Joint Staff. It has the mandate to “educate future leaders of the Armed Forces, Department of State, and other civilian agencies for high-level policy, command and staff responsibilities by conducting a senior-level course of study in national security strategy.”<sup>495</sup> At the same time, “the Eisenhower School (ES) prepares select military officers and civilians for strategic leadership and success in developing national security strategy and in evaluating, marshaling, and managing resources in the execution of that strategy.”<sup>496</sup> Both colleges are intended to produce senior ‘strategic’ leaders within the national security establishment by exposing them to strategic-level problems and the military-political interface without a specific service orientation. While the broader inclusion of other service-level war colleges, such as the Army War College in Carlisle, Pennsylvania or the Air War College in Montgomery, Alabama, would provide a larger sample size and an appreciation of service-specific priorities, it is arguable as to whether or not their inclusion would add anything new given that the majority of the student populations comprise US military officers demographically similar to those at NDU.

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<sup>493</sup> Joint Chiefs of Staff, “Joint Doctrine Notes and Guides,” *Joint Chiefs of Staff*, accessed November 11, 2022, <https://www.jcs.mil/Doctrine/Joint-Doctrine-Pubs/Joint-Doctrine-Notes/>.

<sup>494</sup> *Ibid.*

<sup>495</sup> National Defense University, *Colleges*, accessed September 3, 2021, <https://www.ndu.edu/Academics/Colleges/>.

<sup>496</sup> *Ibid.*



These two institutions' professional populations are the post-battalion/squadron command lieutenant colonel/commanders (navy) and colonels/captains (navy), who have typically served over 15 years or more. These officers have established careers well beyond entry and are on the cusp of colonel-level command or becoming general officers. The student body comes from across the military services. It includes select foreign officers of the same, or even higher, grade and civilian counterparts from the Department of Defense and other U.S. government departments and agencies. Education meets experience at this level of PME, and all students are considered experienced practitioners within their respective fields. Drawing on the literature review in Chapter 2, many scholars mentioned in the review teach, research, or otherwise contribute to PME institutions, including NDU. Their ideas are part of these schools' curricula and encourage serious thought about the changing nature of war. This reinforces the notion that NDU acts as a "thought collective," as described by Ludwik Fleck, or a "test bed" for emerging ideas and concepts.<sup>497</sup> The use of PME institutions also complements Kuhn's explanation of how scientific revolutions occur. Here, the students at National Defense University play the role of "heretics" who challenge convention and "loosen the rules of normal puzzle-solving in ways that ultimately permit a new paradigm to emerge."<sup>498</sup>

## 5. Method of Data Analysis

The data analysis method utilized in this research is qualitative content analysis. In their 2015 book on the topic, social scientists James Drisko and Tina Maschi define content analysis "as a family of research techniques for making systematic, credible, or valid and replicable inferences from texts and other forms of communication."<sup>499</sup> In simplest terms, content analysis addresses "literal communications content" and counts "frequency of word or passage use ... to determine the relative importance of specific content."<sup>500</sup> Drisko and Maschi then describe three types of content analysis: basic, interpretive, and qualitative. A brief description of each follows, helping to explain the rationale for selecting a qualitative approach.

In its basic form, content analysis is a quantitative research method involving alphanumeric designators to "code" select words and passages of text that are considered relevant to the research inquiry. Coding enables the data to be analyzed using standard statistical methods, from which researchers make inferences and draw conclusions for a specific case or cases.<sup>501</sup> Fundamental content analysis is generally deductive, wherein "the researcher's area of interest and preliminary codes are developed prior to data collection and analysis draw[s] on existing theoretical and empirical work."<sup>502</sup> A fundamental assumption and distinguishing characteristic of basic content analysis is that a strong connection exists

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<sup>497</sup> This assessment is based on the author's experience having attended the National War College during the 2013-2014 academic year as well as other anecdotal (but verifiable) information.

<sup>498</sup> Kuhn, *The Structure of Scientific Revolutions*, 78-80.

<sup>499</sup> James W. Drisko and Tina Maschi, *Content Analysis*, (New York: Oxford University Press, 2015), Oxford E-book, <https://doi.org/10.1093/acprof:oso/9780190215491.001.0001>, 8.

<sup>500</sup> *Ibid.*, 3.

<sup>501</sup> United States General Accounting Officer, *Content Analysis*, 6.

<sup>502</sup> Drisko and Maschi, *Content Analysis*, 22.

between words and the meanings they convey.<sup>503</sup> This is called manifest content or communications; its meaning is overt and literal. The focus on manifest content is important because it differentiates fundamental content analysis from the following variation: interpretive analysis.

Interpretive content analysis is like the primary method, which employs statistical methods and aims to deliver valid and replicable conclusions. The difference is that the former method focuses on latent content, which is the contextual meaning of words or passages, as opposed to their manifest meaning, “Latent content is implicit or implied by a communication.”<sup>504</sup> Social science methodologist Klaus Krippendorff, who has authored four editions of *Content Analysis: An Introduction to its Methodology* (2018), distinguishes essential from interpretive content analysis by pointing out that fundamental content analysis focuses on the “what” and “how” of word meaning, whereas interpretive analysis centers on “inferences about “why,” “for whom,” and “to what effect.”<sup>505</sup> This focus on context and factors such as intended meaning and intended audience indicates that interpretive content analysis is more likely to be inductive than deductive. While an interpretive approach could involve “a simple frequent-count approach to data analysis,” it is much more likely to involve coding “data for abductive inferences [derived] from latent content.”<sup>506</sup> Interpretive content analysis requires specialized knowledge to decipher. Still, it offers the potential for a richer and more complex result that can come closer to what is possible with a qualitative approach. The disadvantage is that the interpretive method necessitates increased complexity and rigor since too much interpretation can degrade coding consistency and the reliability of categorization.<sup>507</sup> Interpretive content analysis embodies aspects of both quantitative and qualitative analysis. It employs statistical techniques to evaluate coded data, on the one hand, while acknowledging that the intended word meaning can be something other than its objective meaning. This makes interpretive analysis similar to a qualitative approach.

Qualitative content analysis is the third type of content analysis method mentioned by James Drisko and Tina Maschi. While it is the least “scientific” of the three forms of content analysis, it is also the most flexible and most suited to discerning nuance and complexity in latent content.<sup>508</sup> A qualitative approach to content analysis can overcome many of the limitations associated with quantitative approaches and exclusively collecting manifest content. In his 1952 article on using qualitative approaches in content analysis, German sociologist Siegfried Kracauer described three limitations inherent in quantitative content analysis. The first is that a reliance on quantitative methods risks oversimplifying or losing the nuance and complexity inherent in human communications, irrespective of the medium.<sup>509</sup> The danger herein is that specific context and how that contributes to the overall meaning of a passage is overlooked or obscured. A quantitative approach is susceptible to

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<sup>503</sup> Ibid, 29.

<sup>504</sup> Ibid, 4.

<sup>505</sup> Klaus Krippendorff, *Content Analysis: An Introduction to its Methodology*, 4th ed. (London: SAGE Publications, 2018), 26-27.

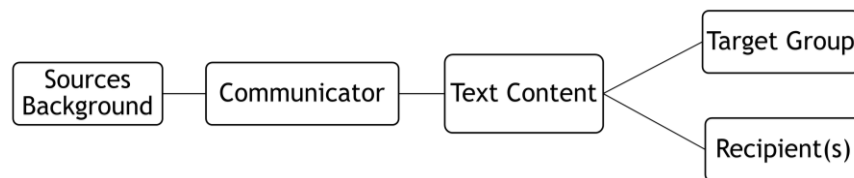
<sup>506</sup> Drisko and Maschi, *Content Analysis*, 59.

<sup>507</sup> Ibid.

<sup>508</sup> Here “scientific” is used as a descriptor to imply the use of statistical analysis and the scientific method broadly, rather than a reference to the degree of rigor or complexity of the argument put forth in the argument.

<sup>509</sup> Siegfried Kracauer, “The Challenge of Qualitative Content Analysis,” *The Public Opinion Quarterly* 16, no. 4 (Winter, 1952-1953): 631-642, accessed November 16, 2022, <https://www.jstor.org/stable/2746123>, 632, 633-634.

accepting a simplistic overall meaning for a particular work. By “homogenizing” meaning, the qualitative approach misses the synergistic or cumulative effect of specific words or sections as they contribute to a more complex text reading. Second, quantitative approaches are ill-suited to analyze communications with multiple meanings or open to a wide array of interpretations, not the least of which is the intended one.<sup>510</sup> Third is that the impact or effectiveness of meaning is highly individual and not at all based on frequency; in such situations, statistical analysis is meaningless.<sup>511</sup> James Drisko and Tina Maschi reiterate Kracauer’s assertions and then make a foundational point about qualitative analysis. Namely, the fact that meaning is contextual, complex, and often open to interpretation.<sup>512</sup> Figure 4.2 depicts a simple communications model that captures the possible multiple meanings from a single communication.



**Figure 4.2. Basic Communications Model from Phillip Mayring, *Qualitative Content Analysis: A Step-by-Step Guide* (London: SAGE Publications, 2022), 62.**

Other models account for preconceptions, different educational and cognitive backgrounds, varied perceptions, and individual or group motivation factors.<sup>513</sup> Although essential, Figure 4.2 shows that a communicator creates textual content for a target group but is cognizant that there are recipients other than the target groups who will receive this information. The primary audience for joint doctrine is assumed to be US military servicemembers, specifically officers and staff non-commissioned officers. Still, the language is not so specific as to be inaccessible to the layman. It is never sure that recipients will receive the information as the communicator intended. As a result, delivery of the message is far from guaranteed. Multiple interpretations are possible. Fortunately, for this dissertation's purposes, this inquiry focuses on the “what.” Using content analysis, the operative question is, “Do the words and phrases used to describe war and the phenomenon of warfare change in joint doctrine over time?”

In reviewing doctrinal publications and NDU materials, the research aims to look for evidence of changes in articulating the character of war. The next step is the matter or method of coding or capturing and recording change more accurately. If content analysis is primarily a matter of searching for different descriptors for, or descriptions of, war (the “what”) and, secondarily, is a matter of determining if word choice (the “how”) is more expansive over time, how then will coding occur? This study does not rely on traditional coding that occurs in quantitative content analysis. Instead, it draws on sociologist Phillip Mayring’s work on qualitative content analysis.

<sup>510</sup> Ibid, 634.

<sup>511</sup> Ibid, 635.

<sup>512</sup> Drisko and Maschi, *Content Analysis*, 84.

<sup>513</sup> Phillip Mayring, *Qualitative Content Analysis: A Step-by-Step Guide* (London: SAGE Publications, 2022), 62. Mayring shows just such a model that he labels the “Content Analytical Communications Model.” All the factors he illustrates apply to this dissertation, but the level of complexity is not useful for the intended level of analysis.

In Mayring’s formulation of a qualitative approach to content analysis, he draws on linguistics to consider “pre-knowledge, pre-concepts, and cognitive schemata” to understand the “interaction between reader and text.” The aim of this inquiry transcends mere quantification and statistical analysis. Instead, it is to reach “a deeper interpretation” of the material. In his *Qualitative Content Analysis: A Step-by-Step Guide* (2022), Mayring describes several methods to conduct qualitative investigations. The technique most suited here is called Inductive Category Formation, which “develops categories directly out of the [textual] material.”<sup>514</sup> Figure 4.3 describes the steps of Inductive Category Formation. The figure provides the steps to derive, revise, and evaluate the categories. This method, which is sometimes referred to as “open coding,” allows the researcher to construct “categories [that] can be interpreted in terms of aims of analysis and used theories.”<sup>515</sup> The implication is that categories can be built to match the description applied to war. For example, the categories can be structured binary: traditional vs. non-traditional. In this case, the conventional category refers to war as human violence, which is the purview of the military or other armed groups as the primary agent. This category contrasts with a non-traditional category corresponding to postmodern warfare and involving activities in virtual domains such as

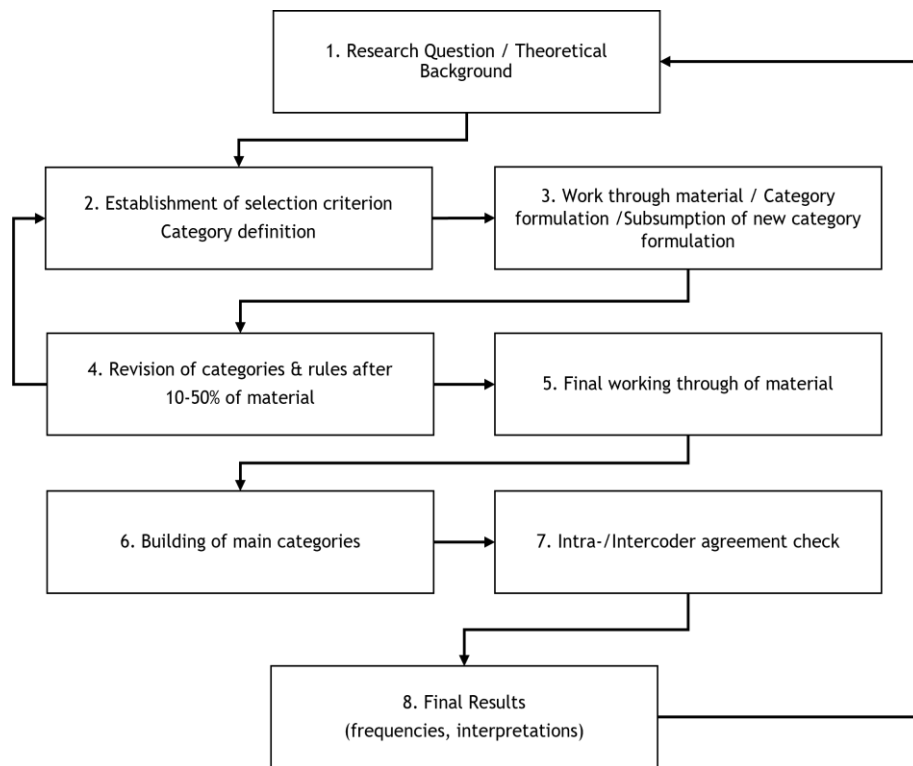


Figure 4.3. Steps of Inductive Category Formation from Phillip Mayring, *Qualitative Content Analysis: A Step-by-Step Guide* (London: SAGE Publications, 2022), 82.

<sup>514</sup> Ibid, 81

<sup>515</sup> Ibid, 82, 84.

cyber, in addition to non-military elements of power such as the economy, political, or info-sphere in which the military and other agents are active.

## 6. Time Horizons

This study employs a longitudinal approach to data sampling for doctrinal publications and the elective offerings at the National Defense University. A longitudinal approach collects data from the same sources over time, making it best for determining the presence of change. Depending on the structure and purpose of the project, the longitudinal method can also provide insight into the nature and magnitude of change. In contrast, the cross-sectional method considers inputs across groups or populations but does not consider time and is more suited to variations in a measurable trait or action across a specific population. However, it is unsuited for this dissertation due to its inability to capture change over time.

The practicality of the longitudinal approach is evident when paired with a content analysis methodology that examines written sources to determine differences in content and meaning over time. Dr. Steven Mariano, Provost of the Naval War College, employed such an approach in his 2012 dissertation in which he sought to determine what the US Army had taken away from its counterinsurgency experience in Vietnam. Mariano's analysis of individual opinions about small wars or counterinsurgency within the Army, looking for references to small wars, insurgency, and counterinsurgency with Army magazines and publications, is a testament to the effectiveness of this approach.<sup>516</sup> His data collection was longitudinal. It began in 1973, shortly after the end of the Vietnam War, and ended in 2012, well into the counterinsurgency campaigns that characterized the wars in Iraq and Afghanistan. Mariano contended that the frequency with which small wars-related terms appeared within US Army publications correlated directly with institutional attitudes toward this type of warfare within the larger Army.<sup>517</sup> While small wars and counterinsurgency never entirely disappeared from professional journals, the Army preferred more “traditional” conventional operations.<sup>518</sup> Through longitudinal content analysis, Mariano demonstrated that individual attitudes and, by extension, institutional preferences for small wars or counterinsurgency operations changed over time. A longitudinal approach is employed here for the same reason: to demonstrate or highlight change over time.

The longitudinal approach used here examines three specific periods or windows that provide a beginning, middle, and endpoint to facilitate detecting and comparing change over time. The three periods are bounded as follows in Figure 4.1:

**Table 4.1. Breakdown of Periods for Examination**

<b>Period</b>	<b>Dates</b>
Period A (Early)	1991-2001
Period B (Middle)	2002-2011
Period C (Late)	2012-2022

<sup>516</sup> Stephen J. Mariano, “Between the Pen and the Sword, The US Army and Small Wars: Individual and Institutional Attitudes, 1973-2012” (PhD diss., Royal Military College of Canada, June 2012), 31.

<sup>517</sup> Ibid, 4.

<sup>518</sup> Ibid, 4-5.

As discussed in the introduction, the starting point is February of 1991, the conclusion of the First Gulf War. This date is significant because the American victory over the Iraqi Army marks the validation of the “American way of war” or the industrial warfare that the US military prefers. Although this date is not a data collection window, it is the point of departure from which the US military and the rest of the world drew conclusions about contemporary conflict. Each period is ten years long on average. The window tries to place one or more significant events within the period while encompassing at least one joint doctrine revision cycle. For this research, an important event was significant for the US military and impacted joint doctrine regarding validating or invalidating the doctrine of the time. For example, the American victory over Iraq during Operation Desert Storm was particularly relevant in validating joint doctrine that, up until that point, had yet to be tested in large-scale combat against a conventional opponent. Another way to look at these “significant events” is an opportunity for the US military to learn or respond to changes in the character of war.

The first window, Period (A), is the early period and covers 1991 until 2001. The early period starts with the US victory over Iraq in the First Gulf War, the significance of which sets the stage for the subsequent study. Later in Period (A), the year 1999 marks the publication of *Unrestricted Warfare* by the Chinese military. It also allowed for sufficient time since the end of the First Gulf War for the US military to internalize many of that war’s lessons. Period (B), or the middle period, finds the US military engaged in Iraq and Afghanistan during the Global War on Terror. It begins with the spectacular terrorist attacks that occurred on September 11, 2001, an event which presented the US military with a new type of threat, that of Islamic terrorism or violent extremism conducted by non-state actors. Throughout this period, the US military was engaged throughout the Middle East, Africa, and even the Pacific, with 2007 and 2011 representing the high-water marks in terms of US troop strength in Iraq and Afghanistan, respectively. During Period (B), the US military overwhelmingly focused on counterterrorism to the detriment of conventional “big war” skills and deterring military threats from state adversaries. Period (B) ended in 2011 with the withdrawal of US military forces from Iraq.

The third and last window, Period (C), goes from 2012-2021. It is the “late” period for this research and is marked by the end of the US military’s preoccupation with global counterterrorism and marks a return to more conventional military matters. Significant events during this period include the rise of the Islamic State in Iraq and Syria and the US withdrawal from Afghanistan (which was completed in 2021). Most significant for this study is the shift back to state-on-state conflict explicitly mentioned by the 2018 National Defense Strategy – the document in which the Secretary of Defense articulates departmental priorities for planning, capability development, force structure, and resourcing, among others.<sup>519</sup> The 2018 NDS marked “the *reemergence of long-term, strategic competition*” [italics in original] in which the US defense establishment recognized and issued guidance to account

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<sup>519</sup> The National Defense Strategy (NDS) is one of the overarching strategic documents produced by the US Department of Defense. Produced by the Office of the Secretary of Defense, the NDS “is used to establish the objectives for military planning regarding force structure, force modernization, business processes, supporting infrastructure, and required resources (funding and manpower).” One of three key documents pertaining to US national security, the NDS supports the executive branch’s National Security Strategy and informs the Chairman of the Joint Chiefs National Military Strategy. From National Security Strategy Archive, “National Defense Strategy,” accessed February 6, 2023, <https://nssarchive.us>.

for the threats posed by other nation states – notably the Peoples Republic of China and Russia.<sup>520</sup> The strategic situation of the United States is not static. It changes, and these changes necessitate revising policy to maintain a strategically favorable position.

Joint publications are no different. Given that the character of war is constantly changing and evolving, prudence alone dictates that the US military keep abreast of changes to maintain its advantage relative to potential adversaries. The US Joint Staff revises and updates joint doctrine “to meet continuously changing national security challenges.”<sup>521</sup> The revision process is governed by the Joint Doctrine Development Process (JDDP) outlined in a manual of the same name. The JDDP manual outlines the Joint Publication Life Cycle that regulates new and existing publications and outlines the process for revisions and required changes outside of the standard revision process.<sup>522</sup> The priority for revision “is determined through a periodic review of the joint doctrine hierarchy to determine the degree that the subject matter of JPs [Joint Publications] is linked to the execution of the current national strategies (e.g., security, defense, and military), alignment of global campaign plans, ... and other criteria determined at the time of the review.”<sup>523</sup> Therefore, the rationale for revision is needs rather than time-based, i.e., it is driven by factors such as changes in the operational environment. The priority is further informed by where a publication fits within the *Joint Doctrine Hierarchy*. The JDDP manual explicitly states that “capstone and keystone JPs are, by default, ‘high priority’ and receive a formal assessment approximately two years following their promulgation, unless directed otherwise.”<sup>524</sup> Mandating an assessment every two years does not mean that a revision or update happens every two years; it indicates the high priority the Joint Staff accords to keeping capstone and keystone publications up to date.

A revision process based purely on time could yield a series of joint publications that, while regularly updated, did not meaningfully differ in content from one edition to the next. A revision process driven by time, not by need, opens the aperture to make false determinations about the state of thinking in a particular subject area. A requirements-driven revision process minimizes, but does not eliminate, false conclusions. The Joint Staff’s needs-based revision process favors the capstone and keystone documents and is relevant to this study because change or the perception of change drives the need for an updated version of the doctrine. Perceiving change and then taking steps to meet or account for it indicates learning at some level of the organization. Whether the learning process has resulted in drawing the correct lessons is another matter, one that falls outside the scope of this effort.

In the case of joint publications, this study is looking for substantive revisions instead of periodic updates of existing publications. A substantive revision significantly improves the state of learning for a given subject. This improvement can be reflected in material, organization, or a new publication covering an emerging subject not previously addressed in existing doctrine. Focusing on substantive revisions is the correct decision to identify content. Still, it makes the three time periods shown in Table 4.2 less a discriminating factor and more useful for organization and identification purposes.

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<sup>520</sup> U.S. Department of Defense, *Summary of the 2018 National Defense Strategy of the United States of America*, 2

<sup>521</sup> Joint Chiefs of Staff, *Joint Doctrine Development Process*, CJCSM 5120.01B (Washington, D.C.: Joint Chiefs of Staff, November 6, 2020), accessed August 8, 2022, <https://www.jcs.mil/Doctrine/>, B-1.

<sup>522</sup> *Ibid.*, B-2, B-20.

<sup>523</sup> *Ibid.*, B-21.

<sup>524</sup> *Ibid.*

## 7. Sampling Strategy and Data Collection Method

Joint doctrine is assumed to represent thinking within the US military, not simply because it is classified as doctrine. This speaks to how the Joint Staff collects, revises, and edits the material that will eventually be published as doctrine. In its “Joint Doctrine Development System” instruction, the Joint Staff outlines this material's authoritative nature, stating that joint doctrine is “official advice and should be followed unless the commander determines exceptional circumstances dictate otherwise.”<sup>525</sup> The Joint Staff instruction explains that “it [joint doctrine] focuses on how to think, not what to think, about operations.”<sup>526</sup> Given the broad offerings of joint doctrinal publications, this study concentrates on those publications best positioned from a topical standpoint to provide a comprehensive view of military operations and warfare. The study selects doctrine that addresses warfare as a phenomenon, instead of narrowly focusing on type operations.<sup>527</sup>

Using the terminology employed by the Joint Doctrine Hierarchy, this research focuses primarily on the joint capstone and keystone series of doctrinal publications. Specifically, this study will use both volumes of the capstone publication *Joint Publication 1* (JP 1) and the keystone series publications for the functional areas of *Intelligence* (JP 2-0), *Operations* (JP 3-0), and *Planning* (JP 5-0) as most relevant to the preparation and conduct of warfare. This study does not include those focusing more on personnel and sustainment (*Joint Personnel Support* (JP 1-0) and *Joint Logistics* (JP 4-0)). This is not to discount the importance of logistics and sustainment in winning wars; it is merely a recognition that these functions exert less on the nature and means of combat and war than the intelligence, operations, and planning functions. The latter are more likely to discuss changes in the character of fighting, thereby more directly answering the research question. This inquiry also looks at specific publications within the operations section of the core doctrine series, the subjects of which point to a more expansive conception of warfare beyond traditional kinetic and maneuver operations in the physical domains. These titles include *Cyberspace Operations* (JP 3-12), *Information Operations* (JP 3-13), *Space Operations* (JP 3-14), *Counterterrorism* (JP 3-26), *Homeland Defense* (JP 3-27), and *Joint Electromagnetic Spectrum Operations* (JP 3-85).

Unfortunately, some of these more specific core doctrine titles are recent publications and lack previous versions that would accommodate the complete study across the period outlined. These facts are listed in the following chapters for each publication, including the size of each volume in terms of pages. While still valuable for validating a more expansive US conception of warfare, the lack of multiple editions for certain publications makes it challenging to demonstrate change over time. Another perspective to consider is that a new publication covering a previously unknown subject area indicates recognition of a gap in knowledge and a change to the corpus of joint operational and strategic warfighting. The number of times a publication has been revised also contributes to its utility as a potential source. In a need or requirement-based revision system, the greater the number of previous editions, the less challenging it is to demonstrate change over time and the greater the amount of potential data to support the study.

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<sup>525</sup> Joint Chiefs of Staff, “Joint Doctrine Development System,” CJCSI 5120.02E (Washington, D.C.: Joint Chiefs of Staff, November 6, 2020), accessed November 10, 2020, <https://www.jcs.mil/Doctrine/>, A-3.

<sup>526</sup> Ibid.

<sup>527</sup> The term “type operations” refers to specific military operations that may be subdivided by genre or type. Examples of type include amphibious operations, urban operations, and close air support to name but a few.



Content analysis of the elective program at the National Defense University is also examined using the same three periods in the longitudinal study. Sampling from NDU's two premier schools in particular, the National War College and the Eisenhower School, is sufficient to provide a representative picture of the US military, not to mention giving insight into certain other agencies and departments of the US government that are involved in national security. Both NWC and Eisenhower have student populations assembled from the joint and interagency communities, notwithstanding their substantial population of international officers. They provide a sufficiently representative slice of the US military for this research.<sup>528</sup>

## 8. Other Methods Considered

Before settling upon content analysis, this dissertation considered other potential methods to answer the research question. The process that came foremost to mind when structuring this work was personal interviews or surveys from a representative cross-section of senior officers from lieutenant colonel through colonel (O-5 to O-6) across the US Military Services. Collecting data using this method provided direct, firsthand input from relevant practitioners within the US military; its advantage lay in the potential to give very current data. The second option was to build several case studies focused on the experiences of the US military that highlighted behaviours correlating to changes in the character of contemporary war. To be of optimal value, such case studies must have included joint-level training exercises and operations in which planning, actions, or decision-making could be causally linked to changes in character or warfare. Joint exercises had the potential to be a rich resource because their purpose is “joint training, joint concept validation, [and] doctrine validation.”<sup>529</sup> The same is true for service-level exercises, albeit at correspondingly lower levels of organization and often with a much-reduced scope of effort. The potential advantage of using case studies was that each case presented a self-contained story, one deliberately selected because it contained large amounts of “conceptual validity” packaged into narrative form.<sup>530</sup> However, both alternatives contained significant limitations that ultimately made them less attractive.

Regarding using interviews or surveys as a method, there is always the challenge of amassing enough input to get a representative cross-section of the target population. In addition, there is the added challenge of parsing individuals from institutional attitudes, especially in an organization as hierarchical as the US military. Unquestionably, a tremendous amount of vibrant, creative thought occurs within the military. It takes place at all levels; one need only look at the professionally oriented websites, unofficial and official, that receive contributions from active and retired service members. Exemplars include *The Small Wars Journal*, West Point's Modern Warfare Institute, its subsidiary the *Irregular Warfare Podcast*, and the online *Military Strategy Magazine*, to name but a few. It is essential to understand what the

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<sup>528</sup> “International Student Management Office,” National Defense University, accessed November 29, 2022, <https://ismo.ndu.edu/About-ISMO/>.

<sup>529</sup> Joint Chiefs of Staff, *Joint Training Manual for the Armed Forces of the United States*, CJCSM 3500.03E (Washington, D.C.: Joint Chiefs of Staff, April 20, 2015), accessed August 16, 2022, <https://www.jcs.mil/Portals/36/Documents/Library/Manuals/m350003.pdf>, H-1.

<sup>530</sup> Alexander L. George and Andrew Bennet, *Case Studies and Theory Development in the Social Sciences* (Cambridge: Belfer Center for Science and International Affairs, 2005), 19.

US military thinks about warfare at the institutional level because that is where long-term decisions about fighting wars are shaped and decided upon. The most compelling reason to forego the use of interviews or surveys is the inability of this method to support a longitudinal survey looking across an almost 30-year period. Dr. Steven Mariano made this same observation when choosing a method in his dissertation on US Army attitudes to counterinsurgency.<sup>531</sup> The only viable means to employ this method would be to begin data collection now for an effort that comes to fruition in the distant future, well beyond the timeline of the current research.

Case studies are also viable data collection methods, particularly those oriented to social science and qualitative approaches. The most common challenge with this method is avoiding bias when selecting cases.<sup>532</sup> One selects and develops cases that contribute to answering the research question. Bias comes into play when the selected cases do not represent the overall phenomenon or population but readily confirm the research hypothesis. Such cases may be outliers. While interesting individually, their value in arriving at durable answers to the research question is doubtful. There is also the practical matter of overcoming classification to access the desired level of information.

All classification barriers are surmountable; though they would constrain, at least in the short to mid-term, the level and quality of information available. It is likely that much of the information sought from both joint and service-level exercises resides within the classified realm and is unavailable without the appropriate security clearances. Considering joint exercises only for the moment, and if there were no classification issues, the challenge of case creation to support a proper longitudinal study illustrating change over time remains. Joint exercises have their own periodicity, and although the exercises are repeated, the format or schemes of maneuver are not always uniform. In this way, they are like the more familiar combined military exercises such as COBRA GOLD or RIMPAC that the US military conducts alongside its allies and partners to cement relationships and demonstrate commitment. It is not sure that the events across the years are uniform as the exercises repeat or even that evaluators collect the same data, which would allow for meaningful side-by-side comparison.

## 9. Limitations & Biases

Having briefly explored the other methods considered for this study and having settled upon content analysis as the preferred method, an explanation of this study's potential methodological shortcomings is in order. The decision to restrict the data collected to certain key joint doctrinal publications instead of examining the totality of available joint offerings does so at the risk of overlooking or missing potential impactful data. This risk is minimized because the documents are primarily high-level, capstone and keystone publications. Both types contain the foundational beliefs and can be taken as symbolic or representative of thinking within the world of joint doctrine.

This focus on joint doctrine at the expense of service level, particularly US Army doctrine, might also be considered a potential limitation. The criticism is that focusing exclusively on joint doctrine overlooks the significant intellectual activity and organizationally

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<sup>531</sup> Mariano, "Between the Pen and the Sword," 1, 30-31.

<sup>532</sup> George and Bennet, *Case Studies and Theory Development in the Social Sciences*, 22-23.

specific viewpoints from individual services. The military services all have a hand in creating and reviewing joint doctrine. The Joint Doctrine Development Process is structured to ensure service involvement and acceptance.<sup>533</sup> As a result, the final products inevitably reflect the most essential service priorities. Individual services have long been engines of innovation within the US military. Service-specific innovation and organizational equities have spawned inter-service competition that has waxed and waned over the years but is now regularized since the passing of the Goldwater–Nichols Department of Defense Reorganization Act of 1986. Harvey Sapolsky believes that the military services have tamed inter-service competition due to the emergence of joint doctrine.<sup>534</sup> In the era of “jointness,” the services tend to act in unison as a bloc against civilian policymakers within the Office of the Secretary of Defense.<sup>535</sup>

Another shortfall is the preference for qualitative over quantitative methods throughout. While the former provides for a rich discussion and narrative, it does have limitations. Specifically, there is a general perception that qualitative methods are less “scientific” than quantitative approaches and the latter’s use of statistical analysis.<sup>536</sup> This last point is a long-running, unresolved issue, especially when judging the social and natural sciences equally. In the case of this dissertation, the reliance on qualitative methods reduces neither the rigor nor the validity of the product. On the contrary, qualitative methods are not merely sufficient but suited to this instance. This study relies on the ability first to detect a language change and then to discern its meaning. While quantitative approaches can be used, coding becomes a challenge. Coding is most suited to measuring the frequency and magnitude of change, but it is not easy to code for nuance and context. This is especially true if a significant word or statement appears only once in a work.<sup>537</sup> Implicit in qualitative methods is acknowledging that human beings are reflective creatures for whom meaning is constructed rather than fixed.<sup>538</sup> Thus, a qualitative approach is best suited to evaluate the US military’s understanding of warfare and how it communicates that meaning through high-level doctrine. In any instance where meaning is being assessed, it is essential to recognize and, to the extent possible, control for bias to maintain research validity. In practical terms, the efficacy of this approach also depends upon the consistency of interpretation applied across texts.

## 10. Research Contribution

The central research question of this study is whether the US military has adapted its high-level, joint doctrine to accommodate the changes in the character of war brought on by the advent of postmodern war. The alternative, that the US military has not modified its outlook and retains its traditional conception of war, is at odds with the assumption underlying this dissertation. This assumption is that the character of contemporary war has changed to such an extent that it necessitates a fundamental re-appraisal. To continue to

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<sup>533</sup> Joint Chiefs of Staff, *Joint Doctrine Development Process*, A-4, A-5.

<sup>534</sup> Sapolsky, Gholz, and Talmadge, *US Defense Politics*, 115.

<sup>535</sup> *Ibid.*, 115, 213.

<sup>536</sup> Mayring, *Qualitative Content Analysis*, 17.

<sup>537</sup> Drisko and Maschi, *Content Analysis*, 83-84.

<sup>538</sup> George and Bennet, *Case Studies and Theory Development in the Social Sciences*, 129.

effectively deter potential adversaries and fulfill its obligation of providing national security, the American military must identify and respond to these changes or risk failure.

Kuhnian paradigm shifts and Fleck's ideas surrounding thought collectives as generators of new thought explain how change might occur in the US military. Kuhn and Fleck apply primarily to knowledge generation and change within the scientific community in their original contexts. That said, their models have broader application in explaining how organizations in other disciplines advance knowledge. This speaks not only to the evolution of doctrine per se, but also to American senior officer professional education and its role as a "thought collective" that generates new knowledge. Again, this line of reasoning circles back to the broader topic of "how militaries learn." In this case, the focus is more educational than epistemological.

Using the methodology outlined in this dissertation, the research findings have significant implications for the understanding of postmodern war. The defining characteristic of this type of warfare is the use of information that is "just as effective and destructive" as traditional military means to achieve political and strategic goals.<sup>539</sup> This understanding is crucial for the US military in shaping its doctrine and strategies. This point has tremendous implications for how the US military wages war and the civil-military relationships that must evolve to support and enable this manner of warfighting. Exploring just one of these implications raises the question of whether the military, as an institution, maintains its monopoly on making war. Since information plays such a significant role in postmodern war, it is possible that government institutions better equipped to operate in the information arena come to the fore and place the military in a subordinate position.

This question is not unique or new. For instance, economics and issues like industrial production were vital considerations that drove how America waged the Second World War. What is different now and in the future is the speed and global penetration of information, which change the decision-making calculus. The trend has been for the US military to creep into other activities, laying claim and asserting expertise in areas such as diplomacy and information that more closely align with other instruments of national power and fall under the purview of different departments.<sup>540</sup> This examination serves as a springboard for such inquiry and, in doing so, contributes to the broader discussion on the evolution of the American way of war.

## 11. Conclusion

This chapter sets forth the epistemological and methodological considerations governing this dissertation. It provides the reader with an appreciation of the research-related choices made to ensure rigor while answering the research question. The post-positivist research philosophy of this dissertation melds the empirical aspects of positivism with the interpretivist idea that individual perspective and bias affect how we see the world. This research examines doctrine and objectively measurable and quantifiable elective offerings. Empiricism is balanced against an acknowledgment that words possess an array of meanings, much of which is latent. Context and audience, both intended and accidental, matter. Hence, content analysis is the preferred method to examine joint doctrine in a

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<sup>539</sup> Liang and Xiangsui, *Unrestricted Warfare*, 6; and Gerasimov, "The Value of Science in Prediction."

<sup>540</sup> Brooks, *How Everything Became War and the Military Became Everything*, 14.

longitudinal study over 30 years. The use of the work of Thomas Kuhn and Ludwik Fleck to explain change within the US military and the selection of a qualitative approach to capture the intrinsic nuance and complexity inherent in human communications are key takeaways from this chapter. Another observation is that Kuhn's work on paradigms lends itself to examining doctrine because the latter acts as a form of paradigm. It is slow to change and represents accepted wisdom within the institution. Likewise, Fleck's work on generating new knowledge lends itself to PME institutions' role as "thought collectives" or generators of new ideas. The elective courses foster new and independent thinking that can be considered a unique "thought style." The following chapters present the research findings of joint doctrine and NDU elective offerings to discern an evolving description of war over time.

## Chapter 5 - Capstone Doctrine

This chapter presents a research overview of capstone doctrine to answer whether the US military's conception of war and warfare has evolved since the early 1990s and with the advent of joint doctrine. The evolution came in response to changes in the character of war, which were – and are - primarily linked to advances in communications technology that have created an increasingly connected world. The chapter's first section examines how joint doctrine evolved from one revision to the next over time. It also discusses the doctrine at three levels: capstone, keystone, and core doctrine. The capstone is the highest level of doctrine and sits atop all other doctrinal publications, focusing upon the broad and overarching doctrinal ideas of warfighting. This chapter on capstone doctrine explores the nine Joint Publication 1-0 editions of *Doctrine for the Armed Forces of the United States*. In the following chapter, the examination proceeds to the next, lower level of doctrine: the keystone level. It is so named because it addresses functional areas of foundational warfighting, such as intelligence, operations, planning, and logistics. Joint Publication 3-0, *Operations* is a prime example of keystone doctrine. The third chapter and the final category to be examined is core doctrine publications. This is the narrowest category of joint doctrine and deals with specific “type” operations such as air defense and amphibious operations. This research does not examine all the offerings within the keystone and core doctrine categories; there are too many offerings, and not all address war or warfare as a phenomenon. Whether keystone or core doctrine, the publications selected have been screened for relevance to war as a phenomenon or are germane because they relate to recent changes in the character of war. In the latter case, such publications relate to the information domain, cyber or space operations, or some aspect of joint warfare central to information and communications technology. Figure 5.1 presents a graphic representation of the doctrine selected for examination by level and function. It also shows the doctrine not chosen within the operations section of core doctrine publications. Personnel management, logistics, and communications doctrine were omitted at the keystone level. At the core doctrine level, most publications fall within the functional families of operations and logistics. This study did not consider any core doctrine publications dealing with logistics. Admittedly, logistics is a critical warfighting function, but it is not an area where one expects phenomenological discussions about warfare to occur.

Table 5.1 provides a comprehensive list of select and non-select publications within the functional family of operations-related core doctrine. Select publications are included in this study, and non-select publications are not. It must be added that the examination of joint doctrine at the level of core doctrine is not comprehensive. This was never a goal of the study, mainly because more pertinent information is expected at the capstone and keystone levels. The study examines select publications within the family of core doctrine to determine whether revised thinking about war can be found as one goes down the Joint Doctrine Hierarchy. Selecting publications at the core doctrine level was influenced by two factors. First, the study selected for publication will discuss war as a phenomenon. Second, it sought publications on one of the “newer” warfare domains, such as cyber, space, and information. Such publications were likely to explain their connection to the more significant activity of war and warfare. Non-select publications focused on specific or tactical topics, such as amphibious assault or control of airspace. Publications were also non-selects if they

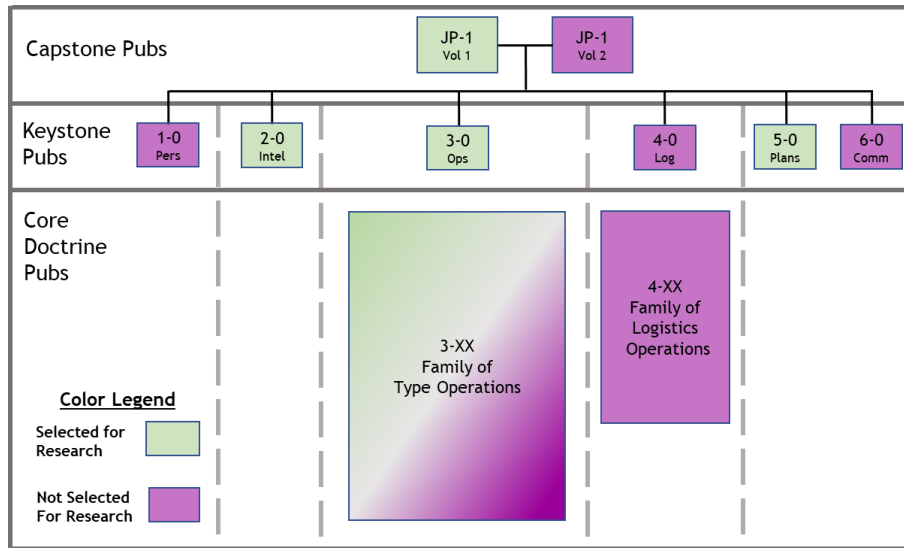


Figure 5.1. Selected Publications for Research as seen in Joint Doctrine Hierarchy. Adapted from Joint Chiefs of Staff, “Joint Doctrine Hierarchy” (August 23, 2022), *Joint Chiefs of Staff*, accessed November 11, 2022, <http://www.jcs.mil/Doctrine>

were classified or contained too few editions to enable a comparison over time. (The complete list can be found in Appendix A.)

## 1. Joint Doctrine

The examination of joint doctrine begins with Joint Publication 1 (JP 1), *Doctrine for the Armed Forces of the United States*. This publication aims to deliver overarching guidance from the highest level of the US military to “help ensure members of the US Military Services fight successfully together.”<sup>541</sup> Regarding content, JP 1 covers two broad topics: warfighting and command and control. It is the only publication found at the capstone level in the hierarchy of joint doctrine. It is intended to link doctrine to national strategy, enable cooperation with other governmental departments, and facilitate working with multinational partners and allies.<sup>542</sup> Given its purpose and foundational role concerning how the US military envisions fighting, at least from a doctrinal perspective, JP 1 is where one would logically expect to find the most robust discussion concerning war and warfare as phenomena. As such, this research effort devotes significant attention to this publication and explores it deeply.

First published in 1991, JP 1 was the first joint publication to be written and governs what has since become a broad family of joint publications.<sup>543</sup> The Joint Staff has designated JP 1 a “high priority” publication. This designation ensures that the document receives a

<sup>541</sup> Joint Chiefs of Staff, *Joint Warfare of the US Armed Forces*, Joint Publication 1 (Washington, D.C.: US Government Printing Office, 1991), iii.

<sup>542</sup> Joint Chiefs of Staff, *Joint Doctrine Development Process*, CJCSM 5120.01B (Washington, D.C.: Joint Chiefs of Staff, November 6, 2020), accessed August 8, 2022, <https://www.jcs.mil/Doctrine/>, GL-5.

<sup>543</sup> Robert A. Doughty, “Reforming Joint Doctrine,” *Joint Forces Quarterly* (Summer 1993): 40-47, accessed March 3, 2023, <https://ndupress.ndu.edu/portals/68/Documents/jfq/jfq-1.pdf>, 42.

formal assessment for efficacy, as a matter of course, no later than two years after the publication of every revision.<sup>544</sup> This review and revision cycle reinforces the importance of JP 1 within the joint doctrine hierarchy. Since its first publication in 1991, there have been eight editions of JP 1, with Joint Staff J-7 releasing a new edition every three to four years on average. As one might expect in the case of a long-standing publication governed by a predictable revision schedule, substantive changes or revisions tend to occur every other edition. For JP 1, this translates into substantive changes beginning with the third edition in 2000, the fourth edition in 2007, the sixth edition in 2013, and the eighth and most current edition in 2020.

Table 5.1 depicts all editions of JP 1 and includes their formal title and year of publication, with the editions containing substantive changes highlighted in light grey. The fourth edition in 2007 is the exception that proves the rule. It contains significant changes even though it directly follows the 2000 edition which also contained substantive revisions.

**Table 5.1. All Editions of Joint Publication 1 with Publication and Page Length**  
(Editions with substantive changes are highlighted in grey.)

#	Title	Date of Publication	Page Length
1	<i>Joint Warfare of the US Armed Forces</i>	11 November 1991	84
2	<i>Joint Warfare of the Armed Forces of the United States</i>	10 January 1995	68
3	<i>Joint Warfare of the Armed Forces of the United States</i>	14 November 2000	106
4	<i>Doctrine for the Armed Forces of the United States</i>	14 May 2007	156
5	<i>Doctrine for the Armed Forces of the United States</i>	20 March 2009	156
6	<i>Doctrine for the Armed Forces of the United States</i>	25 March 2013	172
7	<i>Doctrine for the Armed Forces of the United States</i>	12 July 2017	174
8	<i>Volume 1, Joint Warfighting</i>	29 June 2020	72
	<i>Volume 2, The Joint Force</i>	19 June 2020	128

The seven-year interval between the third and fourth editions is the longest gap between any two and nearly double the average time between revisions. The overlap with the “War on Terror’s” high watermark of activity explains the longer than average gap in publication between 2000 and 2007. The period of turmoil, and institutional learning, accounts for the back-to-back substantive revision. Across all editions, the general discussion explained the tenets and promoted the virtues of joint warfare, and it addressed command and control in the joint context. Specific to the topic of command and control, more significant treatment was given to the subject of partners and allies in multi-national operations and interagency operations and actions.

<sup>544</sup> Joint Chiefs of Staff, *Joint Doctrine Development Process*, CJCSM 5120.01B, B-21.



This effort examined all editions of JP 1 between 1991 and 2020, including the most recent edition, which split the publication into two volumes. In the 2020 edition, JP 1 divides warfighting, command, and control into two volumes. Volume I describes how the Joint Force fights wars and uses military force. Volume II deals with command and control, the different types of joint commands, and interagency and multinational command relationships. The decision to go to two volumes is the latest trend of longer editions and increasing page counts. Except for the second edition in 1995, every subsequent JP 1 edition has had more pages than the preceding one (see Table 5.1).

In analyzing the content, the first question was whether the publication mentioned war or warfare as phenomena. The answer is a resounding “yes.” Every edition of JP 1 mentions war or warfare, and each edition tended to expand and give more detailed treatment to the subject. The exception that proves the rule is Volume II, *The Joint Force*. It is the sole outlier because it primarily focuses on command and control, joint organizations, and relationships with partners and allies. Because the 2020 edition is two volumes, this constitutes less an exception than a change in how the information is presented. Organizing this JP in two volumes makes sense because it allows for a more detailed treatment of the subject matter while avoiding the mass of a single, large volume.

## 2. JP 1 - The First Edition (1991)

A top-down view of the nine editions of JP 1 reveals an ever-expanding treatment of war and warfare. This coverage includes evolving discussions and references to Clausewitz and Sun Tzu that are quoted to aid the reader’s understanding of war. The selection of these two is understandable; each is the best-known theorist from their respective western and eastern cultural traditions. Using the first edition in 1991 as the starting point, the text endorses joint warfare by stating that “the nature of modern warfare demands we fight as a team” and that team warfare “...is synonymous with joint warfare.”<sup>545</sup> This endorsement was necessary because joint warfighting was still relatively new.<sup>546</sup> The requirement to produce joint doctrine came from outside the Department of Defense and resulted from the Goldwater–Nichols Department of Defense Reorganization Act of October 4, 1986.

Congress’ perception of widespread dysfunction and inadequate capability within the US military was the impetus behind Goldwater-Nichols, as it was referred to for short. This perception certainly had roots in America’s defeat during the Vietnam War, but it was not the sole cause.<sup>547</sup> The root cause was bureaucratic friction and redundancy, which

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<sup>545</sup> Joint Chiefs of Staff, *Joint Warfare of the US Armed Forces*, Joint Publication 1 (Washington, D.C.: U.S. Government Printing Office, November 11, 1991), iii, 2.

<sup>546</sup> The first issue of *Joint Forces Quarterly* appeared in 1993. A table of contents review reveals that “jointness” was still relatively new and required continued emphasis and education in armed services. The US military was still implementing the terms of the Goldwater-Nichols Defense Reorganization Act of 1986. A statement from the Chairman opens the issue and is followed by each of the four service chiefs who endorse joint warfare through their unique service lenses. Other articles include “What’s Ahead for the Armed Services?” and “Service Redundancy: Waste or Hidden Capability?” For more information, see <https://ndupress.ndu.edu/portals/68/Documents/jfq/jfq-1.pdf>.

<sup>547</sup> It was not always the case that the US Military Services could not cooperate with one another to achieve common objectives. Looking back to World War II and the Korean War, the US military had previously demonstrated the ability to conduct successful joint operations.

manifested in operational and fiscal disfunction.<sup>548</sup> First, the US military had proven unable to achieve decisive or even favorable results in several limited military actions after Vietnam, like the Mayaguez incident in 1975, the failed attempt to rescue American hostages in Iran in 1980, and peacekeeping operations as part of the Multinational Force in Lebanon which culminated in the Beirut barracks bombing in October 1983 and the deaths of 241 American servicemembers. Even the qualified success of Operation Urgent Fury, which was the US invasion of Grenada in 1983, produced multiple examples highlighting the inability of the US Military Services to operate together effectively. Second, rivalry and competition between the services over roles, missions, and budget share had become counterproductive; an ever-increasing defense budget was not seen as increasing the nation's ability to defend itself and its interests abroad.<sup>549</sup> Congress sought to correct these deficiencies through the legislation spearheaded by Senators Barry Goldwater and William Nichols.

The act mandated that the US Military Services adopt a joint approach to manning, organizing, training, educating, and equipping, in addition to doctrine. Goldwater-Nichols is an external, legislative response to the increasing complexity of warfare and conflict in general to which the US military had been unwilling or slow to respond. It also happens that the Joint Staff published *Joint Warfare of the US Armed Forces* shortly after the US military's sweeping victory over the Iraqi army in the First Gulf War. This event, more than any other, validated the fundamentals of joint warfare, such as teamwork across the services and organizations, agility, and freedom of action.<sup>550</sup> US military operations to liberate Kuwait showcased that technologically advanced weapons in the hands of a highly trained force of all volunteer professionals could overcome the friction, chaos, and complexity of the modern battlefield to bring about victory.

The first edition of JP 1 opens by emphasizing the changes in the current operating environment that make military operations more complex. This trend can be seen throughout the subsequent editions as well. Within Chapter 1, a section entitled "The Nature of Modern Warfare" calls out the "rapid evolution of technology in the post-industrial era" and the "speed of communications and pace of events in the modern world have accelerated," all of which have combined to change the character of war.<sup>551</sup>

The 1991 edition talks about the nature of war without ever explaining it phenomenologically or differentiating between the nature and character of war. It quotes Carl von Clausewitz within the first chapter to introduce his concept of friction and the "fog of war." Yet, it fails to mention or develop other aspects of his theory that might be relevant to understanding war. The 1991 edition does not dismiss the value of Clausewitz's theory or theory in general but does not address it. The first edition nods to the value of theory in the opening chapter, admonishing service members to "...understand the nature of warfare, both through solid grounding in the tested insights of the finest theorists, historians, and practitioners of war..."<sup>552</sup> As written, the 1991 edition of JP 1 assumes that service members

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<sup>548</sup> James R. Locher III, *Victory on the Potomac: The Goldwater-Nichols Act Unifies the Pentagon* (College Station: Texas A&M University Press, 2002), 4.

<sup>549</sup> Locher, *Victory on the Potomac*, 4, 55, 247.

<sup>550</sup> Joint Chiefs of Staff, *Joint Warfare of the US Armed Forces*, 1991, 21, 23, 30.

<sup>551</sup> *Ibid.*, 2-3. Note that the first edition of JP 1 does not state that the character of war has changed. This conclusion first appears in later editions.

<sup>552</sup> *Ibid.*, 2.

are or will become familiar with the various theories of war from another source.<sup>553</sup> Subsequent editions do not make this same assumption, and a discussion of war as a phenomenon and the main theories of war receives more treatment.

### 3. JP 1 - The Third Edition (2000)

The third edition of *Joint Warfare of the Armed Forces of the United States*, which appeared in November 2000, contains substantive changes (see Table 5.1) and expands the discussion of war as a phenomenon. First, it described war as a “human undertaking that does not respond to deterministic rules” and specified that war “...refers to large-scale, sustained combat operations.”<sup>554</sup> Following this reasoning, war only accounts for a small portion of the activities in which the military is used. The remaining activities all fell under the heading of military operations other than war (MOOTW), a term which first appeared in the 2000 edition.

According to JP 1, the purpose of MOOTW is to deter war and promote peace; its unique political considerations influence it and may or may not involve combat or force.<sup>555</sup> At that time, war plus MOOTW constituted the range of military operations (ROMO) across which the US military could be employed and for which it must prepare.<sup>556</sup> This term appeared 32 times in the 2000 edition of JP 1 and only once in the previous 1995 edition. The new terminology is significant, especially when describing war as being “non-deterministic” or not adhering to ordained rules.<sup>557</sup> This language indicates that war can take many forms apart from large-scale combat operations and may be waged by opponents other than states. The 2000 edition of JP 1 is also the first to mention non-state actors as potential adversaries beyond the nation-state.<sup>558</sup> The US military’s experience from the mid-1990s onward with peacekeeping and “operations other than war” in places like Somalia (1993), Haiti (1991/2004), the former Yugoslavia (1993-1996), Sierra Leone (1997), and Liberia (1998) to name but a few, influenced the expanded understanding of war and the accounts for the appearance of non-state actors in the 2000 edition.

### 4. JP 1 - The Fourth Edition (2007)

The 2007 edition also contains substantive changes in how joint doctrine discusses warfare; most notably, it includes the first use of the term “information environment,” described as a quasi-domain alongside the physical domains of air, land, maritime, and

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<sup>553</sup> Academic exposure to Clausewitz, Sun Tzu, and other military theorists typically happens at the services’ intermediate level of professional military education, which targets field-grade officers. Joint professional military education provides more in-depth exposure and normally targets officers of major and above.

<sup>554</sup> Chairman of the Joint Chiefs, *Joint Warfare of the US Armed Forces of the United States*, Joint Publication 1 (Washington, D.C.: U.S. Government Printing Office, November 14, 2000), III-4, III-14.

<sup>555</sup> *Ibid*, III-8, III-14-15.

<sup>556</sup> *Ibid*, III-15.

<sup>557</sup> The fact that joint doctrine maintains that warfare is not held to deterministic rules is at odds with the fact that all editions of JP 1 promulgate the nine principles of war and nine fundamentals of Joint warfare to which the 2000 edition added six principles of MOOTW. All these principles are prescriptive. According to joint doctrine, deviating from these principles is to risk failure.

<sup>558</sup> Chairman of the Joint Chiefs, *Joint Warfare of the US Armed Forces of the United States*, 2000, II-1.

space.<sup>559</sup> The seven-year interval between editions explains the back-to-back substantive changes. During this interval, the September 11, 2001, terror attacks took place, followed by the US invasion of Afghanistan and Iraq, which were centrepieces and smaller parts of what became, from a US perspective, the Global War on Terror. First, the 2007 edition opened with a more expansive definition of war that built off the 2000 edition's definition as a "complex human undertaking." Adding to the earlier definition, the Joint Staff described war in the 2007 edition as "socially sanctioned violence to achieve a political purpose."<sup>560</sup> It used the Clausewitzian definition of war as "a violent clash of wills."<sup>561</sup> More of Clausewitz's theory makes it into this edition, but any mention of the differentiation between war's immutable nature and its changing character is notably absent. Equally important in this edition reconfigured the taxonomy of war away from war and operations other than war.

The 2007 edition of JP 1 settled upon a more dichotomous and balanced solution regarding the taxonomy of war, classifying war as either traditional or irregular. Traditional war is synonymous with conventional war; it involves a violent confrontation between the military forces of nation-states, coalitions, or alliances of nation-states.<sup>562</sup> The confrontation can range from minor to large-scale combat operations and occur in all physical and virtual domains.<sup>563</sup> In traditional war, the aim is to influence the adversary's government by destroying their ability to wage war, seizing and occupying their territory, or using coercive force.<sup>564</sup> In this type of war, the civilian populace is assumed to be a third party, lacking agency and accepting whatever terms the belligerents agree upon to terminate the conflict. Using this definition, the two world wars, the Falklands War, and the 1991 Gulf War; all fall into the category of traditional war despite apparent differences in length, magnitude, and number of belligerents.

In the 2007 edition of JP 1, the Joint Staff contrast traditional war with an irregular variant. This is not to say that irregular war (IW) is the opposite of conventional war. It is best to think of IW as everything that traditional war is not. IW is a form of warfare wherein the weaker opponent seeks to mitigate or nullify the advantages held by a stronger opponent. To achieve this, the weaker side avoids decisive combat, aims for an asymmetric advantage, and pits its strength against the more substantial side's weaknesses. Strength is never matched against strength; the weaker side seeks to "win" by breaking the other side's will to continue the conflict. It achieves this outcome through tactics such as terrorism, insurgency, and disinformation that feed more extensive subversion, attrition, and exhaustion strategies. Often, the focus of these indirect strategies is not the enemy's military but its civilian population. In irregular warfare, "the belligerents, whether states or other armed groups, seek to undermine their adversaries' legitimacy and credibility and to isolate their adversaries from the relevant population."<sup>565</sup> Executed well, a successful irregular warfare

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<sup>559</sup> Chairman of the Joint Chiefs, *Doctrine for the Armed Forces of the United States* (Washington, D.C.: Joint Chiefs of Staff, May 14, 2007), x.

<sup>560</sup> *Ibid.*, I-1.

<sup>561</sup> *Ibid.* The 2007 edition of *Doctrine for the Armed Forces of the United States* borrows more overtly from Clausewitz than other versions. It describes friction, chance, and uncertainty as components of the "fog of war." It characterizes war as "the continuation of politics by other means," which are familiar to those who have read *On War*.

<sup>562</sup> Chairman of the Joint Chiefs, *Doctrine for the Armed Forces of the United States*, 2007, I-6.

<sup>563</sup> *Ibid.*

<sup>564</sup> *Ibid.*

<sup>565</sup> *Ibid.*, I-7.

campaign can erode the enemy population's confidence in its government while delivering some control or influence over that population to the opposing side. Like all forms of warfare, irregular warfare is complex. What makes IW potentially more complicated than traditional war, or at least harder to conceptualize, is that there are often multiple populations or groups in play that the belligerents seek to influence or control simultaneously. Victory is not decided on the battlefield. In traditional war, the assumption was that civilians had limited agency and would accept decisions rendered on the battlefield. In contrast, IW views the civilian population as an independent actor and as the prize for which both sides compete.

The 2007 *Doctrine for the Armed Forces of the United States* constitutes a substantive change or advance in how war is presented. This conclusion does not stem solely from introducing the revised taxonomy of traditional versus irregular warfare. It results from the 2007 edition's acknowledgement of the complexity of war and the contemporary international environment. Previous editions evaluated the international environment primarily through the lens of technological advancement, an approach that has been standard since the earliest editions of joint doctrine. Admittedly, the 2007 version still references "...advances in information technology increase[ing] the tempo, lethality, and depth of warfare."<sup>566</sup> However, there is also a discussion of globalization in Chapter 1 and how globalization alters the "character" of the threat confronting the United States.<sup>567</sup> The conveyed meaning is that globalization's interconnectedness and emerging technology have made it easier for non-state actors to leverage asymmetric advantages against the United States regarding access and scope.<sup>568</sup> The doctrine further indicates that this asymmetry is difficult to counter because much of the associated activity occurs within the information or virtual domains like cyber.<sup>569</sup> This shows a more expansive and nuanced view of war than previous editions of JP 1.

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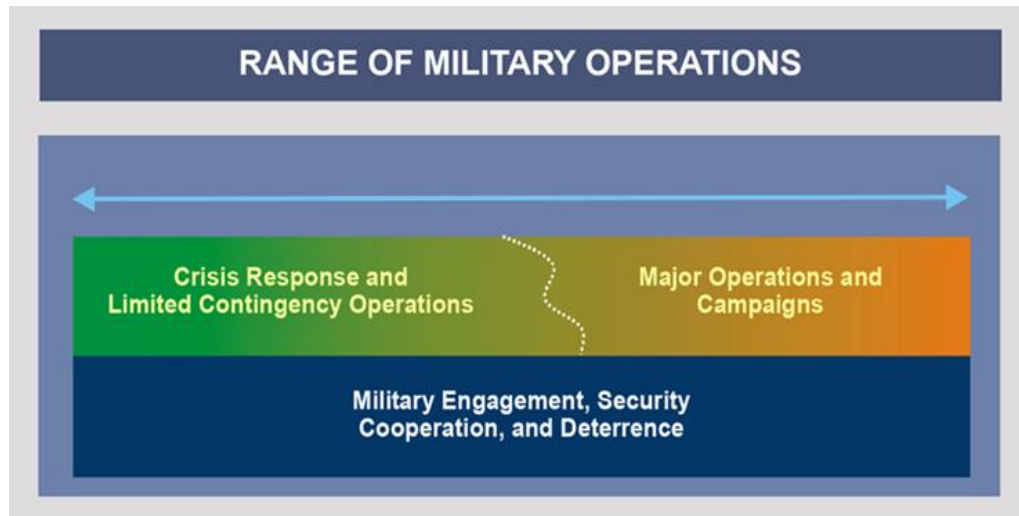
<sup>566</sup> Ibid.

<sup>567</sup> The 2007 edition of *Doctrine for the Armed Forces of the United States* is the first in which the term "globalization" appears, even though the word has been in common use since the 1990s.

<sup>568</sup> Chairman of the Joint Chiefs, *Doctrine for the Armed Forces of the United States*, 2007, I-8.

<sup>569</sup> Ibid. The sentence reads, "The elusive nature of adversaries and the ever-increasing speed of global communications and the media demand greater adaptability and networking from US joint forces..."

Further evidence of a more considered and complex view of war comes from this edition's reconceptualization of the range of military operations seen in Figure 5.2. Gone is the 2000 edition's binary distinction between war and MOOTW; in its place is a more amorphous dividing line between peace and war. Significant operations and campaigns associated with war fall on one end of the spectrum with crisis response and limited



**Figure 5.2. Range of Military Operations Circa 2007. Taken from Chairman of the Joint Chiefs, *Joint Warfare of the US Armed Forces of the United States, 2007, I-16.***

contingency operations that tend to occur more frequently during peacetime or, if not peace, then at least it is a state short of armed conflict. A variety of military engagement, security cooperation, and deterrence activities conducted by the military populate the middle ground between peacetime and wartime. Such military activities set conditions to maintain relationships with allies and partners and signal to potential opponents; the circumstances and desired outcome determined the exact form such military activities take.<sup>570</sup>

This reconfigured graphic depiction of the ROMO is more straightforward than the previous edition, but its simplicity is essential in helping it capture the fact that there is often no sharp distinction between peace and war; military activities can occur anywhere along the continuum: “Often, however, military operations will have multiple purposes and be influenced by a fluid and changing situation.”<sup>571</sup> This last statement is also significant and captures the doctrine writers’ appreciation for the fluidity and complexity of war.

Appearing in 2007 at the height of the War on Terror, it is no coincidence that the 2007 edition of JP 1 “reimagined” how the ROMO was depicted and contained the most nuanced and complex articulation of warfare that had been seen to date in joint doctrine. During this timeframe, the US military was not only involved in Iraq and Afghanistan but also had a significant presence in “lesser” theaters worldwide, like the Horn of Africa, the Sahel, and the Philippines. Each of these theaters was similar in that the enemy facing the US military could be described as an Islamic extremist group, affiliated with Al-Qaida.

<sup>570</sup> Ibid, I-15-16.

<sup>571</sup> Ibid, I-18.

However, each theater was unique regarding prevailing conditions and the constellation of actors, including key population groups and US partners and allies. Even in Iraq and Afghanistan, the military element of power was not, itself, the key to victory against Al-Qaida in Iraq or the Taliban. Often, the military set conditions or enabled other elements of US power. Moreover, the US had to actively participate in the “battle of the narrative” and communicate effectively with critical audiences, lest it cede that ground to opponents who used the information environment as an asymmetric advantage. Supporting this statement, a survey of articles published in *Joint Force Quarterly (JFQ)* from 2006 to 2007 yields multiple offerings that speak to the importance of the information environment and an increased appreciation for the nuance and complexity of modern war.<sup>572</sup> Titles of submissions in *JFQ* include “Clausewitz’s Theory of War and Information Operations,” “Combating Terrorism: A Socio-Economic Strategy,” “Terrorist Use of the Internet: The Real Story,” and “On the Nature of Strategic Communication.”<sup>573</sup> Overwhelmingly, the US found that communicating within the information environment, both locally and globally, was often more important than actions in the physical domains.

## 5. JP 1 - The Sixth Edition (2013)

The 2013 edition is another substantive evolution of the JP 1 publication in terms of its approach to the phenomenon of war. The revised material organization is significant in this edition, apparent in its reconfigured table of contents. For the first time, there is a deliberate mention of theory. In previous editions, much of the discussion on warfare took place in the first chapter, which was titled “American Military Power” in the first two editions, “Fundamental Concepts” in the 2000 edition, and “Foundations” in the 2007 and 2009 editions. In the 2013 edition, this chapter is now listed as “Theory and Foundations,” which speaks precisely to what the reader can expect to find within.

This edition has the most developed section on Clausewitz’s theory of war.<sup>574</sup> It uses his concept of the “fog of war” and explains his view of war as “a continuation of politics by other means” or as a “violent clash of wills,” as was the case in previous versions of JP 1.<sup>575</sup> The 2013 version further explains the Clausewitzian trinity of emotion, chance, and reason, reflected in the interplay between the people, the military, and the government when

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<sup>572</sup> *Joint Force Quarterly* is a periodical published by National Defense University Press in which the Chairman of the Joint Chiefs routinely provides introductory messages for many editions.

<sup>573</sup> In order of mention, the titles are William Darley’s “Clausewitz’s Theory of War and Information Operations,” *JFQ* 40 (2006); Miemie Winn Byrd’s “Combating Terrorism: A Socio-Economic Strategy,” *JFQ* 41 (2006); Irving Lachow and Courtney Richardson’s “Terrorist Use of the Internet: The Real Story,” *JFQ* 45 (2007); and Carnes Lord’s “On the Nature of Strategic Communication,” 46 (2007). All articles are available at <https://ndupress.ndu.edu/jfq/>.

<sup>574</sup> Chapter 1 of 2013 edition mentions Sun Tzu as well, but the Chinese philosopher’s work is not as central as Carl von Clausewitz’s to the thinking articulated in JP 1. The 2013 edition contained the phenomenological and theoretical treatment of war the author sought from the outset.

<sup>575</sup> The translation of Clausewitz’s “Der Krieg ist eine bloße Fortsetzung der Politik mit anderen Mitteln” is often mistranslated as “war is a continuation of politics through other means.” The correct translation is “...with other means.” The semantic difference in the second (and correct) translation is the parallel continuation of diplomacy as war is being waged. In comparison, war replaces diplomacy in the former and better-known mistranslation. For more see *The Diplomat* article “Everything You Know About Clausewitz Is Wrong” from November 12, 2014 available at <https://thediplomat.com/2014/11/everything-you-know-about-clausewitz-is-wrong/>.

a group or state wages war.<sup>576</sup> More important for this study is that the 2007 edition is the first occasion in which the doctrine distinguishes between the nature and character of war in the same manner as Clausewitz. “The basic nature of war is immutable, although warfare evolves constantly.”<sup>577</sup> This is important not necessarily because it acknowledges the variability of war based on time and place—this has happened in previous editions—but because it provides a construct to distinguish between the nature of war and its different manifestations. Increased precision in language, in this case from Clausewitz’s *On War*, enables a more complex understanding of the phenomenon.

Furthering the idea of a more complex understanding of war, the 2007 edition of JP 1 draws a semantic distinction between war and warfare that is not present in the five previous editions. War is the activity, and “warfare is the mechanism, method, or modality of armed conflict against an enemy. It is “the how” of waging war. Warfare continues to change and be transformed by society, diplomacy, politics, and technology.”<sup>578</sup> Bringing home the distinction between war and warfare: the former is the “what,” and the latter is the “how.” JP 1 paraphrases British historian Sir John Keegan’s thought that “war is a universal phenomenon whose form and scope is defined by the society that wages it.”<sup>579</sup> Although earlier joint doctrine accounted for change and evolution in warfare, the 2007 edition provided a more fulsome way of understanding what Clausewitz meant when he referred to the changing character of war as “more than a true chameleon.”<sup>580</sup>

The 2013 publication’s revised organization also includes a more developed discussion of irregular warfare (IW). A new vocabulary describes IWs as a method of war differentiated by the level of sophistication. Complex IW threats leverage advanced weaponry or information technology, command and control systems, and complex support networks, whereas less sophisticated methods rely more on crime, kidnapping, and other illicit activities.<sup>581</sup> This point alludes to the utility of IWs across a range of actors. Most significantly, it is a tool for nation-states as they are more likely to possess and employ sophisticated tools. IW is not solely a tool for non-state actors. Expanding the notion of IW in this way and presenting it as a viable tool for state actors adds to the complexity of war and its myriad manifestations.

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<sup>576</sup> Chairman of the Joint Chiefs, *Doctrine for the Armed Forces of the United States* (Washington, D.C.: Joint Chiefs of Staff, May 14, 2013), I-3.

<sup>577</sup> *Ibid.*, I-3.

<sup>578</sup> *Ibid.*, I-4.

<sup>579</sup> *Ibid.*

<sup>580</sup> Carl von Clausewitz, *On War*, ed and trans. Michael Howard and Peter Paret, (Princeton: Princeton University Press, 1989), 89.

<sup>581</sup> Chairman of the Joint Chiefs, *Doctrine for the Armed Forces of the United States*, 2013, I-4.



This increased complexity is mirrored in how the 2013 edition addresses the Range of Military Operations; it is also more complex and nuanced than in the previous two editions. This is best seen in the visual depiction of ROMO contained in Figure 5.3. What makes the 2013 version more compelling is the introduction of the conflict continuum between peace and war alongside the range of military operations. The 2007 version of the ROMO shown in Figure 5.2 only alluded to a continuum between peace and war. It did not appear on the graphic itself. Including the conflict continuum as an “x” axis makes the idea



Figure 5.3. Range of Military Operations Circa 2013. Taken from Chairman of the Joint Chiefs, *Joint Warfare of the US Armed Forces of the United States*, 2013, I-14.

explicit. This two-dimensional graph also makes the 2013 version of ROMO, as shown in Figure 5.3, more effective in communicating the complexity of the operating environment and the military's role in it. The 2013 ROMO effectively places the military instrument of national power in perspective alongside other elements of national power. Figure 5.3 also points to the applicability of a particular military activity depending on where one falls along the conflict continuum.

## 6. JP 1, Volume 1, Joint Warfighting - The Eighth Edition (2020)

The 2020 edition of JP 1 constitutes the most significant revision of the *Doctrine for the Armed Forces of the United States*. It is both a reorganization and a substantial revision from previous editions. First, JP 1 now comprises two volumes: Volume 1, *Joint Warfighting* at 72 pages and Volume 2, *The Joint Force* at 128 pages. The first volume covers the “fundamentals of joint warfighting [and] the basic warfighting foundations” for the conduct of joint military operations.<sup>582</sup> The second volume focuses on the “unified direction of the Military Services of the United States, foundations of DOD, and core tenets of joint command

<sup>582</sup> Chairman of the Joint Chiefs, *Volume I, Joint Warfighting*, Joint Publication 1 (Washington, D.C.: Joint Chiefs of Staff, June 29, 2020), i.

organization and C2.”<sup>583</sup> Combined, this two-volume version has a total page count of 200 compared to the previous edition, which was 174, giving a clear indication of additional content. Also, the two-volume format necessitated a revised table of contents. Volume 1 contains three chapters, respectively, titled “Global Integration,” “Foundations,” and “Fundamentals.” As indicated by the choice of “global integration,” the 2020 edition of JP 1 presents a much broader, more accommodating conception of war than previous editions.

The first paragraph of the global integration chapter develops the idea that the security environment, i.e., the environment in which war takes place, has “become increasingly transregional, all-domain, and multifunctional.”<sup>584</sup> For clarity, the term multifunctional, in this case, refers to the ability to integrate warfighting or battlefield functions such as command and control, intelligence, fires, maneuver and logistics, to name but several, into a cohesive operation in support of a singular purpose or effect.<sup>585</sup> More important is the 2020 edition’s term “all-domain,” which explains that it encompasses the physical domains and information environment, including cyberspace.<sup>586</sup> Global Integration is “the arrangement of cohesive military actions in time, space, and purpose, executed to address transregional, all-domain, and multifunctional challenges.”<sup>587</sup> The type of adversaries the US military expects to face remains broad, ranging from nation-states to violent, non-state actors, although the text refers to the former as “great powers.”<sup>588</sup>

Another new term that appeared for the first time in this version of joint doctrine is “threshold,” which pertains to a military response or the point at which the US opts to use military force. The doctrine makes this distinction because, as it explains, US adversaries prefer to operate below the threshold of a US response to mitigate the former’s many advantages regarding conventional military power and overall capability.<sup>589</sup> The publication acknowledges that US adversaries, especially peer and near-peer adversaries, increasingly seek to achieve their objectives by manipulating popular perceptions through non-military instruments, which adds further complexity to the situation.<sup>590</sup> In such cases, the information and cyber tools are used to manipulate the perception of specific target audiences to undermine governmental or institutional legitimacy in the US and its allies. These sub-threshold activities do not conform to the binary peace versus war construct that tends to be the default framework, even if the default does not reflect the reality of the international security environment. Significantly, the 2020 edition of JP 1 acknowledges the complexity inherent in the relationship between various states of peace and conflict. This complexity is also reflected in the 2020 edition’s revised rendering of the ROMO, which has been re-labelled as the “Competition Continuum.”

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<sup>583</sup> Chairman of the Joint Chiefs, *Volume II, The Joint Force*, Joint Publication 1 (Washington, D.C.: Joint Chiefs of Staff, June 29, 2020), i.

<sup>584</sup> Chairman of the Joint Chiefs, *Volume I, Joint Warfighting*, 2020, I-1.

<sup>585</sup> Ibid.

<sup>586</sup> Ibid. Relevant here is the term “All-Domain,” which includes the physical domains and the information environment including cyberspace. The term information environment first appeared in 2007, and Information became a Joint function in the 2017 edition of JP 1. The evolution of information’s role in warfare does not just speak to its increasing utility. More importantly, it speaks to the Joint Staff’s realization and acceptance of this fact.

<sup>587</sup> Ibid.

<sup>588</sup> Ibid.

<sup>589</sup> Ibid.

<sup>590</sup> Ibid.

The Competition Continuum re-imagines the ROMO concept and updates it from the 2013 edition. Figure 5.4 introduces competition and cooperation to facilitate a more accurate and complete understanding of the operating environment, and the role played by the military element of national power. The Competition Continuum outlines “three broad areas of strategic relationships among the actors,” which span cooperation, competition

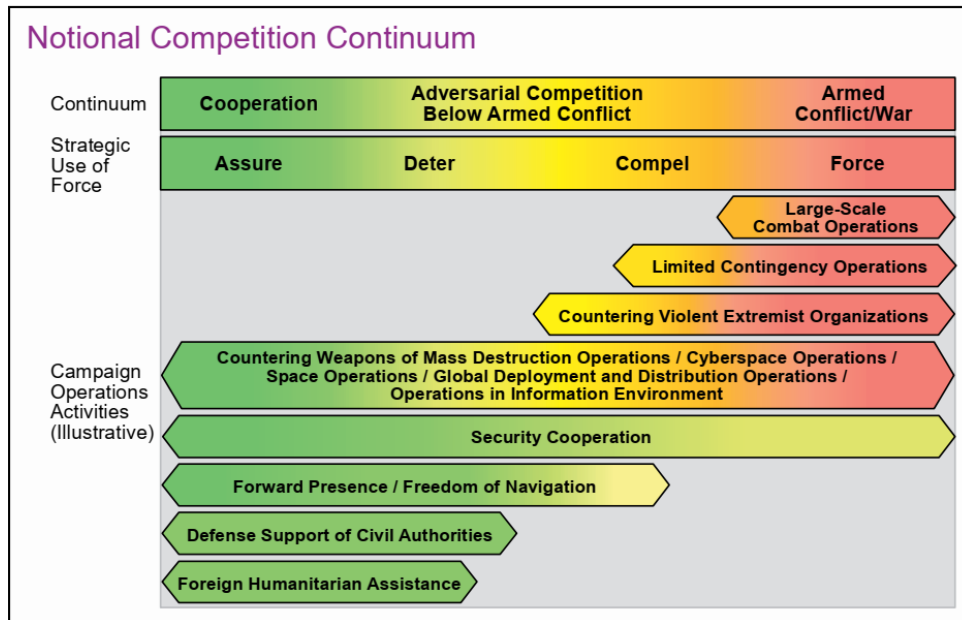


Figure 5.4. Competition Continuum Circa 2020. Taken from Chairman of the Joint Chiefs, *Volume I, Joint Warfighting*, 2020, II-11.

below armed conflict, and armed conflict or war.<sup>591</sup> Across this continuum, there are infinite possibilities or permutations regarding how relationships between actors manifest and how military force may be used. As depicted in Figure 5.4, the military element, whether peace or war, plays a role across the spectrum. Most often, the range of military activities is most diverse in the middle range of the continuum, which is distinguished by competition.

Reinforcing the last point, the 2020 edition proposes that most joint force activities occur within the context of competition rather than during periods characterized by cooperation or armed conflict.<sup>592</sup> This fact is unsurprising because nation-states do not typically find themselves at the extremes of the continuum for long periods. States are rarely in a state of total war or enjoying complete peace without competing with their neighbors. Competition best describes the reality and everyday use of military activity and the other elements of power as nations jockey with one another for relative advantage. To this end, the 2020 edition explicitly highlights the importance of the information element of national power and calls for “integrating physical actions and information” as part of the all-domain approach to joint operations.<sup>593</sup> Information is ubiquitous in the modern operating environment which is characterized by “pervasive media and social networks [that] create an

<sup>591</sup> Ibid, II-10.

<sup>592</sup> Ibid, I-1.

<sup>593</sup> Ibid, I-8.

interconnected, transparent environment.”<sup>594</sup> In such an environment, information is at once a medium and a tool or weapon, able to produce outsize effects that can “legitimize US actions while simultaneously delegitimizing adversary and enemy actions by shaping perceptions, attitudes, and behaviors.”<sup>595</sup> In addition to appreciating the role of information across the continuum of conflict, *Volume I, Joint Warfighting*, contains a significantly developed section on war and warfare that surpasses that of any previous edition.

Of the three chapters in the first volume of JP 1, it is the second chapter, “Foundations,” that contains dedicated sections covering war, its nature and character, the theory of war, its relationship to policy, as well as a taxonomy of warfare in its various forms. Chapter 2 references classic war theory, such as Clausewitz’s *On War*. The 2020 edition quotes Clausewitz in describing war as a “violent clash of wills” comprised of the elements of chance, passion and reason; it is a phenomenon whose nature is permanent or immutable, but the character varies.<sup>596</sup> The chapter explains war as “a fundamentally human endeavor” connected to human nature and humanity in various forms and manifestations.<sup>597</sup> The taxonomy of war remains structurally the same as in the 2007 edition, which broke war down into traditional and irregular forms. New to this edition, and still in keeping with treating war from the theoretical or phenomenological standpoint, there is a discussion of the strategic uses of force not seen in previous editions of JP 1.

The four strategic uses for military force are assurance, deterrence, compellence, and forcible action. These four uses correspond to the Competition Continuum. Assurance is the least violent use of force and demonstrates “commitment and support to US allies and partners.” Deterrence and compellence are two forms of coercion. Deterrence employs force to prevent or dissuade an opponent from engaging in a specific action, whereas compellence uses force or the threat thereof to change existing behavior. Forcible action is using military force against an opponent to break or eliminate resistance. The application of force also typically follows one of four strategies: eroding an opponent’s will to fight through exhaustion, reducing their means of resistance over time by attrition, or destroying the enemy’s means of resistance through annihilation.<sup>598</sup> Multiple methods or strategies are often employed together or sequentially to achieve the desired end.

Because war is so tightly bound to humanity, it manifests in innumerable ways that are not expressed using the military instrument alone. War’s variable character is influenced by human beings as much as by temporal and geographic dictates.<sup>599</sup> Humanity’s influence on war as an activity is evident in this edition of JP 1. It is most apparent in the discussion on warfare, first introduced in 2013 as the “how” of using organized violence against an opponent and continuing in the 2020 edition.<sup>600</sup> The latter goes further in making a more developed argument for warfare as continually evolving as human beings clash with one another in organized groups and seek innovation as a means of advantage.<sup>601</sup> However, the

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<sup>594</sup> Ibid, I-9.

<sup>595</sup> Ibid.

<sup>596</sup> Ibid, II-3.

<sup>597</sup> Ibid, II-4.

<sup>598</sup> Ibid, II-9, II-10.

<sup>599</sup> Ibid, II-3, II-4.

<sup>600</sup> Ibid, II-13.

<sup>601</sup> Ibid.

pursuit of advantage is not the sole driver of change. The context in which war occurs is constantly changing and profoundly influences the character of a conflict.

For the 2020 edition of JP 1, the change had two aspects. The first aspect is the continued evolution of information technology and the ever-increasing frequency and magnitude of change it exerts on human society. The Information Age has unfolded in parallel with the development of joint doctrine itself because of its effect on how force is employed.<sup>602</sup> The second driver of change was a realization that the strategic context confronting the US military had profoundly changed; this came in the form of the 2018 National Security Strategy (NSS). This document was the US response to several interrelated threads of change that had been developing for some time. These changes included the effects of technological advances and the rise of revanchist nation-states such as China and Russia. There was also the perception that the US military's advantage over potential adversaries was eroding and, with it, the rules-based international order. These threads were not new, but previous editions of the NSS had not addressed them overtly or made them policy priorities. Most significantly, the 2018 NSS moved away from terrorism, which had dominated US national security dialog for the past two decades, as the primary threat facing the US and pivoted to inter-state strategic competition.<sup>603</sup> The return to great power competition, albeit with states employing the tools of irregular warfare and leveraging the full power of the information environment to gain asymmetric advantages over the US, is the backdrop for how the 2020 edition of JP 1 characterized and described warfare: it is complex and nuanced, not solely conducted through the military element of power, and remains a fundamentally human endeavor limited only by our ingenuity.<sup>604</sup>

## 7. JP 1: A Summation

This section explored the evolution of JP 1, the capstone doctrinal publication, over approximately 30 years. Keystone and core publications remain to be analyzed, yet it is nonetheless apparent that the doctrine has addressed the phenomenon of warfare with increasing complexity and nuance over time. This evolution is best seen in three broad areas. The first is the reference and use of existing theories of war, namely those from well-known military theorists like Clausewitz, Jomini, and Sun Tzu. Each theorist plays a specific role within the corpus of US military thought and doctrine.

Clausewitz discusses war in terms of its immutable nature and ever-changing character; he provides practical concepts like the trinity and center of gravity to aid in understanding conflict. However, his actual utility to American military thinking is his discussion about the marrying of violence with political purpose, which validates war as a legitimate tool of policy. It also promises that one can achieve political purpose if one correctly understands the character of the conflict in which one is engaged. This last point gained relevance in the aftermath of the Vietnam War, which saw a profound disconnect between battlefield actions and the successful political outcome of the war. Clausewitzian

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<sup>602</sup> Ibid. "Notions of who is a combatant and what constitutes a battlefield [or a weapon] are rapidly shifting beyond previous norms."

<sup>603</sup> U.S. Department of Defense, *Summary of the 2018 National Defense Strategy of the United States of America* (Washington, D.C.: Department of Defense, 2018), accessed November 24, 2021, <https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>, 1.

<sup>604</sup> Chairman of the Joint Chiefs, Volume I, *Joint Warfighting*, 2020, II-3, II-4, II-13.

theory gives one the tools to think about war. The theory of Antoine-Henri Jomini, Clausewitz's Swiss-born contemporary, provides the practical basis for conducting war. Also writing during the Napoleonic era, Jomini was concerned with the practical matter of engagements and battles. The principles of war that appear in every edition of JP 1 are derived from Jomini's work. Last, there is Sun Tzu. The Chinese philosopher is the outlier in that he comes from outside the Western tradition of military history and is separated from Clausewitz and Jomini by over one thousand years. Sun Tzu wrote during the Warring States period of Chinese history, sometime around 500 B.C. His utility lies in his easily remembered dictums and their applicability to higher strategy, especially concerning the skillful use of force and America's return to great power competition.<sup>605</sup> Sun Tzu concentrates on defeating or undermining your opponent's strategy, which might not involve using force, whereas Clausewitz and Jomini focus on winning battles and campaigns.

Looking across the editions of JP 1, theory assumed a more prominent role over time. In the earliest editions, the authors gave a nod to theory, limiting its application to quotes from Clausewitz and the other two theorists as marquee to introduce a new chapter or section.<sup>606</sup> The text only alluded indirectly to theories of war. The supposition was that the authors assumed readers would fill in the gaps from their experience and education through the JPME curriculum. Later editions of JP 1 gave more coverage to Clausewitz, Jomini, and Sun Tzu. But it was not coverage for its own sake or the use of quotes at the head of a new chapter, and it was not a question of the number or frequency of quotations. Over time, different theories of war appeared in the narrative text, and later, sections were dedicated to theory and foundational thinking on war. This is readily apparent from the 2007 edition onward, which presents, at a minimum, Clausewitz's distinction between the nature and character of war as a departure point for understanding war. The most recent editions from 2013 onward utilized military theory to broaden the reader's understanding of warfare, explaining central concepts within the text rather than counting on outside education. This made the capstone doctrine accessible to a broader audience, provided a basis in the theory of war, and more effectively communicated the evolving concepts of joint warfare.

The second indicator is the Range of Military Operations and the Competition Continuum which replaced the former in the 2020 edition. Both are heuristics to help the reader understand the utility of war. The ROMO graphically depicted how the use of military force is influenced by context and purpose. In the earliest editions of JP 1, there was simply war as it pertained to large-scale, sustained combat operations. At the same time, everything else was placed in the catch-all category of Military Operations Other than War or MOOTW.<sup>607</sup> Creating the ROMO diagram and the associated narrative was an immediate improvement over the war/MOOTW dichotomy because it accurately depicts how force was employed. ROMO became increasingly complex and nuanced over time; ROMO reflected the Joint Staff's understanding of changes in the character of war over time, given changes in human society and international relations, not the least of which are those associated with the Information Age. The ROMO and Competition Continuum and the descriptive text are written with sufficient flexibility to accommodate unanticipated changes in the character of

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<sup>605</sup> James P. Micciche, "The Art of Non-War: Sun Tzu and Great Power Competition," *War Room Online Journal*, US Army War College March 18, 2021, accessed June 6, 2023, <https://warroom.armywarcollege.edu/articles/non-war/?print=pdf>, 1.

<sup>606</sup> Joint Chiefs of Staff, *Joint Warfare of the US Armed Forces*, 1991, 2.

<sup>607</sup> Chairman of the Joint Chiefs, *Joint Warfare of the US Armed Forces of the United States*, 2000, III-14.

war. Reading early editions of JP 1 with the benefit of hindsight and with full knowledge of technological developments and changes in warfare, the text's ability to accommodate, if not precisely, changes in the character of war is surprising. For example, earlier editions of JP 1, reaching back to the late 1990s, anticipate the impact of information and information technology, even though the writers at the time could not have known the exact manifestation of such changes.

The intellectual path that led from MOOTW through ROMO up to the contemporary Competition Continuum parallels was informed by the US military's operational experience over the past three decades. The ROMO was, and remains, a tool to understand conflict and the utility of force across the spectrum. The starting point began in the immediate aftermath of the Cold War and is anchored in the US military's success over the Iraqi military during Operation Desert Storm. This operation and the larger context of the First Gulf War validated the tenets of joint warfare.

In the following period, the US military conducted several humanitarian relief, peacekeeping and peace-enforcing operations that fell outside the scope of "traditional" combat operations. These Military Operations Other Than War (MOOTW) in places like Somalia, Haiti, and the former Yugoslavia were complex and challenging to resolve. In many cases, the US military expressed institutional opposition to MOOTW because it was not considered "real" war.<sup>608</sup> In the instances where an armed opponent existed, it was typically non-state actors mixing high and low technology for an asymmetric response to America's technologically advanced military. The ROMO concept provided a foundation that supported the doctrine and enabled military practitioners to understand the missions and conflicts they engaged in more effectively. This trend continued through the wars in Iraq and Afghanistan. US firepower and technology proved less than adequate in eradicating the insurgent groups in either country, and the strategic objectives were closer to nation-building or state creation than it was to destroying the opponent's ability to resist. In 2020, the Competition Continuum replaced the ROMO, coinciding just as the US re-entered a period of great power competition, this time with China and Russia. Once again, this graphical representation helps contemporary practitioners understand the character of war and competition below the threshold of armed conflict.

The third area of progress is the taxonomy of warfare and its development, specifically in capstone joint doctrine. The taxonomy first appeared in the 1995 edition of JP 1 and presented a binary distinction between war and MOOTW. War is assumed to involve large-scale combat operations, and MOOTW is everything else.<sup>609</sup> The taxonomy evolved in 2007, distinguishing between traditional and irregular warfare. It continued to develop over the subsequent three editions: 2013, 2017, and 2020. Upon its introduction in 2007, the dichotomy between traditional and irregular warfare focused on the latter's emphasis on asymmetries. It nullified the advantages of mass, firepower, and technology typically enjoyed by conventional militaries. Instead of traditional concepts of victory and defeat, IW focuses on the battle for legitimacy and influence regarding specific populations.<sup>610</sup> In the 2007 edition, IW is also portrayed as the semi-exclusive purview of non-state actors such as

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<sup>608</sup> Richard J. Rinaldo, "Warfighting and Peace Ops: Do Real Soldiers Do MOOTW?" *Joint Force Quarterly* 14 (March 1997): 112-113, accessed June 7, 2021, <https://ndupress.ndu.edu/portals/68/Documents/jfq/jfq-14.pdf>.

<sup>609</sup> Joint Chiefs of Staff, *Joint Warfare of the Armed Forces of the United States*, Joint Publication 1 (Washington, D.C.: US Government Printing Office, 1995), v, III-1.

<sup>610</sup> Chairman of the Joint Chiefs, *Doctrine for the Armed Forces of the United States*, 2007, I-1.

insurgents and terrorist organizations; this comes as no surprise considering the US military was fully committed to the War on Terror during that period. Again, this mirrors the US military's own experience fighting organizations such as Al-Qaida in Iraq, the Taliban in Afghanistan, and Al-Shabab in Somalia.

Over time, the depiction of IW in joint doctrine becomes more complex and nuanced. It is no longer exclusively the purview of non-state actors. Irregular warfare benefits weaker states, especially when confronted with a stronger adversary.<sup>611</sup> The idea that other nations, not just non-state actors, employ IW as a viable tool to achieve their objectives is essential as it fits within the concept of competition below the level of armed conflict central to the Competition Continuum presented in the 2020 versions of JP 1. The most recent version of JP 1 also emphasizes the importance of information and influence. It de-emphasizes IW as a military-centric activity, especially considering the connected information environment in which all human beings live.<sup>612</sup> At its core, IW remains a struggle for legitimacy and influence over relevant populations, no matter who or what type of group is employing it as warfare.

Considering how JP 1 presented the theory of war, the ROMO and Competition Continuum, and the taxonomy of warfare, it is evident that the capstone joint doctrine served as a unifying and clarifying force within the US military. The purpose was to give everyone a common baseline to conduct joint operations and understand war. How the Joint Staff presented war and warfare as a phenomenon in its capstone level doctrine became more complex and nuanced over time. This demonstrates development and learning over time, just as the US military learned across the three decades of operations that spanned several seminal periods. Better than any other theme in the JP 1 series is the impact of information on how human beings wage war. In concert with the different points raised, this last one indicates the Joint Staff's deep understanding of warfare and its conduct. Developing this idea, the next chapter will focus on the keystone and core doctrine levels covering intelligence, operations, and planning warfighting processes.

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<sup>611</sup> Chairman of the Joint Chiefs, *Doctrine for the Armed Forces of the United States*, 2013, I-6.

<sup>612</sup> Chairman of the Joint Chiefs, *Volume I, Joint Warfighting*, 2020, II-15.



## Chapter 6 - Keystone Publications

Chapter 6 builds upon Chapter 5, which covers capstone joint doctrine. This chapter follows with research findings centering on keystone doctrine comprising the main warfighting functions of personnel, intelligence, operations, logistics, planning, and communications. Specific areas of examination are outlined in green in Figure 6.1. This figure gives a visual depiction of the publications to be examined at the keystone level of publications. At this level, the research focused exclusively on the intelligence, operations, and planning series, deliberately omitting the personnel, logistics, and communications publications. While these three areas are essential to conducting and sustaining military operations, this dissertation omitted them because they were unlikely to discuss war or warfare holistically. Those discussions were more likely to occur in intelligence, operations, and planning doctrine.

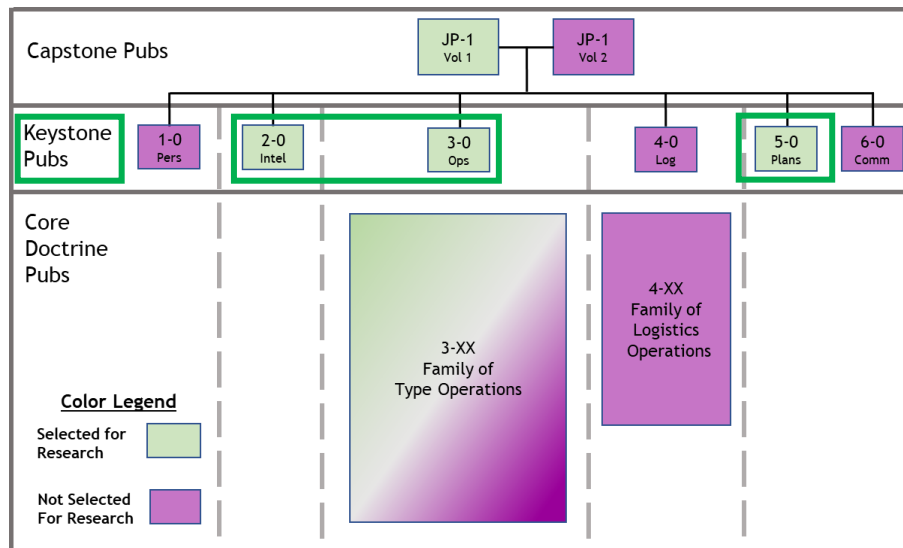


Figure 6.1. Selected Publications as Seen in Joint Doctrine Hierarchy. Adapted from Joint Chiefs of Staff, “Joint Doctrine Hierarchy” (August 23, 2022), *Joint Chiefs of Staff*, accessed November 11, 2022, <http://www.jcs.mil/Doctrine>

### 1. Keystone Publications

Keystone publications fall one level below capstone publications within the Joint Doctrine Hierarchy. Where the capstone publications link doctrine to strategy, keystone publications “establish the doctrinal foundation” for their specific warfighting function.<sup>613</sup> These, in turn, inform “content and terminology” in subsequent linked publications.<sup>614</sup> This research evaluates three keystone publication series: intelligence, operations, and planning. The Joint Staff considers keystone publications “high priority,” in the same manner as

<sup>613</sup> Joint Chiefs of Staff, *Joint Doctrine Development Process*, CJCSM 5120.01B, GL-6.

<sup>614</sup> *Ibid.*

capstone publications. This means keystone publications undergo a formal assessment for revision every two years to maintain currency and relevance.<sup>615</sup> The relationship between capstone and keystone doctrine is more than hierarchical. While the focus on war and warfare narrows from the capstone to the keystone level, information and concepts remain consistent and aligned across the levels. Updates and formal assessments are undertaken precisely to reconcile contradictions across joint publications.<sup>616</sup> It is often the case that such reconciliation takes place as part of the scheduled revision process.

Revisions between the capstone and keystone publications do not strictly follow a hierarchical order where the former undergoes a revision that changes or “trickles down” to the keystone level and so on, all the way to core doctrine. As mentioned, revisions occur on schedule or can be triggered out of necessity. The US Joint Staff J-7 has primary responsibility for doctrine and is the lead agent for the capstone publications (JP 1). Each department within the Joint Staff is responsible for the keystone publication corresponding to its staff function (e.g., the J-5 is accountable for the JP 5-0 *Joint Planning*).<sup>617</sup> In practical terms, this means that new information can appear in a revision of a keystone publication before it appears at the higher capstone level. This fact may have little relevance for military professionals or practitioners referencing joint doctrine because they usually consult the most current version. For this dissertation, it is essential to understand when, where, and at what level of doctrine new information first appears. This point indicates the discursive relationship between the capstone JP-1 and the keystone JP 3-0 publications, evident throughout the content analysis. This dissertation specifically looked for revisions that changed how war and warfare were explained and captured the substance of the change. Second, it was essential to identify the publication and its level within the doctrinal hierarchy where change was first detected to understand better how doctrinal thinking had evolved. Nowhere is that relationship more evident than between JP 1 and *Joint Operations*, JP 3-0.

As an institution, the purpose of the military is to defend the nation and wage war on its behalf. It is through planned and executed operations that militaries make war. Successful operations contribute to the state achieving its objectives, while unsuccessful operations result in defeat. But the military is not forever conducting operations, far from it. Militaries spend most of their time planning, training, and exercising in preparation for conducting operations and wage war. All these activities support the conduct of effective operations. The point of this preamble is to establish the importance of operations as a foundational activity within the military. In all their myriad complexity, operations figure prominently in JP 1 and JP 3-0. This is why JP 3-0 carries such outsize importance in general, particularly regarding this dissertation compared to the intelligence (JP 2-0) and planning series (JP 5-0). Having established its importance and relationship to JP 1, this dissertation will present the research collected from JP 3-0.

The purpose of JP 3-0, articulated in the first edition, is to promulgate the “doctrine and military guidance to govern joint operations of the Armed Forces of the United States.”<sup>618</sup> Table 6.1 lists all editions of *Joint Operations*, JP 3-0 from 1993 through the most recent edition in 2022. In total, nine editions have appeared, with an average time of just

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<sup>615</sup> Ibid, B-21.

<sup>616</sup> Ibid, B-22, B-23.

<sup>617</sup> Ibid, A-6, A-7.

<sup>618</sup> Joint Chiefs of Staff. *Doctrine for Joint Operations*, Joint Publication 3-0 Washington, D.C.: Joint Chiefs of Staff, September 9, 1993, i.

**Table 6.1. All Editions of *Joint Operations*, Joint Publication 3-0. (Editions with substantive changes are highlighted in grey.)**

#	Title	Date of Publication	Page Length
1	<i>Doctrine for Joint Operations</i>	9 September 1993	197
2	<i>Doctrine for Joint Operations</i>	1 February 1995	160
3	<i>Joint Operations</i>	10 September 2001	182
4	<i>Joint Operations</i>	17 September 2006	250
5	<i>Joint Operations</i>	22 March 2010	238
6	<i>Joint Operations</i>	11 August 2011	204
7	<i>Joint Operations</i>	17 January 2017	217
8	<i>Joint Operations</i>	22 October 2018	224
9	<i>Joint Campaigns and Operations</i>	18 June 2022	308

over three and a half years between revisions.<sup>619</sup> As was the trend with JP 1, each successive edition is longer than the preceding one. The aphorism that best explains this fact is that adding new information is more straightforward than removing older information. Moreover, new information does not necessarily render previous information invalid. Of the nine editions, an analysis of the editions judged four to be substantive for this dissertation in that they introduced new details on how the US military viewed warfare rather than simply being a stylistic or minor update of the previous edition.<sup>620</sup> Substantive JP 3-0 changes appeared in 2006, 2011, and 2017, with the most recent 2022 edition shown in Table 6.1. These editions' dates broadly align with the course of the War on Terror, a point which will emerge further in the analysis of each edition.

Given the relationship between JP 1 and JP 3-0 and the heavy focus of both on operations, it is instructive to look at the timing of substantively revised editions in relation to one another. When were new or revised information and ideas introduced and in which publication did they first appear – the capstone JP 1 or the keystone JP 3-0? Did the hierarchy of doctrine influence the decision, or did institutional equities drive the process? For example, the Chairman of the Joint Chiefs might show a preference for JP 1 as the

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<sup>619</sup> The period between revisions has no intrinsic significance outside of comparing JP 3-0 to the periodicity of other keystone publications, which is beyond the scope of this dissertation. According to the Joint Doctrine Development Process, all keystone publications are “high priority” and receive a formal review every two years. This review may or may not trigger a revision or update.

<sup>620</sup> This dissertation determined whether a particular version was substantive, not the US Joint Staff. This determination was made if the edition addressed the topic of war or warfare from a macro-level with new information. This explains why not every edition was considered substantive, even though most editions are longer than the ones they replace.

flagship doctrinal publication and main promulgator of joint warfighting over the JP 3-0 – a subordinate, keystone publication that falls under the purview of the Director for Operations. Did the relevance of the new information itself govern the process, appearing in whichever publication was next on the revision schedule regardless of its place in the hierarchy? Table 6.2 depicts all editions of JP 1 and JP 3-0 in chronological order and identifies which of these revisions introduced substantively new information relating to war and warfare.

**Table 6.2. Drivers of Change. Comparison of Substantive Change Across Capstone and Keystone Publications in the Operations Series. (Substantive Editions are highlighted in grey.)**

Joint Pub #	Title	Date of Publication
JP 1	<i>Joint Warfare of the US Armed Forces</i>	11 November 1991
JP 3-0	<i>Doctrine for Joint Operations</i>	9 September 1993
JP 1	<i>Joint Warfare of the Armed Forces of the United States</i>	10 January 1995
JP 3-0	<i>Doctrine for Joint Operations</i>	1 February 1995*
JP 1	<i>Joint Warfare of the Armed Forces of the United States</i>	14 November 2000
JP 3-0	<i>Doctrine for Joint Operations</i>	10 September 2001
JP 3-0	<i>Joint Operations</i>	17 September 2006
JP 1	<i>Doctrine for the Armed Forces of the United States</i>	14 May 2007*
JP 1	<i>Doctrine for the Armed Forces of the United States</i>	20 March 2009
JP 3-0	<i>Joint Operations</i>	22 March 2010*
JP 3-0	<i>Joint Operations</i>	11 August 2011
JP 1	<i>Doctrine for the Armed Forces of the United States</i>	25 March 2013*
JP 3-0	<i>Joint Operations</i>	17 January 2017
JP 1	<i>Doctrine for the Armed Forces of the United States</i>	12 July 2017
JP 3-0	<i>Joint Operations</i>	22 October 2018
JP 1	<i>Volume 1, Joint Warfighting</i>	29 June 2020*
JP 3-0	<i>Joint Campaigns and Operations</i>	18 June 2022*

From this study's analysis, there was no discernable pattern or indication that the Joint Staff preferred JP 1 over JP 3-0 as the preferred means to introduce new information. Table 6.2 supports the conclusion that speed drove the process. Promulgating the latest information to the force as quickly as possible appeared to be the critical determinant, so whichever publication was next in the revision process would contain the new or revised information. Nothing indicates that the Joint Staff favored one publication over the other as the preferred means to introduce new ideas.<sup>621</sup> As the Joint Staff wrote and vetted substantive changes or additions to doctrine, it introduced those changes in the subsequent publication in line for revision.<sup>622</sup>

The *Joint Doctrine Development Process* prescribes that keystone publications align, by design, with the content and terminology articulated in capstone publications. In practical terms, this means there is little to no conceptual variance between JP 1 and JP 3-0 content. Another reason for the consistency of ideas is that operations are central to both publications. Regardless of the domain in which they occur, military operations are the building blocks of joint warfighting. For the research, this means that much of what appears in JP 1 also appears in a similar form in JP 3-0. To minimize redundancy and avoid the tendency to explain information already covered in Chapter 5, this chapter provides an overview of the first edition of JP 3-0 as it relates to war and the theory of war, and then places it within the context of its times as compared to the capstone JP 1. Subsequent sections cover the other substantive revisions of JP 3-0, which appeared in 2006, 2011, 2017, and 2022.

## 2. JP 3-0 - The First Edition (1993)

The first edition of *Doctrine for Joint Operations*, JP 3-0, appeared two years after JP 1. Where JP 1 provides an overarching view of joint warfare, organizations, and command and control, JP 3-0 focuses more on the doctrine and guidance governing joint operations with a bias for land operations because that is where humanity lives. The information is hierarchically linked and reinforcing across the width and breadth of joint doctrine.<sup>623</sup> As one would expect, there is a significant overlap between the content of the first edition of JP 1 in 1991 and the first edition of JP 3-0 in 1993. The two publications also bookend Operation Desert Shield/Desert Storm, the significance of which to joint doctrine is hard to overstate. The US victory in the First Gulf War validated the joint warfighting concept in JP 1, which certainly bolstered institutional interest in joint doctrine and concomitantly affected JP 3-0. Appearing two years after the end of the 100-hour ground campaign, JP 3-0 begins with a description of the security environment that has become increasingly complex in the aftermath of the Cold War. This complexity derived from a combination of increasing

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<sup>621</sup> The research undertaken in this dissertation did not reveal whether the Joint Staff has a policy to introduce substantive changes to doctrine at a specific level, e.g., capstone over keystone doctrine.

<sup>622</sup> Joint Chiefs of Staff, *Joint Doctrine Development Process*, CJCSM 5120.01B, D-1. The *Joint Doctrine Development Process* (JDDP) prescribes that keystone publications are to align with the content and terminology articulated in capstone publications. However, the JDDP does not dictate that new or revised information must first appear at the capstone level. The likely reason is that the Joint Staff prioritizes getting information to the force as quickly as possible, which explains why new information appears in the next publication in the revision process.

<sup>623</sup> Joint Chiefs of Staff, *Joint Doctrine Development Process*, CJCSM 5120.01B, B-1. This is the aim, though sometimes disparities between publications are not caught by the revision process. For a visual depiction of the joint doctrine hierarchy, refer to Figure 6.1 at the beginning of the chapter.

regional challenges filling the void of the bipolar East-West conflict and technological advances, which enabled non-state actors to compete on an equal footing with traditional states.<sup>624</sup> This environment had a proportional effect on military force; its use, even when militarily successful, no longer guaranteed a predictable outcome. All too often, the result was indeterminate.<sup>625</sup> *Joint Operations* addressed this complexity using the same range of military operations (ROMO) construct first introduced in JP 1. It also borrowed the binary taxonomy of warfare that recognized war, while labelling everything else that was not armed conflict as a Military Operation Other Than War (MOOTW).<sup>626</sup> Of its six chapters, *Joint Operations* dedicates one chapter each to operations in war and MOOTW, illustrating the narrowing of focus and increased detail from capstone to keystone publications. Otherwise, *Joint Operations* adheres closely to the capstone publication in explaining warfare with minor word-choice deviations and no difference in meaning. This is in keeping with the Joint Doctrine Development Process, which emphasizes continuity of meaning.<sup>627</sup>

Like the first edition of JP 1, JP 3-0 does not spend much effort explaining theories of war. There are two mentions of Clausewitz across 197 pages, but references to the linkage between war and the political objectives for which it is fought are explicit and appear across all six chapters.<sup>628</sup> While JP 3-0 uses some aspects of Clausewitzian theory, like that of war's connection to politics, it neglects other important aspects, such as the distinction between the nature and character of war – mirroring what was written in the first edition of JP 1. The continuity between the first publication of JP 1 in 1991 and JP 3-0 in 1993 demonstrates adherence to the Joint Doctrine Development Process, which called for continuity of information. Joint doctrine did not distinguish between war's nature and character and used the terms interchangeably. It was only in 2013 that joint doctrine gave more treatment to theories of war and began to distinguish between war's nature and its character.

Both publications appeared in the early years of the 1990s, less than ten years after Goldwater-Nichols. The American military's performance during the First Gulf War in 1990-1991 can be seen as a validation of the Defense Reorganization Act and the joint doctrine that the act mandated. What was different with the publication of *Joint Operations* two years later was that the stability of the Cold War period had disappeared in the wake of the fragmentation of the Soviet Union. The world had become much more complex and uncertain. Shortly after American political columnist Charles Krauthammer proclaimed “the unipolar moment” based on the perceived ascension of US military and economic power, several regional crises arose in places like Somalia and Rwanda and clearly demonstrated the

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<sup>624</sup> Joint Chiefs of Staff. *Doctrine for Joint Operations*, Joint Publication 3-0, 1993, I-1.

<sup>625</sup> Part of the allure of the First Gulf War was that it resembled a bygone form of war in which conventional armies met and decided the conflict's outcome. However, the character of war had already changed. Retired US Army general Charles Bolger identifies this phenomenon in his 1991 article “The Ghosts of Omdurman” which likened the US Army's successful armored operations during Operation Desert Storm to the British Army's last of its kind cavalry charge during the 1898 Battle of Omdurman. In other words, the US Army perfected a form of warfare (large scale mechanized operations) that had seen its heyday come and go. The ongoing war in Ukraine simultaneously validates and invalidates this point. Large-scale mechanized warfare between conventional armies has returned, but the widespread use of drones has called into question the efficacy of the main battle tank.

<sup>626</sup> Joint Chiefs of Staff. *Doctrine for Joint Operations*, Joint Publication 3-0, 1993, I-2, I-3.

<sup>627</sup> Joint Chiefs of Staff. *Joint Doctrine Development Process*, CJCSM 5120.01B, B-1.

<sup>628</sup> Joint Chiefs of Staff. *Doctrine for Joint Operations*, Joint Publication 3-0, 1993, I-12, III-31.

limits of military power.<sup>629</sup> The international security environment's ever-evolving complexity highlighted the military instrument's limitations as a problem-solving tool. The limits to the utility of military force would be a recurrent theme with which subsequent JP 3-0 editions would grapple continually.

### 3. Substantive Revisions of JP 3-0 (2006, 2011, 2017, and 2022)

As was the case with JP 1, subsequent editions of *Joint Operations*, JP 3-0 evolved to keep pace with changes in contemporary conflict and meet the needs of the US military. Earlier in this chapter, the complementary relationship between JP 1 and JP 3-0 regarding information overlap and the timing of the two publications was explained. It merits repeating because this section presents an overview of how the JP 3-0 evolved and is primarily drawn from four substantive revisions out of nine total editions since 1993. This assessment mentions, but does not cover in detail, information already presented in the previous chapter on JP 1. Specifically, this measure applies to the two main ideas contained in JP 1 and highlighted in the previous chapter, namely: (1) the Range of Military Operations and (2) the taxonomy of war (traditional versus irregular warfare). New content relating to these topics appeared in the contemporary JP 1 and JP 3-0 editions. Because the Joint Staff appears to have prized getting information to the force as quickly as possible once a doctrinal change was made, there is no significance to where it first appeared.

JP 1 covers the ROMO and its evolution over time into the Competition Continuum circa 2018, as well as the traditional and irregular warfare taxonomy. The nine editions of JP 3-0 also cover the ROMO and taxonomy of warfare but present the topics in greater detail. This is precisely what one expects going from the capstone to the more detailed, keystone publications. These publications focus more on the “how” of conducting joint warfare than “what” the US military thinks about war and joint warfighting. In other words, the lower one goes on the doctrine hierarchy, the more challenging it becomes to determine what the US military thinks about war and warfare as human activities. One must not infer much about what war is (and is not) from doctrinal statements about how the US military thinks it will fight. More useful are descriptions of the contextual environment in which war occurs, which can be found in the JP 3-0 and other keystone publications. These descriptions contain information about the context in which conflict will arise and include things like setting, potential adversary, and anticipated capabilities that provide a backdrop that gives substance to the doctrine.

Every edition of *Joint Operations* devoted significant attention to describing US perspectives on the security environment. Early editions used the word “battlespace” to refer to this environment, a decidedly tactical connotation at odds with the operational focus of keystone doctrine.<sup>630</sup> The 2006 edition of JP 3-0 discussed the “operational environment,” which comprises the physical domains and the information environment.<sup>631</sup> The operational environment is more complex and expansive than the previously used term “battlespace” and is more closely connected to the “security environment” from JP 1, which is an even

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<sup>629</sup> Krauthammer, “The Unipolar Moment,” 23-24.

<sup>630</sup> Joint Chiefs of Staff, *Joint Operations*, JP 3-0 (Washington, D.C.: Joint Chiefs of Staff, September 17, 2006), i, iii.

<sup>631</sup> *Ibid*, xvi, II-19.

larger construct. The security environment is another term for the international system and encompasses the geopolitical, social, and technological considerations that define it.<sup>632</sup> It figures prominently in both JP 1 and JP 3-0, precisely because it describes the dynamic milieu in which force is used. The 2011 revision of JP 3-0 offers a reduced explanation of the security environment, richer in detail than the previous 2010 edition. It alludes to changes in the character of war without explicitly stating as much.<sup>633</sup> Relatedly, as the strategic problem facing the US has changed over the past three decades since the introduction of joint doctrine, so too has the description of the security environment in joint doctrine evolved to allow the US military to make sense of the shifting global security setting.

The steady growth of the operational and security environments in relative size and complexity has been the most apparent change. As technology and globalization created an increasingly connected world, this expanding connectivity, in turn, created increased global awareness, highlighting and exacerbating frictions and threats. Everything was now connected, forcing first-world nations, particularly the US, to have an increasingly global perspective. This fact is reflected in the 2006 edition of *Joint Operations*, which describes an “interconnected” operational environment and “the global nature of operations.”<sup>634</sup> America’s global interests as a superpower are not the exclusive drivers of this perspective. This “globalist” perspective in JP 3-0 is also influenced by the proliferation of technology, which has given America’s adversaries, state and non-state, global reach.

Access to commercial technology, especially information technology, empowered non-state actors, providing them with the technical opportunities to strike at the interests of states in ways that governments could not easily deter or respond to with traditional military instruments. Information technology gave a global mouthpiece to every group able to access it. In its description of the security environment, the 2006 edition of *Joint Operations* gives ample attention to the effect of non-state actors on the international system and the implications for contemporary conflict. Such attention makes sense considering the 2006 edition of JP 3-0 is the first revision to appear after the 9/11 terrorist attacks.

In 2006, the US military was only five years into what became its two decade-long War on Terror, in which it would fight two major counterinsurgency efforts in Iraq and Afghanistan and confront numerous irregular threats around the globe.<sup>635</sup> The US military shifted its focus from counterterrorism to great power competition in 2018.<sup>636</sup> It would be an understatement to say that the conflicts in Iraq and Afghanistan “informed” the US military’s perspective on conflict. These conflicts dominated US military thinking for at least a decade and a half. Reinforcing this perception is the Joint Staff’s addition of three new

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<sup>632</sup> Ibid, ix.

<sup>633</sup> Joint Chiefs of Staff, *Joint Operations*, Joint Publication 3-0 (Washington, D.C.: Joint Chiefs of Staff, August 11, 2011), I-3. This section talks about the constantly changing nature of the strategic environment and the requirement to use force as an enduring challenge. These challenges “...are the natural products of the enduring human condition, but they will exhibit new features in the future,” i.e., the character of war is constantly evolving to fit the context of the times.

<sup>634</sup> Joint Chiefs of Staff, *Joint Operations*, 2006, I-15, IV-20.

<sup>635</sup> Congressional Research Service, *U.S. Military Operations in the Global War on Terrorism: Afghanistan, Africa, the Philippines, and Colombia*, RL32758, updated January 20, 2006, by Andrew Feickert, accessed January 12, 2024, <https://crsreports.congress.gov/product/pdf/RL/RL32758/5>, 3.

<sup>636</sup> Joint Chiefs of Staff, *Description of the National Military Strategy 2018*, 2.



“principles” to the existing nine “principles of war” in the 2006 edition of *Joint Operations*.<sup>637</sup> The new principles were restraint, perseverance, and legitimacy—all qualities needed when conducting protracted counterinsurgency campaigns. Here, doctrine reflected reality and the US military's learned experience during combat operations that involved significant nation-building efforts.

The depiction of non-state actors in joint doctrine also continued to change. Throughout the War on Terror, the categories of non-state actors evolved to depict increasing adversarial organizational complexity. This variation reflected the US military's experience in Iraq, Afghanistan, Somalia, and surrounding regions. Informed by this operational experience and adaptation, the 2011 and 2017 revisions of *Joint Operations* openly discuss using proxy and surrogate forces to assist US forces in achieving military objectives when the political situation precludes direct involvement.<sup>638</sup> An example of this methodology is US support to the proxy Syrian Defense Forces to combat the Islamic State in Syria from 2016 onward.<sup>639</sup> Again, the joint doctrine came to reflect US strategic reality.

Similarly, the treatment given to the topic of information and its effects changes across revisions in the JP 3-0 series. From the first edition of *Joint Operations* in 1993, information always figured prominently. Until the third edition of *Joint Operations* in 2001, discussions of war and warfare were rooted in the physical domains of land, air, water, and space. It was not until 2006 before the Joint Staff elevated information to a co-equal status with the physical domains and coined the term “information environment.”<sup>640</sup> While joint doctrine had consistently recognized the information component of war, it was only after 2006 that the information environment began to receive greater attention as US forces sought a solution to the ongoing insurgency. By 2006, there was still no clear end in sight to the Iraq War, and US public opinion toward the war took a significant downturn from which it never recovered.<sup>641</sup>

The 2017 revision introduces the idea of cooperation and competition with potential adversaries continuing this trend, giving broad treatment to information, its effects, and implications for joint operations.<sup>642</sup> Information and information management are divided into constituent parts and categories, each with a discrete purpose. For example, *Joint Operations* introduces the Commander's Communications Synchronization (CCS) as a messaging process or framework that uses information to advance “national interests, policies, and objectives by understanding and communicating...” with partners and opponents.<sup>643</sup> The 2017 edition further recognizes the importance of influence and information. Military operations serve multiple purposes.<sup>644</sup> There has always been a

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<sup>637</sup> Joint Chiefs of Staff, *Joint Operations*, 2006, II-2, V-26. The nine “traditional” principles of war are objective, offensive, mass, economy of force, maneuver, unity of command, security, surprise, and simplicity.

<sup>638</sup> Joint Chiefs of Staff, *Joint Operations*. Joint Publication 3-0 (Washington, D.C.: Joint Chiefs of Staff, August 11, 2011), I-12; and Joint Chiefs of Staff, *Joint Operations*. Joint Publication 3-0 (Washington, D.C.: Joint Chiefs of Staff, January 17, 2017), I-12.

<sup>639</sup> James K. Wither, “Outsourcing Warfare: Proxy Forces in Contemporary Armed Conflicts,” *Security & Defense Quarterly* 31, no. 4 (2020): 17-34, accessed July 6, 2023, DOI: <http://doi.org/10.35467/sdq/127928>, 19-20.

<sup>640</sup> Joint Chiefs of Staff, *Joint Operations*, 2006, iv, II-20.

<sup>641</sup> Pew Research Center, “Public Attitudes Toward the War in Iraq: 2003-2008,” *Pew Research Center*, March 19, 2008, accessed January 12, 2024, <https://www.pewresearch.org/2008/03/19/public-attitudes-toward-the-war-in-iraq-20032008/>.

<sup>642</sup> Joint Chiefs of Staff, *Joint Operations*, 2017, VI-1.

<sup>643</sup> *Ibid*, III-17.

<sup>644</sup> *Ibid*, V-7.

narrative value to action, and it has never been more effective or promulgated more widely than in today's globalized, information-driven societies.

The role of information in warfare and conflict is constantly evolving, a fact that is reflected in each subsequent JP 3-0 revision. The most recent edition, *Joint Campaigns and Operations* (2022), presents the most comprehensive and nuanced discussion of the role of information to date. This discussion begins with the understanding that the joint force is more often engaged in competition with adversaries than in a state of peace or war. The use of the term “competition” in this edition is significant, as it signifies a departure from the simplistic and binary states of war and peace used in previous editions to describe the complex and multifaceted international system.<sup>645</sup> Military practitioners acknowledged that reality was often much more complex. Even without hostilities, countries still compete with one another in many different areas and use various means.<sup>646</sup> Seen through a narrower military lens, opposing militaries challenge one another using a host of actions, including displays of force and aggressive maneuvering, which are sometimes clandestine or even covert.<sup>647</sup>

In this context, the possession of information and the ability to craft a compelling narrative that portrays the other side negatively often prove more beneficial than military force. As a result, traditional military tools and activities are now used to support influence campaigns. This marks a shift from the previous practice where information operations were a mere afterthought before senior military leaders grasped the importance of the information environment. The most recent version of JP 3-0 recognizes that it is not uncommon for competition and cooperation to occur simultaneously in the relationship between the US and its adversaries.<sup>648</sup> Here, joint doctrine mirrors the complexity of the relationship the US shares with China and Russia – relationships that can reflect competition or cooperation depending on the issue. Furthermore, events no longer occur in isolation. Globalization and information technology connect everything. JP 3-0 refers to “global campaigning” to address this fact. Global campaigning is how “the joint force campaigns across the competition continuum” and necessitates that the US military takes a holistic view of how it employs information.<sup>649</sup> This view must balance the global impact of information and actions against what is happening within the competition continuum.<sup>650</sup>

*Joint Campaigning and Operations* maintains that the modern information environment has dramatically increased the complexity and range of threats against the US and its allies.<sup>651</sup> In a remarkably clear-eyed and insightful passage describing the current strategic environment, the 2022 edition states that “today's threats can increasingly synchronize and integrate direct military force and information activities and employ other instruments of national power to create combinations of lethal and nonlethal effects with greater sophistication while less constrained by geographic, functional, legal, or moral

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<sup>645</sup> So important was the introduction of competition to replace the accepted “peace vs. war” dichotomy that the Joint Staff released the *Competition Continuum* in 2019. This was a joint doctrine note that introduced the concept to the force and foreshadowed the change in doctrine in 2020 for JP 1 and 2022 for JP 3-0.

<sup>646</sup> Joint Chiefs of Staff, *Competition Continuum*, JDN 1-19, 1.

<sup>647</sup> *Ibid.*, 2.

<sup>648</sup> Joint Chiefs of Staff, *Joint Campaigns and Operations*, Joint Publication 3-0 (Washington, D.C.: Joint Chiefs of Staff, June 18, 2022), V-1.

<sup>649</sup> *Ibid.*, IV-9.

<sup>650</sup> *Ibid.*, IV-5, IV-9.

<sup>651</sup> *Ibid.*, I-3.

boundaries.”<sup>652</sup> Joint doctrine acknowledges that war has spilled over into all domains, not the least of which are those domains of information and cyberspace. Moreover, US adversaries are likely to employ “indirect and non-attributable methods” to circumvent or nullify perceived US strength. Warfare now takes place in multiple domains simultaneously, and the US military must be capable of responding in a flexible and appropriate manner. Simultaneous actions across several domains can be used to produce asymmetric advantage. This multi-domain warfare is a logical evolution of combined arms warfare in which multiple weapons systems are integrated and combined with maneuver to place the enemy in an untenable situation and defeat them.<sup>653</sup>

To address this challenge, the US Army created the Multi-Domain Battle Concept in 2017 and incorporated it into doctrine in Field Manual 3-0, *Operations*, the Army’s version of JP 3-0.<sup>654</sup> An Army-specific term, Multi-Domain Operations (MDO), “are the combined arms employment of joint and Army capabilities to create and exploit relative advantages that achieve objectives, defeat enemy forces, and consolidate gains on behalf of joint force commanders.”<sup>655</sup> While MDO has no precise equivalent in joint doctrine, the fundamentals of joint warfighting coincide with MDO in that the latter seeks to place the enemy in a dilemma through asymmetric advantage and “the all-domain application of the joint functions.”<sup>656</sup> In so many words, both joint and service doctrine acknowledge the expansion of warfare to all domains and the resultant shift this has created in the character of contemporary conflict.

The 2022 revision is not the first edition of JP 3-0 to observe the changing character of conflict. The preceding chapter, which focused on JP 1, also looked for mention of changes in contemporary conflict, and there was a similar observation at the capstone level. In JP 1, the focus was on the depiction of war, specifically the use of Clausewitzian theory and the distinction Clausewitz made between the nature and character of war. The 2013 revision of JP 1 was the first to explain, rather than merely quote, Clausewitz and the more relevant parts of his theory. Within the keystone operations series, the character of conflict first appeared in the 2017 revision, and still no distinction was made between the nature and character of war.<sup>657</sup> The 2018 revision remain unchanged and used the exact phrasing from 2017.<sup>658</sup> It was not until the 2022 revision that JP 3-0 mirrored Clausewitzian theory, distinguishing as the latter does between the immutable nature of war and its continually evolving character.<sup>659</sup> Given the coherence of the content across joint doctrine enabled by a revision process that explicitly looks to minimize contradictions

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<sup>652</sup> Ibid, I-2, I-3.

<sup>653</sup> US Marine Corps, *Warfighting*, 94.

<sup>654</sup> Department of the Army, *Operations*, Field Manual 3-0 (Washington, D.C.: Department of the Army, October 2022), 1-1.

<sup>655</sup> Ibid, 1-1.

<sup>656</sup> Chairman of the Joint Chiefs, *Volume I, Joint Warfighting*, 2020, III-5.

<sup>657</sup> Joint Chiefs of Staff, *Joint Operations*, 2017, I-2. It is interesting that the 2017 revision distinguishes between the “character of war” and the “character of conflict.” It maintains that the character of war has not changed, while “the character of conflict has evolved.” This idea matches the spirit, if not the letter, of Clausewitz’s thinking about war’s nature and character. Clausewitz believed that because war’s nature is violent, interactive between opposing wills, and driven by politics, which are always present, its character or expression is constantly changing as a result.

<sup>658</sup> Joint Chiefs of Staff, *Joint Operations*. Joint Publication 3-0 (Washington, D.C.: Joint Chiefs of Staff, October 22, 2018), I-2.

<sup>659</sup> Joint Chiefs, *Joint Campaigns and Operations*, 2022, A-1.

between publications, it is somewhat surprising that it took nine years and three revisions of JP 3-0 before it mirrored the JP 1. The 2013 edition of JP 1 was the first to provide a substantial discussion on the theory and foundations underpinning joint warfighting. It drew heavily from Clausewitz’s theory of war and utilized his dual ontology, where war’s eternal nature co-exists alongside its ever-changing character.

#### 4. Joint Intelligence, JP 2-0

The next keystone publication to be examined in this study is intelligence. This series comprises one publication, *Joint Intelligence*, Joint Publication 2-0 (JP 2-0), of which four editions have been since 2000. Table 6.3 lists all four editions along with the page length, indicating the general trend of the publication increasing in length with each subsequent edition. In his introduction to the 2007 revision, General Peter Pace, sixteenth Chairman of

**Table 6.3. All Editions of *Joint Intelligence*, Joint Publication 2-0. (Editions with substantive changes are highlighted in grey.)**

#	Title	Date of Publication	Page Length
1	<i>Doctrine for Intelligence Support to Joint Operations</i>	9 March 2000	103
2	<i>Joint Intelligence</i>	22 June 2007	150
3	<i>Joint Intelligence</i>	22 October 2013	144
4	<i>Joint Intelligence</i>	26 May 2022	300

the Joint Chiefs, provided JP 2-0’s mandate to communicate “current guidance for

conducting joint and multinational intelligence activities across the range of military operations.”<sup>660</sup> Regarding the previous joint publications examined in this dissertation, Joint Intelligence is oriented toward the intelligence specialist. This differentiates JP 2-0 from JP 1 or JP 3-0, both written for a broader military audience. The latter publications are certainly more conceptual than the JP 2-0 series, which is dominated by the intelligence process and the collection and dissemination of information.<sup>661</sup> The JP 5-0, *Joint Planning*, is similarly specialized in that the focus is the joint planning process. As a series, JP 2-0 also differs from JP 3-0 in its relationship to capstone doctrine. As was already mentioned, there is a significant amount of overlap in the material covered in JP 1, *Joint Warfighting*, or the *Doctrine for the Armed Forces of the United States* as it was initially named, and JP 3-0, *Joint Operations* across all editions. This is not the case with JP 2-0 because understanding joint intelligence and the associated intelligence process is not required to understand joint warfighting. The

<sup>660</sup> Joint Chiefs of Staff, *Joint Intelligence*, Joint Publication 2-0 (Washington, D.C.: Joint Chiefs of Staff, June 22, 2007), introduction.

<sup>661</sup> Joint Chiefs of Staff, *Joint Intelligence*, Joint Publication 2-0 (Washington, D.C.: Joint Chiefs of Staff, May 26, 2022), I-2. *Joint Intelligence*, JP 2-0, is the sole publication within the intelligence series of joint doctrine at both the keystone and core doctrine levels. This contrasts sharply with the operations series that contains several dozen publications at the core doctrine level.

same cannot be said for joint operations because understanding military operations is intrinsic to grasping the fundamentals of joint warfighting. This is not to say that the intelligence series is disconnected from the capstone joint doctrine. Intelligence is, of course, a necessary component of joint warfighting. Instead, it again emphasizes the intelligence process, which focuses on evaluation and feedback and comprises five steps: 1) planning and direction, 2) tasking and collection, 3) processing and exploitation, 4) analysis and production, and 5) dissemination and integration.<sup>662</sup>

Although there is some variability across the four editions, the content and organization of each edition exhibit only slight variation from one to the other. Every edition of JP 2-0 talks about the nature and role intelligence plays in joint warfare, the principles of joint intelligence, intelligence support to planning, and intelligence sharing within and between joint, multinational, and interagency organizations. What is missing in every edition, but the most recent, is a treatment of the nature and character of war, especially the latter and how it is changing in the information age. In each of the editions, there are, on average, 27 mentions of war and 11 of warfare.<sup>663</sup> There is no honest discussion or development of war or warfare as a phenomenon in JP 2-0; this is left to capstone doctrine and the operations series. Within the 2007, 2013, and 2022 editions, there is a category of intelligence known as Scientific and Technical (S&T) intelligence that allows for second-order conclusions to be drawn about the changing character of war. “S&T intelligence encompasses foreign developments in basic and applied sciences and technologies with warfare potential, particularly [but not exclusively related to] enhancements to weapon systems.”<sup>664</sup> This definition implies that new technology can expand warfare into other domains and areas, as with information and hybrid warfare. However, JP 2-0 does not expand upon this point to complete the thought and establish a firm linkage with the theory of war contained in JP 1 and JP 3-0, which is crucial for understanding the evolving nature of warfare.

As mentioned above, the 2022 edition is the only revision that delves into changes in the character of war. The 2022 revision of *Joint Intelligence* directly references the concept of the Competition Continuum familiar from the JP 3-0 analysis and the preceding chapter on JP 1. Where previous editions of the intelligence series talked about the ROMO, the 2020 edition talks about “a world of enduring competition” characterized by a blend of cooperation and competition below the level of armed conflict.<sup>665</sup> It also points out the necessity of intelligence support throughout the competition continuum, mainly since so much of the activity can occur within the information environment.<sup>666</sup> The 2022 revision of *Joint Intelligence* does not break any new ground regarding war or warfare. In keeping with guidance to minimize redundancy contained in the Joint Doctrine Development Process, the 2022 JP 2-0 borrows ideas and concepts relating to the theory of war that JP 1 and JP 3-0 had introduced and developed.<sup>667</sup>

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<sup>662</sup> Ibid.

<sup>663</sup> The 2007 edition of JP 2-0 has the most mentions of war at 32, and the 2020 edition has the most mentions of warfare at 32. The first edition in 2000 has the fewest mentions of war at 20, and the 2017 edition has only one mention of warfare.

<sup>664</sup> Joint Chiefs of Staff, *Joint Intelligence*, 2007, I-19.

<sup>665</sup> Joint Chiefs of Staff, *Joint Intelligence*, 2022, I-18.

<sup>666</sup> Ibid, I-18, I-19.

<sup>667</sup> Joint Chiefs of Staff, *Joint Doctrine Development Process*, CJCSM 5120.01B, B-1.

## 5. Joint Planning, JP 5-0

The keystone planning series of publications contains the “fundamental principles and doctrine” for joint and multinational operational and campaign planning.<sup>668</sup> It is a logical selection for inclusion in this dissertation because planning military operations is central to organized warfare in the modern era, especially with the advent of professional militaries. Table 6.4 depicts the five JP 5-0 editions released since 1995, with the latest edition coming in 2020. Although the extended title of JP 5-0 has changed over time, this dissertation uses *Joint Planning* as the common name. Each revision of *Joint Planning* is of equal or longer length than the edition it replaced. This has been the case with few exceptions in the other joint doctrinal publications included in this analysis.

Of the five total editions, content analysis found two editions to be substantive in that they offered significant revisions and improvements over the preceding edition. Table 6.4 highlights the 2006 and 2017 editions as substantive, although only the second discusses warfare at a level of detail helpful for this dissertation. To best understand the evolution of JP 5-0, these publications need to be examined in the context of the period in which they appeared.

**Table 6.4. All Editions of *Joint Planning*, Joint Publication 5-0. (Editions with substantive modifications are highlighted in grey.)**

#	Title	Date of Publication	Page Length
1	<i>Doctrine for Planning Joint Operations</i>	13 April 1995	104
2	<i>Joint Operation Planning</i>	26 December 2006	218
3	<i>Joint Operation Planning</i>	11 August 2011	264
4	<i>Joint Planning</i>	16 June 2017	360
5	<i>Joint Planning</i>	1 December 2020	358

The 2006 revision of JP 5-0, *Joint Operation Planning*, is the second edition to be published. It appeared 11 and a half years after the inaugural *Doctrine for Planning Joint Operations* (1995).<sup>669</sup> It is a substantive revision because it added over 110 pages of content and renamed all four chapters, although the number of chapters remained constant. Given the publication date during the War on Terror and that over a decade had elapsed since the preceding edition, this edition reflects many of the lessons relating to joint planning gleaned from the early years of operations in Iraq and Afghanistan. Similarly, the 2017 edition

<sup>668</sup> Joint Chiefs of Staff, *Doctrine for Planning Joint Operations*, Joint Publication 5-0 (Washington, D.C.: Joint Chiefs of Staff, April 13, 1995), i.

<sup>669</sup> While 11 and a half years elapsed between the first and second editions of JP 5-0, two core doctrine-level, intelligence-series publications appeared in 1999 and 2002. They were Joint Task Force Planning Guidance and Procedures, JP 5-00.2, and Joint Doctrine for Campaign Planning, JP 5-00.1, respectively. Neither discussed war as a phenomenon, and their content has since been included directly in recent editions of *Joint Planning*, JP 5-0.

reflects the collected learning toward the conclusion of the War on Terror and the resumption of great power competition with countries such as Russia and China.

The 2017 revision of *Joint Planning* is substantive because it added nearly 100 pages of content from the preceding 2011 edition, which contained 264 pages. It also completely revised the chapter naming convention and increased the number of chapters from four to seven. The additional chapters give standalone attention to strategic guidance, operational assessment, and transition to execution. One point of significance for the 2017 revision is that it distinguishes between war's unchanging nature and its evolving character in complete accord with Clausewitz's writing, presenting a complete and even philosophical view of conflict.<sup>670</sup> The passage stipulates that "military operations will increasingly operate in a **transregional, multi-domain, and multi-functional** (TMM) environment."<sup>671</sup> This is an important statement. One that the Joint Staff reinforces by including a graphic depiction of the operational environment. Figure 6.2 is intended to aid the reader in understanding the inherent complexity such an environment brings to military operations. It does so by

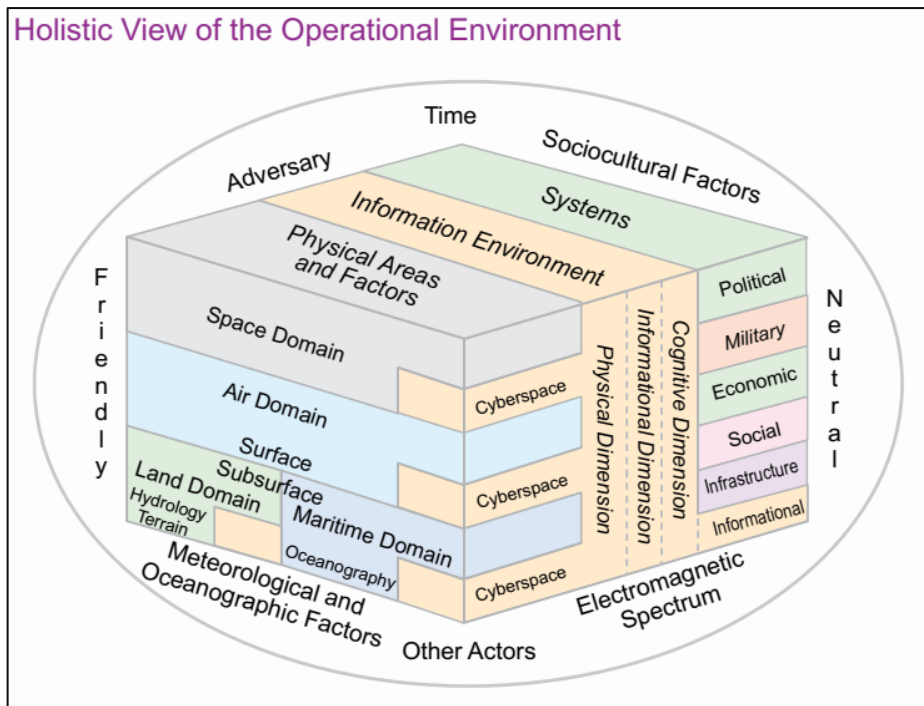


Figure 6.2. Holistic View of the Operational Environment Circa 2017. Taken from Chairman of the Joint Chiefs, *Joint Planning, 2017*, IV-12.

presenting the myriad factors that impact military operations and depicting the complex relationship and interplay between them. The narrative and graphic indicate that the Joint Staff considers the strategic environment increasingly complex and connected. Because the

<sup>670</sup> Joint Chiefs of Staff, *Joint Planning*, Joint Publication 5-0 (Washington, D.C.: Joint Chiefs of Staff, June 16, 2017), I-1.

<sup>671</sup> Ibid, I-1. Note: Bold in original text.

strategic environment provides the overarching context for the operational environment in which conflict occurs, one concludes that the operational environment and conflict are headed in the same direction. While this is not necessarily a direct reference to war, it corresponds to similar language appearing in the later revisions of JP 1 and JP 3-0, linking changes in the character of war to the information technology-induced complexity of the international system. This same trend is also evident in the most recent edition of *Joint Planning*.

The US Joint Staff published the most recent edition of JP 5-0 in December 2020. While this research did not assess the 2020 revision as a substantive change over the previous edition, the 2020 revision treated war and warfare as distinct phenomena beyond establishing a simple requirement for intelligence and creating intelligence estimates to support military operations.<sup>672</sup> It maintains the same distinction between the nature and character of war.<sup>673</sup> The 2020 edition uses “character of conflict” instead of “war” or “warfare,” but that word choice does not affect the strength of the point being made. Namely, that intelligence plays a key role in understanding the character of conflict. This edition also reproduces the exact depiction of the “holistic view of the operational environment” shown in Figure 6.2 from the 2017 edition.<sup>674</sup>

The 2020 revision of *Joint Planning* also includes new information that is interesting and relevant to how joint doctrine presents war and warfare. The chapter on operational design extensively discusses defeat, stabilization, and competition mechanisms. Although defeat and stabilization mechanisms appear in the 2017 edition, they receive much greater treatment in the 2020 edition and a new category of competition mechanisms.<sup>675</sup> These mechanisms are the effects the joint force desires to achieve against an adversary across different contexts and depending on the policy objective. Most readers are already familiar with or can quickly grasp the basic defeat mechanisms associated with traditional warfare, like destruction, attrition, and exhaustion.<sup>676</sup> These mechanisms often also apply to irregular warfare and any situation involving direct combat with an enemy force. Other more specific defeat mechanisms include effects like dislocation, disintegration, isolation, disruption, degradation, denial, and neutralization.<sup>677</sup>

When the military mission is to support diplomacy, engage in foreign assistance, or deter a potential adversary, stabilization mechanisms prevent or otherwise limit the potential for armed conflict.<sup>678</sup> Desired outcomes may include maintaining peace, deterring violence,

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<sup>672</sup> This study does not assess the 2020 edition as a substantive improvement over the 2017 edition because it maintains the same chapter organization and rough page count. The former edition contains 358 pages, and the latter has 360 pages. While the newer edition does contain updated information, it is not of sufficient content or quantity to be designated a substantive revision.

<sup>673</sup> Joint Chiefs of Staff, *Joint Planning*, Joint Publication 5-0 (Washington, D.C.: Joint Chiefs of Staff, December 1, 2020), I-1.

<sup>674</sup> *Ibid.*, IV-8.

<sup>675</sup> Joint Chiefs of Staff, *Joint Planning*, 2017, IV-31, IV-32. The mechanism descriptions are of greater substance in the 2020 edition over the earlier, 2017 edition of *Joint Planning*.

<sup>676</sup> Joint Chiefs of Staff, *Joint Planning*, 2020, IV-41.

<sup>677</sup> Joint Chiefs of Staff, *Joint Planning*, 2020, IV-41, IV-42; and Joint Chiefs of Staff, *Joint Planning*, 2017, IV-31. The 2020 edition contains four additional mechanisms than the 2017 edition: disruption, degradation, denial, and neutralization. Destruction, dislocation, disintegration, and isolation are identical in both editions.

<sup>678</sup> Joint Chiefs of Staff, *Joint Planning*, 2020, IV-42.



or aligning with a government policy goal other than armed conflict.<sup>679</sup> Stabilization mechanisms include the following effects or outcomes: compellence, control, influence, and support. Competition mechanisms are a new addition to the 2020 revision and receive minimal treatment in a two-sentence paragraph. They fall between the defeat mechanisms associated with armed conflict on one end of the competition continuum and stabilization mechanisms at the other. In situations of competition between adversaries where the goal is to maintain the use of military force below the level of armed conflict, JP 5-0 directs planners to “identify competition mechanisms” and “maintain or establish favorable conditions.”<sup>680</sup> The explanation of competition mechanisms is wanting and not helpful to planners. What is certain is that competition mechanisms are highly variable and dependent upon context, policy goals, and an understanding of the adversary’s risk calculus. Similar in function to defeat and stabilization mechanisms, what makes competition mechanisms challenging is the difficulty in bringing about the desired adversary response without escalating the situation – not unlike deterrence.

The treatment of the competition mechanisms and other refinements point to a shift in how the Joint Staff looks at conflict. Competition below the level of armed conflict is just as nuanced an endeavor as maintaining stability or deterring an opponent, if not more so. There is no permanent solution or victory in competition; it is an ongoing condition. The effects or mechanisms desired in competition are inherently political, and the outcomes can be context-specific. As a result, competition mechanisms do not lend themselves to a list of stock outcomes, as with attrition or loss-based defeat mechanisms. However, great power competition presents a challenge for which the US military must prepare. Although the military is frequently neither the best nor only tool that the US has at its disposal, the forward-deployed nature of the US military often makes it the default choice for policymakers.

In the same vein, the 2020 edition of *Joint Planning* has flexibly amended the definition of decisive point to better accommodate the complexity of warfare in the Information Age and the ambiguity accompanying the open-ended nature of competition. In previous editions, the understanding of the term was rooted in the physical domain and most frequently linked to key terrain. The 2017 edition of *Joint Planning* explains decisive points as a “geographic place, specific key event, critical factor, or function that, when acted upon, allows a commander to gain a marked advantage over an enemy or contributes materially to achieving success.”<sup>681</sup> In the 2020 edition, the definition removes geographic places from the definition of decisive points and substitutes it with the term “key terrain,” specifically “to account for operations in cyberspace.”<sup>682</sup> The 2020 Joint Planning explicitly reinforces that these definitions and categories are non-binding, ensuring adaptability to contemporary conflict circumstances.<sup>683</sup>

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<sup>679</sup> Joint Chiefs of Staff, *Joint Planning*, 2017, IV-31; and Joint Chiefs of Staff, *Joint Planning*, 2020, IV-42. The four mechanisms are the same across both editions.

<sup>680</sup> Joint Chiefs of Staff, *Joint Planning*, 2020, IV-44. Competition mechanisms are not absent from the 2017 edition.

<sup>681</sup> Joint Chiefs of Staff, *Joint Planning*, 2017, IV-26

<sup>682</sup> Joint Chiefs of Staff, *Joint Planning*, 2020, iii, IV-32.

<sup>683</sup> Ibid, IV-19. The text reads: “The characterization of elements into categories is not meant to be exclusive. Many factors affect more than one condition. For example, a **decisive point** could be an enemy force, a key terrain feature, or ensuring sufficient food and medical supplies are delivered on time (for humanitarian assistance).”

The 2017 and 2020 editions of *Joint Planning* discuss the changing character of war and warfare. In the 2017 revision, the publication was reorganized from four chapters to seven and contained an additional 96 pages of content that the 2011 edition did not have. The main addition was a chapter on campaign planning and how to organize the ongoing, daily operations outside of combat necessary to maintain the joint force, as well as several appendices.<sup>684</sup> The 2020 edition of JP 5-0 maintains the same organization as its predecessor, the 2017 edition. While the 2020 edition of JP 5-0 updates terminology and definitions, the update to the term “decisive point” is the most significant. It is best seen as a logical update to the 2017 edition, maintaining a sense of continuity and familiarity for the readers rather than a substantial revision.<sup>685</sup> There is little content in either edition relating to the phenomenon of war and warfare that does not have roots in JP 1 and JP 3-0. The incorporated changes reflect the lessons of the US military as it withdrew from Iraq and Afghanistan and ended the War on Terror. Simultaneously, the resumption of great power competition heavily influences the 2020 edition.

## 6. Keystone Doctrine: A Summation

This chapter analyzed the content of multiple joint doctrine publications for evidence of changes in the description of war and warfare. It focused on keystone publications from 1991 through 2022. All the keystone publications reviewed mentioned war and warfare from the phenomenological perspective, but the treatment of the topics was not the same across the intelligence, operations, and planning series. *Joint Operations*, JP 3-0 contained the most references to war and warfare. This is to be expected because of the centrality of operations in both JP 3-0 and the capstone JP 1, a point this chapter established early on because it facilitates understanding the importance of JP 3-0 relative to the other capstone publications. The intelligence and planning series support operations, as a result, they garner less attention than the JP 3-0. The former tends to focus more on the processes governing intelligence collection and dissemination and the discrete steps of the joint planning process. In both cases, discussion of the nature and character of war is secondary to the mission, or the type of operation being planned. In the JP 3-0 editions, a definite evolution of thought regarding war and warfare was observable. Like JP 1, the evolution of thought seen in JP 3-0 is best explained as the US military’s commendable attempt to overcome the challenge of conducting military operations in an environment where information and information technology had become an increasingly important and influential factor.

The decades-long War on Terror illustrates the power of information. Specifically, the good effect with which terrorist organizations and insurgent groups used information against the US more than highlights this fact. US joint doctrine responded to this challenge by adding the “new” domains such as information and cyber and including information as a joint function. This is significant because it represents the US military’s explicit acknowledgment of the increasing role of information and information-adjacent activities,

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<sup>684</sup> Joint Chiefs of Staff, *Joint Planning*, 2017, iii.

<sup>685</sup> At 358 pages, the 2020 edition of JP 5-0 is two pages shorter than the 2017 edition, which bolsters the assessment that it is an update, not a complete revision. The three-year interval between the 2017 and 2020 editions further supports this determination; keystone publications, like the JP 5-0, are “high priority” and reviewed every two years for potential updates or rewrites.

such as cyber, in postmodern warfare. These virtual domains have taken on outsized importance as tools for traditional states. First, weaker states use these tools to achieve an asymmetric advantage over stronger ones in the same manner as non-state actors. Second, the challenge of attribution in the information and cyber domains has expanded the scope of state-on-state competition below the threshold of armed conflict by lowering the risk of escalation. This change is reflected in recent editions of keystone doctrine, which now include competition as a legitimate condition between two or more states in the international system that are not at peace but also not at war. Joint doctrine has jettisoned the binary peace versus war construct depicted, albeit imperfectly, by the ROMO or Range of Military Operations. Replacing it is the Competition Continuum and a more nuanced, holistic understanding of the operational environment.<sup>686</sup> The synthesis of these points leads one to assess that joint doctrine grapples with changes in the character of war brought about by the Information Age.

Given this preliminary assessment, the next chapter focuses one level deeper within the hierarchy of joint doctrine. It examines core doctrine publications from the operations series to determine if the same trends are present.

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<sup>686</sup> The ROMO is described as “imperfectly” portraying a condition of being either at peace or at war because it never adequately explained or named actions at the midpoint between the two poles where something akin to competition would occur. However, the ROMO is a continuum and could, therefore, accommodate using force against an adversary short of war.

## Chapter 7 - Core Doctrine Publications

Chapter 7 builds upon Chapter 6, which covers joint doctrine at the keystone level. This chapter follows with the presentation of research findings centering on the core doctrine that draws from the operations series, which has the JP 3-0 as its keystone publication. As already displayed in the previous chapter, Figure 7.1. refreshes the reader on the Joint Doctrine Hierarchy and demonstrates where core doctrine publications fall within the hierarchy. The color coding in the figure also communicates the publications included in this research and the ones omitted. Partial shading indicates that this dissertation analyzed some, but not all, core doctrine publications. A detailed list of operations series core doctrine publications included in this research is contained in Appendix A. Core doctrine is the lowest level joint doctrine publication and covers specific types of operations under each of the keystone publications. The study focused exclusively on the operations series, deliberately omitting core doctrine publications falling under the other series: personnel,

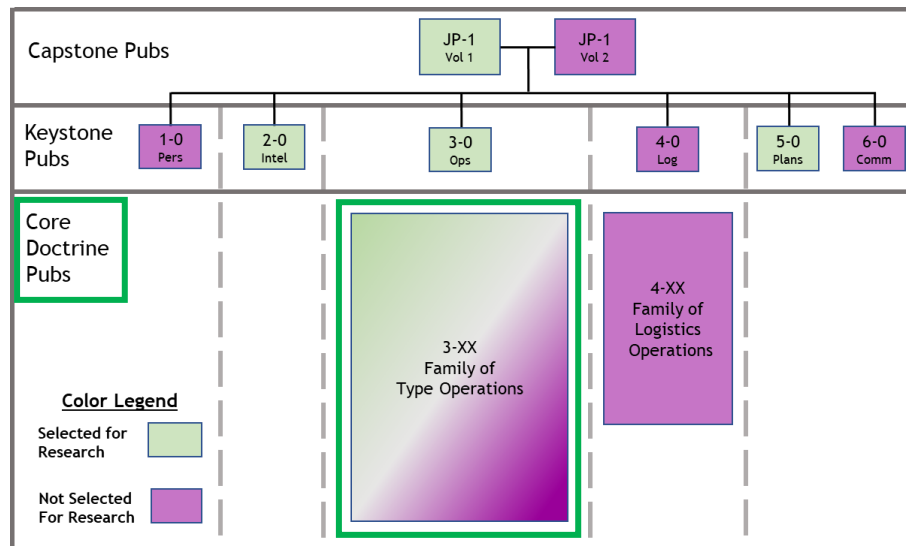


Figure 7.1. Selected Publications as Seen in Joint Doctrine Hierarchy. Adapted from Joint Chiefs of Staff, “Joint Doctrine Hierarchy” (August 23, 2022), *Joint Chiefs of Staff*, accessed November 11, 2022, <http://www.jcs.mil/Doctrine>

intelligence, logistics and planning. The reason is that there are no (or a minimal number of) core doctrine publications within the personnel, intelligence, planning, and communications series; they exist at the keystone level only.<sup>687</sup> Not only does the operations series contain the most significant number of core doctrine publications from which to choose, but these publications are integral to examining war and warfare because they cover specific types of combat operations, reinforcing their relevance to the dissertation.

<sup>687</sup> Joint Chiefs of Staff, “Joint Doctrine Publications,” accessed June 19, 2023, <https://www.jcs.mil/Doctrine/Joint-Doctrine-Pubs/>. See each warfighting series for the complete list of publications under that function.

## 1. Core Doctrine Publications

This dissertation's third and final publication type belongs to core doctrine and comes from the operations series. As mentioned, core doctrine publications are narrower in focus than the keystone publications examined in the previous chapter. The latter handles specific mission areas or operations like amphibious assault, fire support, or deployment and redeployment operations.<sup>688</sup> Under the current Joint Doctrine Hierarchy, only the operations and logistics series offer publications at the core doctrine level; the other series have nothing below the keystone level.<sup>689</sup> There are 51 core doctrine titles within the operations series. This dissertation examines nine titles, as shown in Table 7.1. The selection of titles for this research opted for those dealing with the newer domains such as space, cyber, and information. The rationale is that newer topics cater to emergent themes produced by the changing environment in which conflict occurs. The selection criteria manifests a preference for titles about non-physical domains that deal with information or warfare in the Information Age. The assumption is that these titles would be more likely to mention war and warfare. Moreover, the thinking is that doctrine writers would be more likely to explain

**Table 7.1. List of Core Doctrine Publications Examined.**

#	Joint Pub #	Title	# of Editions
1	JP 3-04	<i>Information in Joint Operations</i>	1
2	JP 3-12	<i>Joint Cyberspace Operations</i>	3
3	JP 3-13	<i>Information Operations</i>	5
4	JP 3-14	<i>Space Operations</i>	5
5	JP 3-26	<i>Homeland Security</i>	1
6	JP 3-26	<i>Joint Combating Terrorism</i>	3
7	JP 3-27	<i>Homeland Defense</i>	2
8	JP 3-33	<i>Joint Force Headquarters</i>	5
9	JP 3-85	<i>Joint Electromagnetic Spectrum Operations</i>	1

their subject matter's utility to warfare, especially if it is a new addition to joint doctrine. This research effort looked at 26 documents across the nine core doctrine titles. Not all publications examined mentioned war or warfare as a phenomenon. The chapter begins with the information and information operations because they offer the most significant amount

<sup>688</sup> Joint Chiefs of Staff, "Joint Doctrine Hierarchy" (August 23, 2022), *Joint Chiefs of Staff*, accessed November 11, 2022, <http://www.jcs.mil/Doctrine>.

<sup>689</sup> Ibid.

of war/warfare-related content and demonstrate the most remarkable evolution of thought over time.

## 2. Information Operations, JP 3-13

Joint Publication 3-13 is easily the most impactful core doctrine publication examined as part of this dissertation for two reasons. First, it deals directly with information as a component of warfare, and the conduct of war in the Information Age is a central preoccupation of this research. Second, content analysis of the multiple editions of this publication reveals the most significant evolution of thought in the last two decades concerning the role information plays in contemporary war. Table 7.2 shows that this dissertation examined a total of five editions or revisions of *Information Operations*, designated as JP 3-13 and spanning from 1998 to 2014. This includes one edition released in 2004 as a

**Table 7.2. All Editions of *Information Operations*, Joint Publication 3-13 and 3-04.  
(Editions with substantive changes are highlighted in grey.)**

#	Title	Date of Publication	Page Length
1	<i>Joint Doctrine for Information Operations</i>	9 October 1998	136
2	<i>Joint Doctrine for Information Operations</i> (2nd Draft)	14 December 2004	143
3	<i>Information Operations</i>	13 February 2006	117
4	<i>Information Operations</i>	27 November 2012	69
5	<i>Information Operations</i>	27 November 2014	89
6	<i>Information in Joint Operations</i> (JP 3-04)	14 September 2022	180

second draft. In 2022, the Joint Staff discontinued JP 3-13, re-designating and re-titling joint information operations doctrine as JP 3-04, *Information in Joint Operations* also shown in Table 7.2. The re-designation elevates the publication over other information-related publications such as JP 3-12, *Cyberspace Operations* and JP 3-13.2, *Military Information Support Operations*. Lacking a keystone publication on information, giving the publication a higher designation communicates its position in the doctrinal hierarchy.

Advances in information technology are the primary characteristic of an increasingly complex international security environment. This theme is consistent throughout all editions of JP 3-13, *Information Operations*, and continues in the redesignated JP 3-04, *Information in Joint Operations*. In the early editions of JP 3-13, the Joint Staff acknowledges the importance of information operations but wrestles with how to conduct and incorporate them alongside more traditional military activities like kinetic fires and maneuver.<sup>690</sup> This mirrors the distinction between information operations and information

<sup>690</sup> Joint Chiefs of Staff, *Joint Doctrine for Information Operations*, Joint Publication 3-13 (Washington, D.C.: Joint Chiefs of Staff, April 9, 1998), I-1.

warfare. While both involve actions taken to affect adversary information systems and flows while protecting one's own, according to doctrine, information warfare only occurs during a crisis or conflict.<sup>691</sup> Like the introduction of new technology, the Joint Staff recognized the importance of information operations and the fact that every action has an information component even as it struggled to describe the gamut of information operations and how to conduct them.

The first two editions of JP 3-13 describe information operations as potentially influencing adversary decision-makers. At the same time, this early doctrine articulates a relatively simplistic and bounded view of information operations as degrading an adversary's ability to use information while protecting one's own.<sup>692</sup> It says little about influencing perceptions to bring about or avoid specific outcomes. Joint doctrine for information creates a taxonomy which breaks information operations into core IO capabilities: psychological operations (PSYOP), operational security (OPSEC), military deception (MILDEC), electronic warfare (EW), and computer network operations (CNO).<sup>693</sup> By the third edition published in 2012, these core IO capabilities were replaced by a much broader and more numerous set of information-related capabilities (IRCs). By design, the doctrine writers are ambiguous in defining what constitutes an IRC – it can be a tool, technique, or activity.<sup>694</sup> The writers define an IRC by its ability to affect a specific target audience's ability “to collect, process, or disseminate information before and after [it makes] decisions.”<sup>695</sup> For the first time, information doctrine provides a mechanism to influence specific groups of human beings as the animating principle behind IO.

Joint doctrine's tendency to place IO into existing military paradigms and constructs constitutes a second observable trend that has evolved across the multiple editions of JP 3-13. In the first editions, IO is classified as offensive or defensive, and information and the application of information effects are seen as a form of “fires” not dissimilar from artillery or air-delivered ordnance.<sup>696</sup> Adopting the vocabulary of traditional, kinetic fires makes IO more accessible to military practitioners exposed to it for the first time, but doing so provides no insight into conducting IO. Despite the fact that the US military recognized IO as an untapped capability with tremendous potential; joint doctrine depicts IO capabilities as additional or “bolt-on” actions that augment traditional military activities and capabilities. Up through the third edition of 2006, joint information operations doctrine did not recognize that every action possesses an intrinsic informational value. In other words, every action carries meaning, and that meaning has value. This value can be realized by supporting specific messages or memes that contribute to a desired outcome.

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<sup>691</sup> Ibid.

<sup>692</sup> Joint Chiefs of Staff, *Information Operations*, Joint Publication 3-13 (Washington, D.C.: Joint Chiefs of Staff, February 13, 2006), I-5.

<sup>693</sup> Ibid, II-2.

<sup>694</sup> Joint Chiefs of Staff, *Information Operations*, Joint Publication 3-13 (Washington, D.C.: Joint Chiefs of Staff, November 27, 2012), I-3. “IRCs are the tools, techniques, or activities that affect any of the three dimensions of the information environment.”

<sup>695</sup> Ibid.

<sup>696</sup> Joint Chiefs of Staff, *Joint Doctrine for Information Operations*, Joint Publication 3-13 (Second Draft) (Washington, D.C.: Joint Chiefs of Staff, December 14, 2004), I-8. The December 2014 edition of JP 3-13 is a second draft and offers a rare insight into the evolution of information operations. This draft discusses information maneuver and information fires. It illustrates the attempt to fit IO into existing paradigms while seeking to maximize the potential capability IO offered the US military; and Joint Chiefs of Staff, *Information Operations*, 2006, II-2.

Nothing better illustrates the evolution of the US military’s understanding of information as an integral aspect of war and warfare than the joint definition of information operations. Throughout the six publications, the definition of IO is substantively modified four times. Table 7.3 depicts all four definitions together for ease of comparison. The Joint Staff’s first attempt to define IO in 1998 is simplistic when viewed several decades later. The 1998 definition reflects the US military’s experience during the Gulf War and its importance to information dominance and network-centric warfare, both part of the Revolution in Military Affairs that dominated American military thinking through the 1990s. The second and third definitions reflect the US military’s search to determine the “what” and “how” of

**Table 7.3. Evolution of IO Definition Across All Editions of Joint Publication 3-13 and 3-04. (The author added bold text.)**

#	Information Operations Definition	Date of Publication
1	Actions taken to <b>affect adversary information and information systems</b> while <b>defending one’s own</b> information and information systems.	9 October 1998
2	The <b>integrated employment of the core capabilities</b> of electronic warfare ( <b>EW</b> ), computer network operations ( <b>CNO</b> ), psychological operations ( <b>PSYOP</b> ), military deception ( <b>MILDEC</b> ), and operations security ( <b>OSPEC</b> ), in concert with specified supporting and related capabilities, <b>to influence, disrupt, corrupt, or usurp adversarial human and automated decision making while protecting our own.</b>	14 December 2004 (Draft)
3	There is no change from the 2004 Draft.	13 February 2006
4	The <b>integrated employment</b> , during military operations, <b>of information-related capabilities</b> in concert with other lines of operation <b>to influence, disrupt, corrupt, or usurp the decision-making of adversaries and potential adversaries while protecting our own.</b>	27 November 2012
5	There is no change from the 2012 Edition.	27 November 2014
6	Military actions that involve the <b>integrated employment of multiple information forces to affect drivers of behavior.</b>	14 September 2022

reliable information operations. The reference to core IO capabilities in 2004 and 2006 and the transition to IRCs in 2012 and 2014 reflects the Joint Staff’s attempt to explain better how to execute information operations. What also stands out in the 2012 definition of IO is the description of IO effects. Done successfully, IO produce effects that “influence, disrupt, corrupt, or usurp” an adversary’s decision-making process.<sup>697</sup> While it was impossible to determine the Joint Staff’s specific rationale in shifting from IO core capabilities to IRCs, it was likely in response to lessons learned in Iraq and Afghanistan. In both conflicts, the US military and its coalition partners struggled to counter Al-Qaeda and Taliban messaging to the indigenous population.<sup>698</sup>

<sup>697</sup> Joint Chiefs of Staff, *Information Operations*, Joint Publication 3-04 (Washington, D.C.: Joint Chiefs of Staff, November 27, 2012), II-1.

<sup>698</sup> Paul Kamolnick, “Countering Radicalization and Recruitment to Al-Qaeda: Fighting the War of Deeds” (Carlisle: US Army War College Press, 2014): 66-67; and Sir Jock Stirrup, “Afghanistan: A Journey, Not a Destination” (speech, Royal United Services Institute, December 2008).



The Joint Staff's understanding of information as a tool of joint warfighting continues to mature and presents a refined sense of information in joint warfare. Information operations have given way to Operations in the Information Environment (OIE). As mentioned, the Joint Staff discontinued *Information Operation*, JP 3-13, re-titling and re-designating it *Information in Joint Operations*, JP 3-04. The definition of OIE can be found at the bottom of Table 7.3. The title, *Information in Joint Operations*, and the OIE definition indicate a significant conceptual shift in the use and role of information in military operations, war, and warfare.<sup>699</sup> There is also a revised definition of "information" as "data in context to which a receiver assigns meaning," which demonstrates a constructivist perspective as it relates to meaning.<sup>700</sup> Here, the "receiver determines the relevance and value of the information," and the meaning can be variable and at odds with that intended by the sender.<sup>701</sup> This new take on information advances well beyond the original DOD definition in complexity.<sup>702</sup> Information no longer augments military operations to produce complimentary effects; it is considered integral to the overall effort. Joint doctrine considers information, which includes its use and manipulation, to be integral to contemporary military operations. JP 3-04 summarizes that OIE may be conducted as independent operations but are "never done in isolation."<sup>703</sup> They are applicable throughout all military activities, across the competition continuum, and at every level of war, from the strategic through the tactical.<sup>704</sup> The 2022 JP 3-0, *Joint Campaigns and Operations* mirrors this language; it describes OIE across the competition continuum. On the one end, OIE begins with cooperative sharing with partners and informing adversaries; it progresses to the "competitive use of information" to influence adversary audiences and ends at the opposite end of the continuum with the offensive and defensive use of information in armed conflict.<sup>705</sup>

Two other points from the 2022 *Information in Joint Operations* bear mentioning because they demonstrate how the Information Age and two decades of conflict have changed the US military's approach to information. An afterthought no longer, the US military now considers information a potent military tool. The significance of OIE as opposed to IO has already been highlighted. More important is the realization that properly wielded information can be more effective than traditional tools of hard military power (e.g., tanks and missiles) in achieving desired outcomes. Since the end of the Cold War, military power has often proven unable to "translate victories into enemy behaviors that lead to intended, enduring, strategic outcomes."<sup>706</sup> The use of information and associated tools to influence a target audience is also more acceptable than the broad application of military force in the eyes of the international community. Many state and non-state actors within the

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<sup>699</sup> Joint Chiefs of Staff, *Information in Joint Operations*, Joint Publication 3-04 (Washington, D.C.: Joint Chiefs of Staff, September 14, 2022)2022, I-9.

<sup>700</sup> Ibid, I-4.

<sup>701</sup> Ibid, I-5, I-8.

<sup>702</sup> The *DoD Dictionary of Military and Associated Terms*, JP 1-02 last included a definition of "information" in the 15 August 2011 edition. That edition defined "information" as: "1. Facts, data, or instructions in any medium or form. 2. The meaning that a human assigns to data by means of the known conventions used in their representation."

<sup>703</sup> Joint Chiefs of Staff, *Information in Joint Operations*, 2022, VII-3.

<sup>704</sup> Ibid.

<sup>705</sup> Joint Chiefs of Staff, *Joint Campaigns and Operations*, III-24.

<sup>706</sup> Joint Chiefs of Staff, *Information in Joint Operations*, 2022, I-1.

global systems are already well-versed in employing information to achieve their ends. The 2022 edition substantiates this observation, highlighting adversaries' use of enduring information campaigns against the US as the defining feature of the contemporary security environment.<sup>707</sup>

Of all the core doctrine publications this dissertation examined, the JP 3-13 and JP 3-04 dealing with information operations demonstrated the most significant evolution of thought over time. The latest edition of the publication was a marked departure from previous editions, so much so that the Joint Staff re-designated and re-titled the publication as a new product to highlight this fact. In 1998, the *Joint Doctrine for Information Operations* stated that the purpose of US information operations was to degrade adversary information systems while protecting one's own. The US military has evolved dramatically in the face of unconventional and asymmetric adversaries; it now recognizes that everything possesses an information value that contributes to (or can detract from) the overarching narrative.<sup>708</sup> The limiting factors become message selection and time. The chosen narrative must resonate with the target audience to be effective. In addition, getting messages approved and waiting for them to have effect both require long lead times. This often works against the US military when facing a more information-agile opponent with less rigid permission structure.

### 3. Cyberspace Operations, JP 3-13

According to joint doctrine, cyberspace and its activities are one component of the information environment. Joint doctrine defines cyberspace as “the notional environment in which digitized information is communicated over computer networks.”<sup>709</sup> Cyberspace has become an essential part of military operations and demonstrates the impact of the Information Age on warfare. This fact illustrates Alvin and Heidi Toffler's observation in *War and Anti-War* (1993) that, in every epoch of human development, there is a relationship between how people generate wealth and how they make war.<sup>710</sup> Although the joint definition of cyberspace appeared in 2006, it was not until 2010 that the capstone JP 1 and keystone JP 3-0 began to mention “cyberspace” and associated activities within the text with regularity.<sup>711</sup> In 2013, the Joint Staff published the first edition of *Cyberspace Operations*, JP 3-12. Table 7.4 depicts the three editions of this publication, along with their publication dates and length.

An analysis of the content across the three editions reveals that joint doctrine includes cyberspace operations as a component of contemporary warfare. There are few direct mentions of war or warfare within the three editions. Most often, war is mentioned in

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<sup>707</sup> Ibid, I-2.

<sup>708</sup> Ibid, II-5, II-6.

<sup>709</sup> Joint Chiefs of Staff, *Information Operations*, 2006, GL-6. This is the first definition of cyberspace within joint doctrine.

<sup>710</sup> Toffler, *War and Anti-War*, 3, 33.

<sup>711</sup> *Information Operations*, JP 3-13 from 2006 contains the first definition of cyberspace within the joint doctrine. The 2007 edition of JP 1 and the 2010 edition of JP 3-0 include a glossary definition of “cyberspace” that is more verbose, yet semantically indistinguishable from the 2006 JP 3-13. Although “cyberspace” is mentioned as early as the 2001 JP 3-0 edition, it is not defined. The use of the term “cyber” picks up markedly after 2010. The 2009 edition of JP 1 contains 12 mentions of “cyberspace,” the 2010 edition of JP 3-0 mentions the term 26 times, and the most recent 2022 edition of JP 3-0 contains 134 mentions of “cyberspace.” The increasing frequency of the term indicates a growing understanding of cyber's utility to military operations and its increased importance.

**Table 7.4. All Editions of *Cyberspace Operations*, Joint Publication 3-12.**

#	Title	Date of Publication	Page Length
1	<i>Cyberspace Operations</i>	5 February 2013	70
2	<i>Cyberspace Operations</i>	8 June 2018	104
3	<i>Joint Cyberspace Operations</i>	19 December 2022	114

conjunction with the Law of Armed Conflict and the latter’s application to operations in cyberspace. However, every edition of JP 3-12 discusses cyberspace operations in a manner that enables some ready conclusions about contemporary warfare and the role of cyberspace in it. The first edition of *Cyberspace Operations* in 2013 sets the tone, stating that cyberspace operations are applicable across the range of military operations.<sup>712</sup> It defines cyberspace operations (CO) as “the employment of cyberspace capabilities where the primary purpose is to achieve objectives in or through cyberspace.”<sup>713</sup> Although “cyberspace capabilities” is an ambiguous term, it is rooted in the 2006 edition of JP 3-13, *Information Operations*, where it appears as computer network operations (CNO), an activity the edition names a core IO capability.<sup>714</sup> The first edition of JP 3-13 deliberately traces the lineage of cyberspace operations as a subset of IO comprising three related activities: computer network attack, defense, and exploitation.<sup>715</sup> In 2013, JP 3-12 points out that CO, at least since 2006, has evolved into “a broader integrating function focused on the adversary” and is fully integrated into joint operations.<sup>716</sup> In short, CO is not a “bolt-on” capability. Like OIE, it traveled an evolutionary path from additive capability to integral function. In 2020s, CO is relevant throughout the competition continuum and applicable at every level of war.<sup>717</sup>

A second point common throughout every edition is that cyberspace actions constitute a form of “fires,” much like traditional artillery and can be offensive, defensive, or supportive.<sup>718</sup> As a form of “fires,” cyberspace attack actions are subject to a nomination and targeting process to maximize their effect and minimize the potential of collateral damage. Thinking along such lines is highly reminiscent of kinetic fires in the physical world – a similarity that is no doubt deliberate. The doctrine writers’ use of supporting arms terminology is intended to make this new capability more accessible and, therefore, understandable. It is also an apt comparison because cyberspace operations can produce damage. While most cyberspace operations do not create physical effects, later editions of JP

<sup>712</sup> Joint Chiefs of Staff, *Cyberspace Operations*, Joint Publication 3-12 (Washington, D.C.: Joint Chiefs of Staff, February 5, 2013), I-6.

<sup>713</sup> Ibid, I-1.

<sup>714</sup> Joint Chiefs of Staff, *Information Operations*, 2006, II-4.

<sup>715</sup> Joint Chiefs of Staff, *Cyberspace Operations*, 2013, II-5.

<sup>716</sup> Ibid, II-5, II-6.

<sup>717</sup> The ability to leverage cyberspace operations and cyber effects are heavily dependent upon authorities. While CO have application at every level of war, the authorities and permission to employ cyberspace capabilities tends to reside at higher levels of command.

<sup>718</sup> Joint Chiefs of Staff, *Cyberspace Operations*, 2013, II-9; Joint Chiefs of Staff, *Cyberspace Operations*, Joint Publication 3-12 (Washington, D.C.: Joint Chiefs of Staff, June 8, 2018), II-7; and Joint Chiefs of Staff, *Joint Cyberspace Operations*, Joint Publication 3-12 (Washington, D.C.: Joint Chiefs of Staff, December 19, 2022), II-7.

3-12, including the most recent edition, acknowledge the potential for cyberspace actions to create physical damage that may rise to a level commensurate with an armed attack.<sup>719</sup>

According to the 2022 *Joint Cyberspace Operations*, CO currently takes three forms: Department of Defense Information Network (DODIN) operations to protect DOD information networks, offensive cyber operations, and defensive cyber operations. Many CO involve manipulating, deleting, exploiting, and safeguarding information for a specific effect or end.<sup>720</sup> The overlap between CO and OIE is apparent. It can also lead to confusion. Cyber has penetrated every facet of human endeavor, and this is no less true of warfare than any civilian profession, such as banking or marketing. It is increasingly challenging for cyber to remain the separate purview of specialists since everyone touches it in some capacity. Joint doctrine clarifies that cyberspace is a domain within the information environment “through which specific information capabilities... may be employed.”<sup>721</sup> At the risk of oversimplifying the difference, cyberspace operations invariably deal with information, but not all information activities involve cyberspace.<sup>722</sup>

#### 4. Space Operations, JP 3-14

The research for this dissertation analyzed the *Space Operations*, JP 3-14 series of five total editions. The first edition appeared in August 2002, and there has been an average of four and a half years between editions. The most recent JP 3-14 encompasses the establishment of the US Space Force in December 2019 as a fifth, independent armed service responsible for global space operations under the Department of the Air Force. Table 7.5 depicts every edition of JP 3-14, along with the year of publication and page length. None of the editions are overly technical, given the nature and potential for the subject matter to be just that. All editions of JP 3-14 are focused on explaining space operations and how they have become an integral component of terrestrial military operations.<sup>723</sup> None of JP 3-14’s five editions engage with war or warfare from a phenomenological standpoint.

**Table 7.5. All Editions of *Space Operations*, Joint Publication 3-14.**

#	Title	Date of Publication	Page Length
1	<i>Joint Doctrine for Space Operations</i>	9 August 2002	87
2	<i>Space Operations</i>	6 January 2009	129
3	<i>Space Operations</i>	29 May 2013	135
4	<i>Space Operations</i>	10 April 2018	86
5	<i>Space Operations</i>	26 October 2020	96

<sup>719</sup> Joint Chiefs of Staff, *Joint Cyberspace Operations*, 2022, II-8.

<sup>720</sup> Ibid, II-2, II-4, II-5.

<sup>721</sup> Ibid, II-15.

<sup>722</sup> Ibid, II-16.

<sup>723</sup> Here “terrestrial” refers to military operations on Earth (i.e., on land, at sea, and in the air).

While many people are familiar with space and the role that satellites play in facilitating modern communications, fewer people are aware or actively contemplate the military application of space, and the fact that the US military considers space a separate domain.<sup>724</sup> Analyzing the five editions of *Space Operations*, it is clear the publication's purpose is to serve as a primer for the space domain and space operations. A common theme across editions is the argument that humanity is increasingly dependent upon space capabilities and, therefore, they must figure into the calculus of military operations.<sup>725</sup> Much of this dependency relates directly to the Information Technology Revolution that uses space to make ubiquitous and instantaneous global communication a reality. This is especially true for developed countries such as the United States that have an outsized reliance on satellite-enabled communications technology for civil, commercial, and military purposes. The most recent revision of *Space Operations* (2020) discusses how space has become both literally and figuratively a more crowded and contested domain.<sup>726</sup> First, space is not infinite. The orbital area surrounding the Earth contains an ever-increasing amount of man-made objects and debris, making space operations difficult and complex.<sup>727</sup> The cost of space capabilities is also decreasing over time, enabling a growing number of actors, including state and non-state actors and US partners and adversaries, to access space capabilities and challenge an area the US has long dominated.<sup>728</sup> Space access is a vital national interest of the United States, underpinning its security and military advantage.<sup>729</sup> A physical domain like land or air, space has become integral to the joint functions of command and control, intelligence, movement and maneuver, fires, protection, and sustainment.<sup>730</sup> Space does not dominate any joint functions, but space access and space control are necessary for the US military to optimize its military capabilities.

The lack of discussion or reference to war and warfare within the five editions of JP 3-14 is best explained as a deliberate decision by the Joint Staff and the doctrine writers. One reason for this omission in JP 3-14 is the narrow focus typically found in core doctrine publications. By design, core doctrine leaves foundational explanations to capstone and keystone doctrine. Another, more likely, explanation lies in the enabling or enhancing role that space operations play in contemporary war. This relationship is best expressed by a section in the first three JP 3-14 editions called "Space Operations and the Principles of War" in the 2002 edition and "Space and the Principles of Joint Operations" in the 2009 and 2013 editions.<sup>731</sup> This section discusses space operations through the lens of the nine (or nine plus three) principles of war. Where one expects the principles to serve as a guide for

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<sup>724</sup> Joint Chiefs of Staff, *Joint Warfighting*, Volume I, 2020, I-1.

<sup>725</sup> Joint Chiefs of Staff, *Space Operations*, Joint Publication 3-14 (Washington, D.C.: Joint Chiefs of Staff, April 10, 2018), I-1.

<sup>726</sup> Joint Chiefs of Staff, *Space Operations*, Joint Publication 3-14 (Washington, D.C.: Joint Chiefs of Staff, October 26, 2020), I-6.

<sup>727</sup> Ibid.

<sup>728</sup> Ibid, I-1; and Frank A. Rose, "Managing China's Rise in Outer Space" *Brookings Institution*, April 2020, accessed January 21, 2024, [https://www.brookings.edu/wpcontent/uploads/2020/04/EP\\_20200427\\_china\\_outer\\_space\\_rose\\_v3.pdf.1](https://www.brookings.edu/wpcontent/uploads/2020/04/EP_20200427_china_outer_space_rose_v3.pdf.1).

<sup>729</sup> Joint Chiefs of Staff, *Space Operations*, 2018, I-1.

<sup>730</sup> Joint Chiefs of Staff, *Volume I, Joint Warfighting*, xiii.

<sup>731</sup> The "Principles of Joint Operations" differ from the nine traditional "Principles of War" in that they add three additional elements: restraint, perseverance, and legitimacy. Joint doctrine added these three to the 2006 edition of JP 3-0. Restraint, perseverance, and legitimacy came in response to the US military's experience in the counterterrorism and counterinsurgency campaigns of the War on Terror.

military operations in the air, on land, and at sea, the Joint Staff employs the principles to justify space operations and prove their utility. For example, the principle of maneuver highlights enabling space capabilities like positioning, navigation, and timing (PNT), which allows precision munitions, frequency-hopping communications, and friendly or blue force tracking.<sup>732</sup> The publication expends considerable effort validating space operations and capabilities, reinforcing the initial assessment that the publication's chief purpose is educating readers on the importance of space capabilities in a continually evolving conflict environment characterized by multi-domain operations.

The space domain is unique compared to the other physical domains and the information environment. It is a physical domain like land, air, and water, but it is difficult to conceptualize. Compared with the other physical domains, it is hard to access, and space-related capabilities are not observable by the naked eye. In this regard, space shares several similarities with virtual domains like the information environment and the cyber domain. These virtual domains are also challenging to conceptualize because they cannot be readily seen or touched. Although these virtual domains require physical tools to access them, their nature is primarily cognitive.<sup>733</sup> Nonetheless, the information environment and cyber domain have demonstrated the ability to have a tremendous impact on contemporary war. The same statement does not hold true for space operations. It is currently the case that space capabilities enable and augment traditional warfare components such as command and control or fires, making them faster and more precise. While this has conferred an advantage on the US military and other countries with similar capabilities, space has not been decisive. Joint doctrine reflects this circumstance; it portrays space as more enabling or additive than decisive. This may not always be the case. Advances in technology and changes in policy and international agreements might someday alter the space domain's relationship to war.

## 5. Counterterrorism and Joint Combating Terrorism, JP 3-26

The following publication considered in this research was *Counterterrorism*, JP 3-26. *Counterterrorism* departs from the selection criteria for publications in this dissertation because it does not necessarily occur in a non-physical or virtual domain. However, the counterterrorism mission certainly contains a robust information component. The study includes this core doctrine publication because of the US military's decades-long involvement in counterterrorism that begins well before the 9/11 attacks triggered the War on Terror. Without question, the War on Terror profoundly influenced how the US military thinks about war in general and counterterrorism in particular. Examining joint counterterrorism doctrine provides another perspective on the lessons gleaned from this experience. By extension, it also offers broader insight concerning postmodern warfare and, more importantly, whether this contributes to the US military's understanding of contemporary conflict as expressed in doctrine.

Counterterrorism (CT) is a subset of irregular warfare and came to prominence for the US military in the aftermath of the 9/11 terrorist attacks. However, this was hardly the US military's first exposure to terrorism. In the mid-to late-1990s, the US military was the

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<sup>732</sup> Joint Chiefs of Staff, *Space Operations*, Joint Publication 3-14 (Washington, D.C.: Joint Chiefs of Staff, March 20, 2009), I-4.

<sup>733</sup> Joint Chiefs of Staff, *Information in Joint Operations*, 2022, I-5.

target of and responded to terrorist attacks by al-Qaeda in 1995 against the USS Cole in Yemen, the 1996 Khobar Towers bombing in Saudi Arabia, and the 1998 US embassy bombings in Kenya and Tanzania. Earlier joint doctrine relating to terrorism focused on antiterrorism (AT), which is defensive and aims to reduce vulnerability to terrorist attacks.<sup>734</sup> Counterterrorism (CT), on the other hand, is offensive and comprises direct and indirect actions to “influence and render global and regional environments inhospitable to terrorist networks.”<sup>735</sup> Taken together, AT and CT compose the more significant subset of Combating Terrorism (CbT), which encompasses all actions to “oppose terrorism throughout the entire spectrum.”<sup>736</sup> Highlighting both components of CbT is essential because, for many years, the two each had their distinct joint publications: *Antiterrorism*, JP 3-07.2 and *Counterterrorism*, JP 3-26. Table 7.6 depicts all three editions of JP 3-26; the first two are titled *Counterterrorism*, while the most recent edition takes on the broader CbT mission and is titled *Joint Combating Terrorism*. Like *Information in Joint Operations*, JP 3-04 (originally *Information Operations*, JP 3-13), the Joint Staff’s approach to counterterrorism evolved and became more expansive throughout its three editions. The learning regarding counterterrorism resulted from two decades’ worth of CT and CbT

**Table 7.6. All Editions of *Counterterrorism*, Joint Publication 3-26.**

#	Title	Date of Publication	Page Length
1	<i>Counterterrorism</i>	13 November 2009	125
2	<i>Counterterrorism</i>	24 October 2014	81
3	<i>Joint Combating Terrorism</i>	30 July 2020	170

operations executed as part of the War on Terror. With it came the realization that CT and CBT operations were more effective and successful when connected with a whole of government effort. No connection was more important than the one between counterterrorism and strategic messaging at the national level and information operations at the lower levels of military operations. This point is not surprising; the War on Terror forced the US government to confront the overlapping realities of information and terrorism. Information, employed skillfully and with agility, provides terrorist organizations a powerful tool to reach sympathetic audiences and attract new followers with a compelling message.

The 2009 edition of *Counterterrorism* illustrates this convergence, and the text highlights information and strategic communications’ role in successful CT efforts. Using the terminology of the time, “IO should be applied across the breadth and depth of CT operations” to connect with moderates and try to reach extremist supporters, while strategic communications works to counter extremist messaging at the macro or strategic level.<sup>737</sup> When *Counterterrorism* first appeared in 2009, it was the first joint publication to offer a

<sup>734</sup> Joint Chiefs of Staff, *Antiterrorism*, Joint Publication 3-07.2 (Washington, D.C.: Joint Chiefs of Staff, April 14, 2006), I-2.

<sup>735</sup> Joint Chiefs of Staff, *Counterterrorism*, Joint Publication 3-26 (Washington, D.C.: Joint Chiefs of Staff, November 13, 2009), GL-6.

<sup>736</sup> *Ibid.*, v, GL-5.

<sup>737</sup> *Ibid.*, V-14, V-16.

doctrinal explanation and provide context for the global CT campaign the US military had been conducting since 2001. The first edition's second chapter opens with a brief statement on the evolution of CT from being primarily a diplomatic and law enforcement activity to a global, whole of government undertaking led by the military and acknowledges that the US still has much to learn.<sup>738</sup> This first edition is also significant because it approaches the topic of CT by explaining the national-level response and connecting it to a strategic approach. The latter includes an entire chapter on operational approaches, which is a detailed overview of the 2006 National Military Strategic Plan for the War on Terrorism, operationalized as Concept Plan 7500, better known as the *DOD Global War on Terrorism Campaign Plan*.<sup>739</sup> A generic construct applicable across the width and breadth of potential CT missions would have been more typical for a doctrinal publication. Instead, the 2009 JP 3-26 provides a declassified version of CONPLAN 7500 reflagged as the strategic campaign framework, albeit with a global perspective mirroring the War on Terror. The framework, shown in Figure 7.2, is known informally as the “three balls of death.”<sup>740</sup> As the coordinating authority for the War on Terror, US Special Operations Command (USSOCOM) created this framework in 2008 to explain the campaign design.

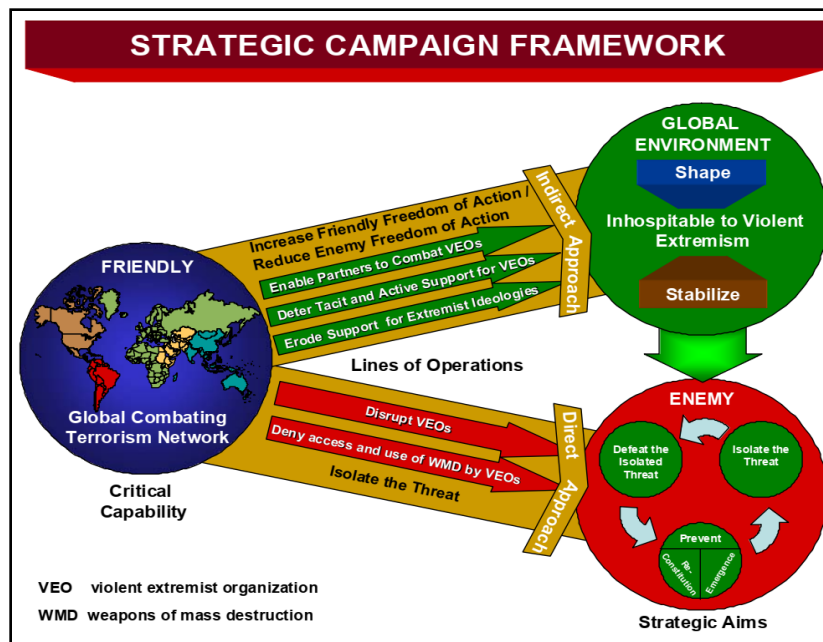


Figure 7.2. Strategic Campaign Framework. Adapted from Joint Chiefs of Staff, *Counterterrorism*, JP 3-26 (November 13, 2009), III-2.

The War on Terror was the first time the US military was required to prosecute a CT campaign, especially one that was global in nature. Seen in this light, using the first-of-its-

<sup>738</sup> Ibid, II-1. “DOD’s understanding of the nature of the war and the nature of the enemy continues to mature and evolve.”

<sup>739</sup> Ibid, I-2.

<sup>740</sup> Ibid, III-2. Use of the term “three balls of death” to refer to the strategic campaign framework is known to the author from his personal involvement.



kind strategic approach as the basis for and means to explain the first doctrinal publication is understandable. The 2009 edition is a case of "building the airplane in flight," as the US military determined how to prosecute the Global War on Terror or GWOT. From one perspective, there is a certain logic to including the strategic framework for a "first of its kind" global counterterrorism campaign directly into the doctrinal publication. However, that decision is not without some risk if political and military events invalidate or undercut the strategic framework.

The second edition of *Counterterrorism* appeared in 2014. It differs from the first in that it no longer provides commentary on the ongoing War on Terror. The 2014 edition aligns much more closely with what one expects from doctrine: it defines and explains military operations, in this case CT, in generic, conceptual terms. First, the definition of counterterrorism is narrowed to "activities and operations taken to neutralize terrorists and their organizations and networks... to render them incapable of using violence to instill fear and coerce governments or societies to achieve their goals."<sup>741</sup> This new definition eliminates the requirement to address root causes of grievance, a feature of the 2009 edition.<sup>742</sup> Delimiting the definition strictly separates counterterrorism and success in that mission from more extraordinary nation-building efforts that may be necessary but are certainly more complex and fraught. Opting for a stricter definition reflects the experience of the campaigns in Iraq and Afghanistan, where CT and counterinsurgency (COIN) efforts were inextricably tied to creating a functioning state. In Iraq and Afghanistan, the magnitude and complexity of the latter task (nation-building) contributed mightily to the inability to accomplish the former (CT and COIN).

The 2014 edition, like its predecessor, devotes a great deal of attention to the strategic security environment. The security environment becomes a medium for explaining the challenge of dealing with violent extremist organizations that employ terrorism as a tactic of irregular warfare and nation-states that unlawfully employ it in traditional warfare.<sup>743</sup> Again, the strategic security environment is analogous to the international system. It is affected by the three overlapping themes of (1) globalization and information technology, (2) political instability, and (3) terrorism and transnational organized crime that coalesce and influence one another.<sup>744</sup> These themes combine to make the operating environment increasingly complex and the threat challenging to neutralize – especially when there is over-reliance on the military element at the expense of other components of national power. *Counterterrorism* is clear that effective CT campaigns are multi-faceted, requiring the use of all aspects of national power, and each is a unique case unto itself.<sup>745</sup> There are no one-size-fits-all approaches. Every adversary has unique vulnerabilities, and every instance has its own unique context. Both must be understood to achieve a successful outcome.<sup>746</sup>

The 2020 version of JP 3-26 is not a substantively new edition; it is a revision that closely resembles the 2014 edition. What makes this edition significant is a more mature and nuanced understanding of the phenomena of terrorism and counterterrorism. For example,

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<sup>741</sup> Joint Chiefs of Staff, *Counterterrorism*, Joint Publication 3-26 (Washington, D.C.: Joint Chiefs of Staff, October 24, 2014), GL-3.

<sup>742</sup> *Ibid.*, iii; and Joint Chiefs of Staff, *Counterterrorism*, 2009, GL-6.

<sup>743</sup> Joint Chiefs of Staff, *Counterterrorism*, 2014, I-5.

<sup>744</sup> *Ibid.*, I-3.

<sup>745</sup> *Ibid.*, I-6, V-1.

<sup>746</sup> *Ibid.*, IV-11.

the publication acknowledges the wide “variety of political, social, criminal, economic, and religious ideologies” that motivate groups to use terrorism as a tactic.<sup>747</sup> Also significant (and illuminating) is the change in publication title from *Counterterrorism* to *Joint Combating Terrorism*. As mentioned earlier in this section, the new title incorporates counterterrorism and antiterrorism in one publication.<sup>748</sup> Addressing the mission areas of AT and CT in one volume, the JP 3-26 now presents a holistic perspective and mirrors the mission of CbT itself, which advocates a holistic approach to terrorism. Reintroduced into the definition of combating terrorism is the requirement to “diminish contributing root causes,” rhetoric that the Joint Staff removed from the definition of CT in 2014.<sup>749</sup> Building upon the 2014 edition’s argument for the utility of terrorism, the 2020 edition emphasizes its attractiveness to state and non-state actors to achieve their political objectives.<sup>750</sup>

Another feature of the most recent edition of *Joint Combating Terrorism* is its treatment of the Internet, social media, and digital communications. It specifically talks about the internet’s ability to amplify the threat posed by violent extremist organizations (VEOs). Internet and digital communications allow terrorist actors to collaborate more easily. The 2020 edition recognizes that it is now possible for disparate and unaligned groups to come together in the digital environment, often in unpredictable ways, while also enabling these groups to reach a vastly greater audience.<sup>751</sup>

The assessment in *Joint Combating Terrorism* of VEO evolution and innovation parallels what has been seen in state-on-state competition. It is often described as hybrid warfare, grey zone conflict, or competition below the level of armed conflict. Among the many methods VEOs employ to achieve their objectives, they are increasingly adept at exploiting grievances and spreading disinformation, often using advanced technology and leveraging marginalized populations as proxies for their ends.<sup>752</sup> Terrorist groups have done this in the past. What is new is the global reach these organizations now have, one enabled by information technology. The second chapter in *Joint Combating Terrorism* on the terrorist threat is, in so many words, a commentary on how VEOs wage war in the Information Age. Also new is an appendix called “Combating Terrorism in the Information Environment” that explains how to think about the physical, informational, and cognitive dimensions that compose the information environment.<sup>753</sup> This appendix brings full circle, the preceding observation on VEO’s use of information in the last years’ – the Information Age has made VEOs what they are today.

As a final point, this edition contains a vignette conceptualizing the US military’s struggle against terrorist organizations as a “memetic” conflict in which extremist

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<sup>747</sup> Joint Chiefs of Staff, *Joint Combating Terrorism*, Joint Publication 3-26 (Washington, D.C.: Joint Chiefs of Staff, July 30, 2020), I-2.

<sup>748</sup> Joint Staff, Memorandum for Joint Doctrine Development Community, “61st Joint Doctrine Planning Conference (JDPC), 23-24 May 2018” (Washington, D.C.: Joint Staff, July 17, 2008), 10. The consolidation of *Antiterrorism*, JP 3-07.2 and *Counterterrorism*, JP 3-26, into the 2020 *Joint Combating Terrorism*, JP 3-26, is an example of an initiative called “reset.” This J-7 Joint Staff initiative is oriented on developing and placing existing content over creating and maintaining new doctrine to produce a “lean and ‘right-sized’” joint doctrine library.

<sup>749</sup> Joint Chiefs of Staff, *Joint Combating Terrorism*, 2020, I-4; and Joint Chiefs of Staff, *Counterterrorism*, 2014, I-5.

<sup>750</sup> Joint Chiefs of Staff, *Joint Combating Terrorism*, 2020, I-1.

<sup>751</sup> *Ibid.*, I-2, I-3. “The convergence of new social networks and non-state actors leads to increasingly unfamiliar and unpredictable relationships and interactions between state and non-state actors.”

<sup>752</sup> *Ibid.*, II-6, II-7.

<sup>753</sup> *Ibid.*, G-1.

organizations act as pathogens, carrying “communicable” ideas that “infect” the larger population and spread “disease.”<sup>754</sup> Through information and action, the terrorists and counterterrorists strive to alternatively “infect” or “inoculate” the target population. While this is a useful metaphor for understanding the relationship between terrorism and combating terrorism, it has broader application within irregular warfare. States engaging in or combatting hybrid warfare are engaging in a similar struggle over “communicable” ideas and, thus, the idea of “memetic” conflict applies.

## 6. Homeland Security, JP 3-26 and Homeland Defense, JP 3-27

This dissertation reviewed the one edition of *Homeland Security*, JP 3-26. Published in August 2005, the Joint Staff did not continue the publication after the first edition and applied the 3-26 designation to counterterrorism. A review of the Joint Doctrine Working Party minutes from 2006-2010 did not reveal why the Joint Staff cancelled *Homeland Security*. However, the best explanation is that JP 3-27, *Homeland Defense*, subsumed the subject matter. The subjects of homeland security and homeland defense overlap. Homeland security (HS) is a “national effort to prevent terrorist attacks within the United States and reduce America’s vulnerability to terrorism.”<sup>755</sup> The Department of Homeland Security (DHS), or in some cases, the Department of Justice (DOJ), is responsible for the HS mission and, in that capacity, is supported by the Department of Defense (DOD). DOD support to DHS is broken down into two mission areas: homeland defense (HD) and defense support of civil authorities (DSCA). This examination includes *Homeland Security*, JP 3-26, because HS is not a traditional mission for the US military; it arose in the aftermath of 9/11, and is, therefore, new.<sup>756</sup> As with any new mission or technology, the possibility exists that it contains new or novel thoughts about war. However, the content analysis of this publication did not reveal meaningful discussion or narrative about war or warfare as a phenomenon. What *Homeland Security* did was to describe a strategic security environment in which the United States’ greatest threats come from irregular, violent extremist, or terrorist organizations.<sup>757</sup> Such groups possess the ability to mount attacks against American citizens at home and abroad, and neither the two oceans nor the forward-deployed US military are sufficient in themselves to keep this threat from reaching the homeland.

This dissertation also analyzed the three editions of *Homeland Defense*, JP 3-27. They are included in this research for the same reason as *Homeland Security*: they are a new mission and provide the potential for new thoughts on war. Table 7.7 depicts the single edition of *Homeland Security*, JP 3-26 and all three editions of *Homeland Defense*, JP 3-27. HD protects the “sovereignty, territory, domestic population, and critical defense infrastructure” of the United States “against external threats and aggression or other threats as directed by the President.”<sup>758</sup> HD is a mission area defined by its purpose of protecting the United

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<sup>754</sup> Ibid, I-5.

<sup>755</sup> Joint Chiefs of Staff, *Homeland Security*, Joint Publication 3-26 (Washington, D.C.: Joint Chiefs of Staff, August 2, 2005), GL-9.

<sup>756</sup> Ibid, A-3. The Homeland Security Act of 2002 established the Department of Homeland Security and, by extension, the HS mission set. It was preceded by the USA Patriot Act of 2001.

<sup>757</sup> Ibid, I-5 – I-7.

<sup>758</sup> Joint Chiefs of Staff, *Homeland Defense*, Joint Publication 3-27 (Washington, D.C.: Joint Chiefs of Staff, July 13, 2007), I-1.

**Table 7.7. All Editions of *Homeland Security*, Joint Publication 3-26, and *Homeland Defense*, Joint Publication 3-27.**

#	Title	Date of Publication	Page Length
1	<i>Homeland Security</i>	2 August 2005	117
2	<i>Homeland Defense</i>	13 July 2007	181
3	<i>Homeland Defense</i>	29 July 2013	145
4	<i>Homeland Defense</i>	10 April 2018	140

States. HD is accomplished through myriad military activities, all of which contribute to protecting the United States. There are no tasks exclusive to homeland defense alone. CT is similar, but it is oriented against a specific type of threat: terrorist or violent extremist organizations. HD guards against all threats: state, non-state, terrorist, criminal, and those defined by the President of the United States.<sup>759</sup> Across all editions of *Homeland Defense*, significant attention is paid to explaining the differences and overlap between HD, HS, and DSCA. The publication pays equal attention to describing the tapestry of overlapping organizational responsibility that is the US interagency construct. DOD is not the primary government agency in many cases and must not subsume civil control, especially in domestic employment of the US military. As with *Homeland Security*, outside of cursory descriptions of the security environment, JP 3-27 does not contain meaningful or new content dealing with war or warfare as a phenomenon. To this point, the most recent edition of JP 3-27 references the global security environment just once. In the case of HS and HD doctrine (JP 3-26 and 3-27), the analysis did not validate the assumption that new missions might prompt a reconsideration of war and warfare.

## 7. Joint Force Headquarters, JP 3-33

*Joint Task Force Headquarters* or *Joint Force Headquarters*, as the most recent edition of JP 3-33 is named, covers the formation, organization, and delineation of responsibilities within a joint force headquarters. The research included JP 3-33 for two reasons. First, as depicted in Table 7.8, five editions provide sufficient examples to determine the evolution of thought over time. The first appeared in 1999 with a revision or update. They were released after that date, on average, every six years. Second, *Joint Force Headquarters* focuses on staff and special staff organization and functioning. The assumption, made within the methodology chapter, and reiterated at the beginning of this chapter, was that the publication might offer insight into the evolution of warfare because military staffs must incorporate and account for new battlefield capabilities or conflict domains, like information

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<sup>759</sup> Joint Chiefs of Staff, *Homeland Defense*, Joint Publication 3-27 (Washington, D.C.: Joint Chiefs of Staff, April 10, 2018), I-4, I-5.

**Table 7.8. All Editions of Joint Task Force Headquarters, Joint Publication 3-33.**

#	Title	Date of Publication	Page Length
1	<i>Joint Force Capabilities</i>	13 October 1999	96
2	<i>Joint Task Force Headquarters</i>	16 February 2007	351
3	<i>Joint Task Force Headquarters</i>	30 July 2012	287
4	<i>Joint Task Force Headquarters</i>	31 January 2018	352
5	<i>Joint Force Headquarters</i>	19 September 2022	354

and cyber. However, the analysis did not find any discussion of war or warfare. The publication's content focused on the minutia of task force organization, command and control, and then the roles and responsibilities of the various functional directorates (e.g., operations, plans, and communications). None of JP 3-33's five editions yielded helpful material for this dissertation about the broader concepts of war and warfare.

## 8. Joint Electromagnetic Spectrum Operations, JP 3-85

The final joint doctrine publication considered in this dissertation is *Joint Electromagnetic Spectrum Operations*, JP 3-85, published in 2020. The previous edition of this publication was designated within the communications series of core doctrine as *Joint Electromagnetic Spectrum Management Operations*, JP 6-01 and dates to 2012. Table 7.9 lists both volumes. Regardless of designation, both publications focus on “military operations in and through the electromagnetic spectrum (EMS) across the competition continuum.”<sup>760</sup> The EMS is a part of multi-domain operations but not its own separate domain. Instead,

**Table 7.9. All Editions of *Joint Electromagnetic Spectrum Operations*, Joint Publication 6-01 and 3-85.**

#	Title	Date of Publication	Page Length
1	<i>Joint Electromagnetic Spectrum Management Operations</i> (JP 6-01)	20 March 2012	100
2	<i>Joint Electromagnetic Spectrum Operations</i>	22 May 2020	148

it straddles the physical domains and the information environment. Joint doctrine considers the EMS a maneuver space that must be protected and, alternatively, one that can be exploited against an opponent.<sup>761</sup> The US military accomplishes this by conducting joint electromagnetic spectrum operations, or JEMSO. These operations span the competition continuum from monitoring and exploitation, protective actions to defend within the EMS,

<sup>760</sup> Joint Chiefs of Staff, *Joint Electromagnetic Spectrum Operations*, Joint Publication 3-85 (Washington, D.C.: Joint Chiefs of Staff, May 22, 2020), I-1.

<sup>761</sup> Ibid.

and offensive electronic attack intended to deny US adversaries the use of the EMS or portions thereof.<sup>762</sup>

Although difficult to conceptualize because it is neither visible nor tangible, the EMS is critical to the US military, economy, and government functioning. Within the military sphere, the EMS affects all joint functions. It is the pathway for communications and information transfers that are critical to command and control, data transfer, and precision navigation, to name just a portion of the capabilities that depend upon it.<sup>763</sup> In this light, the EMS is very similar to the space domain; the comparison is even more appropriate than the one made between space and the information environment. Both space and the EMS are necessary, if not essential, to modern military capabilities. This trend shows no signs of slowing down as the US military continues to rely on technology overmatch as the foundation of its competitive advantage. In addition, many of the space trends correspond to the EMS. The latter is increasingly congested as commercial telecommunications utilize finite bandwidth, just as space is increasingly filled with satellites and debris.<sup>764</sup> Similarly, increased commercial activity has caused a proportional increase in the number of actors using advanced telecommunications technology while lowering the cost of access.<sup>765</sup> More and more actors, including private individuals, utilize space-enabled or space-based capabilities previously available only to advanced states. Like space, the EMS is a contested arena to which the US military can no longer assume it has unfettered access.

The comparisons between space and the EMS remains valid regarding the value of JEMSO in this dissertation. The EMS is a critical component of the US military's high technology style of warfare in the same manner as space. As a result, there is a requirement for joint doctrine to address operations across the EMS and provide guidance on retaining control of this maneuver space as adversaries seek to use it for their ends. However, given this requirement, the JP 3-85 offers no new insight into war or its conduct. The EMS is a vital component of the operating environment, necessary to a host of traditional military functions. The EMS functions as a medium through which military capability flows, rather than being a capability on its own. This fact differentiates the EMS from the information environment. Access to EMS is essential and will remain so. Even accounting for a reduction in barriers to accessing the EMS, advances in EMS-related technology have not prompted a change in the character of contemporary war.

## 9. Core Doctrine: A Summation

The research for this chapter analyzed the content of multiple joint doctrine publications for evidence of changes in the description of war and warfare. It focused on core doctrine publications from 1991 through 2022 and was a continuation of the preceding two chapters covering capstone and keystone doctrine. Not all core doctrine discusses war from a phenomenological perspective. Much of it covers specific types of operations and does not need to re-address material already presented within higher doctrinal publications. The most impactful publication within core doctrine is *Information Operations*, JP 3-13 and its

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<sup>762</sup> Ibid, I-1, I-6 – I-7.

<sup>763</sup> Ibid, I-12, I-13.

<sup>764</sup> Ibid, I-3.

<sup>765</sup> Ibid, I-1, I-5. Adversaries employ commercial off-the-shelf systems “without regard to legal constraints” and to avoid detection by blending in with civilian users.

successor, *Information in Joint Operations*, JP 3-04. A definite progression in complexity and nuance is apparent and manifests in two ways. First is the thinking about the nature of information itself. The JP 3-04 discusses multiple aspects of information, such as what influences how people receive information, who decides what information is valuable, and, most importantly, who determines meaning. Information's role as a warfare component is another area demonstrating significant thought progression. Joint doctrine on operations in the information environment maintains that everything has an informational value that can be used to achieve an effect and influence target audiences. In some cases, proper application of information can produce effects rivaling what more traditional uses of force can achieve.

The remaining core doctrine publications that discussed war and warfare did so primarily in their descriptions of the evolving strategic or global security environment. In the joint vocabulary, this term is synonymous with the international system. The doctrine described it as heavily influenced by factors such as globalization, advances in information technology, political instability, terrorism, and transnational crime. This description comes through most clearly in the three editions of *Counterterrorism*, JP 3-26, as they chart the evolution of terror tactics and violent extremist organizations. The modus operandi of contemporary VEOs shares many of the same traits ascribed to the actions of states that are engaged in great power competition, despite differences in size, level of organization, and motivation. This is unsurprising because the context is the same: VEOs and competing states exist in the same information-driven and technology-enabled international system. This is the influence of the Information Age on humanity, manifesting, in this case, in the conduct of war.

Of the 18 keystone and 28 core doctrine publications analyzed in this research effort, some did not contain content relating to war or warfare. They did not contribute to this dissertation's argument. Doctrine dealing with processes such as *Joint Intelligence*, JP 2-0 and functions like *Joint Force Headquarters*, JP 3-33 or specific subjects like *Joint Electromagnetic Spectrum Operations*, JP 3-85 did not yield much value. In some cases, assumptions that publications covering new mission areas like homeland security and homeland defense would prompt a re-evaluation of war or warfare proved wrong.

The next chapter in this dissertation covers the role that elective courses at the National Defense University (NDU) play as a mechanism for new thinking about war. In this case, NDU and its subordinate institutions exemplify what Ludwik Fleck describes as a *Denkkollektiv* (thought collective). According to Fleck's theories, thought collectives are responsible for knowledge generation and new ideas. Examining NDU's resident colleges will provide a window into that process.

## Chapter 8 - National Defense University as a Thought Collective

This chapter contains the second part of the research collected for this dissertation. The previous three chapters explored how American military doctrine explains war and warfare to its primary audience, the US military. That examination was a chronological analysis that started in 1991, during the advent of joint doctrine, and continued through the contemporary period to 2022. Those three chapters comprise the main thrust of this dissertation's research: determining whether the US military has changed how it describes war and warfare in its doctrine. This chapter comprises a second, subordinate research effort that analyzes the elective courses offered by the National Defense University (NDU) in Washington, D.C. The purpose is to identify electives within the course catalog that encouraged students to expand their conception of warfare beyond the "canonical" view articulated in joint doctrine. This examination supports the research question by providing insight into a potential source of new thinking and new knowledge that could potentially influence joint doctrine in the future by molding the thinking of American military officers and defense civilians who will write that doctrine in the future.

Also, this part of the dissertation uses Ludwik Fleck's previously discussed theory concerning how humans generate new knowledge. According to Fleck, "thought collectives" or *Denkkolletive* are the source of new thinking and expertise. Thought collectives are groups that, while familiar with the prevailing thought in a particular discipline, can generate new ideas because they are sufficiently distanced from mainstream thinking such that it does not bind them. This separation can be organizational, geographic, or both. Regardless, this distance creates the freedom to generate new ideas that add to the available body of knowledge and expand human understanding.

This description applies to the National Defense University (NDU), which comprises five colleges: the College of International Security Affairs, the College of Information and Cyberspace, the Eisenhower School, the National War College, and the Joint Forces Staff College (JFSC). NDU and all the colleges are located at Fort McNair in Washington, D.C., except for the JFSC in Norfolk, Virginia. The mission of the JFSC is to produce joint-qualified staff officers for follow-on service on the Joint Staff and at combatant commands throughout the US military. Best known for its 10-week Joint and Combined Warfighting School (JCWS), commonly referred to as Joint Professional Military Education Phase II or JPME II, the JFSC is not considered to be a "senior-level school" on the same level as the four resident colleges at Fort McNair. While these resident colleges produce joint qualified officers, there is greater emphasis on preparing US military officers, those from select allied and partner nations, and civil servants from the Departments of Defense and State to assume leadership roles within the national security complex.<sup>766</sup> As a result, the resident colleges within NDU offer robust curricula that lasts a full academic year. In addition, the resident colleges like the Eisenhower School or National War College are

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<sup>766</sup> National Defense University, *Vision and Mission*, accessed September 3, 2021, <https://www.ndu.edu/about/vision-mission/#:~:text=Vision%20and%20Mission,educational%20programs%2C%20research%20and%20engagement>.



more prestigious than the JFSC, attending the former implies upward career mobility and promotion, while JFSC does not.<sup>767</sup>

NDU “educate[s] joint warfighters and other national security leaders in critical thinking about the application of military power.”<sup>768</sup> Responsible for producing graduates “capable of both the creative application of joint and combined military power in war...,” the curriculum is heavily weighted toward JPME requirements.<sup>769</sup> Although each of the four resident colleges at NDU has a different mandate or area of concentration, the curriculum at each covers JPME requirements for national security strategy, theater strategy and campaigning, and the joint planning process as dictated by the Chairman’s policy on officer professional military education.<sup>770</sup> Doctrine is not the focal point of the JPME II curriculum per se, but the broad concepts of joint warfighting are certainly foundational to mastering the JPME requirements. American military officers are expected to be conversant in joint warfighting doctrine and concepts by the time they attend the senior professional military education offered by NDU and the service war colleges.<sup>771</sup>

Part of the Department of Defense, NDU falls under the Chairman of the Joint Chiefs of Staff as one of the Chairman’s controlled activities.<sup>772</sup> In practice, the Chairman directs NDU and its component colleges to support the Joint Staff and the Office of the Secretary of Defense with emergent or “hot button” tasks.<sup>773</sup> In the past, these have included the Quadrennial Defense Review and, more recently, Joint Force Development and Design. NDU brings additional capacity to problem-solving within DoD. Coupled with the fact that the university is not responsible for a particular staff function or mission area, this gives NDU institutional neutrality and allows it to foster a research-based academic environment which generates knowledge. NDU students engage in wide-ranging intellectual exploration and enjoy the educational freedom to produce creative and novel solutions. This occurs even as NDU is connected to the larger US national security establishment. Still, NDU’s quasi-neutral status within the Department allows it to function as “another set of eyes” and offer solutions that may elude or be dismissed by the establishment. This relationship accords with Fleck’s explanation of how “thought collectives” operate and interact with the larger community of thought.<sup>774</sup> NDU students engage in wide-ranging

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<sup>767</sup> For more on the JFSC and its curriculum, see the JCWS webpage at <https://jfsc.ndu.edu/Academics/Joint-and-Combined-Warfighting-School-JCWS/Program-Description/>.

<sup>768</sup> National Defense University, *Realizing the Vision 2022-2027: National Defense University Strategic Plan* (Washington, D.C.: National Defense University, December 6, 2022), 2, accessed October 14, 2023, [https://www.ndu.edu/Portals/59/Documents/Vision-Mission/NDU-Strat-Plan\\_2022.pdf?ver=wdlc3nl25xS7ob0zoeUig%3d%3d](https://www.ndu.edu/Portals/59/Documents/Vision-Mission/NDU-Strat-Plan_2022.pdf?ver=wdlc3nl25xS7ob0zoeUig%3d%3d).

<sup>769</sup> Ibid, 3.

<sup>770</sup> Joint Chiefs of Staff, “Officer Professional Military Education Policy,” CJCSI 1800.01F, *Chairman of the Joint Chiefs of Staff Instruction* (Washington, D.C.: Joint Chiefs of Staff, May 15, 2020), 2, A-1, accessed October 16, 2023, [https://www.jcs.mil/Portals/36/Documents/Doctrine/education/cjcsi\\_1800\\_01f.pdf?ver=2020-05-15-102430-580](https://www.jcs.mil/Portals/36/Documents/Doctrine/education/cjcsi_1800_01f.pdf?ver=2020-05-15-102430-580).

<sup>771</sup> As part of the continuum of officer PME, each service’s command and staff college or intermediate-level PME equivalent teaches joint doctrine and concepts as part of the JPME, Phase I requirement. This is covered in the Chairman’s instruction, CJCSI 1801.01F.

<sup>772</sup> Joint Chiefs of Staff, “National Defense University Policy,” CJCSI 1801.01F, *Chairman of the Joint Chiefs of Staff Instruction* (Washington, D.C.: Joint Chiefs of Staff, October 14, 2022), 2, accessed October 16, 2023, <https://www.jcs.mil/Portals/36/Documents/Library/Instructions/CJCSI%201801.01F.pdf>.

<sup>773</sup> Ibid, D-B-2.

<sup>774</sup> Fleck, *Genesis and Development of a Scientific Fact*, 105-106

intellectual exploration in a research-based academic environment, which maximizes the students' ability to learn.

The four NDU colleges at Fort McNair address JPME II requirements as part of their core curricula. In addition, each college has its area of concentration that distinguishes it from the others. The National War College concentrates on strategic leadership and strategy formulation at the highest level of government.<sup>775</sup> The Eisenhower School, formerly the Industrial College of the Armed Forces, focuses on the “sinews of war.” Students at the Eisenhower School study economic theory and gain familiarity with the US industrial base and an appreciation for the “marshaling and managing [of] resources to execute strategy.”<sup>776</sup> The College of International Security Affairs (CISA) is the DOD’s flagship institution for combatting terrorism and irregular warfare and solving challenges associated with the “contemporary security environment.”<sup>777</sup> Created in 2002, CISA was first known as the School for National Security Executive Education and is best known for its International Combating Terrorism Fellowship Program.<sup>778</sup> The College of Information and Cyberspace (CIC) is the final resident college and, until 2017, was known as the Information Resources Management College. Since its establishment in 1964, CIC has focused on information and computers. Today, CIC concentrates on the cyber domain and the “use of the information instrument of national power.”<sup>779</sup> Across NDU, the core curricula addresses each college’s area of concentration and JPME II requirements to achieve the program and learning outcomes described in the Chairman’s policy for officer professional military education.<sup>780</sup> In addition to the core curriculum at their respective colleges, students at NDU are required to take elective classes. Each college offers electives that broadly fall within its area of concentration or its faculty’s areas of expertise. NDU administers the overall electives program and provides electives to students across the four resident colleges. NDU conducts a fall term from August to December and a spring term that begins in January and graduates in June. Students in all of the colleges take one elective class per term, although there is the option to take additional electives as an overload.<sup>781</sup> It is also possible for students to take several electives in specific areas like cyber studies, ethics, financial management, specific regional focus areas, strategic leadership studies, and war studies that satisfy the requirements for a concentration to be awarded upon graduation.<sup>782</sup> Drawing from the National War Colleges student handbook, the purpose of the elective program is to “complement the core curriculum... [and] provide students the opportunity to broaden and deepen their study.”<sup>783</sup> Germane to this research, the handbook explicitly states that electives serve as “experimental vehicles through which issues can be examined with a small group of interested students.”<sup>784</sup>

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<sup>775</sup> Joint Chiefs of Staff, “Officer Professional Military Education Policy,” CJCSI 1800.01F, A-B-9.

<sup>776</sup> *Ibid.*, A-B-10.

<sup>777</sup> *Ibid.*, A-B-11.

<sup>778</sup> National Defense University, *History*, accessed July 30, 2023, <https://www.ndu.edu/about/history/>.

<sup>779</sup> Joint Chiefs of Staff, “Officer Professional Military Education Policy,” CJCSI 1800.01F, A-B-9.

<sup>780</sup> *Ibid.*, 1-2.

<sup>781</sup> The norm is one elective per term. However, CISA only requires one elective to meet program requirements.

<sup>782</sup> National Defense University, “National Defense University 2023-2024 Electives Program Catalog” (Washington, D.C.: National Defense University, 2023), 3-6. “Some concentrations are restricted to specific colleges, but most are open to students across all colleges.”

<sup>783</sup> National War College, “National War College Student Handbook, National War College, Academic Year 2023-24” (Washington, D.C.: National Defense University, August 7, 2023), 13.

<sup>784</sup> National War College, “National War College Student Handbook,” 19.

Here, NDU identifies its elective program as a place where new knowledge is created, using language similar to Fleck's own description of his thought collectives. The remainder of this chapter describes the findings from a close examination of NDU elective catalogs from 1991 through 2022.

## 1. NDU Elective Catalogs

Focusing on the NDU electives program supports creating new knowledge and understanding in that students can move beyond doctrine, expand their knowledge, and think deeply about war and warfare. Ideally, obtaining the course syllabi for every elective offered by NDU would be the best way to collect this data. A thorough course syllabus contains a robust course description and background, desired learning outcomes, assignment descriptions, and a list of required readings or references. Table 7.1. breaks down the 32 years of examination into a beginning, middle, and end period to facilitate analysis that was first introduced in Chapter 4. Like the examination of joint doctrine, this study used content analysis to examine the NDU elective catalogs.

**Table 8.1. Breakdown of Periods for Examination**

<b>Period</b>	<b>Dates</b>
Period A (Early)	1991-2001
Period B (Middle)	2002-2011
Period C (Late)	2012-2022

Each elective catalog covered one academic year and offered uniformly formatted descriptions of the electives offered by NDU for that academic year. The advantage of using elective catalogs, as opposed to other materials like course syllabi, is that they are accessible and offer consistent comparisons across the years. The disadvantage is that each elective description is limited to one paragraph, which becomes the basis for evaluating the subject matter and educational approach. In practice, these descriptive paragraphs are written for students to enable them to decide whether to choose an elective or not. Instructors craft course descriptions to attract students because electives with too few students risk being cancelled. Despite that aspect of the course catalogs, these paragraphs provided enough material over the collection period for a reasoned assessment of whether the electives dealt with war and warfare and encouraged critical or exploratory thought. Elective descriptions ranged in length from 150 to over 300 words. In addition to describing the topic, the paragraphs typically addressed some combination of the instructor's academic method, assignment requirements, desired learning outcomes, or what the student should be capable of after completing the elective. Elective data detailing the maximum number of students per section, credit hours awarded, the number of sections offered, the day and time the class met, and the instructor's name followed the descriptive paragraph.

Figure 8.1. contains a sample elective description, in this case from the National War College, that reflects the typical length and detail provided in the various elective catalog editions. The research examined ten such catalogs spanning 1998 until 2022 and conforming to the three study periods. The next step in reviewing the electives was to place them into broad categories based on their subject matter. The categories created from that examination were broadly based on the electives themselves. They do not correspond to traditional academic disciplines and departments, or the episodic categorization used by NDU for its

electives program.<sup>785</sup> The categories are internal to this dissertation to facilitate data collection and make it easier to group like-electives over the years. However, categorizing electives was secondary to identifying those discussing war as a human activity and those encouraging free, exploratory thinking.

As mentioned earlier, each of NDU's resident colleges has its own specialty or area of concentration. These areas of concentration influenced the core curriculum, but did not appear to limit or constrain the electives each college offered. Regardless of subject matter, electives fell into two categories: those covering topics within a college's area of concentration and more general elective offerings. For example, the Eisenhower School focused on economics and the US industrial base and offered an elective titled "Critical Thinking and Decision Making in Defense Acquisition" during the 2010-2011 academic year. During that same year, the Eisenhower School also offered electives covering more general

**NWC 6022: Development & National Security**

This course examines the role of development assistance as an instrument of national power, serving national security and foreign policy objectives. While development is traditionally conceptualized as part of the Economic Instrument of Power, the course will additionally explore the diplomatic and information aspects of development as a foreign policy tool. This course provides a useful amplification of core course consideration of the instruments of power. The course will be taught from a practical, rather than theoretical, perspective, with the needs of the national security strategist in mind. Emphasis will be on interactive discussion. By the end of the course, students will understand what development is, who the major actors in the development space are, how development differs from other types of assistance such as humanitarian, how it is designed and implemented, and how its effectiveness can be measured. Students will also be able to assess the factors in the operating environment that make a development intervention more, or less, likely to succeed. Most importantly, students will understand how the strategist can deploy development interventions to advance larger foreign policy and security objectives.

**(Class Limit 12) (2 Credit Hours)**

TUE, 1535 - 1730, 01/07/2020 – 03/24/2020; (changes to 1330 – 1525 after 6th session)

Instructors: Ms. Janina Jaruzelski/Ms. Maria A. Longi

**Figure 8.1. Sample NDU Elective Description. Taken from National Defense University, "National Defense University 2019-2020 Elective Program Catalog" (Washington, D.C.: National Defense University, 2020), 24.**

topics such as the "Law of Armed Conflict" and "The Politics of Congress." The more specialized electives corresponded to the college's focus area or an instructor's particular area of expertise, while the more general topics fulfilled curricula requirements for students across NDU.

Based upon the review of the elective catalogs, this study created 12 categories to enable the diverse subjects to be grouped for ease of analysis. Table 8.2 depicts the list of categories. The categories are in consonance with the NDU mission of educating "joint warfighters and national security leaders" to formulate defense policy, operate with

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<sup>785</sup> Each college at the National Defense University had its own elective categories that were evident from the academic years 1998-1999 until 2005-2006. The dissertation did not adopt NDU's elective categories because they were in use for less than half of the years under observation, and the categories themselves underwent frequent revisions in naming convention from year to year. Consequently, these inconsistencies made the categories problematic.

**Table 8.2. List of Elective Categories by Subject**

Category			
1	International Relations Theory	7	Leadership
2	History	8	Economics
3	US Government / Interagency	9	Futures
4	Strategy / Planning	10	Innovation
5	Defense Policy / Military Studies	11	Technology
6	Regional Studies	12	Independent Research

multinational partners, and execute national security strategy.<sup>786</sup> Three of the four resident colleges and NDU offered courses falling into International Relations Theory, History, Government, Strategy and Planning, and two broad categories of Defense Policy/Military Studies and Regional Studies. The College of Information and Cyberspace is the most narrowly focused of NDU's four resident colleges.<sup>787</sup> CIC offers technological-aligned electives on cybersecurity, information, telecommunications systems, "Big Data," and emerging technology. CIC is focused on the role of information and cyber play in national security and, by extension, war and warfare. It represents the cutting edge of NDU's mission to prepare national security professionals for the challenges of the current security environment. At least part of this preparation involves having these future leaders think critically about present and future security challenges confronting the US. In CIC's case, this involves exposing students to information technology and its ongoing impact on national security. However, not all these challenges relate to war and armed conflict directly. Some of these challenges are organizational or informed by domestic politics; the defense budget is one such case. Notwithstanding these few exceptions, comprehending and prevailing in armed conflict is a central theme for NDU. It is thus reasonable to conclude that at least some portion of NDU, the US military's highest institution of professional military education, devotes time to thinking about war's evolution and future direction.<sup>788</sup>

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<sup>786</sup> National Defense University, *Realizing the Vision 2022-2027*, 2.

<sup>787</sup> Joint Chiefs of Staff, "Officer Professional Military Education Policy," CJCSI 1800.01F, A-B-9. CIC focuses on cyberspace and "the use of the information instrument of national power."

<sup>788</sup> NDU offered independent research options (as listed in Table 7.1) for every academic year so students could explore topics in which they had a personal or professional interest. This chapter does not include independent research because establishing this data set would have been impossible. It is likely that most, if not all, of the independent research topics would have satisfied the selection criteria and contained original thought. However, the institution's electives program illustrates Fleck's concept of thought collectives and how NDU approached the changing character of war.

## 2. A Note to the Method for this Branch of Research

Specific to the analysis of NDU electives, a determination was made as to whether the elective dealt with war and warfare from a phenomenological standpoint after reviewing the course description.<sup>789</sup> The research also posed a second follow-up question, asking whether the course allowed original or exploratory thinking. This second question also relied upon the course descriptions in the elective catalogs for the answer. The resulting assessments are more subjective because course descriptions do not always speak to the amount of creativity or original thinking required in a particular elective. However, the answers were derived indirectly using telltale phrases such as "...exploring the new paradigm..." and "...changing the character of war..."<sup>790</sup> The assessment was such that language, in conjunction with such issues as information or the Information Age, indicated the potential for original thought.

The focused research in this chapter can be expressed through the question, are there electives at NDU that encourage critical and original thinking about war and warfare? This question does not imply an absence of critical thought in the core curriculum or that none occurs in other parts of the elective program. Since it is based on course descriptions, this analysis also cannot account for the atmosphere or teaching style within the classroom itself that encourages or discourages original or innovative thinking. The aim is to move beyond "canon," i.e., what is taught in joint doctrine, and isolate and identify the potential for original thought regarding war's evolution and ever-changing character. The ability to engage in free and original thought corresponded to Fleck's thought styles and thought collectives, which he saw as engines of new knowledge. The following sections each cover one of the three time periods under analysis and describe, based on elective course descriptions, whether there was evidence of exploratory thought on war with the potential to go beyond joint doctrine.

## 3. Period A (Early): 1991-2001

The research examined two course catalogs from the early or first observation period. The catalogs came from the academic years 1998-1999 and 2000-2001.<sup>791</sup> Before this date, NDU held no formal academic accreditation and would not have been required to maintain the same level of records. As a result, Period A, the early observation period, contains the smallest sample size of elective catalogs.<sup>792</sup>

Beginning with the elective catalog for the academic year 1998-1999, there is clear evidence of courses that examine war as a holistic phenomenon and encourage thinking

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<sup>789</sup> The method followed for the content analysis is described in Chapter 4.

<sup>790</sup> National Defense University, "National Defense University AY 2005-2006 Electives Program Catalog: Electives Schedule and Course Descriptions" (Washington, D.C.: National Defense University, 2005), 61; and National Defense University, "National Defense University 2021-2022 Electives Program Catalog" (Washington, D.C.: National Defense University, 2021), 24.

<sup>791</sup> Earlier catalogs from this period were not obtainable.

<sup>792</sup> Having consulted with Mr. Larry Johnson, NDU Registrar, he attributed the lack of previous catalogs to the fact that NDU first received its accreditation as a member of the Middle States Commission on Higher Education in 1997. Larry Johnson, e-mail message to author, November 17, 2023; and "National Defense University," MSCHE, Middle States Commission on Higher Education, last modified June 22, 2023, accessed November 17, 2023, National Defense University, <https://www.msche.org/institution/0140/>.

beyond the boundaries of joint doctrine.<sup>793</sup> Many courses that satisfy these two criteria deal directly with information or the Information Age and its effect on warfare and national security policy. Several courses from the College of Information and Cyberspace, which was called the Information Resources Management College (IRMC) in 1998, stand out like “National Security in the Information Age” (IRMC 5400) and “Information Age Policy Issues” (IRMC 5405).<sup>794</sup> The former “explores the technological revolution that made information a component of national power,” and the latter examines the “interrelated technological, social, political, and economic aspects of national security driven by a global information revolution.”<sup>795</sup> The presence of these courses is not surprising given the year (1998), its proximity to the end of the Cold War, the ongoing Information Technology Revolution, and the related Revolution in Military Affairs (RMA), which argued that warfare had fundamentally changed due to technology.<sup>796</sup> These electives were shaped by the decisive American victory in the First Gulf War and evolving concepts of joint warfare reinforced by that victory.

Also aware of these forces and their effect on the character of war, the Industrial College of the Armed Forces offered an elective on “Joint Operational Warfare,” which the description specifically stated was “aimed at mature students desiring to perform guided research into producing new thinking about joint warfare.”<sup>797</sup> Similarly, IRMC’s “Revolution in Military Organizations” (IRMC 5435) confronts the RMA head-on, asking the students to question what national security and the military should look like in 2025.<sup>798</sup> Similarly, the National War College examines the RMA in “Future Warfare: A Revolution in Military Affairs?” (NWC 5675). This course uses historical examples from military history to challenge the conventional wisdom that the RMA would “fundamentally change the way U.S. forces fight.” Still, it leaves students to make the final determination based on examining change through the lenses of doctrine, organization, and technology.<sup>799</sup> By comparison, NWC also offered “Joint Vision 2010: A Framework for the Future Military?” (NWC 5815). Although this elective focused on the future of the US military as outlined in the concept of *Joint Vision 2010*, it was not assessed to be significant for this research. The description made

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<sup>793</sup> Throughout the remainder of this chapter, electives are referenced using their long title and the course designation found in the corresponding NDU electives catalog. For example, National War College’s course “Military Innovation in Future Wars” (NWC 5645).

<sup>794</sup> College of Information and Cyberspace, “2020-2021 JPME-II Program Student Handbook” (Washington, D.C.: National Defense University, 2020): i, accessed November 13, 2023, <https://cic.ndu.edu/Portals/74/CIC%20JPME%20Student%20Handbook%20-%20AY20-21.PDF>; and National Defense University, “National Defense University Electives Program Catalog: Course Descriptions AY 1998-1999” (Washington, D.C.: National Defense University, 1998), 16.

<sup>795</sup> NDU, “Electives Program Catalog: Course Descriptions AY 1998-1999,” 16.

<sup>796</sup> A revolution in military affairs is a phenomenon that changes the character of war and how wars are fought. RMAs have occurred episodically throughout history and, according to military historian Williamson Murray, are the result of even greater changes in “the political, social, and military landscape.” The most recent RMA took place during the First Gulf War in 1991 and was the result of many factors, not the least of which were advances in information technology and US joint warfighting doctrine. For more see Williamson Murray, “Thinking About Revolutions in Military Affairs,” 73.

<sup>797</sup> NDU, “Electives Program Catalog: Course Descriptions AY 1998-1999,” 6.

<sup>798</sup> *Ibid.*, 7.

<sup>799</sup> *Ibid.*, 31.

it clear that the focus of NWC 5815 was on testing an existing joint concept for validation rather than looking at war or pushing the boundaries of joint doctrine.<sup>800</sup>

The academic year 2000-2001 catalog was the second elective catalog examined from the first observation period. This was the last academic year before the 9/11 terrorist attack. The attack did not affect academic offerings because the academic year at NDU concluded in June, and the attack occurred in September 2001. Two electives carry over from AY 1998-1999 and appear in the 2000-2001 elective catalog with identical course descriptions from the previous year. These courses are IRMC's "National Security in the Information Age" (IRMC 5400) and NWC's "Future Warfare: A Revolution in Military Affairs?" (NWC 5675). Other new electives that address how war was evolving during that period include ICAF's "Non-Traditional Terrorist Threats" (ICAF 5155) and NWC's "Information Operations Strategy and Engagement" (NWC 5753). Both courses took a holistic approach to the topic and encourage students' original thought.

The fact that ICAF 5115 predated the 9/11 attacks, which used civilian airliners as weapons, is significant and highlights the US military's attempt to think meaningfully about terrorism. Although it is one data point, it contradicts the conventional wisdom rendered by the 9/11 Commission that the US Government suffered from a complete "failure of imagination," making the country vulnerable to a novel approach.<sup>801</sup> ICAF 5115 demonstrates that at least one part of the US Government appeared to be thinking seriously about the potential for such catastrophic attacks, even if it missed its exact form. Second, the course description emphasizes how America's adversaries at that time creatively exploited asymmetries to nullify the US military's conventional advantage. Many lessons came out of the First Gulf War; the US was not the only country to garner lessons from that conflict – both state and non-state actors were active learners.<sup>802</sup> The course description for ICAF 5115 goes on to describe a range of potential threats, ranging from economic sabotage and cyberattacks to destroying critical infrastructure and human-engineered pandemics.<sup>803</sup> Moreover, this course on non-traditional threats is noteworthy because it examines how US non-state adversaries might use information and technology in novel ways to gain an asymmetric advantage.

The second course of significance is NWC's "Information Operations Strategy and Engagement" (NWC 5753). This course was intended to serve as a primer on using information to pursue national security objectives in the Information Age.<sup>804</sup> Taught at the top-secret level, NWC 5753 focused on IO strategy and engagement, which were still developing fields within the larger discipline of information operations. The primary open-source text was James Adams' *The Next World War: Computers are the Weapons and the Front Line is Everywhere* (2001). Given the recent nature of the core text and the highest security classification an NDU elective can possess, it is apparent that NWC 5753 was not only timely, but essential. A look at joint doctrine on IO from the same period reinforces the

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<sup>800</sup> NDU, "Electives Program Catalog: Course Descriptions AY 1998-1999," 34.

<sup>801</sup> National Commission on Terrorist Attacks Upon the United States, *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States* (Washington, D.C.: Government Printing Office, 2003), 344.

<sup>802</sup> National Defense University, "National Defense University Electives Program Catalog: Course Descriptions AY 2000-2001" (Washington, D.C.: National Defense University, 2000), 17.

<sup>803</sup> *Ibid.*, 17.

<sup>804</sup> *Ibid.*, 50.



importance of this course in advancing learning. Only two and a half years earlier, the Joint Staff had published the first IO doctrine with the *Joint Doctrine for Information Operations* (JP 3-13). At that time, joint IO doctrine was systems-focused. IO was envisioned to protect friendly information systems and reduce the “fog of war,” while exploiting and comprising the enemy’s information systems. Although the exact content of NWC 5753 is unknown, the elective’s significance lies in its approach to information as a tool to attain “national security goals and objectives.” This stance was far ahead of joint IO doctrine at the time and presaged the trajectory IO doctrine would take in the future, not to mention the impact information would have on warfare in general.

The two elective program catalog examined during Period A, from 1991-2001, indicate that NDU offered electives that allowed students to move intellectually beyond the framework of joint doctrine. The electives highlighted in this section enabled students to examine the implications of warfare in the Information Age and, in so doing, to form a more complete perspective of war. Beyond satisfying the specific research questions posed by this dissertation, the review of NDU’s two earliest course catalogs stood out because they represent US military thinking in the period after the First Gulf War and before the terrorist attacks of September 11, 2001. A comprehensive review of both elective catalogs reflected what one might expect of the world’s sole superpower in the absence of large, ongoing military operations such as the War on Terror. In this period, no single topic like terrorism or counterinsurgency dominated the elective catalogs. The material primarily dealt with the success of the previous decade and the lessons garnered in 1991 from Operation Desert Storm.

Many of the electives examined in this early period covered the impact of the Information Age on national security policy and, to a lesser extent, armed conflict. Frequently, the subject of information technology was linked to national security, national defense processes like acquisition, or the US military as an organization. In the case of subjects relating to the US military or the conduct of military operations in general, electives were typically narrowly framed and focused on land campaigns of past wars and, to a lesser degree, air campaigns. Courses that examined war through a wider perspective and set the stage for a broader examination of conflict were less common, and electives focused on naval warfare were non-existent. The number and breadth of the regional and cultural studies electives offered during both academic years were noteworthy. No single region or culture garnered more attention than any other, as with electives concerning the Middle East and Islam during the middle period of the War on Terror or China in the more recent years. During the early observation period, NDU’s regional and cultural electives surveyed a larger swathe of the globe in keeping with the United States being the world’s superpower during a period of relative calm in which global understanding was emphasized.<sup>805</sup> The following section will cover NDU’s elective program from 2002 to 2011, encompassing the height of US involvement in Iraq and Afghanistan.

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<sup>805</sup> While these last two observations lie outside the scope of this research, they are nonetheless interesting, having come about after comparing the elective catalogs against one another across three periods of observation spanning 30 years.

#### 4. Period B (Middle): 2002-2011

For the middle period of observation, this dissertation utilized four elective program catalogs from academic years 2003-2004, 2005-2006, 2008-2009, and 2010-2011. The increased availability of catalogs from this period provided ample material spanning the entire observation period. For the academic year 2003-2004, three elective courses satisfied research criteria by addressing war, instead of focusing on a single aspect, and promoted exploratory thinking beyond current policy and doctrine. Two of these courses carried over from the previous observation period, specifically the 2000-2001 academic year, and appeared to be the same in the 2003-2004 catalog. The first course was IRMC's "National Security in the Information Age" (IRMC 5400), and the second was NWC's "Transformation for Strategists" (NWC 5675). IRMC 5400 continued to address the impact of the Information Age on warfare and national security and sought to describe the "new paradigm" of this type of warfare.<sup>806</sup> NWC 5675 was the same course NWC offered in 2000-2001 under the title "Future Warfare: A Revolution in Military Affairs?" (also designated NWC 5675). Both iterations of the course shared the exact description and explored the multi-faceted aspects of transforming the US military to incorporate the changes brought on by the RMA.<sup>807</sup> The course title was changed to match DoD's use of the word "transformation" as institutional shorthand for changes to US military force structure and technology to match the lessons of the RMA. The fact that the content did not change reflects the reality that change takes time. Even when change comes in the form of a "revolution," procurement and force structure programs take time to catch up. Institutional change is often measured in decades, especially in large organizations like the US Military Services.

The remaining course that met the selection criteria of this research was offered by IRMC and was called "Information Engagement and National Power" (IRMC 5408). Broadly focused on the impact of the Information Age, the elective centered on identifying the nature and power of information to achieve tangible objectives in its eponymous age and the specific implications for national security.<sup>808</sup> Opening with Joseph Nye's concept of "soft power," it delved into the internet as a "battlespace" and the use of targeted and manipulated information to influence audiences toward specific outcomes.<sup>809</sup> Some 20 years later, all this language has become a familiar part of any professional discussion on IO. At the time, IRMC 5408 was a groundbreaking course and reflected emerging joint doctrine in its approach to IO; the Joint Staff had only just published the second edition of the JP 3-13 on Information Operations in 2004.

For the academic year 2005-2006, there was one new addition to the course catalog and three previously offered courses. Beginning with courses offered in previous years, there was IRMC's "National Security in the Information Age" (IRMC 5400) and "Information

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<sup>806</sup> National Defense University, "National Defense University Electives Program Catalog AY 2003-2004" (Washington, D.C.: National Defense University, 2003), 31.

<sup>807</sup> Ibid, 48. The 1997 Quadrennial Defense Review or QDR was the departmental guidance that addressed the DOTMLPF or doctrine, organization, training, manning, logistics, personnel, and facility implications of transformation.

<sup>808</sup> Ibid, 31.

<sup>809</sup> NDU, "Electives Program Catalog AY 2003-2004," 31. Also, Joseph Nye is the University Distinguished Service Professor and Emeritus at Harvard University. In 2004, Nye published *Soft Power: The Means to Success in World Politics*.

Engagement and National Power” (IRMC 5408) as well as NWC’s “Transformation for Strategists” (NWC 5675). All appeared to go forward without any changes in the course description. The one new elective offering was ICAF’s “Warfare in the Information Age” (ICAF 5506). This course stood out because it precisely satisfied the selection criteria: it addressed war as a complete activity without being tied to joint doctrine and encouraged original student thought. The elective focused on the “changing nature of warfare in the information age...” and the “...implications [of this change] for force transformation.”<sup>810</sup> Although many of the electives examined for this dissertation dealt with the Information Age and its impact on warfare, this course was singular in highlighting the context in which conflict took place as the preeminent, driving factor. The reference to DoD’s transformation of the US military implied going beyond the doctrine of the time. By invoking “transformation,” the course designer seemed to acknowledge that humanity was still figuring out how to wage war in the Information Age. It remained an ongoing process – one without a clear terminus.

Moving to the 2008-2009 academic year, the research identified four elective courses for evaluation. Of the four, two were offered during previous years: IRMC’s “National Security in the Information Age” (IRMC 6207) and ICAF’s “Warfare in the Information Age” (ICAF 5506). New for this academic year was a course titled “Strategic Thought” (SNSEE 6901) offered by CISA, which was then known as the School for National Security Executive Education.<sup>811</sup> As the name of the course implies, the elective’s purpose was to learn and apply classic strategic thought from military philosophers such as Clausewitz and Sun Tzu to understand the contemporary security environment. SNSEE 6901 appeared to emphasize Clausewitz in particular. Taking nothing away from the US military’s preoccupation with Clausewitz since the post-Vietnam rejuvenation of professional military education, the elective used Clausewitz’s “dual ontology” and distinguished between war’s nature and character.<sup>812</sup> It contrasted classic thought against more recent strategic thinking, such as the “new wars” school of thought attributed to Mary Kaldor and Thomas Hammes. This juxtaposition was intended to help students grapple with the challenge posed by non-state actors such as Al-Qaeda and the Taliban, which fell in line with CISA’s mandate as a locus for irregular warfare and combatting terrorism.<sup>813</sup> The course description plainly stated, “students will examine whether the nature of war is changing... or whether its basic parameters remain.”<sup>814</sup> This statement made this course noteworthy regarding senior-level PME within the US military. It shared several parallels with the research conducted for this dissertation, including the assumption that the character of war is changing and comparisons made between old and new theories of war.

Equally significant in the academic year 2008-2009 was the elective from NWC called “War, Peace, and the Modern State” (NWC 5525). This course satisfied the research selection criteria in that it dealt with the war’s role in developing the modern nation-state. Judging from the course description, NWC 5525 gave more treatment to the topic of war and warfare and less to the development of the modern state. The elective proposed tackling

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<sup>810</sup> NDU, “National Defense University AY 2005-2006 Electives Program Catalog,” 33.

<sup>811</sup> National Defense University, *History*, accessed July 30, 2023, <https://www.ndu.edu/about/history/>.

<sup>812</sup> National Defense University, “AY 08-09 Electives Program Catalog” (Washington, D.C.: National Defense University, 2008), 17; and Bollman and Sjøgren. “Rethinking Clausewitz’s Chameleon,” 48.

<sup>813</sup> NDU, “AY 08-09 Electives Program Catalog,” 17.

<sup>814</sup> *Ibid.*

the “central question of the 21st century post-modern period” –identifying the line between peace and war in the Information Age.<sup>815</sup> The elective’s methodology challenged the “solvency” of modern-age terms and Western paradigms of war and peace, acknowledging upfront that the latter is insufficient to explain contemporary warfare.<sup>816</sup> The description concluded by stating that while the state might still dominate war and hold the primary position in the international system, this importance was not assured, given the direction of contemporary warfare.<sup>817</sup> This conclusion is in no way surprising given the ongoing US military operations at that time, which concentrated on forestalling potential defeat in both Iraq and Afghanistan.

Given the context of the ongoing War on Terror, “War, Peace, and the Modern State” appeared to answer what was, at the time, an open question as to whether long-duration counterinsurgency campaigns, especially those led by Western nations, could be successful.<sup>818</sup> This question was especially relevant concerning the disparity in messaging between the US and Al-Qaeda and the Taliban –the messaging emanating from the latter always appeared more responsive and effective than the West’s best effort. “War, Peace, and the Modern State” approached war from an all-inclusive viewpoint and pushed past the military boundaries of joint doctrine. Based on the complexity of the subject matter, this course certainly required students to engage in original thought, evaluating and synthesizing concepts – far beyond reading doctrine and history.

The final elective catalog examined from the middle observation period came from the 2010-2011 academic year. This research effort discovered three courses from the NDU elective program that were significant in how they looked at warfare. The first was “Strategic Thought” (CISA 6901), offered by CISA and carried over from 2008 to 2009. The course description had no changes, and the course was assumed to remain the same. Of the two new offerings, CISA introduced an elective focused on information and influence operations called “Warriors of the Mind: Strategic Influence in the 21st Century” (CISA 6904).

What set this elective apart from previous years’ information-related electives like “Information Engagement and National Power” or “Warfare in the Information Age” was CISA 6904’s focus on using information to influence or subvert specific target audiences.<sup>819</sup> In this regard, “Warriors of the Mind” was comparable to “Information Engagement and National Power” (IRMC 5408), offered by IRMC in the academic years 2003-2004 and again in 2005-2006. That latter course appeared to be a conceptual, top-down look at “soft power” and the impact of the information environment on the national security decision-making process.<sup>820</sup> In contrast, “Warriors of the Mind” was more practitioner-oriented, focusing on the tools of strategic influence, highlighting their use with several creative, non-military case studies such as “Afghan Idol” and eBay’s attempt to enter the Chinese market.<sup>821</sup> What was

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<sup>815</sup> Ibid, 35.

<sup>816</sup> Ibid.

<sup>817</sup> Ibid.

<sup>818</sup> In 2008, the “Anbar Awakening” had just taken shape in Iraq in which the Sunni minority in Anbar Province made common cause with US forces against al-Qaeda and former Baathist elements. In Afghanistan, US forces were still two years out from “the surge,” which would be the high-water mark in terms of US troop commitment in that multi-decade conflict.

<sup>819</sup> National Defense University, “AY 10-11 Electives Program Catalog” (Washington, D.C.: National Defense University, 2010), 49-50.

<sup>820</sup> NDU, “National Defense University AY 2005-2006 Electives Program Catalog,” 61.

<sup>821</sup> NDU, “AY 10-11 Electives Program Catalog,” 49-50.

also significant was the lack of references to joint doctrine as an interpretive paradigm or context in the course description. Given this fact and the use of unique case studies, this course likely provoked the students to have original and creative thoughts about using the information environment to realize strategic objectives. Although CISA 6904 took a narrower view of warfare than many of the electives included in this research, its inclusion in this research was warranted because “Warriors of the Mind” focused on the weaponization of information – a tenet central to understanding war in the Information Age.

The final elective that deserved mention from the 2010-2011 catalog was “Global Dimensions of Information Operations” (IRMC 6227). This IRMC elective bore several similarities to the previously mentioned “Information Engagement and National Power” (IRMC 5408), also taught by the same college. However, it was unclear whether “Global Dimensions of Information Operations” was a natural evolution of IRMC 5408. That a connection exists is beyond doubt. Dr. Daniel T. Kuehl, who directed NDU’s program on information operations, instructed and almost certainly developed both courses (IRMC 5408 and 6227).<sup>822</sup> “Global Dimensions of Information Operations” examined information through the lens of international relations theory and analyzed how information, as an element of national power, overlapped with and supported the economic, diplomatic, and military elements: “it focuses on three key aspects of information power: critical information infrastructures, military information operations, and strategic communication.”<sup>823</sup> As the elective’s name implied, IRMC 6227 emphasized the power of information as a strategic tool capable of reaching a global audience. IRMC 6227 also looked at how the US and other nations used these three aspects of information power within the international system to pursue their interests. “Global Dimensions of Information Operations” considered information’s utility as a tool for weaker actors to favorably balance power disparities between and among nations, sub-national groups, non-state actors, and individuals.<sup>824</sup>

IRMC 6227 appeared to focus exclusively on the strategic level of operations and did not address joint doctrine. In addition, there was no mention of war or warfare anywhere within the course description. Yet, this elective was deemed significant because it introduced students to information as an element of national power alongside the other more traditional elements AND showed how different countries and groups used information compared to the US. Although the DIME construct had been used for some time, the hard aspects of power enjoyed the importance of place because they were easier to conceptualize.<sup>825</sup> The value of this course was that it appeared to challenge that paradigm; it provided students with an insight into what information could achieve in the digital age. This accords with the idea put forth in previous chapters: that information can be more robust and versatile than traditional hard power tools, such as military force.

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<sup>822</sup> Ibid, 13; NDU, “National Defense University AY 2005-2006 Electives Program Catalog,” 59; and Obituary for Daniel Timothy Kuehl, *Erie Times-News*, July 1, 2014, accessed December 5, 2023, <https://www.legacy.com/us/obituaries/erietimesnews/name/daniel-kuehl-obituary?id=32371907>.

<sup>823</sup> NDU, “AY 10-11 Electives Program Catalog,” 12.

<sup>824</sup> Ibid.

<sup>825</sup> DIME is an acronym to describe the elements of national power. It includes Diplomatic, Information, Military, and Economic power.

## 5. Period C (Late): 2012-2022

From 2012 through 2022, four years' worth of elective catalogs are available for analysis regarding the academic years 2014-2015, 2016-2017, 2019-2020, and 2021-2022. All these catalogs were included as part of this research. Like the middle period, there was good coverage; on average, every other academic year during the late period was part of the analysis. The first elective catalog evaluated came from the academic year 2014-2015 and yielded one course that satisfied the selection criteria.

That course is NWC's "Strategic Warfare in the 21st Century: New Domains, New Challenges" (NDU 6050). This course looked at emerging strategic capabilities such as precision global strike, cyber, and space operations and their effect on state-on-state competition and, by extension, the more extensive international system.<sup>826</sup> As the course title implies, emphasis was placed on competition in the "new" domains like space and cyber. It explored the implications for the US in the areas of "crisis management, deterrence, escalation, and military operations" when confronted by an adversary that possesses capability across multiple domains.<sup>827</sup> Interestingly, this course came from NDU's weapons of mass destruction (WMD) concentration, which tended to have specific course offerings focusing on weapons, proliferation, and arms control aspects rather than on the larger issue of war. NDU 6050 was a notable exception and was highlighted precisely because it examined these new domains.

During the 2016-2017 academic year, two elective courses were identified that satisfied the criteria for inclusion. Both came from NWC. The first was "Cyber Operations and National Security Strategy" (NWC 6005), which focused on using cyber at all three levels of warfare, tactical through strategic, and emphasized cyber as a tool in competition below the level of armed conflict.<sup>828</sup> The elective's stated purpose was to provide students with an understanding of how the US and its adversaries use "cyber technology to achieve their national security objectives."<sup>829</sup> This elective did not appear to draw heavily from joint doctrine. The cyber domain's emphasis on achieving national objectives prompted its inclusion in this research because it is yet another example of changes in the character of war. In addition, NWC 6005 was novel because it also represented a case in which an information-based, virtual instrument was deemed more valuable and effective than traditional "hard" tools of military power. Linking NWC 6005 to the broader context of events, it appeared in 2016 on the cusp of the US officially recognizing that it was competing with China, and the rise of the cyber domain as a prominent arena of Sino-US competition.<sup>830</sup>

The second NWC course (NWC 6007) examined broad change themes across military history. Notably, it focused on how "social norms, cultural traditions, political organization, and technology have affected the character and conduct of military

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<sup>826</sup> National Defense University, "National Defense University 2014-2015 Electives Program Catalog: Phase III" (Washington, D.C.: National Defense University, 2014), 26-27. The elective appears to focus exclusively on state actors, even though some of these capabilities, such as cyber, are also within the grasp of non-state actors.

<sup>827</sup> Ibid, 27.

<sup>828</sup> National Defense University, "National Defense University 2016-2017 Electives Program Catalog" (Washington, D.C.: National Defense University, 2016), 21.

<sup>829</sup> Ibid, 21.

<sup>830</sup> Open recognition that the US was competing with China can be linked to the DoD's publication of the National Defense Strategy in January 2018, which named China a strategic competitor.

operations;” it did this using several historical case studies.<sup>831</sup> The course considered war a human activity and sought to apply lessons from case studies analyzing the development of war in the 20th century.<sup>832</sup> Similar to the previous NWC elective, “Cyber Operations in National Security” (NWC 6005), “Themes in Military History” engaged with war holistically as it tried to chart the path of war’s ongoing evolution. Moreover, NWC 6007 compared war’s influence on humanity alongside factors such as culture, society, politics, and technology. The broad examination of war and recognition of its role in shaping the trajectory of humankind overlapped with this dissertation’s focus on the impact of changes in the character of war. More than any other factor, this last point mandated that “Themes in Military History” be included in this research.

Significant in the 2019-2020 academic year was the introduction of numerous courses dealing with information and influence operations. Although previous academic years contained electives that dealt with both topics, the academic year 2019-2020 significantly increased the number of courses that addressed this topic. Not every course merited inclusion because not all were relevant to war or warfare. Still, the following titles indicate the attention and breadth given to the two subject areas of information and cyber. The College of Information and Cyberspace (CIC) offered the majority, but not all, of these information-related electives. NWC continued to provide “Cyber Operations and National Security Strategy” (NWC 6005). Among the most significant of these electives was “Infrastructures and Information Operations” (CIC 6025), which described the “fragility” of national critical infrastructures and their vulnerability to cyber and information exploitation and subversion.<sup>833</sup> Other CIC titles such as “Cyber Terrorism and Cyber Crime” (CIC 6026), “How Influence Works: The Technology Behind It” (CIC 6045), “Terrorism and Crime” (CISA 6978), and “Terrorism and Information Warfare” (CIC 6046) followed in the same vein and indicated a high level of interest in the subject. These courses addressed aspects of terrorist and criminal organizations exploiting the information environment because such tactics are effective, accessible (both economically and practically), and relatively low risk. Connected to this phenomenon was the nexus that exists between terrorist groups, criminal organizations, and states seeking to achieve an asymmetric advantage by working with one or both groups as they compete with stronger conventional powers such as the US.

The re-emergence of “great power competition” occurred during this period as the US military and Department of Defense evaluated the threats facing them as the US drew down its military involvement in the Middle East and Afghanistan. The US shifted its focus away from non-state terrorist organizations to states. China and Russia were the two most potent and capable adversaries facing the US. The 2018 National Defense Strategy and National Military Strategy addressed China’s rise as a strategic competitor and Russia’s resurgence on the world stage.<sup>834</sup> In 2019, General Joseph Dunford, the 19th Chairman of the Joint Chiefs, released a memorandum titled “Special Areas of Emphasis (SAE) for Joint Professional Military Education in Academic Years 2020 and 2021.” SAE were topics identified by the Joint Staff for inclusion into the PME curriculum such that it kept pace

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<sup>831</sup> NDU, “National Defense University 2016-2017 Electives Program Catalog,” 52.

<sup>832</sup> Ibid.

<sup>833</sup> National Defense University, “National Defense University 2019-2020 Electives Program Catalog” (Washington, D.C.: National Defense University, 2019), 8.

<sup>834</sup> Joint Chiefs of Staff, *Description of the National Military Strategy 2018*, 2; and U.S. Department of Defense, *Summary of the 2018 National Defense Strategy of the United States of America*, 2.

with current events or otherwise met an identified need.<sup>835</sup> The Chairman's memorandum identified six SAEs, the first two being "The Return to Great Power Competition" and "Globally Integrated Operations in the Information Environment."<sup>836</sup> These two SAEs corresponded to and explained NDU's strategic influence, great power competition, and the increase in courses related to information and influence operations.

In his memorandum that introduced "The Return to Great Power Competition" SAE, the Chairman further stipulated that he wanted NDU students to understand "the complex and dynamic character of competition between the United States and great power threats and the implications of future warfare," as a distinct component of their instruction.<sup>837</sup> The following month, the Joint Staff released Joint Doctrine Note 1-19 on the Competition Continuum, which legitimated competition as a normal state behavior within the international system and gave doctrinal context to the military.<sup>838</sup> Many US officers had grown up professionally with an "artificial" dichotomy in which peace and war were the only choices. These officers likely acknowledged that a vast "grey zone" existed between the two in which the military has significant utility and scope for action.<sup>839</sup> Although the Chairman's memorandum directed NDU to act beginning with the academic year 2020-2021, NDU appeared to have anticipated the requirement and made the change one year earlier in 2019-2020. While it is not unusual for verbal guidance to precede written directives in the US military, there may be another explanation. Namely, topics relating to competition between states and great powers were already popular in military and foreign policy literature for some years before the Chairman issued his guidance to the JPME institutions.<sup>840</sup> It is likely that NDU was responding to this trend in scholarship.

Given this guidance from the Chairman and the Joint Staff, two purpose-built electives seem to have addressed the lacunae identified in the memorandum and the doctrine note. These were CIC's "Influence Warfare" (CIC 6047) and the Eisenhower School's "Great Power Competition in an Economic Age" (ES 6028). The course description for CIC6047 is brief, consisting of 56 words. Yet the elective's approach to the topic was evident in that it exposed students to tools "outside traditional instruments of state power" such as disinformation, subversion, sabotage, *kompromat*, *Szalámítaktika* (salami-slicing tactics), and deception.<sup>841</sup> Based on the partial list of methods in the description, the course was informed by Russian and Chinese actions like *kompromat*, which uses compromising material to de-legitimize opponents and the systematic use of incremental moves over time to alter

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<sup>835</sup> Chairman of the Joint Chiefs of Staff, "Special Areas of Emphasis for Joint Professional Military Education in Academic Years 2020 and 2021" (official memorandum, Washington, D.C.: Department of Defense, May 6, 2019), 1-2, accessed December 11, 2023, [https://www.jcs.mil/Portals/36/Documents/Doctrine/education/jpme\\_sae\\_2020\\_2021.pdf](https://www.jcs.mil/Portals/36/Documents/Doctrine/education/jpme_sae_2020_2021.pdf). Special Areas of Emphasis distinguish themselves from Joint Learning Areas (JLAs) in that the former are intended to address short-term knowledge gaps. In contrast, JLAs are longer-term and serve as foundational pillars of the JPME curriculum.

<sup>836</sup> *Ibid.*, 1.

<sup>837</sup> *Ibid.*, 1-2.

<sup>838</sup> Joint Chiefs of Staff, "Competition Continuum," Joint Doctrine Note 1-19 (Washington, D.C.: Joint Chiefs of Staff, June 3, 2019), v, accessed December 6, 2023, [https://www.jcs.mil/Portals/36/Documents/Doctrine/jdn\\_jg/jdn1\\_19.pdf?ver=2019-06-10-113311-233](https://www.jcs.mil/Portals/36/Documents/Doctrine/jdn_jg/jdn1_19.pdf?ver=2019-06-10-113311-233).

<sup>839</sup> *Ibid.*, 1-2.

<sup>840</sup> A search of the online archive for *Foreign Affairs* and *Joint Forces Quarterly (JFQ)* revealed articles relating to competition that appeared as early as September 2016 and July 2017 for *Foreign Affairs* and *JFQ*, respectively.

<sup>841</sup> NDU, "National Defense University 2019-2020 Electives Program Catalog," 9.



the status quo known as salami-slicing.<sup>842</sup> The course was a primer for irregular warfare in the Information Age. It also supported the idea of postmodern war in which states manipulate information, meaning, and perception to achieve objectives that would not be possible through overt force.

The Information Technology Revolution vastly increased the power of information beyond what had been the case in previous eras. This change in information affected other elements of national power. In some cases, it increased their relative effectiveness and elevated them as viable means to achieve what, in the past, would have likely required military force. Acknowledging this changed reality, the Eisenhower School offered “Great Power Competition in an Economic Age: The U.S., China, and Public-Private Innovation.” According to the description, the purpose of this course was to open students to the idea that competition has many modalities and is not restricted to any single element of power. It is certainly not the exclusive purview of the military. This course looked at the American and Chinese economies and the role of technology and innovation in both systems, and then it examined the national security implications resulting from this comparison.<sup>843</sup> The intent was to uncover and explore opportunities for the US to outcompete or gain a comparative advantage over the Chinese.<sup>844</sup> Although this course did not deal with the phenomenon of war per se, it is included in the research because it coincided with the Joint Staff’s emphasis on competition and the idea that competition and conflict in the Information Age extends well beyond the traditional clash of arms.

During the 2021-22 year, five courses dealt with war or warfare holistically and offered the potential for original thought. Two of the four courses were recurrent offerings and examined earlier in this chapter. The descriptions for these courses remained the same, and an examination of the NDU elective catalog for 2021-2022 confirmed that there were no changes. These repeat courses were “Influence Warfare” (CIC 6047) and “Cyber Operations and National Security Strategy” (NWC 6005). Of the two new additions, the most significant was “Innovation, Technological Change, & Warfighting in an Era of Great Power Competition” (NDU 6074). This elective was offered by NDU and looked at how the introduction of new technologies changed the conduct of warfare. Proceeding from the standpoint that technological advances today are changing the character of contemporary war, this elective sought to have the students extrapolate and project what the implications of this change might be when fully realized.<sup>845</sup> Shaped by the Chairman’s SAE on the return to great power competition, this course went beyond merely exploring changes in the conduct of war. It prompted students to consider the political and institutional implications such changes might have for the military as a profession.<sup>846</sup> This elective was especially pertinent to this study for two reasons. First, it accepted the changing character of war as a central proposition. Second, the course required students to consider how that changing character shaped great power competition.

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<sup>842</sup> Andrew Higgins, “Foes of Russia Say Child Pornography is Planted to Ruin Them,” *New York Times*, last modified December 9, 2016, accessed December 11, 2023, <https://www.nytimes.com/2016/12/09/world/europe/vladimir-putin-russia-fake-news-hacking-cybersecurity.html? r=0>; and Ivo Daalder, “Beware China’s Salami Tactics in Taiwan,” *Politico*, last modified June 1, 2023, accessed December 11, 2023, <https://www.politico.eu/article/beware-china-salami-tactics-in-taiwan-strait-invasion-united-states/>.

<sup>843</sup> NDU, “National Defense University 2019-2020 Electives Program Catalog,” 37.

<sup>844</sup> *Ibid.*

<sup>845</sup> NDU, “National Defense University 2021-2022 Electives Program Catalog,” 24.

<sup>846</sup> *Ibid.*

The information and intelligence-focused CIC offered the final elective course, “Cyber Warfare” (CIC 6021). As the course name implies, this elective explored the evolution of cyber as an independent warfighting domain and the importance of that domain to US strategic interests.<sup>847</sup> At first look, this course appeared too narrowly oriented for this research because it delved into specific cyber activities such as encryption, privacy, data mining, and social networking.<sup>848</sup> There was also nothing in the course description that explicitly identified war as a phenomenon. While these observations are valid, the elective description was explicit that discussion of the cyber domain and cyber capabilities took place within the context of military operations in addition to providing “...technical, legal, and policy background.”<sup>849</sup> Consistent with this study, the course could not but deal with whether cyber actions be considered acts of war. This point is relevant to the theme that war in the Information Age has seen the “weaponization” of other domains and elements of power. This weaponization has had the effect of pushing war well beyond its traditional military bounds. NDU had previously offered elective courses on cyber before CIC 6021. Cyber and information are essential subjects at NDU; the existence of the College of Information and Cyberspace attests to this fact, as does the past decade and a half of electives on the topic. What was different in the case of this most recent “Cyber Warfare” elective was the changed context. By 2021, malicious or subversive cyber activities had become a fact of everyday life with Russia’s attempt to influence the 2016 American presidential election and Chinese malign actions in the cyber domain.<sup>850</sup> In previous academic years, the cyber domain was more theoretical than real for the military layperson. In 2021, CIC 6021 presented the reality of cyber as an everyday tool of competition.

## 6. Conclusion

There is ample evidence that the US Military’s senior joint PME institution changed how it taught about warfare over the past thirty years. This change was consistent with what the military was absorbing and learning as it conducted operations. In its electives program, the National Defense University offered courses that examined war holistically and enabled exploratory or original thinking. In many instances, these courses encouraged thinking beyond the conceptual boundaries of contemporaneous joint doctrine. Across all years and periods of observation, many of the electives satisfied the criteria of addressing war or warfare as a phenomenon related to information or some facet of military operations in the information environment. In some cases, the elective focused on the use of information in war and competition. For example, many electives related to cyber or the use of information to gain influence or subvert the influence and legitimacy of others and how this changed the landscape of traditional war. In other cases, the elective topics were broad and dealt with the

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<sup>847</sup> Ibid, 38.

<sup>848</sup> Ibid.

<sup>849</sup> Ibid.

<sup>850</sup> David E. Sanger, David Barboza, and Nicole Perlroth, “Chinese Army Unit Is Seen as Tied to Hacking Against U.S.,” *New York Times*, February 18, 2013, accessed December 12, 2023, <https://www.nytimes.com/2013/02/19/technology/chinas-army-is-seen-as-tied-to-hacking-against-us.html>; Karen Yourish, Larry Buchanan, and Derek Watkins, “A Timeline Showing the Full Scale of Russia’s Unprecedented Interference in the 2016 Election, and Its Aftermath,” *New York Times*, September 20, 2018, accessed December 12, 2023, <https://www.nytimes.com/interactive/2018/09/20/us/politics/russia-trump-election-timeline.html>.

Information Age and its effect on the nation-state and the more extensive international system. Other electives addressed the impact of information and the cyber domain on national security issues, such as the impact on defense policy and strategy formulation. In every case, the selected courses related to postmodern war and the conduct of war in the Information Age. This was especially true as it related to the weaponization of non-military elements of state power enabled by the advances of the Information Age.

Looking at the courses, specific themes or topics are readily discernable depending on the observation period. These topics were related to whatever important issue the Joint Staff or department was struggling with at the time and subjects in which the Joint Staff wanted to see the force educated. The guidance for the latter was contained in an appendix of the Chairman's instruction on "Officer Professional Military Education Policy" or OPMEP, which listed the Joint Learning Areas for the senior-level PME institutions.<sup>851</sup>

The RMA or Revolution in Military Affairs and the Joint Force were the two main themes observed from the electives during the first observation period (1991-2001). Given the context of the US military's then relatively recent operational success during Operation Desert Shield/Desert Storm in the early 1990s, emphasizing joint warfighting and the lessons of the RMA is unsurprising. Not only did the US military's victory over the Iraqi Army herald the arrival of the RMA, but it also validated joint warfighting in what had been its first substantial test in large-scale operations against an Iraqi Army that had been tested in the grinding attrition of the Iraq and Iran War (1980-1988).<sup>852</sup> The topic of military transformation became evident as an explicit theme during this research segment's final observed academic year (2000-2001). This was due to the influence of then-Secretary of Defense Donald Rumsfeld, who championed the "Transformation" initiative. This multi-faceted initiative comprised many programs across the US military, to realize the lessons of the RMA and incorporate "new ways of thinking and new ways of fighting" into the force.<sup>853</sup>

Transformation carried over into the second period from 2002 to 2011, a time dominated by the War on Terror. Although the US military was engaged globally in combatting terrorism operations, the campaigns in Afghanistan and Iraq were the most significant in terms of national effort, which included military and non-military nation-building operations. What began as military interventions in both countries soon evolved into significant whole-of-government efforts to create functioning states. Unsurprisingly, topics relating to terrorism figured prominently within the NDU curriculum from 2002 to 2011. The curriculum shaped perspectives on counterterrorism and counterinsurgency in the Information Age. In addition, the US military was also engaged in combatting terrorism operations in other countries like Somalia, Morocco, and the Philippines. Such operations typically involved lower levels of effort and overall violence. What these minor campaigns lacked in violence and the overt use of military force, they made up for in using information

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<sup>851</sup> Joint Chiefs of Staff, "Officer Professional Military Education Policy," CJCSI 1800.01F, A-B-1.

<sup>852</sup> In the early 1990s, the Iraqi Army was considered battle-tested, one of the five largest armies in the world, and considered well-equipped for a Middle Eastern army. For more, see Pesach Malovany, *Wars of Modern Babylon: A History of the Iraqi Army from 1921 to 2003* (Lexington: University of Kentucky Press, 2017), 493, 495, accessed May 30, 2024, ProQuest Ebook Control.

<sup>853</sup> Rumsfeld, "Transforming the Military," 21, 26.

to shape the larger strategic narrative and influence target populations.<sup>854</sup> A core issue of this time was the ability of violent extremist organizations to radicalize individuals within western states. This led to an open question of whether those states could compete equally regarding strategic messaging and counter-messaging.<sup>855</sup> Similar to military transformation, an emphasis on information operations straddled this and the following research period.

During the final 2021-2022 period, information operations and strategic influence remained an important topic, albeit the focus had shifted from violent extremist organizations to countering the impact of state actors. What was also apparent during the later part of the period was the return of the state as an adversary after several decades of focus on counterterrorism and counterinsurgency against non-state actors. Beginning around 2016, the curriculum shifted across the four NDU colleges to address state-on-state cooperation, competition, and conflict that had re-emerged as the norm within the international system. Great power competition became the preferred term, and the 2019 publication of Joint Doctrine Note 1 on “Competition” cemented its use. Other themes within the last observation period were cyber and influence operations within the SAEs of “The Return to Great Power Competition” and “Globally Integrated Operations in the Information Environment.” Both fell squarely within the realm of war in the Information Age.

Throughout these periods, the Joint Staff use of SAEs and JLAs demonstrated how the NDU curriculum remained relevant to the needs of the US military in a changing environment. NDUs' response to Joint Staff learning requirements across three decades' worth of curriculum was interesting, as it was possible to see elements of continuity and change. That observation notwithstanding, the primary purpose of the NDU-related research was to identify whether NDU facilitated original thinking about the changing character of war.

Some electives holistically dealt with war and encouraged the generation of original thought. The critical and salient finding is that there were such elective courses. Many of these courses challenged students to think about the phenomenon of war holistically, going beyond focusing on specific aspects or “types” of conflict. Although it is impossible to trace a straight line between these electives and any specific technological or doctrinal advance in the US military, these classes pushed students to go beyond joint doctrine, prompting them to think critically about the challenge of future conflict in the Information Age. It can be opined that these NDU electives ultimately acted as the progenitors of new knowledge in a manner akin to Ludwik Fleck's thought collectives and thought styles.

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<sup>854</sup> Hady Amr and P.W. Singer, “To Win the “War on Terror,” We Must First Win the “War of Ideas”: Here's How,” *Annals of the American Academy of Political and Social Science* 618 (2008): 213-214, accessed December 12, 2023, <https://heinonline.org/HOL/Page?handle=hein.cow/anamacp0618&id=201&collection=cow&index=>

<sup>855</sup> Dylan Gerstel, “ISIS and Innovative Propaganda: Confronting Extremism in the Digital Age,” *Swarthmore International Relations Journal* 1, no. 1 (2016): 1, accessed December 12, 2023, <https://works.swarthmore.edu/cgi/viewcontent.cgi?article=1004&context=swarthmoreirjournal>.

## Chapter 9 - Conclusion

The Information Age changed the character of war into what this dissertation calls postmodern war. This choice for postmodern war is deliberate and intended to highlight the power of information and its outsized role in contemporary warfare. This change constitutes a significant paradigm shift regarding how human beings wage war. The work of Thomas Kuhn, an American philosopher of science, best explains the nature of this shift. Kuhn wrote *The Structure of Scientific Revolutions* in the early 1960s about paradigms within the physical sciences. He discussed how paradigms arise, gain prominence, and are, in turn, destroyed as new paradigms replace earlier ones. The US military is in the middle of a paradigm shift regarding waging war in the Information Age. The fact that previously effective methods of warfare can no longer achieve the desired objectives indicates this paradigm shift. A new way of thinking about the war must be created. This has caused the US military to adjust its thinking on warfare despite having a strong institutional preference for industrial warfare. Industrial warfare is how the US fought the First Gulf War in 1991. It represents an earlier and preferred paradigm using highly lethal, massed mechanized formations enabled by technology.

America's adversaries took note of how the US military performed in the deserts of Iraq and Kuwait. They concluded that it would be unfeasible to challenge the US military head-to-head in a conventional conflict. Instead, America's adversaries, especially those lacking traditional military power, opted to pursue asymmetric approaches designed to avoid or mitigate US conventional military advantages. The Information Age and the democratization of information provided the primary avenue for this challenge. Everyone on the planet now has access to some form of modern information technology connected to the global information environment. With this technology, individuals can reach an international audience. The Information Technology Revolution expanded the ability to challenge the US asymmetrically by competing below the level of armed conflict. The question is whether the facts of this reality have caused the US military to change its conception of war from one rooted in the Industrial Age to one informed by the Information Age. To answer this question, this dissertation explored US military doctrine for evidence of change.

Doctrine, especially in the military, constitutes accepted wisdom and an excellent location to begin answering the research question. The choice for joint doctrine over service-level doctrine was clear. Choosing the latter risked presenting a narrower, service-specific position. The former applies to all the US Military Services. Joint doctrine enables joint warfare, best described as "team warfare."<sup>856</sup> The military services collaborate to enhance their strengths and mitigate weaknesses. Using content analysis, this dissertation looked for references within joint doctrine relating to the condition of war and the activity of warfare. This included associated theories of war to facilitate the reader's understanding of doctrine and war in general.

There is also a supporting stream of research in this dissertation that explores the creation of new knowledge within the US military. This stream looks at one route by which new ideas make their way into the military and, by extension, joint doctrine. The last chapter

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<sup>856</sup> Joint Chiefs of Staff, *Joint Warfare of the US Armed Forces*, ii.

examined the National Defense University and its resident colleges as a significant “thought collective” or generator of new knowledge within the US military. Specifically, the focus was on NDU’s elective program because it keeps pace with changes in warfare. The work of Ludwik Fleck provided the rationale underpinning the creation of new knowledge and NDU’s role as a thought collective. National Defense University and its four subordinate colleges perform this function for the US military, generating new ideas and comprehension that influence national security practitioners and, eventually, future joint doctrine.

The literature surveyed for this dissertation enabled a thorough review of the current state of the field in Military or War Studies and its relationship to the research question. The review did not find any works that addressed the unique research question of how the US military conceptualized war as a human activity, specifically any work that used joint doctrine as a lens. This finding speaks directly to the dissertation’s contribution and value to the larger War Studies field. The literature review explored three areas of War Studies. The first was the changing character of war and whether such changes caused the US military to modify its thinking on warfare. In keeping with 1991 as the start of the inquiry, this dissertation focused on the period since the end of the Cold War, starting with the end of the First Gulf War. Much of this literature belonged to the “new wars” school, which wrestled with the changes in the character of war in the late 1990s and early 2000s. Mary Kaldor coined the term “new wars” to capture conflicts in which at least one combatant was a non-state actor with access to modern weaponry and information technology. In addition, the antagonists stoked conflict to enrich themselves monetarily instead of the more traditional objectives of acquiring territory or resources. The warring parties used war to control the local population. Conflict was an activity unto itself, not a means to resolve disputes. Asymmetries, i.e., the pitting of a strength against a weakness or the ability to mitigate a strength, figure prominently in the “new wars,” especially in cases where a non-state actor fought against a state.

Within the past decade, the prevalence of non-state actors vying with states has receded and been replaced by the return of state-on-state conflict and competition. This shift is characterized by China’s rise as a near-peer competitor to the US and Russia’s attempt to reassert control over the territory of the former Soviet Union. These events are not unique within the international system, especially when viewed against the longer ebb and flow of history. Empires rise and fall, and states achieve regional power only to see that power recede over time.<sup>857</sup> What has changed is information and the power it holds. For better or worse, the Information Technology Revolution has connected humanity to a degree unprecedented in human history. Broadly labelled under the term “globalization,” information and its associated technology are now ubiquitous. The speed at which information flows worldwide has made the world smaller in relative terms. Humanity is living in the Information Age, and its full effects have yet to be fully realized. Despite its ongoing nature, the Information Age has already produced many profound changes in the character of contemporary conflict. Practitioners and scholars have created a variety of terms such as “hybrid warfare,” “grey zone conflict,” and others to describe the phenomenon of war in the Information Age. This dissertation settled upon “postmodern war” as the preferred term for contemporary conflict; precisely because it best captures the

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<sup>857</sup> Paul Kennedy, *The Rise and Fall of the Great Powers: Economic Change and Military Conflict from 1500 to 2000* (New York: Vintage Books, 1989).

newly realized power of information, the subjectivity of meaning intrinsic to postmodernism, and which is necessary to weaponize information.<sup>858</sup> More familiar to scholars and practitioners are terms like “hybrid warfare” and “grey zone conflict.” The former describes the variability of the weapons, forces, and methods employed in contemporary conflict, while the latter describes the ambiguous environment between peace and war in which states compete. Grey zone conflict can involve direct military conflict but exists below the threshold of war.

Expectedly, there is a broad diversity of opinion on what constitutes “hybrid warfare” and “grey zone conflict.” It is established that contemporary warfare frequently emphasizes using information and shaping perception to influence specific audiences. “Hybrid war” often involves the use or weaponization of non-military elements of power to achieve outcomes that would formerly have required the use or threat of force.<sup>859</sup> State and non-state actors use non-military tools like information, trade, or law to create favorable conditions for achieving their objectives short of using military force. States seek to manage the risk of escalation by keeping competition below the threshold of armed conflict. Mark Galeotti referred to this phenomenon as the “weaponization of everything.”<sup>860</sup> In practice, it allows a weaker opponent to gain an asymmetric advantage against a more potent adversary and manage the risks of escalation.

The second area of exploration in the literature review was the American way of war. How the US military engages in warfare informs and is informed by how it thinks about the phenomenon of war. As the seminal work on the topic, Russell Weigley’s *The American Way of War* (1973) was the point of departure. More recent scholarship offered a more nuanced and complex view of the US approach to conflict. The work of Antulio Echevarria was especially significant for two reasons. First, Echevarria’s work was recent and timely, covering the US military’s recent experience in Afghanistan and Iraq. Second, Echevarria focused on how the US military waged war and less on how it thought about war in the abstract, which was Weigley’s approach. Echevarria presented the American approach as more than what Weigley portrayed as a binary choice between strategies of annihilation or attrition. He maintained that the US military draws from various strategic approaches. Moreover, the approach is rooted in the prevailing military and political circumstances of the times. Echevarria’s focus on how the US wages war as opposed to how it thinks about war may seem at odds with this dissertation, primarily when the latter seeks to understand what the US military thinks about war as a human activity. This point of contention is reconciled by Echevarria’s focus on how the political, social, and military contexts influenced the US military’s strategic approach in previous conflicts. In this light, Echevarria provided insight into the US military’s approach to making war, which is helpful for this dissertation.

The third and final area explored in the literature was doctrine and its role in military organizations. Doctrine educates new military members by providing a standard for military operations. Simultaneously, it exerts a unifying force across organizations, enabling them to cooperate effectively on the battlefield. This is the case for the US joint force. Joint doctrine unifies the various services, enables their cooperation on the battlefield, and produces a synergistic effect where the effect of the whole is greater than the sum of its parts. This outcome is possible only because the US military sees joint doctrine as a repository of

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<sup>858</sup> Ehrhart, “Postmodern Warfare and the Blurred Boundaries Between War and Peace,” 264.

<sup>859</sup> Solmaz, “Hybrid Warfare: One Term, Many Meanings.”

<sup>860</sup> Galeotti, *The Weaponization of Everything*, 10.

“accepted truth.”<sup>861</sup> Having established the state of the literature, this dissertation next explored Russian, Chinese, and Israeli perspectives on contemporary conflict to provide alternatives to the American view of postmodern warfare.

The first two cases were Russia and China, which the US considers its two most dangerous adversaries. Israel, the third example, is a valuable case because it shows a smaller state's response to the challenge of postmodern war. Russia and China are both practitioners of asymmetric and hybrid warfare. Both states share an expansive view of conflict that is better seen as a state of omnipresent competition between opposing systems. Viewed in this manner, the level of conflict ebbs and flows with events but never decreases. Sometimes, it is low, and there is no overt violence save competition between opposing narratives. At other times, the level rises and gives way to crises involving the open use of force. Such events require careful management to avoid escalation, especially when one or more of the states possess nuclear weapons.<sup>862</sup> There is, however, never true peace. States are consistently positioning and looking for opportunities to exploit to their advantage. This view tends to be a feature of authoritarian states and shares many similarities to the Cold War between NATO and the Warsaw Pact. A world view wherein the participants are constantly engaged in some form of conflict negates the more traditional peace versus war dichotomy. It creates the space in which competition occurs: the so-called “grey zone.” Within the “grey zone,” all elements of national power can be employed to gain an advantage. Even force is permissible, so long as the risk of escalation is managed, and violence remains below the level of armed conflict. George Kennan envisioned this in his concept of political warfare, i.e., applying all facets of state power short of war to increase one's influence at the expense of a rival.<sup>863</sup>

Exploring Russian and Chinese perspectives on postmodern war and comparing them to the American perspective also revealed how opposing sides influence one another's thinking. In other words, America's thinking on war and that of its two main adversaries are mutually constitutive. Both sides influence each other's understanding and responses to the same or similar phenomenon. In this instance, both sides impact the other's knowledge of hybrid warfare. However, what each side perceives might not reflect reality. This observation certainly reflects Russia's understanding of and response to hybrid warfare. Russia believes that the US and its allies were behind the Arab Spring and the “color” revolutions in Eastern Europe. From the Russian perspective, hybrid warfare is an American invention. While there was undoubtedly overt American diplomatic and non-materiel support for pro-democracy movements, the more plausible explanation leads back to weak and unpopular authoritarian regimes ruling over populations harboring longstanding grievances. Although subversion cannot be discounted entirely, the likelihood is low that the US conducted unconventional warfare campaigns in multiple countries without attracting international attention.

Seen through Russian eyes, hybrid warfare is not war. It is a whole-of-government effort to set conditions for Russia to achieve its strategic objectives. At the heart of *gibridnaya voyna* is a comprehensive information and subversion campaign designed to influence a target

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<sup>861</sup> Jackson, *The Roots of Doctrine*, 6.

<sup>862</sup> This desire to control escalation through deterrence applies to strong and weak states alike. Russia used the threat of broader military action in 2014 to dissuade the Ukrainians from a more forceful response to Russia's seizure of Crimea. During the ongoing Russo-Ukrainian War, the Russians delayed, and in some cases prevented, NATO support to Ukraine by threatening the potential use of nuclear weapons.

<sup>863</sup> Kennan, “The Inauguration of Organized Political Warfare,” 1.



state's governance and geostrategic orientation.<sup>864</sup> There may be a conventional military force, but it is subordinate to the information component.<sup>865</sup> While this explains Russia's perception, there is also the matter of Russia conducting hybrid warfare from the perspective of the West. What Russia calls New Generation Warfare captures the West's understanding of hybrid warfare. This is Russia's strategic approach that seeks to achieve advantage through subversion or the erosion of an opponent's will. Many of the information tactics and techniques employed in NGW have their roots in Soviet-era revolutionary and counter-revolutionary agitation and Soviet methods of reflexive control.<sup>866</sup> While there are many similarities between NGW and *gibridnaya voyna* regarding the use of information and other non-military elements of power, *gibridnaya voyna* emphasizes actions in the cognitive over those in the physical domain.<sup>867</sup> NGW hybrid campaigns culminate with the employment of hard military power, whether in the form of special operations, as was the case with the annexation of Crimea or conventional military forces, as happened in 2024 in Ukraine. This reliance on military power as the *coup de grace* places NGW squarely within the war genre, regardless of the emphasis placed on using non-military tools and actions in domains other than the physical. However, it would be a mistake to interpret this last point as a judgment on the efficacy of any single hybrid warfare approach. Instead, there are two lessons. The first relates to the almost infinite number of variations that hybrid warfare can take. This makes hybrid warfare a flexible tool but the flexibility and variations contribute to the ambiguity and questionable utility of the term. The second point is the preeminent role information plays in postmodern war, regardless of the form it assumes. Even when hybrid warfare features conventional military force, such as in Russian NGW, information frequently eclipses traditional military instruments in effectiveness and carries a lower risk of escalation.

The Chinese appear to have learned this lesson and appreciate information's power. This appreciation underpins China's three warfares, which consists of public opinion (*yulun zhan*), lawfare (*jalu zhan*), and psychological manipulation (*xinli zhan*). From China's perspective, there is no requirement for a "hard" finish or the use of traditional military power, unless it makes for a more effective strategy. Like Russia's *gibridnaya voyna*, China's three warfares are modern expressions of Kennan's political warfare. Here, the state uses all the tools at its disposal to degrade and undermine an adversary's influence, while enhancing its own.<sup>868</sup> However, the three warfares traces its roots back to China's Warring States period (475 BCE to 221 BCE).<sup>869</sup> Philosopher Sun Tzu wrote on strategy and warfare over two thousand years ago, delivering lessons that remain applicable today. Reading Sun Tzu, it is easy to see the linkage between postmodern war and the importance of deception and defeating the enemy's strategy over destroying his army.<sup>870</sup>

In the case of Russia and China, this expansive view of conflict is rooted in their historical experiences, whether that be Russia's revolutionary and counterrevolutionary

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<sup>864</sup> Fridman, *Russian "Hybrid Warfare,"* 132-133, 135.

<sup>865</sup> Ibid.

<sup>866</sup> DeBenedictus, *Russian "Hybrid Warfare,"* 207-208.

<sup>867</sup> Berzins, "Russian New Generation Warfare is not Hybrid Warfare," 44-45.

<sup>868</sup> Kennan, "The Inauguration of Organized Political Warfare," 1.

<sup>869</sup> Ota, "Sun Tzu in Contemporary Chinese Strategy," 76.

<sup>870</sup> Fumio Ota, "Sun Tzu in Contemporary Chinese Strategy," *Joint Force Quarterly* 73 (April 2014): 78-79, accessed January 9, 2024, <https://ndupress.ndu.edu/Media/News/News-Article-View/Article/577507/sun-tzu-in-contemporary-chinese-strategy/>.

struggle or the importance of Sun Tzu to Chinese strategic thought.<sup>871</sup> This connection to the past partially explains Russia and China's preference for hybrid warfare approaches but does not fully explain it. Within the contemporary space, hybrid warfare appears purpose-built to support a worldview of omnipresent conflict and competition between states. More importantly, it effectively mitigates much of the US military's conventional advantage. This makes hybrid warfare an ideal tool for Russia and China, which consider themselves the weaker party in any military confrontation with the US. However, they are not the only two states that have expanded their notion of war beyond the traditional.

Israel holds a similar view of conflict given its small size, geographic location, and the fact that adversaries surround it. The Israeli Defense Force created a strategic approach known as the Campaign Between Wars (CBW) to address the challenge of its geostrategic situation and changes in the character of war. Beginning in the 1980s, the character of Israel's conflicts changed from high-intensity conventional fights between nation-states to lower-intensity conflicts fought against non-state actors such as the terrorist organizations Hamas and Lebanese Hezbollah. In these more recent conflicts, Israel was unable to achieve durable outcomes using its military without unacceptable political consequences. In addition, the IDF saw its military advantage dwindle as the Palestinian and Lebanese terrorist organizations increased their capability and lethality. In 2006, the IDF suffered significant losses against Hezbollah in the Second Lebanon War and recognized the need to change its strategic approach.

CBW acknowledges that it is neither feasible nor realistic to defeat non-state terrorist organizations decisively. Instead, this approach sought to use military force to keep them off balance, thereby preventing spectacular attacks against the Israeli homeland. The strategic logic is that routine but limited use of the IDF would keep the enemy off balance and allow Israel to prepare for more significant conflicts. CBW recognizes information's outsized role in warfare, but information is not the primary bid for success. The IDF conducts information operations to support military action, degrade the enemy, and exploit opportunities within the information environment. These actions in the information environment are intended to preserve Israel's freedom of action while depriving the enemy of the same. The main critique of the CBW was its inability to deliver a way out of Israel's long-term strategic problem. Against terrorist organizations such as Hamas and Hezbollah, the CBW did nothing to force them to change their strategic calculus, especially as the group's first principle is the destruction of the Israeli state. Seen in this light, Hamas' attack against Israel on October 7, 2023, points to the CBW's failure as a strategic approach.<sup>872</sup> Even if the CBW did not succeed, it highlighted the IDF's attempt to face postmodern war and information's role as a critical component.

Having explored the US approach to warfare and cases from three other states, the next step was to evaluate US joint doctrine and the elective offerings at the National Defense University since the early 1990s and the end of the First Gulf War. Using inductive and

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<sup>871</sup> Pieter W.G. Zhao, "Chinese Political Warfare: A Strategic Tautology? The Three Warfares and the Centrality of Political Warfare within Chinese Strategy," *The Strategy Bridge*, last modified August 28, 2023, accessed January 9, 2024, <https://thestrategybridge.org/the-bridge/2023/8/28/chinese-political-warfare-a-strategic-tautology>.

<sup>872</sup> Although not included in this research, Hamas' October 7, 2024, attack which resulted in the deaths of 1200 Israelis and the abduction of another 253 individuals must received at least a cursory mention. Hamas' ability to defeat Israel's border security and inflict such damage dealt a severe psychological blow to the Israeli population. This effect was likely part of Hamas' strategic calculus.

abductive reasoning, this dissertation employed a longitudinal approach to find evidence of change in how joint doctrine described and explained war over time. A second, minor research effort looked at the electives program at NDU, and how its elective courses dealt with war and warfare. The dissertation drew inferences about the US military's position on war from this initial data. Abductive reasoning used Thomas Kuhn's ideas on paradigm shifts and Ludwik Fleck's concepts of "thought collectives" and "thought styles" to explain change.<sup>873</sup>

This dissertation examined three levels of joint doctrine. The highest level was the capstone doctrine, which consists of one publication, *Joint Warfighting*. Joint Publication 1 (JP 1) presents a holistic explanation of how the US military conducts joint warfare; it also addresses command and control of military forces across the military services and US allies and partners. Keystone publications are the next lower level in the hierarchy, organized by joint functions, or what is more readily recognized as the traditional Napoleonic staff functions of intelligence, operations, logistics, planning, and communications. Of these five functions, this dissertation analyzed the intelligence, operations, and planning series because they are most closely aligned with warfare and related more directly to combat than the logistics series. While logistics is critical to sustaining warfare, it supports combat operations rather than contributing to them directly. Of these three, operations are the most important to this dissertation because the ideas and concepts within JP 3-0, *Joint Operations*, inform and connect with those in the capstone JP 1. Core doctrine publications were the lowest level joint doctrine considered in this dissertation. These publications were also the most narrowly structured in terms of subject, often focusing on specific functions or types of operations such as counterterrorism, information, and space operations.

The capstone JP 1 gave war and warfare more extensive treatment as a human activity than any other joint doctrine publication, including the JP 3-0 operations series. When comparing the eight successive editions of JP 1, what stood out was the increasing complexity and nuance with which the publications dealt with the phenomenon of war. The JP 3-0 mirrored this increased complexity and attention to the phenomenon of war. However, the operations series was typically two years behind the most current version of JP 1 because of the publication revision cycle. Over time, the amount of content devoted to explaining theories of war from philosophers like Clausewitz, Jomini, and Sun Tzu increased in both JP 1 and JP 3-0. The Joint Staff used theory to better explain war to the military professionals who are the primary consumers of joint doctrine. Similarly, the language used to describe war also becomes more complex and diverse over time. For example, the 2013 edition of JP 1 distinguished between war and warfare. It described war as "a universal phenomenon whose form and scope are defined by the societ[ies]" that wage it, whereas warfare referred to "the mechanism [or] method" by which combatants prosecute it.<sup>874</sup> The most recent edition of JP 1, released in 2020, emphasizes Clausewitz's theory of war and includes a broader discussion on using force outside the context of traditional warfare. The JP 3-0 mirrored these changes in its 2022 edition and added 84 pages of content. Compared to previous editions of JP 1 and JP 3-0, the most recent editions of both publications address the complexity of contemporary warfare. This treatment reflects the shift in US

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<sup>873</sup> Walton, *Abductive Reasoning*, xiii.

<sup>874</sup> Joint Chiefs of Staff, *Doctrine for the Armed Forces of the United States*, 2013, I-4.

strategic thinking away from counterterrorism and its response to Russian revanchism and Chinese regional expansion.

Examining this dissertation's core question, the analysis revealed that US thinking on war has evolved over the past several decades. In particular, this evolution reflected the development of the US military's relationship with information as a component of warfare. As stated earlier, the point bears repeating that the successive editions of joint doctrine can be collectively regarded as a commentary on how the US military is learning to wage war in the Information Age. The evolution in thought that occurred relative to information's role in warfare was most readily apparent within the editions of JP 1. In the first edition of the 1990s, the US military primarily viewed information as a commodity. Friendly forces sought to degrade an opponent's ability to access and manage information, while protecting their ability to do the same. This was the "information warfare" described in the 1998 core doctrine publication JP 3-13, *Joint Doctrine for Information Operations*. This view can be attributed, at least in part, to the US military's information dominance over the Iraqi Army during the First Gulf War. The US military placed significant stock in piercing the "fog of war." The ability to gain "information superiority" was a pillar of network-centric warfare, a warfighting concept prominent in the late 1990s.<sup>875</sup>

In the following decades, especially during the War on Terror, information evolved beyond simply being a commodity to be collected, protected, and denied to potential opponents. It became the building block of narratives to contest what has become a battle for influence over public opinion. States and individuals use the internet to promulgate stories and messages to bolster or undermine one side's position over the other. During the War on Terror, the internet became the medium through which nonstate violent extremist organizations like al-Qaeda engaged with and recruited, or in western parlance, "radicalized," sympathetic audiences to their cause. This fact of warfare in the Information Age did not surprise the US government and military. Still, they found themselves hard-pressed to compete on an equal footing with terrorist organizations in terms of messaging speed and receptivity. Accepting this shift in the power and use of information that the internet enabled, the Joint Staff dispensed with the term "information warfare" in favor of "information operations." In 2022, it settled upon "operations in the information environment" (OIE).

Current terminology recognizes that information is at once integral to and a component of everything that takes place in the world, not the least of which is foreign affairs and military operations. The ability to create and manipulate narratives is no longer an additive or "bolt-on" capability but is intrinsic to military operations at every level. The graphic depiction of the operational environment in the 2017 edition of JP 5-0, *Joint Planning*, reinforces this point. It demonstrates continuity of thought across the joint doctrine. The value of the graphic, shown in Figure 9.1, is its depiction of the interconnected nature of the myriad factors influencing the operational environment.

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<sup>875</sup> Arthur Cebrowski and John Garstka, "Network-Centric Warfare: Its Origin and Future," *U.S. Naval Institute Proceedings* 124, no.1, (January 1998): 28-35, accessed April 23, 2019, <https://www.usni.org/magazines/proceedings/1998/january/network-centric-warfare-its-origin-and-future>.

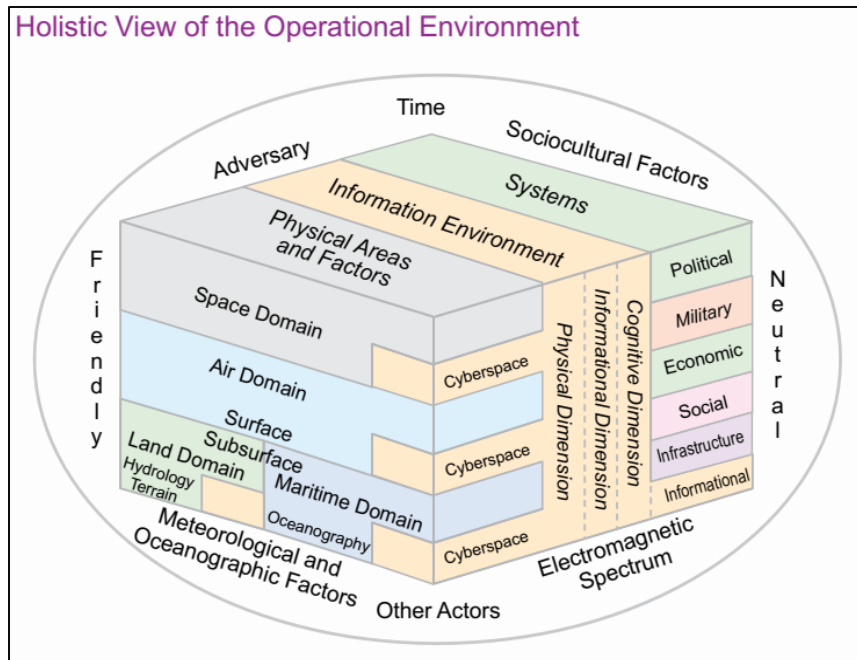


Figure 9.1. Holistic View of the Operational Environment Circa 2017. Taken from Chairman of the Joint Chiefs, *Joint Planning, 2017, IV-12*.

Information is the mortar that binds everything: domains, capabilities, and actors. The ability to assign and change these meanings gives information its power. The Joint Staff changed JP 3-13's long-form title from *Information Operations*, which conveys a standalone capability, to *Information in Joint Operations*, reinforcing the idea that everything has an information aspect. Failure to recognize this fact underestimates information's role in postmodern war.<sup>876</sup>

The second significant observation from joint doctrine was the increasing complexity and nuance in the Range of Military Operations (ROMO) conceptual construct over time. The ROMO helps readers of joint doctrine understand and match military operations across a continuum ranging from peace to war. Although many joint publications reference or mention the ROMO, JP 1 and JP 3-0 develop it most fully. The ROMO evolved from a simple chart that categorized military activities as combat and non-combat operations, describing the latter broadly as military operations other than war (MOOTW). Later versions depict the ROMO as a continuum bounded by peace at one end and war at the other. Through the middle of the continuum, crisis response and limited contingency operations were likely (and more appropriate for international conditions) on the side erring toward peace. At the other end, nearer to war, combat operations were more likely to occur. The first substantial re-imagining of the ROMO happened in 2013. That year's edition of JP 1 depicted the ROMO as two-dimensional, with an 'X' and a 'Y' axis. The continuum in the international system tracked along the 'X' axis (peace to war). The 'Y' axis (magnitude of the

<sup>876</sup> As per the most recent edition of the JP 3-12, *Cyberspace Operations*, cyber capabilities are experiencing a similar renaissance. They are increasingly viewed as having application throughout the competition continuum and at every level of war (although the exact form might still be in question), rather than remaining a siloed capability reserved use only at the higher levels of war.

military response) presented the range of military operations ranging from military engagement at the lower end to large-scale operations and campaigns at the higher end. Each iteration of the ROMO diagram presented a more complex understanding of the international system and the myriad operations the military can perform in it. Not surprisingly, the narrative descriptions of the global security environment found in later JP 1 and JP 3-0 editions are more descriptive and reflect greater complexity.

The Competition Continuum is the final version of the ROMO and appears in the 2020 edition of JP 1. This most recent iteration reflected the complexity of the international environment and the US military's realization that the world had entered a renewed phase of great power competition. The Competition Continuum is the most complex visualization that matches military activities with the level of conflict. The Joint Staff's Competition Continuum accounts for Russian and Chinese hybrid warfare activities. More broadly, it accommodates the gamut of "competition" or "grey zone" actions.

In parallel with the Competition Continuum, the Joint Staff identified four outcomes to be achieved using the military. These outcomes are helpful because they enable the diagram to visually link desired strategic outcomes with the use of force. On the low end, these outcomes range from assuring allies, deterring adversaries, and gradually increasing to compelling one to act in a desired manner and using violence to force an opponent to submit to one's will. This level of detail and complexity indicates learning by the US Joint Staff. The acknowledgement of competition as a valid condition of the international system in which there is neither peace, nor war gets closer to the reality of the global system. It reflects the Joint Staff's appreciation that the character of war has changed, becoming more complex and nuanced over time. Recognition of this fact facilitates a better understanding of what the military can achieve in support of national objectives. It also enables better military and policy decision-making on what force can achieve.<sup>877</sup> This last point addresses, at least in doctrine, Antulio Echevarria's ongoing criticism that the US military struggles to link "action on the battlefield" with policy outcomes.

The third observation from the content analysis is the US military's creation of a taxonomy of warfare. The first capstone and keystone joint publications in the early 1990s contained a basic categorization of military operations that place operations in two categories: war or military operations other than war (MOOTW). The latter was a catchall category that, in theory, encompassed every type of military operations performed outside of a state of hostilities or combat. The war versus MOOTW dichotomy was inherently flawed because it lacked the complexity to reflect events in the real world. Combat can occur in the absence of war; Canadian Forces working for the United Nations in 1992 experienced exactly that during peacekeeping operations in Srebrenica, former Yugoslavia.<sup>878</sup> Militaries frequently conduct operations that do not involve combat or combat support during wartime, e.g., when they conduct humanitarian assistance operations. In 2006, the new edition of JP 3-0 dropped the term MOOTW and introduced a binary taxonomy of traditional and irregular warfare (IW). Classifying war as traditional or irregular also appeared in the revised JP 1 the following year. Traditional warfare takes place between uniform

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<sup>877</sup> Posen, *The Sources of Military Doctrine*, 14. Barry Posen identifies doctrine's role in informing military professionals and policymakers as to what can realistically be achieved with military force.

<sup>878</sup> Lenard J. Cohen and Alexander Moens, "Learning the Lessons of UNPROFOR: Canadian Peace keeping in the Former Yugoslavia," *Canadian Foreign Policy Journal* 6 no. 2 (March 2011): 90-91, accessed June 23, 2024, <https://doi.org/10.1080/11926422.1999.9673175>.

combatants using conventional military weapons and tactics. IW emphasizes the role of non-state actors and asymmetric advantages such as fighting among the people or using irregular forces to offset traditional military advantage. Joint doctrine is not prescriptive about what makes a conflict irregular other than noting that it is a departure from conventional war.

The editions of JP 1 and JP 3-0 from 2017 onward demonstrate increasing complexity in how they approach IW. This change followed Russia and China's use of hybrid warfare to alter the international status quo, seize territory, or coerce neighboring states using information and economic coercion alongside limited military action. These actions in the competitive space reflected a desire to exact costs from the US and its allies AND manage escalation. Operating in this manner enabled Russia and China to remain below the threshold of armed conflict and achieve their objectives. In 2020, the Joint Staff responded to these actions with an expanded definition of IW that contained more specificity regarding the use of information. Although the revised definition does not employ the term hybrid warfare, it is more sophisticated than earlier definitions and adds to a deeper understanding of war.

Content analysis of the core doctrine publications did not offer divergent or new material related to the phenomenon of war and warfare that has not already been addressed. If anything, core doctrine publications reinforced observations from the keystone doctrine. This dissertation analyzed eight out of 51 available core doctrine titles within the operations series. Publications dealing with new mission sets, such as JP 3-14, *Space Operations*, and JP 3-85, *Joint Electromagnetic Spectrum Management Operations*, did not contribute meaningfully to the analysis. Both space and the electromagnetic spectrum (EMS) are mediums for conflict. Unlike the information environment that contributed to a profound change in the character of war, neither space operations nor the EMS have had a similar effect.

Examining joint doctrine over 30 years illustrated how the US military's conceptualization of war has evolved. How the US military views war transcends the traditional view of combat between organized armies. This was not the case in 1991 when JP 1 first appeared. The first edition's content did not capture the complexity of contemporary warfare. It spoke to the US military's preference for the industrial warfare it had practiced in the deserts of Kuwait and Iraq during Operation Desert Storm. The evolution of joint doctrine and its portrayal of warfare over time represents the US military's adaptation to the challenges of postmodern war in the Information Age and the change in thinking it represents.

The assumption that the US military is currently engaged in a paradigm shift regarding the changing character of war is central to this dissertation. The decreased ability of the military element to achieve its objectives when employed in traditional roles validated this assumption. Specific to this dissertation's study period, the US military failed to bring about durable outcomes during the War on Terror. The discussion focused on the new paradigm of postmodern war in the Information Age. Little coverage was given to the old, outgoing paradigm, best characterized as industrial warfare or a subset of traditional war. However, the research did find ample evidence of the old paradigm within joint doctrine. As much as joint doctrine demonstrated growth in information and its expanded role in warfare, it continued reinforcing the old paradigm by the frequency with which it used and referred to the principles of war. Originating with Jomini during the Napoleonic wars, the principles

lend themselves to traditional and industrial wars.<sup>879</sup> The principles appear in every edition of JP 1 and remain relevant, although all principles might not fully apply in every case. Presenting this information highlights two observations about paradigms and their shifts. On the one hand, the longevity of the principles of war reinforced Kuhn's observation that paradigm shifts typically unfold over long periods. Second, it also called to mind Antoine Bousquet's observation referenced in Chapter 2 that paradigms in warfare differ from those in the physical sciences, and old paradigms of war can exist in the same space as new ones.<sup>880</sup> Unlike scientific paradigms, often present as "laws" or "truths," paradigms in warfare are closely linked to technology. It is not uncommon for older styles or modes of conflict to exist on the battlefield alongside the new. This observation does not alter the use of the term postmodern conflict to describe contemporary war. The ability of multiple modes of warfare to co-exist means that not every conflict manifests as postmodern. However, the current information-centric epoch in which conflict occurs features vital elements of postmodernity affecting all aspects of human existence. While these observations do not change the conclusion, they are essential because they enable a more complete understanding of paradigm shifts in warfare and what makes them unique.

As a final observation concerning joint doctrine, there was a substantial time gap between a new idea and its incorporation into joint doctrine. Commonly used terminology such as "globalization" and "competition" took years to appear in print, despite their common usage in speech and professional literature; the same applies to "competition" and the cyber domain. A default interpretation is that the military is slow to change and preoccupied with "fighting the last war." Like other militaries throughout history, the US military appears to trail behind events and trends. However, such an interpretation is incorrect and oversimplifies the challenge of writing doctrine. Acknowledging that joint doctrine represents the established "truth" of the US military and goes through the clearing house of the five US military services, it is more accurate to conclude that the Joint Doctrine Development Process requires significant time to produce a finished product. Making the process more efficient might be possible, but arbitrarily shortening it risks impacting the cohesive and unifying effects of joint doctrine on the military services. The lag identified in joint doctrine is a function of the JDDP. The Joint Staff puts significant energy toward anticipating the direction of future war and warfare. It accomplishes this by exploring concepts, conducting exercises, and engaging in public and private research efforts. If the US military appears to be trailing or lagging behind current trends in warfare, it is because of the inherent difficulty in correctly predicting the future.

This dissertation also contained a subordinate research effort that analyzed the electives program at the National Defense University. Researching the electives provided further examples of the US military's changing perspective on contemporary warfare. Analyzing ten years' worth of NDU electives spanning three decades, there was ample evidence that NDU offered multiple courses that engaged with war and warfare. Many of these electives were structured to elicit original thoughts from the officers and civilians taking the classes. The focus on original thinking is germane because the dissertation used Ludwik Fleck's work on thought collectives as an explanation. According to Fleck, thought

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<sup>879</sup> Chapters 4, 5, and 6 dealt with the principles of war in depth. This note also acknowledges the subgenre of literature within War Studies that argues the relevance of the principles of war relative to contemporary war.

<sup>880</sup> Bousquet, *The Scientific Way of Warfare*, 238.



collectives generate new ideas and knowledge that ultimately advance learning. NDU serves as an engine for generating such knowledge, although this is not one of its statutory missions; it is more focused on creating joint warfare practitioners.<sup>881</sup> In the same way that various editions of joint doctrine can be seen as milestones along the US military's learning journey, many of the NDU electives related to the information environment chart a similar journey. Within each observation period, specific topics came to the fore as focus areas for learning. During the first decade of observation, the Revolution in Military Affairs and the Joint Force were emphasized. During the second, it was the Department of Defense's Transformation effort and the War on Terror. Within the last period, topics related to information, strategic influence, and the re-emergence of great power competition garnered the most attention. Each of these periods was an attempt to come to grips with the changing character of war.

Regardless of the topic presented during any of the periods, it was evident from the course descriptions that NDU and its resident colleges pushed students beyond didactic instruction and doctrine. The elective courses encouraged students to think meaningfully about the topic at the core of each elective. Evidence supporting this assertion came from the elective descriptions, which contained ample independent research assignments. Many of these called upon the students to offer solutions to contemporary problems and extrapolate potential futures. In this manner, NDU acted like Fleck's thought collectives and generated new knowledge for the US military. One recommendation to increase exposure to novel thinking at NDU would be a university-wide wargame or series of games deliberately focusing on new concepts. Such an initiative would complement NDU's existing electives program, reach a larger audience, and increase the transmission of new ideas with potential implications for joint doctrine.

However, it is difficult to discern how new knowledge influences the direction and content of doctrine. For one, the joint publication development and revision process is lengthy. Second, this dissertation did not track NDU alumni who served on the Joint Staff or were otherwise in a position to contribute to the formulation and revision of doctrine. This question offers a potential avenue for long-term research connecting student research with future doctrinal changes and Department of Defense initiatives. The dissertation did highlight the Joint Staff and, by extension, the US military's use of NDU to address pressing topics. This was done when emerging issues were not built into the curriculum, and the Chairman wanted students to research these topics and present their findings to the Joint Staff. The Joint Learning Areas and the Chairman's Special Areas of Emphasis in the Chairman's "Officer Professional Military Education Policy" identified these topics.

This dissertation's research question asked whether, over time, the US military had changed its conception of war and warfare in response to the changing character of war in the Information Age. Assuming that the character of war is constantly evolving, this dissertation selected the term postmodern war to highlight the prominent role played by information in contemporary conflict. Content analysis of joint doctrine concluded that the US has evolved its conception of war and warfare. This assessment came after analyzing 30 years of joint doctrine at the capstone, keystone, and core doctrine levels. In one sense, the doctrine demonstrates the evolution of joint warfighting tactics, techniques, and procedures. On another level, the corpus of doctrine represents the US military's learning journey

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<sup>881</sup> National Defense University, *Realizing the Vision 2022-2027*, 2-3.

regarding military operations and war in the Information Age. This dissertation also looked at Russian, Chinese, and Israeli approaches to postmodern war for additional context and perspective. Whether the term was hybrid warfare, *gibridnaya voyna*, or the three warfares, they all acknowledge the connected reality and inherent power of information in its eponymous age. All three approaches emphasize the power of information and the imperative to employ it alongside traditional military capabilities to achieve policy objectives.

The fact that the US military reached a conclusion similar to the three alternate approaches regarding the changing character of war lends credence to Thomas Kuhn's concept of paradigm shifts in the physical sciences. New paradigms emerge slowly over time. When the shift finally occurs, the new paradigm replaces the old one, often destroying the latter. In the 1990s, the US military looked at information in terms of information systems. Psychological operations were viewed separately as specialized operations. Information was related to situational and battlefield awareness; it was a resource to be protected and managed to cut through the friction and fog of war. This represents the old paradigm. Only later is there a shift in perspective as the US military comes to see information as a domain and, later, as a weapon to be employed against the enemy. At the end of the observation period, the US military's mindset is one in which operations occur in the information environment. Not unlike psychological operations in the early years of joint doctrine, contemporary operations in the information environment target the perceptions of specific target audiences. The pre-eminence of information, especially in military operations, leads to an expanded view of conflict beyond the military element. This view is similar to US adversaries' expanded view conflict. It also approaches Kennan's concept of political warfare, in which the state uses all aspects of power against the enemy.

The process of change is ongoing throughout all human endeavors. This truth applies equally to changes in the character of war and the evolution of postmodern war. Likely, humanity will not reach the full expression of war in the Information Age for some time. This dissertation examines the US military conception of war and warfare using joint doctrine and the NDU electives program, which documents one aspect of change and constitutes an original contribution to the field of War Studies. The final product has the utility of highlighting doctrine's role in transmitting knowledge within the military. There are many other avenues of future inquiry to explore. One of these has already been mentioned: connecting student research at NDU with long-term changes in doctrine. A second logical step that builds on this effort would be to explore the space between doctrine and operations. Such an effort could provide further insight into the gap between espoused organizational beliefs and behavior in military organizations.

## Appendix A: Select and Non-Select, Core Doctrine Publications from 3-0 Operations Series

#	JP	Publication Title	Selected
1	3-01	Countering Air and Missile Threats	N
2	3-02	Amphibious Operations	N
3	3-03	Joint Interdiction	N
4	3-04	Information in Joint Operations	Y
5	3-05	Joint Doctrine for Special Operations	N
6	3-06	Joint Urban Operations	N
7	3-07	Joint Stabilization Activities	N
8	3-07.3	Peace Operations	N
9	3-07.4	Counterdrug Operations	N
10	3-08	Interorganizational Cooperation	N
11	3-09	Joint Fire Support	N
12	3-09.3	Close Air Support	N
13	3-10	Joint Security Operations in Theater	N
14	3-11	Operations in Chemical, Biological, Radiological, and Nuclear Environments	N
15	3-12	Cyberspace Operations	Y
16	3-13	Information Operations	Y
17	3-13.2	Military Information Support Operations	Y
18	3-13.3	Operations Security	Y
19	3-13.4	Military Deception	Y
20	3-14	Space Operations	Y
21	3-15	Barriers, Obstacles, and Mines in Joint Operations	N
22	3-16	Multinational Operations	N
23	3-18	Joint Forcible Entry Operations	N
24	3-20	Security Cooperation	Y
25	3-22	Foreign Internal Defense	N
26	3-24	Counterinsurgency	N
27	3-26	Homeland Security	Y
28	3-27	Homeland Defense	Y
29	3-28	Defense Support of Civil Authorities	N
30	3-29	Foreign Humanitarian Assistance	N
31	3-30	Joint Air Operations	N
32	3-31	Joint land Operations	N
33	3-32	Joint Maritime Operations	N
34	3-33	Joint Force Headquarters	Y
35	3-34	Joint Engineer Operations	N
36	3-35	Joint Deployment and Redeployment Operations	N
37	3-36	Joint Air Mobility and Sealift Operations	N
38	3-40	Joint Countering Weapons on Mass Destruction	N
39	3-41	Chemical, Biological, Radiological, and Nuclear Response	N
40	3-42	Joint Explosive Ordnance Disposal	N
41	3-50	Personnel Recovery	N
42	3-52	Joint Airspace Control	N
43	3-57	Civil-Military Operations	N
44	3-59	Meteorological and Oceanographic Operations	N
45	3-60	Joint Targeting	N
46	3-68	Joint Noncombatant Evacuation Operations	N
47	3-72	Joint Nuclear Operations	N

48	3-80	Resource Management	N
49	3-84	Legal Support	N
50	3-85	Joint Electromagnetic Spectrum Operations	Y

This study selected specific core doctrine publications based on the likelihood that they contained a phenomenological discussion of war and its applicability to “new” warfare domains such as information, cyber, and space. Multiple editions were an additional consideration because it allowed for comparison over time.

## Abbreviations and Acronyms

4GW	Fourth Generation Warfare
A2AD	Anti-access Area Denial
AT	Antiterrorism
BRI	Belt and Road Initiative
C2	Command and Control
C3I	Command, Control, Computers, and Intelligence
CbT	Combating Terrorism
CBW	Campaign Between Wars
CIC	College of Information and Cyberspace
CISA	College of International Security Affairs
CJCS	Chairman of the Joint Chiefs of Staff
CNO	Computer Network Operations
CO	Cyberspace Operations
COIN	Counterinsurgency Operations
CT	Counterterrorism
DHS	Department of Homeland Security
DOD	Department of Defense
DODIN	Department of Defense Information Network
DOS	Department of State
DOTMLPF	Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facilities
DSCA	Defense Support of Civil Authorities

EBO	Effects Based Operations
EMS	Electromagnetic Spectrum
ES	Eisenhower School
EW	Electronic Warfare
FM	Field Manual
GWOT	Global War on Terror
HD	Homeland Defense
ICAF	Industrial College of the Armed Forces
IDF	Israeli Defense Force
IO	Information Operations
IRC	Intelligence Related Capability
IRMC	Information Resources Management College
ISIS	Islamic State of Iraq and Syria
IW	Irregular Warfare
JDDP	Joint Doctrine Development Process
<i>JFQ</i>	<i>Joint Forces Quarterly</i>
JFSC	Joint Forces Staff College
JP	Joint Publication
JPME	Joint Professional Military Education
JSC	Joint Staff College
MDO	Multi-domain Operations
MILDEC	Military Deception
MOOTW	Military Operations Other Than War

NATO	North Atlantic Treaty Organization
NDS	National Defense Strategy
NDU	National Defense University
NGO	Non-governmental Organization
NGW	New Generation Warfare
NMS	National Military Strategy
NSS	National Security Strategy
NWC	National War College
OIE	Operations in the Information Environment
OOTW	Operations Other Than War
OPSEC	Operational Security
PGM	Precision Guided Munition
PLA	People's Liberation Army
PME	Professional Military Education
PNT	Position, Navigation, and Timing
PRC	People's Republic of China
PSYOP	Psychological Operations
RMA	Revolution in Military Affairs
ROMO	Range of Military Operations
S&T	Scientific & Technical
SAE	Special Areas of Emphasis
SNSEE	School for National Security Executive Education
US	United States

USA

United States Army

USMC

United States Marine Corps

USSOCOM

United States Special Operations Command

VEO

Violent Extremist Organizations



## Bibliography

### Books, Journal Articles, & Manuscripts

Adamsky, Dmitry (Dima). "Cross-Domain Coercion: The Current Art of Russian Strategy." *Proliferation Papers* no. 54. Paris: Institut Francais des Relations Internationales, November 2015. Accessed December 22, 2015. <https://www.ifri.org/en/publications/enotes/proliferation-papers/cross-domain-coercion-current-russian-art-strategy>.

Ahvenainen, Sakari. "The Quincy Wright Model: Postmodern Warfare as a Fifth and Global Phase of Warfare." *Proceedings of the 15<sup>th</sup> European Conference on Cyber Warfare and Security*. Munich: Academic Conferences and Publishing International Ltd, 2016: 305-312.

Altman, Dan. "By Fait Accompli, Not Coercion: How States Wrest Territory from Their Adversaries." *International Studies Quarterly* 61, no. 4 (2017): 881-891. Accessed August 27, 2021. EBSCOhost.

Amr, Hady and P.W. Singer. "To Win the "War on Terror," We Must First Win the "War of Ideas": Here's How." *Annals of the American Academy of Political and Social Science* 618 (2008): 212-222. Accessed December 12, 2023. <https://heinonline.org/HOL/Page?handle=hein.cow/anamacp0618&id=201&collection=cow&index=>.

Applebaum, Anne. "Ukraine and the Words that Lead to Mass Murder." *The Atlantic*. Last modified April 25, 2022. Accessed October 27, 2023. <https://www.theatlantic.com/magazine/archive/2022/06/ukraine-mass-murder-hate-speech-soviet/629629/>.

Barkawi, Tarak and Shane Brighton. "Powers of War: Fighting, Knowledge, and Critique." *International Political Sociology* 5, no. 2 (2011):126-143. Accessed October 1, 2021, <https://doi.org/10.1111/j.1749-5687.2011.00125.x>.

Banasik, Mirosław. "Russia's Hybrid Warfare in Theory and Practice." *Journal on Baltic Security* 2, no. 1. (2016): 157-182. Accessed November 10, 2016. <http://www.baltdefcol.org/files/files/JOBS/JOBS.02.1.pdf#page=161>.

Barak, Oren; Amit Sheniak; and Assaf Shapira. "The Shift to Defence in Israel's Hybrid Military Strategy." *Journal of Strategic Studies* (June 2020): 1-33. Accessed July 9, 2022. <https://doi.org/10.1080/01402390.2020.1770090>.

Barry, Charles and Hans Binnendijk. "Widening Gaps in U.S. and European Defense Capabilities and Cooperation." *Transatlantic Current* no. 6, (July 2012). National Defense University, Institute for National Strategic Studies. Accessed February 2, 2022. <https://apps.dtic.mil/sti/pdfs/ADA577669.pdf>.

Bartles, Charles K. "Getting Gerasimov Right." *Military Review* 96, no. 1 (January 2016): 30–38. Accessed September 30, 2021. [https://www.armyupress.army.mil/Portals/7/militaryreview/Archives/English/MilitaryReview\\_20160228\\_art009.pdf](https://www.armyupress.army.mil/Portals/7/militaryreview/Archives/English/MilitaryReview_20160228_art009.pdf).

\_\_\_\_\_. "Russia's Indirect and Asymmetric Methods as a Response to the New Western Way of War." *Special Operations Journal* 2, no. 1. (June 2016): 1-11. Accessed November 7, 2016. <http://dx.doi.org/10.1080/23296151.2016.1134964>.

Baudrillard, Jean. *The Gulf War Did Not Take Place*. Translated by Paul Patton. Bloomington: Indiana University Press, 1995.

Berzins, Janis. "Russia's New Generation Warfare in Ukraine: Implications for Latvian Defense Policy." *Policy Paper no. 2*. Riga: National Defense Academy of Latvia, April 2014. Accessed November 7, 2016. <http://www.naa.mil.lv/~media/NAA/AZPC/Publikacijas/PP%2002-2014.ashx>.

\_\_\_\_\_. "Russian New Generation Warfare is not Hybrid Warfare." In *The War in Ukraine: Lessons for Europe*, edited by Artis Pabriks and Andis Kudors, 40-51. Riga: The Centre for East European Policy Studies, University of Latvia Press, 2015.

\_\_\_\_\_. "The Theory and Practice of New Generation Warfare: The Case of Ukraine and Syria." *The Journal of Slavic Military Studies* 33, no. 3 (December 2020): 355-380. Accessed May 24, 2022. <https://doi.org/10.1080/13518046.2020.1824109>.

Best, Steven and Douglas Kellner. *The Postmodern Turn*. New York: The Guilford Press, 1997.

Beyerchen, Alan. "Clausewitz, Nonlinearity, and the Unpredictability of War." *International Security* 17, no. 3 (Winter 1992-93): 59-90.

Blank, Stephen. "From Neglect to Duress: The West and the Georgian Crisis Before the 2008 War," in Cornell and Starr, 104-121.

Bollman, Anders Theis, and Søren Sjøgren. "Rethinking Clausewitz's Chameleon: Is it Time for Western Militaries to Abandon the Idea of War's Immutable Nature?" In *Military Politics: New Perspectives*, edited by Thomas Crosbie, 48-72. New York: Berghahn Books, 2023.

Bousquet, Antoine. "Chaoplex Warfare or the Future of Military Organization." *International Affairs* 84, no. 5 (September 2008): 915-929. Accessed August 25, 2017. <https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1468-2346.2008.00746.x>.

\_\_\_\_\_. *The Scientific Way of Warfare: Order and Chaos on the Battlefields of Modernity*. London: Hurst, 2009.

- Brinton, Crane, Gordon A. Craig, and Felix Gilbert. "Jomini." In *Makers of Modern Strategy*, edited by Edward Mead Earle, 77-92. Princeton: Princeton University Press, 1943.
- Brooker, Cassandra. "The Effectiveness of Influence Activities in Information Warfare." *Australian Army Occasional Paper No. 8*. Canberra: Australian Army Research Centre, 2021.
- Brooks, Rosa. "Fighting Words." *Foreign Policy*. Last Modified February 4, 2014. Accessed September 4, 2023. <https://foreignpolicy.com/2014/02/04/fighting-words/>.
- \_\_\_\_\_. *How Everything Became War and the Military Became Everything*. New York: Simon & Schuster, 2013.
- Brorson, Stig and Hanne Andersen. "Stabilizing and Changing Phenomenal Worlds: Ludwik Fleck and Thomas Kuhn on Scientific Literature." *Journal for General Philosophy of Science* 32, no. 1 (2001): 109-129. Accessed October 15, 2021. <https://link.springer.com/article/10.1023/A:1011236713841>.
- Bunker, Robert J. "Unrestricted Warfare: Review Essay I." *Small Wars and Insurgencies* 11, no. 1 (Spring 2000): 114-121. Accessed September 29, 2021. <https://www.tandfonline.com/doi/abs/10.1080/09592310008423265>.
- Calhoun, Mark T. "Clausewitz and Jomini: Contrasting Intellectual Frameworks in Military Theory." *Army History*, no. 80 (Summer 2011): 22-37. Accessed March 3, 2022. <http://www.jstor.org/stable/26296157>.
- Cebrowski, Arthur K. and John J. Garstka. "Network-Centric Warfare: Its Origin and Future." *U.S. Naval Institute Proceedings* 124, no. 1 (January 1998): 28-35. Accessed April 23, 2019. <https://www.usni.org/magazines/proceedings/1998/january/network-centric-warfare-its-origin-and-future>.
- Chekinov, Sergei G. and Sergei A. Bogdanov. "The Essence and Content of the Evolving Notion of War in the 21st Century." *Military Thought* 26, no. 1 (2017): 71-86. Accessed May 24, 2022. Eastview Information Services.
- \_\_\_\_\_. "The Nature and Content of a New-Generation War." *Military Thought* 4, no. 1 (2013): 12-23. Accessed October 14, 2021. Eastview Information Services.
- Clark, Mason. *Russian Hybrid Warfare*. Military Learning and the Future of War Series (September 2020). *Institute for the Study of War*. Accessed March 21, 2022. <https://understandingwar.org/sites/default/files/Russian%20Hybrid%20Warfare%20ISW%20Report%202020.pdf>.
- Clausewitz, Carl von. *On War*. Rev. ed. Edited and translated by Michael Howard and Peter Paret. Princeton, NJ: Princeton University Press, 1989.

- Clay, Marcus and Roderick Lee. "Unmasking the Devil in the Chinese Details: A Study Note on the *Science of Military Strategy 2020*." *China Aerospace Studies Institute*. Last modified January 2022. Accessed July 18, 2022. [2022-01-24 SMS 2020 in Perspective.pdf \(af.edu\)](#).
- Cohen, Eliot A. "How Does One Process Defeat?" *The Atlantic*. July 29, 2021. Accessed October 7, 2021. <https://www.theatlantic.com/ideas/archive/2021/07/how-do-you-reconcile-yourself-defeat/619596/>.
- Cohen, Lenard J. and Alexander Moens. "Learning the Lessons of UNPROFOR: Canadian Peace keeping in the Former Yugoslavia." *Canadian Foreign Policy Journal* 6 no. 2 (March 2011): 85-100. Accessed June 23, 2024. <https://doi.org/10.1080/11926422.1999.9673175>.
- Cohen, Stuart A. *Israel and its Army: From Cohesion to Confusion*. New York: Taylor & Francis, 2008. Adobe PDF eBook.
- Coombs, Howard G. "In the Wake of a Paradigm Shift: The Canadian Forces College and the Operational Level of War (1987-1996)." *Canadian Military Journal* 10, no. 2 (2010): 19-27. Accessed Sept 30, 2021. <http://www.journal.forces.gc.ca/vol10/no2/doc/05-coombs-eng.pdf>.
- Cooney, Patrick J. "Tank Tracks." *Armor PB-17-91-2*, March – April 1991. Fort Knox: US Army Armor Center, 1991. Accessed October 20, 2021. [https://www.benning.army.mil/Armor/eARMOR/content/issues/1991/MAR\\_APR/ArmorMarchApril1991web.pdf](https://www.benning.army.mil/Armor/eARMOR/content/issues/1991/MAR_APR/ArmorMarchApril1991web.pdf).
- Corbett, Julian. *Some Principles of Maritime Strategy*. Urbana, Illinois: Project Gutenberg, 2005. Accessed December 6, 2017. [http://www.gutenberg.org/files/15076/15076-h/15076-h.htm#Page\\_91](http://www.gutenberg.org/files/15076/15076-h/15076-h.htm#Page_91).
- Cornell, Svante E., and Frederick S. Starr, eds. *The Guns of August 2008: Russia's War in Georgia*. London: Taylor & Francis Group, 2009. Accessed October 8, 2021. ProQuest Ebook Central.
- Crews-Anderson, Timothy. *Critical Thinking and Informal Logic*. Penrith: Humanities-Ebooks, LLP, 2007. Accessed November 3, 2022. <http://ebookcentral.proquest.com/lib/vmi/detail.action?docID=3306069>.
- DeBenedictus, Kent. *Russian "Hybrid Warfare" and the Annexation of Crimea: The Modern Application of Soviet Political Warfare*. London: I.B. Tauris, 2022.
- Dickson, Keith. "War in (Another) New Context: Postmodernism." *The Journal of Conflict Studies* 24, no. 2 (2004). The Gregg Centre for the Study of War and Society. Accessed August 14, 2017. <https://journals.lib.unb.ca/index.php/jcs/article/view/203/360>.

- Douhet, Giulio. *The Command of the Air*. Translated by Dino Ferrari. Maxwell Air Force Base, Air University Press, 2019.
- Drisko, James W., and Tina Maschi. *Content Analysis*. New York: Oxford University Press, 2015. Oxford E-book, <https://doi-org.vmiezproxy.vmi.edu/10.1093/acprof:oso/>.
- Earle, Edward Mead, ed. *Makers of Modern Strategy*. Princeton: Princeton University Press, 1943.
- Echevarria II, Antulio J. "An American Way of War or a Way of Battle?" *Articles & Editorials*, 291. Carlisle: US Army War College Press, 2004. Accessed April 23, 2018. [https://press.armywarcollege.edu/articles\\_editorials/291](https://press.armywarcollege.edu/articles_editorials/291).
- \_\_\_\_\_. *Reconsidering the American Way of War: US Military Practice from the Revolution to Afghanistan*. Washington, D.C.: Georgetown University Press, 2015.
- \_\_\_\_\_. *War's Logic: Strategic Thought and the American Way of War*. New York: Cambridge University Press, 2021.
- Ehrharts, Hans-Georg. "Postmodern Warfare and the Blurred Boundaries Between War and Peace." *Defense & Security Analysis* 33, no. 3 (2017): 263-275. Accessed October 29, 2021. <https://doi.org/10.1080/14751798.2017.1351156>.
- \_\_\_\_\_. "Postmoderne Kriegsfuehrung: In der Grauzone zwischen Begrenzung und Entgrenzung kollektiver Gewalt." *Sicherheit und Frieden (S+F)* 34, no. 2 (2016): 97-103.
- Eisenkot, Gadi and Gabi Siboni. "The Campaign between Wars: How Israel Rethought Its Strategy to Counter Iran's Malign Regional Influence." *Washington Institute for Near East Policy: Policy Watch* (September 2019): 1-2. Accessed October 1, 2021. EBSCOhost, International Security & Counter Terrorism Reference Center.
- Farrell, Theo and Terry Terrif. "The Sources of Military Change." In *The Sources of Military Change: Culture, Politics, Technology*. Edited by Theo Farrell and Terry Terrif. Boulder: Lynne Rienner Publishers, 2002.
- Finkel, Meir. "IDF Strategy Documents, 2002-2018: On Processes, Chiefs of Staff, and the IDF." *Strategic Assessment* 23, no.4 (October 2020): 3-17. Accessed July 25, 2022. <https://strategicassessment.inss.org.il/wp-content/uploads/2020/11/IDF-Strategy-Documents.pdf>.
- Fitzsimonds, James R. and Jan M. van Tol. "Revolutions in Military Affairs." *Joint Forces Quarterly* (Spring 1994): 25-31. Accessed May 25, 2018. <https://www.hsdl.org/?view&did=445534>.

- Fleck, Ludwik. *Genesis and Development of a Scientific Fact*. Edited by Thaddeus J. Trenn and Robert K. Merton. Translated by Fred Bradley and Thaddeus J. Trenn. Chicago: University of Chicago Press, 1979.
- Fleming, Colin M. "New or Old Wars? Debating a Clausewitzian Future." *Journal of Strategic Studies* 32, no. 2 (2009): 213-241.
- Franck Jr., Raymond E. and Gregory G. Hildebrandt. "Competitive Aspects of the Contemporary Military-Technical Revolution: Potential Military Rivals to the US." *Defense Analysis* 12, no. 2 (1996): 239-258. Accessed January 31, 2022. <https://doi.org/10.1080/07430179608405696>.
- Freedman, Lawrence. "The Gulf War and the New World Order." *Survival* 33, no. 3 (1991): 195 -209.
- Fridman, Ofer. "Hybrid Warfare or *Gibridnaya Voyna*?" *RUSI Journal* 162, no. 1 (April 2017): 42-49. Accessed June 18, 2021. <https://doi.org/10.1080/03071847.2016.1253370>.
- \_\_\_\_\_. *Russian 'Hybrid Warfare': Resurgence and Politicization*. London: Hurst & Company, 2018.
- Frieser, Karl-Heinz. *The Blitzkrieg Legend: The 1940 Campaign in the West*. Annapolis: Naval Institute Press, 2012.
- Fukuyama, Francis. "The End of History?" *The National Interest*, no. 16 (Summer 1989): 3–18. Accessed August 8, 2024., <http://www.jstor.org/stable/24027184>.
- Galeotti, Mark. "'Hybrid War' and 'Little Green Men': How It Works and How It Doesn't." In *Ukraine and Russia: People, Propaganda and Perspectives*. Edited by Agnieszka Pikulicka-Wilczewska and Richard Sakwa, 156-191. Bristol: E-International Relations, 2015. Accessed January 31, 2022. <https://www.e-ir.info/2016/06/04/ukraine-and-russia-people-politics-propaganda-and-perspectives/>.
- \_\_\_\_\_. *Russian Political Warfare: Moving Beyond the Hybrid*. E-Book. New York: Routledge, 2019.
- \_\_\_\_\_. "The Mythical 'Gerasimov Doctrine' and the Language of Threat." *Critical Studies in Security* 2018. Accessed May 18, 2022. <https://doi.org/10.1080/21624887.2018.1441623>.
- \_\_\_\_\_. *The Weaponisation of Everything: A Field Guide to the New Way of War*. New Haven: Yale University Press, 2022.
- Gareev, Makhmut A. and Vladimir Slipchenko. *Future War*. Leavenworth: Foreign Military Studies Office, 2007.

- George, Alexander L., and Andrew Bennett. *Case Studies and Theory Development in the Social Sciences*. Cambridge: MIT Press, 2005.
- Gerasimov, Valery. "The Value of Science in Prediction." Edited and translated by Rob Coalson. *Military-Industrial Kurier*, February 27, 2013. Posted on *In Moscow's Shadows* (Blog), July 6, 2014. Accessed October 26, 2016. <https://inmoscowsshadows.wordpress.com/2014/07/06/the-gerasimov-doctrine-and-russian-non-linear-war/>.
- \_\_\_\_\_. "The Value of Science is in the Foresight: New Challenges Demand Rethinking the Forms and Methods of Carrying out Combat Operations." *Military Review* (January – February 2016): 23-29. Accessed October 12, 2021. [https://www.armyupress.army.mil/Portals/7/military-review/Archives/English/MilitaryReview\\_20160228\\_art008.pdf](https://www.armyupress.army.mil/Portals/7/military-review/Archives/English/MilitaryReview_20160228_art008.pdf).
- Gerstel, Dylan. "ISIS and Innovative Propaganda: Confronting Extremism in the Digital Age." *Swarthmore International Relations Journal* 1, no. 1 (2016): 1-9. Accessed December 12, 2023. <https://works.swarthmore.edu/cgi/viewcontent.cgi?article=1004&context=swarthmoreirjournal>.
- Glenn, Russell W. *All Glory is Fleeting: Insights from the Second Lebanon War*. Santa Monica: RAND, 2012. Accessed July 27, 2022. <https://www.jstor.org/stable/10.7249/j.ctt3fh003>.
- Goble, Paul A. "Defining Victory and Defeat: The Information War Between Russia and Georgia." In Cornell and Starr, 181-195.
- Göransson, Markus. "Understanding Russian Thinking on *Gibridnaya Voyna*." In *Hybrid Warfare: Security and Asymmetric Conflict in International Relations*. Edited by Mikael Weissmann, Niklas Nilsson, Björn Palmertz and Per Thunholm, 83-94. London: I.B. Tauris, 2021. Accessed September 11, 2021. Bloomsbury Collections.
- Gray, Charles H. *Postmodern War*. New York: The Guilford Press, 1997.
- Gray, Colin S. *Defense Planning for National Security: Navigation Aids for the Mystery Tour*. Carlisle: US Army War College, Strategic Studies Institute, 2014. <http://www.jstor.org/stable/resrep11331>.
- \_\_\_\_\_. *Explorations in Strategy*. London: Praeger, 1996.
- \_\_\_\_\_. "Influence from the Sea: Naval Power and World Order." *Address before the SACLANT Maritime Seminar, The Role of NATO Maritime Forces in the 1990s*. June 17-18, 1993.
- Grossman, Erik J. "Russia's Frozen Conflicts and the Donbas." *Parameters* 48, no. 2 (2018): 51-62. Accessed October 10, 2021, doi:10.55540/0031-1723.2944.
- Halper, Stefan. "China: The Three Warfares." *Report for the Office of Net Assessment, US Department of Defense* (2013). Accessed July 20, 2020. [https://www.iwp.edu/wpcontent/uploads/2019/05/201810171\\_HalperChinaThreeWarfares.pdf](https://www.iwp.edu/wpcontent/uploads/2019/05/201810171_HalperChinaThreeWarfares.pdf).

- Hammes, Thomas X. *The Sling and the Stone: On War in the 21st Century*. St Paul: Zenith Press, 2006.
- Hansen, Flemming Splidsboel, "When Russia Wages War in the Cognitive Domain." *The Journal of Slavic Military Studies* 34, no. 2 (2021): 181-201. Accessed June 3, 2022. <https://doi.org/10.1080/13518046.2021.1990562>.
- Harrison-Dinniss, Heather. *Cyber Warfare and the Laws of War*. New York: Cambridge University Press, 2012. Accessed October 8, 2021. ProQuest.
- Haynes, Peter D. "American Culture, Military Services' Cultures, and Military Strategy." Master's Thesis, Naval Postgraduate School, December 1998. Accessed October 6, 2017. <http://www.dtic.mil/get-tr-doc/pdf?AD=ADA359941>.
- Herring, George C. "America and Vietnam: The Unending War." *Foreign Affairs* 70, no. 5 (Winter 1991/1992): 104-119. Accessed October 15, 2021. <https://doi.org/10.2307/20045006>.
- Herz, John H. "Idealist Internationalism and the Security Dilemma." *World Politics* 2, no. 2 (January 1950): 157-180. Accessed November 13, 2014. <https://doi.org/10.2307/2009187>.
- Hill, Fiona and Angela Stent, "The World Putin Wants: How Distortions About the Past Feed Delusions About the Future." *Foreign Affairs* 101, No. 5 (September/October 2022): 108-122.
- Hoffman, Frank. *Conflict in the 21st Century: The Rise of Hybrid Wars*. Arlington: Potomac Institute, 2007.
- \_\_\_\_\_. *Mars Adapting: Military Changes during War*. Annapolis: Naval Institute Press, 2021.
- Hone, Thomas. "Replacing Battleships with Aircraft Carriers in the Pacific in World War II." *Naval War College Review* 66, no.1 (Winter 2013): 56-76. Accessed February 2, 2022. <https://www.jstor.org/stable/26397352>.
- Hughes, Daniel, ed. *Moltke on the Art of War: Selected Writings*. New York: Ballantine Books, 1993.
- Illarionov, Andrei. "The Russian Leadership's Preparation for War, 1999-2008," in Cornell and Starr, 49-84.
- Isserson, Georgii Samoilovich. *The Evolution of Operational Art*. Translated by Bruce W. Menning. Fort Leavenworth: Combat Studies Institute Press, 2013.
- Jackson, Aaron P. *The Roots of Military Doctrine: Change and Continuity in Understanding the Practice of Warfare*. Fort Leavenworth: Combat Studies Institute Press, 2013.



- Jandora, John W. "War and Culture: A Neglected Relation." *Armed Forces & Society* 25, no. 4 (Summer 1999): 541-556. Accessed on February 16, 2022. <https://doi.org/10.1177/0095327X9902500402>.
- Jash, Amrita. "Fight and Win Without Waging a War: How China Fights Hybrid Warfare." *CLAWS Journal* (Winter 2019): 96-109. Accessed June 28, 2022. <https://ojs.indrastra.com/index.php/clawsjournal/article/view/74>.
- Jervis, Robert. *Perception and Misperception in International Politics*. Princeton: Princeton University Press, 2017. <https://doi.org/10.1515/9781400885114>.
- Jonsson, Oscar. *The Russian Understanding of War: Blurring the Line Between War and Peace*. Washington, D.C.: Georgetown University Press, 2019.
- Jordan, Javier. "International Competition Below the Threshold of War: Toward a Theory of Gray Zone Conflict." *Journal of Strategic Security* 14, no. 1 (2020): 1-24. Accessed August 3, 2022. <https://doi.org/10.5038/1944-0472.14.1.1836>.
- Kaldor, Mary. "In Defense of New Wars." *Stability: International Journal of Security and Development* 2, no. 1 (2013): 4. Accessed August 21, 2017. <https://www.stabilityjournal.org/articles/10.5334/sta.at/>.
- \_\_\_\_\_. *New & Old Wars: Organized Violence in a Global Era*. Stanford: Stanford University Press, 2001.
- Kamolnick, Paul. "Countering Radicalization and Recruitment to Al-Qaeda: Fighting the War of Deeds." Carlisle: US Army War College Press, 2014.
- Kaplan, Fred. *The Insurgents: David Petraeus and the Plot to Change the American Way of War*. New York: Simon & Shuster, 2013.
- Kasapoglu, Can. "Russia's Renewed Military Thinking: Non-linear Warfare and Reflexive Control." *Research Paper 121*. Rome: NATO Defense College. Accessed December 4, 2016. <http://cco.ndu.edu/Portals/96/Documents/Articles/russia's%20renewed%20Military%20Thinking.pdf>.
- Kellner, Douglas. "Postmodern War in the Age of Bush II." *New Political Science* 24, no. 1 (2002): 57-72. Accessed August 17, 2017. <https://doi.org/10.1080/07393140220122644>.
- Kennan, George F. "The Inauguration of Organized Political Warfare." Redacted Version. April 30, 1948. *The Wilson Center Digital Archive*. Accessed June 14, 2022. <https://digitalarchive.wilsoncenter.org/document/114320>.

- Kober, Avi. "From Heroic to Post-Heroic Warfare: Israel's Way of War in Asymmetrical Conflicts." *Armed Forces & Society* 41, no. 1 (2015): 96-122. Accessed November 11, 2021. <https://doi.org/10.1177/0095327X13498224>.
- \_\_\_\_\_. "The Israel Defense Forces in the Second Lebanon War: Why the Poor Performance?" *Journal of Strategic Studies* 31, no. 1 (2008): 3-40. Accessed October 1, 2021. <https://doi.org/10.1080/01402390701785211>.
- \_\_\_\_\_. *Practical Soldiers: Israel's Military Thought and Its Formative Factors*. Leiden: Brill, 2015. ProQuest Ebook Central.
- \_\_\_\_\_. "The Rise and Fall of Israeli Operational Art, 1948–2008." In Olsen and van Creveld, 166-194.
- Kracauer, Siegfried. "The Challenge of Qualitative Content Analysis." *The Public Opinion Quarterly* 16, no. 4 (Winter, 1952-1953): 631-642. Accessed November 16, 2022. <https://www.jstor.org/stable/2746123>.
- Krauthammer, Charles. "The Unipolar Moment." *Foreign Affairs* 70, no. 1, (1990/1991): 23-33. Accessed October 6, 2017. <https://doi.org/10.2307/20044692>.
- Krepinevich, Andrew. "Why No Transformation?" *Joint Forces Quarterly* (Autumn/Winter 1999-2000): 97-101. Accessed January 25, 2022. <https://ndupress.ndu.edu/portals/68/Documents/jfq/jfq-23.pdf>.
- Krieg, Andreas. *Subversion: The Strategic Weaponization of Narratives*. Washington, D.C.: Georgetown University Press, 2023.
- Krippendorff, Klaus. *Content Analysis: An Introduction to its Methodology*. 4th ed. London: SAGE Publications, 2018.
- Kuhn, Thomas S. *The Structure of Scientific Revolutions*. 3rd ed. Chicago: The University of Chicago Press, 1996.
- \_\_\_\_\_. "Foreword." In *Genesis and Development of a Scientific Fact*. By Ludwick Fleck. Edited by Thaddeus J. Trenn and Robert K. Merton. Translated by Fred Bradley and Thaddeus J. Trenn. Chicago: University of Chicago Press, 1979.
- Lawrence, Philip K. *Modernity and War: The Creed of Absolute Violence*. London: MacMillan Press Ltd, 1997.
- Lawson, Sean T. *Nonlinear Science and Warfare: Chaos, Complexity and the U.S. Military in the Information Age*. New York: Routledge, 2014. Accessed August 17, 2017. EBSCOhost eBook Collection.

- Lee, Sangkuk. "China's 'Three Warfares': Origins, Applications, and Organizations." *Journal of Strategic Studies* 37, no. 2 (2014): 198-221. Accessed July 17, 2020. <https://doi.org/10.1080/01402390.2013.870071>.
- Liang, Qiao and Wang Xiangsui. *Unrestricted Warfare*. Beijing: PLA Literature and Arts Publishing House, 1999. Accessed April 14, 2016. <http://www.iwar.org.uk/iwar/resources/china/iw/unrestricted-warfare.pdf>.
- Lind, William S., Keith Nightengale, John F. Schmitt, Joseph W. Sutton, and Gary I. Wilson, "The Changing Face of War: Into the Fourth Generation," *Marine Corps Gazette* 73, no. 10 (October 1989): 22-26, accessed June 16, 2021, ProQuest ID 206338817.
- Linn, Brian McAllister. "The American Way of War Debate: An Overview." *Historically Speaking* 11, no. 5 (2010): 22-23. Accessed May 4, 2018. <https://muse.jhu.edu/article/405440>.
- Locher, James R. *Victory on the Potomac: The Goldwater-Nichols Act Unifies the Pentagon*. College Station: Texas A&M University Press, 2002.
- Lucas, Edward R. and Thomas Crosbie. "Evolution of Joint Warfare." In *Handbook of Military Sciences*, edited by Anders M. Sookermany. Cham: Springer, 2021. Accessed August 30, 2023. [https://doi.org/10.1007/978-3-030-02866-4\\_21-1](https://doi.org/10.1007/978-3-030-02866-4_21-1).
- Lucas Jr., George R. "Postmodern War." *Journal of Military Ethics* 9, no. 4 (2010): 289-298. Accessed August 17, 2017. <https://doi.org/10.1080/15027570.2010.536399>.
- Luttwak, Edward N. *The Grand Strategy of the Roman Empire: From the First Century CE to the Third*. Rev. ed. Baltimore: Johns Hopkins University Press, 2016.
- Mahnken, Thomas G. *Technology and the American Way of War*. New York: Columbia University Press, 2008.
- Mariano, Stephen J. "Between the Pen and the Sword, The US Army and Small Wars: Individual and Institutional Attitudes, 1973-2012." PhD dissertation. Royal Military College of Canada, June 2012.
- Mattis, James N., and Frank Hoffman. "Future Warfare: The Rise of Hybrid Wars." *U.S. Naval Institute Proceedings* 131, no. 11 (November 2005): 18-19. Accessed October 31, 2021. EBSCOhost, International Security & Counter Terrorism Reference Center.
- Mayring, Phillip. *Qualitative Content Analysis: A Step-by-Step Guide*. London: SAGE Publications, 2022.
- McFate, Sean. *The New Rules of War: Victory in the Age of Durable Disorder*. New York: Harper Collins, 2019.

- Messner, Evgeny. "The Face of Contemporary War." In *Strategiya: The Foundations of the Russian Art of Strategy*, edited and translated by Ofer Fridman, 236-288. Oxford: Oxford University Press, 2021.
- Metz, Steven. *Armed Conflict in the 21<sup>st</sup> Century: The Information Revolution and Post-Modern Warfare*. New York: Nova Science Publishers, 2018. Accessed November 18, 2021. EBSCOhost e-book
- Münkler, Herfried. *The New Wars*. Translated by Patrick Camiller. Cambridge: Polity Press, 2005.
- Murray, Williamson. "Thinking About Revolutions in Military Affairs." *Joint Forces Quarterly* (Summer 1997): 69-76. Accessed January 20, 2022. <https://ndupress.ndu.edu/portals/68/Documents/jfq/jfq-16.pdf>.
- Myers, Richard B. "A Word from the Chairman." *Joint Forces Quarterly* 33 (Winter 2002-03): 1-8. Accessed October 27, 2021. <https://ndupress.ndu.edu/portals/68/Documents/jfq/jfq-33.pdf>.
- Naveh, Shimon. "Interview with BG (Ret.) Shimon Naveh, November 1, 2007." *Operational Leadership Experiences*. Fort Leavenworth: Combat Studies Institute, 2007.
- Olsen, John Andreas and Martin van Creveld, eds. *The Evolution of Operational Art: From Napoleon to the Present*. Oxford: Oxford University Press, 2011.
- Ong, Weichong. "The Rise of Hybrid Actors in the Asia-Pacific." *The Pacific Review* 31. no. 6 (2018): 740-761. Accessed June 28, 2022. <https://doi.org/10.1080/09512748.2018.1513549>.
- Ortal, Eran. "The Fly on the Elephant's Back: The Campaign Between Wars in Israel's Security Doctrine." *Strategic Assessment* 24, no. 2, (April 2021): 108-115. Accessed July 28, 2022. <https://strategicassessment.inss.org.il/en/articles/the-fly-on-the-elephants-back-the-campaign-between-wars-in-israels-security-doctrine/>.
- Ota, Fumio. "Sun Tzu in Contemporary Chinese Strategy." *Joint Force Quarterly* 73 (April 2014): 76-80. Accessed January 9, 2024. <https://ndupress.ndu.edu/Media/News/News-Article-View/Article/577507/sun-tzu-in-contemporary-chinese-strategy/>.
- Paparone, Chris. "How We Fight: A Critical Exploration of US Military Doctrine." *Organization* 24, no. 4 (2017): 516-533. Accessed March 22, 2022, <https://doi.org/10.1177/1350508417693853>.
- Panhwar, Abdul Hameed, Sanaullah Ansari, and Asif Ali Shah. "Post-positivism: An Effective Paradigm for Social and Educational Research." *International Research Journal of Art & Humanities* 45, no. 45 (2017): 253-259. Accessed October 2, 2020, EBSCO host.

- Paret, Peter, ed. *Makers of Modern Strategy: From Machiavelli to the Nuclear Age*. Princeton: Princeton University Press, 1986.
- Perry, William J. "Desert Storm and Deterrence." *Foreign Policy* 70, no. 4 (Fall 1991): 66-82. Accessed October 25, 2021. <https://doi.org/10.2307/20044914>.
- Pfänder, Alexander. *Logic*. Translated by Donald Ferrari. Boston: De Gruyter, Inc., 2013. ProQuest Ebook Central.
- Phillips, D.C. *The Expanded Social Scientist's Bestiary: A Guide to Fabled Threats to, and Defenses of, Naturalistic Social Science*. Lanham: Rowman & Littlefield Publishers, Inc., 2000.
- Piatkowski, Krystian. "Polish Special Forces: In Search of a New Posture." *Journal of Slavic Military Studies* 11, no. 3 (1998): 105-127. Accessed January 30, 2022. <https://doi.org/nduezproxy.idm.oclc.org/10.1080/13518049808430353>.
- Pitchford, Jenna. "From One Gulf to Another: Reading Masculinity in American Narratives of the Persian Gulf and Iraq Wars." *Literature Compass* 9, no. 5 (2012): 357-370. Accessed October 25, 2021. <https://doi.org/10.1111/j.1741-4113.2012.00885.x>.
- Posen, Barry. "Foreword: Military Doctrine and the Management of Uncertainty." *The Journal of Strategic Studies* 39, no. 2 (2016): 159-173. Accessed August 30, 2023. <http://dx.doi.org/10.1080/01402390.2015.1115042>.
- \_\_\_\_\_. *The Sources of Military Doctrine: France, Britain, and Germany Between the World Wars*. Ithaca: Cornell University Press, 1984.
- Preston, Richard A., Alex Roland, and Sydney F. Wise. *Men in Arms: A History of Warfare and Its Interrelationships with Western Society*. 5<sup>th</sup> ed. Stamford: Thomson Learning, 2001.
- Pulkki, Arto. "Crimea has First-Line Troops in the Russian Armed Forces." *Suomen Sotilas* (Finnish Soldier). March 3, 2014. Accessed October 7, 2021. <http://www.suomensotilas.fi/krimilla-on-venajan-asevoimien-ensilinjan-joukkoja/>.
- Pynnöniemi, Katri and Minna Jokela. "Perceptions of Hybrid War in Russia: Means, Targets and Objectives Identified in the Russian Debate." *Cambridge Review of International Affairs* 33, no. 6: 828-845. Accessed May 18, 2022. <https://doi.org/10.1080/09557571.2020.1787949>.
- Renz, Bettina. "Russian Military Reform: Prospects and Problems." *RUSI Journal* 155, no. 1 (February 2010): 58-62. [doi:10.1080/03071841003683476](https://doi.org/10.1080/03071841003683476).
- Renz, Bettina and Hanna Smith. "Russia and Hybrid Warfare - Going Beyond the Label." *Aleksanteri Papers* No. 1. Helsinki: Aleksanteri Institute, 2016. Accessed December 19, 2016. [http://www.helsinki.fi/aleksanteri/english/publications/presentations/papers/ap\\_1\\_2016.pdf](http://www.helsinki.fi/aleksanteri/english/publications/presentations/papers/ap_1_2016.pdf).

- Renz, Bettina and Rod Thornton. "Russian Military Modernization: Cause, Course, and Consequences." *Problems of Post-Communism* 59, no. 1 (January/February 2012): 44-54. Accessed November 11, 2013. <http://dx.doi.org/10.2753/PPC1075-8216590104>.
- Rinaldo, Richard J. "Warfighting and Peace Ops: Do Real Soldiers Do MOOTW?" *Joint Force Quarterly* 14 (March 1997): 111-116. Accessed June 7, 2021. <https://ndupress.ndu.edu/portals/68/Documents/jfq/jfq-14.pdf>.
- Robinson, Paul. "The Russia-Ukraine Conflict and the (Un)Changing Character of War." *Journal of Military and Strategic Studies* 22, no. 2 (2022): 65-88. Accessed December 12, 2022. <https://jmss.org/issue/view/5362>.
- Robinson, Stephen. *The Blind Strategist: John Boyd and the American Art of War*. Chatswood, NSW: Exisle Publishing, 2021.
- Romjue, John L. *From Active Defense to AirLand Battle: The Development of Army Doctrine 1973-1982*. Fort Monroe, VA: U.S. Army Training and Doctrine Command, 1984.
- Ruiz Palmer, Diego A. "Back to the Future? Russia's Hybrid Warfare, Revolutions in Military Affairs, and Cold War Comparisons." Research Paper, no. 120. *NATO Defense College* (2015). Accessed September 22, 2021. <http://www.jstor.org/stable/resrep10267>.
- Rumsfeld, Donald H. "Transforming the Military." *Foreign Affairs* 81, no.3 (2002): 20-32. Accessed October 25, 2021. <https://doi.org/10.2307/20033160>.
- Sady, Wojciech. "Ludwik Fleck – Thought Collectives and Thought Styles." In *Polish Philosophers of Science and Nature in the 20th Century*. Edited by Wladyslaw Krajewski, 197-205. New York: Rodopi, 2001. Brill Ebook.
- St. B. T. Evans, Jonathan and David E. Over. "Reasoning to and from Belief: Deduction and Induction Are Still Distinct." *Thinking & Reasoning* 19, no. 3 (2013): 267-286. ProQuest Ebook Central.
- Sapolsky, Harvey M., Eugene Gholz, and Caitlin Talmadge. *US Defense Politics: The Origins of Security Policy*. 2nd ed. New York: Routledge, 2014.
- \_\_\_\_\_. *US Defense Politics: The Origins of Security Policy*. 4th ed. London: Routledge, Taylor & Francis Group, 2021. Accessed November 14, 2021, <https://doi.org/10.4324/9781003001751>.
- Scales, Robert. *Certain Victory: The U.S. Army in the Gulf War*. Washington, D.C.: Potomac Books, 2006.

- Schuurman, Bart. "Clausewitz and the "New Wars" Scholars." *The US Army War College Quarterly: Parameters* 40, no. 1 (Spring 2010): 89-100.
- Scobel, Andrew. "The Chinese Way of War." In Olsen and van Creveld, 195-221.
- Shimko, Keith L. *The Iraq Wars and America's Military Revolution*. Cambridge: Cambridge University Press, 2010. Accessed November 12, 2021. EBSCOhost e-book.
- Siboni, Gabi, Yuval Bazak, and Gal Perl Finkel. "The Development of Security-Military Thinking in the IDF." *Strategic Assessment* 21, no .1 (April 2018): 7-32. Accessed July 17, 2022. [https://www.inss.org.il/wp-content/uploads/2018/05/adkan21.1ENG\\_3.pdf](https://www.inss.org.il/wp-content/uploads/2018/05/adkan21.1ENG_3.pdf).
- Simpson, Emile. *War from the Ground Up: Twenty-First Century Combat as Politics*. New York: Columbia University Press, 2012.
- Singer, P.W. and Emerson T. Brooking. *Like War; the Weaponization of Social Media*. New York: Houghton Mifflin, 2018.
- Smith, Rupert. *The Utility of Force: The Art of War in the Modern World*. New York: Knopf, 2007.
- Sokolsky, Joel J. *The Revolution in Military Affairs and the Future of Arms Control and Verification*. Ottawa: Department of Foreign Affairs and International Trade, 2001.
- Stimson, Henry L., and McGeorge Bundy. *On Active Service in Peace and War*. New York: Harper, 1947.
- Strachan, Hew and Sibylle Scheipers, eds. *The Changing Character of War*. Oxford: Oxford University Press, 2011.
- Strassler, Robert B., ed. *The Landmark Thucydides*. New York: Simon and Schuster, 2008.
- Suchkov, Maxim A. "Whose Hybrid Warfare? How 'the Hybrid Warfare' Concept Shapes Russian Discourse, Military, and Political Practice." *Small Wars & Insurgencies* 32, no. 3 (2021): 415-440. Accessed June 23, 2022. <https://doi.org/10.1080/09592318.2021.1887434>.
- Sun Tzu. *The Art of War*. Translated by Ralph D. Sawyer. Boulder: West View Press, 1994.
- Svechin, Aleksandr A. *Strategy*. Edited by Kent D. Lee. Translated by Mary Albon et al. Minneapolis: East View Information Services, 1992.
- Svendsen, Adam. "Sharpening SOF Tools, Their Strategic Use and Direction." *Defense Studies* 14, no. 3 (July 2014): 284-309. Accessed January 30, 2022. [doi:10.1080/14702436.2014.890341](https://doi.org/10.1080/14702436.2014.890341).

- Swain, Richard M. "“The Hedgehog and the Fox”: Jomini, Clausewitz, and History,” *Naval War College Review* 43, no. 4 (Autumn 1990): 98-109. Accessed March 5, 2022. <https://www.jstor.org/stable/44638488>.
- Thach, John S. “The Thach Weave is Born.” In *The Pacific War Remembered: An Oral History Collection*, edited by John T. Mason, Jr., 93-97. Annapolis: Naval Institute Press, 1986.
- Thomas, Timothy. "Russia's Reflexive Control Theory and the Military." *Journal of Slavic Military Studies* 17, no. 2 (August 2010): 237-256. Accessed December 4, 2016. Taylor & Francis Online.
- \_\_\_\_\_. “The Chekinov-Bogdanov Commentaries of 2010-2017: What Did They Teach Us about Russia’s New Way of War?” *The MITRE Corporation* (2020). Accessed May 24, 2022. <https://apps.dtic.mil/sti/pdfs/AD1141587.pdf> .
- \_\_\_\_\_. “The Evolving Nature of Russia’s Way of War.” *Military Review* (July/August 2017): 34-42. Accessed May 5, 2018. <https://www.armyupress.army.mil/Journals/Military-Review/English-Edition-Archives/July-August-2017/Thomas-Russias-Way-of-War/>.
- \_\_\_\_\_. *Thinking Like a Russian Officer: Basic Factors and Contemporary Thinking on the Nature of War*. Fort Leavenworth: Foreign Military Studies Office, 2016.
- Thornton, Rod. "The Changing Nature of Modern Warfare: Responding to Russian Information Warfare." *RUSI Journal* 160, no. 4 (August/September 2015): 40-48. Accessed November 7, 2016. <http://dx.doi.org/10.1080/03071847.2015.1079047>.
- Tira, Ron. “Israel’s Second War Doctrine.” *Strategic Assessment* 19, no. 2 (July 2016): 143-156. Accessed July 29, 2022. <https://strategicassessment.inss.org.il/wp-content/uploads/antq/fe-566341227.pdf>.
- Toffler, Alvin and Heidi. *War and Anti-War: Survival at the Dawn of the 21<sup>st</sup> Century*. New York: Little, Brown & Co., 1993.
- Turabian, Kate L. *A Manual for Writers of Research Papers, Theses, and Dissertations: Chicago Style for Students and Researchers*. 8th ed. Chicago: The University of Chicago Press, 2013.
- van Creveld, Martin. *The Sword and the Olive: A Critical History of the Israeli Defense Force*. New York: Public Affairs, 2002. Adobe PDF eBook.
- \_\_\_\_\_. *Technology and War: From 2000 B.C to the Present*. New York: The Free Press, 1989.
- \_\_\_\_\_. *The Transformation of War*. New York: The Free Press, 1991.



- \_\_\_\_\_. "The Transformation of War Revisited." *Small Wars and Insurgencies* 13, no. 2 (2002): 3-15. Accessed February 17, 2022. <https://doi.org/10.1080/09592310208559177>.
- Vaughn, Lewis. *The Power of Critical Thinking: Effective Reasoning about Ordinary and Extraordinary Claims*. 2nd ed. New York: Oxford University Press, 2008.
- Walton, Douglas. *Abductive Reasoning*. Tuscaloosa: University of Alabama Press, 2005. ProQuest Ebook Central.
- Walton, Douglas, Chris Reed, and Fabrizio Macagno. *Argumentation Schemes*. Cambridge: Cambridge University Press, 2008.
- Walton, Timothy A. "China's Three Warfares." *Delex Special Report 3*. Herndon: Delex Systems, 2012.
- Weigley, Russell F. *The American Way of War: A History of United States Military Strategy and Policy*. Bloomington: Indiana University Press, 1977.
- Weiss, Kenneth. "Ludwik Fleck and the Art-of-Fact." *Evolutionary Anthropology* 12 (2003): 168-172. Accessed October 1, 2021. <https://doi.org/10.1002/evan.10118>.
- Wither, James K. "Outsourcing Warfare: Proxy Forces in Contemporary Armed Conflicts." *Security & Defense Quarterly* 31, no. 4 (2020): 17-34. Accessed July 6, 2023, DOI: <http://doi.org/10.35467/sdq/127928>.
- Wortzel, Larry M. "The Chinese People's Liberation Army and Information Warfare." *Monographs, Books, and Publications* 506. Carlisle: US Army War College Press, 2014. Accessed July 10, 2020. <https://press.armywarcollege.edu/monographs/506>.
- Yadlin, Amos and Assaf Orion. "The Campaign Between the Wars: Faster, Higher, Fiercer?" *Institute for National Security Studies* (2019). Accessed July 24, 2022. <http://www.jstor.com/stable/resrep19363>.
- Zhao, Pieter W.G. "Chinese Political Warfare: A Strategic Tautology? The Three Warfares and the Centrality of Political Warfare within Chinese Strategy." *The Strategy Bridge*. Last modified August 28, 2023. Accessed January 9, 2024. <https://thestategybridge.org/the-bridge/2023/8/28/chinese-political-warfare-a-strategic-tautology>.

## Podcasts & Webpages

- Akopov, Petr. "The Beginning of Russian and the New World." *Military*. Last modified February 28, 2022. Accessed December 24, 2022. <https://mil.in.ua/en/news/brave-new-world-of-putin-an-article-by-the-propaganda-publication-ria-novosti-which-was-to-be-published-after-the-occupation-of-ukraine/>.
- Bassford, Christopher. "Clausewitz in America Today." *ClausewitzStudies.org*. Accessed March 8, 2022. <https://www.clausewitzstudies.org/hold2/BassfordClausewitzInAmericaToday2010a.pdf>.
- \_\_\_\_\_. "Jomini and Clausewitz: Their Interaction." *ClausewitzStudies.org*. Accessed March 8, 2022. <https://www.clausewitzstudies.org/readings/Bassford/Jomini/JOMINIX.htm>.
- Bird, Alexander. "Thomas Kuhn." *The Stanford Encyclopedia of Philosophy*. Edited by Edward N. Zalta. Last modified Spring 2022. Metaphysics Research Lab, Stanford University, 2022. Accessed October 15, 2022. <https://plato.stanford.edu/archives/spr2022/entries/homas-kuhn/>.
- Burgers, Tobias and Scott N. Romaniuk. "China's Real Takeaway From the War in Ukraine: Grey Zone Conflict Is Best." *The Diplomat*. Last modified October 6, 2022. Accessed October 14, 2022. [China's Real Takeaway From the War in Ukraine: Grey Zone Conflict Is Best – The Diplomat](https://www.diplomat.com/article/china-s-real-takeaway-from-the-war-in-ukraine-grey-zone-conflict-is-best-the-diplomat).
- Costello, John. "Chinese Views on the Information "Center of Gravity:" Space, Cyber and Electronic Warfare," *China Brief* 15, no. 8 (April 16, 2015), accessed July 23, 2022, <https://jamestown.org/program/chinese-views-on-the-information-center-of-gravity-space-cyber-and-electronic-warfare/>.
- Cordesman, Anthony H. "Updated Report: Chinese Strategy and Military Forces in 2021." *Center for Strategic & International Studies*. Last modified August 3, 2021. Accessed June 16, 2022. <https://www.csis.org/analysis/updated-report-chinese-strategy-and-military-forces-2021>.
- Corn, Tony. "Peaceful Rise through Unrestricted Warfare: Grand Strategy with Chinese Characteristics." *Small Wars Journal* (June 5, 2010). Accessed August 11, 2017. <http://smallwarsjournal.com/jrnl/art/grand-strategy-with-chinese-characteristics>.
- DiPippo, Gerard. "Strangling the Bear? The Sanctions on Russia after Four Months." *Center for Strategic & International Studies*. Last modified June 22, 2022. Accessed July 1, 2022. <https://www.csis.org/analysis/strangling-bear-sanctions-russia-after-four-months>.

- Dougherty, Christopher, Gian Gentile, Michael Kofman, and Dara Massicot, "What the Experts Got Wrong (and Right) About Russian Military Power," *War on the Rocks* (Podcast). Hosted by Ryan Evans. May 30, 2022. Accessed June 3, 2022. <https://warontherocks.com/2022/05/what-the-experts-got-wrong-and-right-about-russian-military-power/>.
- Galeotti, Mark. "Controlling Chaos: How Russia Manages its Political War in Europe." Policy Brief 228, *European Council on Foreign Relations* (August 2017). Accessed July 17, 2022. [https://ecfr.eu/archive/page/-/ECFR228\\_CONTROLLING\\_CHAOS1.pdf](https://ecfr.eu/archive/page/-/ECFR228_CONTROLLING_CHAOS1.pdf).
- \_\_\_\_\_. "I'm Sorry for Creating the 'Gerasimov Doctrine'." *Foreign Policy*. Last modified March 5, 2018. Accessed May 18, 2022. <https://foreignpolicy.com/2018/03/05/im-sorry-for-creating-the-gerasimov-doctrine/>.
- \_\_\_\_\_. "Putinism-Patrushevism." *In Moscow's Shadows* 74 (Podcast), July 31, 2022. Accessed August 2, 2022. <https://www.buzzsprout.com/1026985/11055773-in-moscow-s-shadows-74-putinism-patrushevism>.
- \_\_\_\_\_. "Russian Perceptions of Conflict with Discussion of War in Ukraine." *Oxford Changing Character of War Lunchtime Seminar* (Podcast). March 22, 2022. Accessed March 24, 2022. <http://www.ccw.ox.ac.uk/past-events/2022/3/22/russian-perceptions-of-conflict-with-discussion-of-war-in-ukraine>.
- \_\_\_\_\_. "Russia's Security Council: Where Policy, Personality, and Process Meet." *Marshall Center Security Insight*, no. 41 (October 2019). Accessed July 17, 2022. <https://www.marshallcenter.org/en/publications/security-insights/russias-security-council-where-policy-personality-and-process-meet-0>.
- \_\_\_\_\_. "The Gerasimov Doctrine." *Berlin Policy Journal* April 28, 2020. Accessed May 18, 2022. <https://berlinpolicyjournal.com/the-gerasimov-doctrine/>.
- \_\_\_\_\_. "The 'Gerasimov Doctrine' and Russian Non-Linear War." *In Moscow's Shadows* (Blog), July 6, 2014. Accessed October 26, 2016. <https://inmoscowsshadows.wordpress.com/2014/07/06/the-gerasimov-doctrine-and-russian-non-linear-war/>.
- Gentile, Gian P. *Wrong Turn: America's Deadly Embrace of Counterinsurgency*. New York: New Press, 2013.
- Hoffman, Frank. "On Not-So-New Warfare: Political Warfare vs Hybrid Threats." *War on the Rocks*. Last modified July 28, 2014. Accessed June 12, 2022. <https://warontherocks.com/2014/07/on-not-so-new-warfare-political-warfare-vs-hybrid-threats/>.

- Heuser, Beatrice and Paul O'Neill. "Episode 5: Alexander Svechin: Soviet Strategic Thought." *Talking Strategy*. RUSI Podcasts. Last modified November 15, 2022. Accessed September 18, 2023. <https://www.rusi.org/podcasts/talking-strategy/episode-5-alexander-svechin-soviet-strategic-thought>.
- Jennings, Ralph. "China's Economy Could Overtake US Economy by 2030." *Voice of America*. Last modified January 04, 2022. Accessed August 3, 2022. <https://www.voanews.com/a/chinas-economy-could-overtake-us-economy-by-2030/6380892.html>.
- Jones, Seth. "Three Dangerous Men." In *Shield of the Republic* (podcast). Hosted by Eliot S. Cohen and Eric Edelman. Accessed November 24, 2021. <https://shield.thebulwark.com/three-dangerous-men>.
- Klus, Adam. "Myatezh Voina: The Russian Grandfather of Western Hybrid Warfare." *Small Wars Journal*. Last modified July 10, 2016. Accessed June 26, 2022. <https://smallwarsjournal.com/jrnl/art/myatezh-voina-the-russian-grandfather-of-western-hybrid-warfare>.
- Kofman, Michael. "Hybrid Warfare and Other Dark Arts." *War on the Rocks* (Blog). Last modified March 11, 2016. Accessed June 29, 2022. <https://warontherocks.com/2016/03/russian-hybrid-warfare-and-other-dark-arts/>.
- Kofman, Michael and Kent DeBenedictus. "From Little Green Men to Tanks Outside of Kyiv." *Irregular Warfare Podcast* 55. Hosted by Laura Jones and Kyle Atwell. June 17, 2022. Accessed June 17, 2022. <https://mwi.usma.edu/from-little-green-men-to-tanks-outside-kyiv-irregular-warfare-in-ukraine-since-2014/>.
- Kofman, Michael and Matthew Rojansky. "A Closer Look at Russia's 'Hybrid War.'" *Kennan Cable* no. 7, (April 2015). Kennan Institute. Accessed March 13, 2022. <https://www.wilsoncenter.org/publication/kennan-cable-no7-closer-look-russias-hybrid-war>.
- Luchesse, Michael. "A Real Russian Heart: Aleksandr Dugin, Vladimir Putin and the Dangerous New Russian ideology." *Engelsbergs Ideas*. Last modified August 23, 2023. Accessed September 15, 2024. <https://engelsbergideas.com/essays/aleksandr-dugin-vladimir-putin-and-the-new-russian-ideology/>.
- Obama, Barack. *Press Conference by the President*. December 16, 2016. Accessed July 5, 2022. <https://obamawhitehouse.archives.gov/the-press-office/2016/12/16/press-conference-president>.
- Paparone, Chris. "Structuring Logistics for Unstructured War." *Logistics in War*. Last modified April 6, 2017. Accessed August 1, 2017. <https://logisticsinwar.com/2017/04/06/structuring-logistics-for-unstructured-war/>.

- Radchenko, Sergey. "What Drives Vladimir Putin?" *Engelsbergs Ideas*. Last modified August 9, 2022. Accessed July 5, 2022. <https://engelsbergideas.com/essays/what-drives-vladimir-putin/>.
- Rose, Frank A. "Managing China's Rise in Outer Space." *Brookings Institution*. April 2020. Accessed January 21, 2024. [https://www.brookings.edu/wp-content/uploads/2020/04/FP\\_20200427\\_china\\_outer\\_space\\_rose\\_v3.pdf](https://www.brookings.edu/wp-content/uploads/2020/04/FP_20200427_china_outer_space_rose_v3.pdf).
- Ryan, Mick. "How Ukraine Can Win a Long War." *Foreign Affairs*. Last modified August 30, 2023. Accessed September 11, 2024. <https://www.foreignaffairs.com/ukraine/win-long-war-strategy-counteroffensive>.
- Sady, Wojciech. "Ludwik Fleck." In *The Stanford Encyclopedia of Philosophy*. Edited by Edward N. Zalta. Last modified Winter 2021. Metaphysics Research Lab, Stanford University, 2021. Accessed October 15, 2022. <https://plato.stanford.edu/archives/win2021/entries/fleck/>.
- Schneider, Jacquelyn. "Does Technology Win Wars?" *Foreign Affairs*. Last modified March 3, 2023. Accessed March 9, 2023. <https://www.foreignaffairs.com/ukraine/does-technology-win-wars>.
- Schreck, Carl Schreck. "From 'Not Us' To 'Why Hide It?': How Russia Denied Its Crimea Invasion, Then Admitted It." *Radio Free Europe*. February 26, 2019. Accessed October 10, 2021. <https://www.rferl.org/a/from-not-us-to-why-hide-it-how-russia-denied-its-crimea-invasion-then-admitted-it/29791806.html>
- Seener, Barak M. "The Godfather Wars." *The American Interest*. Last modified August 28, 2020. Accessed January 31, 2020. <https://www.the-american-interest.com/2020/08/28/the-godfather-wars/>.
- Solmaz, Tarik. "'Hybrid Warfare': One Term, Many Meanings." *Small Wars Journal*. Last modified February 25, 2022. Accessed April 17, 2024. <https://smallwarsjournal.com/jrnl/art/hybrid-warfare-one-term-many-meanings>.
- Takagi, Koichiro. "The Future of China's Cognitive Warfare: Lessons from the War in Ukraine." *War on the Rocks*. Last modified July 22, 2022. Accessed July 24, 2022. <https://warontherocks.com/2022/07/the-future-of-chinas-cognitive-warfare-lessons-from-the-war-in-ukraine/>.
- Tanchum, Michaël. "China's new military base in Africa: What it means for Europe and America." *European Council on Foreign Relations*. Last modified December 14, 2021. Accessed October 29, 2023. <https://ecfr.eu/article/chinas-new-military-base-in-africa-what-it-means-for-europe-and-america/>.
- Zweibelson, Ben. "Design Theory and the Military's Understanding of Our Complex World." *Small Wars Journal* (August 7, 2011). Accessed August 13, 2017. <https://apps.dtic.mil/sti/pdfs/ADA547529.pdf>.

## US and Other Government Sources

- Chairman of the Joint Chiefs of Staff. "Special Areas of Emphasis for Joint Professional Military Education in Academic Years 2020 and 2021." Official memorandum. Washington, D.C.: Department of Defense, May 6, 2019. Accessed December 11, 2023. [https://www.jcs.mil/Portals/36/Documents/Doctrine/education/jpme\\_sae\\_2020\\_2021.pdf](https://www.jcs.mil/Portals/36/Documents/Doctrine/education/jpme_sae_2020_2021.pdf).
- China Aerospace Studies Institute. *In Their Own Words: Science of Military Strategy 2020*. Montgomery: Air University, 2022. Accessed July 10, 2022. <https://www.airuniversity.af.edu/CASI/Display/Article/2913216/in-their-own-words-2020-science-of-military-strategy/>.
- Conference on Security and Co-Operation in Europe. *Final Act*. Helsinki: Organization for Security and Co-operation in Europe, August 1, 1975.
- Department of the Army. *Operations*, Field Manual 3-0. Washington, D.C.: Department of the Army. October 2022.
- Department of Defense. "Writing Style Guide and Preferred Usage for DOD Issuances." Washington, D.C.: Department of Defense. February 2020.
- Headquarters, U.S. Air Force. *Basic Doctrine*. Air Force Manual 1-1, Vol. 1. Washington, D.C.: U.S. Government Printing Office, 2015.
- Israel Defense Force. *Deterring Terror: How Israel Confronts the Next Generation of Threats*. Translated by Susan Rosenberg. Cambridge: Belfer Center for Science and International Affairs, August 2016. Accessed July 25, 2022. [Israeli Defense Forces' Defense Doctrine - English Translation | Belfer Center for Science and International Affairs](#).
- Joint Chiefs of Staff. *Description of the National Military Strategy 2018*. Washington, D.C.: Government Printing Office, 2018. Last modified July 12, 2019. Accessed August 22, 2018. <https://www.jcs.mil/Media/News/News-Display/Article/1903669/description-of-the-2018-national-military-strategy-released/>.
- Office of the Secretary of Defense. *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2021*. Accessed July 8, 2022. <https://media.defense.gov/2021/Nov/03/2002885874/-1/-1/0/2021-CMPR-FINAL.PDF>.
- National Commission on Terrorist Attacks Upon the United States. *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States*. Washington, D.C.: Government Printing Office, 2003.

National Defense University. *Colleges*. Accessed September 3, 2021.  
<https://www.ndu.edu/Academics/Colleges/>.

\_\_\_\_\_. *History*. Accessed July 30, 2023. <https://www.ndu.edu/about/history/>.

\_\_\_\_\_. "National Defense University Electives Program Catalog: Course Descriptions AY 1998-1999." Washington, D.C.: National Defense University, 1998.

\_\_\_\_\_. "National Defense University Electives Program Catalog: Course Descriptions AY 2000-2001." Washington, D.C.: National Defense University, 2000.

\_\_\_\_\_. "National Defense University Electives Program Catalog Supplement: Class Schedules AY 2000-2001." Washington, D.C.: National Defense University, 2001.

\_\_\_\_\_. "National Defense University Electives Program Catalog AY 2003-2004." Washington, D.C.: National Defense University, 2003.

\_\_\_\_\_. "National Defense University Spring AY 2003-2004 Spring Electives Program Catalog: Updated Spring Electives Schedule and Course Options." Washington, D.C.: National Defense University, 2004.

\_\_\_\_\_. "National Defense University AY 2005-2006 Electives Program Catalog: Electives Schedule and Course Descriptions." Washington, D.C.: National Defense University, 2005.

\_\_\_\_\_. "AY 08-09 Electives Program Catalog." Washington, D.C.: National Defense University, 2008.

\_\_\_\_\_. "AY 10-11 Electives Program Catalog." Washington, D.C.: National Defense University, 2010.

\_\_\_\_\_. "National Defense University 2014-2015 Electives Program Catalog: Phase III." Washington, D.C.: National Defense University, 2014.

\_\_\_\_\_. "National Defense University 2016-2017 Electives Program Catalog." Washington, D.C.: National Defense University, 2016.

\_\_\_\_\_. "National Defense University 2019-2020 Electives Program Catalog." Washington, D.C.: National Defense University, 2019.

- \_\_\_\_\_. "National Defense University 2021-2022 Electives Program Catalog." Washington, D.C.: National Defense University, 2021.
- \_\_\_\_\_. *Realizing the Vision 2022-2027: National Defense University Strategic Plan*. Washington, D.C.: National Defense University, December 6, 2022. Accessed October 14, 2023. [https://www.ndu.edu/Portals/59/Documents/Vision-Mission/NDU-Strat-Plan\\_2022.pdf?ver=wdlc3nl25xS7ob0zoeUig%3d%3d](https://www.ndu.edu/Portals/59/Documents/Vision-Mission/NDU-Strat-Plan_2022.pdf?ver=wdlc3nl25xS7ob0zoeUig%3d%3d).
- National War College. "National War College Student Handbook, National War College, Academic Year 2023-24." Washington, D.C.: National Defense University, August 7, 2023.
- North Atlantic Treaty Organization, Headquarters. *Hybrid Threats and Hybrid Warfare Reference Curriculum*. Brussels: NATO Headquarters, June 2024.
- U.S. Congressional Research Service. *China's "One Belt, One Road."* IF10273: August 6, 2015. By Susan Lawrence. Accessed Oct 12, 2021. <https://crsreports.congress.gov/product/pdf/IF/IF10273>.
- \_\_\_\_\_. *China's "One Belt, One Road" Initiative: Economic Issues*. IF10273: January 22, 2021. By Karen Sutter. Accessed Oct 12, 2021. <https://crsreports.congress.gov/product/pdf/IF/IF10273>.
- \_\_\_\_\_. *China Primer: South China Sea Disputes*. IF 10607: February 2, 2021. By Ben Dolven, Susan V. Lawrence, and Ronald O'Rourke. Accessed January 31, 2022. <https://crsreports.congress.gov/product/pdf/IF/IF10607>.
- \_\_\_\_\_. *U.S. Military Operations in the Global war on Terrorism: Afghanistan, Africa, the Philippines, and Colombia*. RL32758: Updated January 20, 2006. By Andrew Feickert. Accessed January 12, 2024. <https://crsreports.congress.gov/product/pdf/RL/RL32758/5>.
- U.S. Department of Defense. *Summary of the 2018 National Defense Strategy of the United States of America*. Washington, D.C.: Department of Defense, 2018. Accessed November 24, 2021. <https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>.
- United States General Accounting Office. *Content Analysis: A Methodology for Structuring and Analyzing Written Material*. Washington, D.C.: General Accounting Office, September 1996.
- U.S. Navy. *Advantage at Sea: Prevailing with All Domain Integrated Naval Power*. Washington, D.C.: Government Printing Office: December 3, 2020. Accessed October 7, 2021. <https://media.defense.gov/2020/dec/16/2002553074/-1/-1/0/triservicestrategy.pdf>.
- US Marine Corps. *Warfighting*, MCDP 1. Washington, D.C.: U.S. Marine Corps, 1997.



## Joint Doctrine, Concepts, Manuals, Notes, & Instructions

Joint Chiefs of Staff. *Competition Continuum*. Joint Doctrine Note 1-19. Washington, D.C.: Joint Chiefs of Staff, June 3, 2019. Accessed December 6, 2023. [https://www.jcs.mil/Portals/36/Documents/Doctrine/jdn\\_jg/jdn1\\_19.pdf?ver=2019-06-10-113311-233](https://www.jcs.mil/Portals/36/Documents/Doctrine/jdn_jg/jdn1_19.pdf?ver=2019-06-10-113311-233).

\_\_\_\_\_. “Guidance for Developing and Implementing Joint Concepts.” CJCSI 3010.02E. *Chairman of the Joint Chiefs of Staff Instruction*. Washington, D.C.: Joint Chiefs of Staff, August 17, 2016. Accessed September 11, 2024. <https://www.jcs.mil/Doctrine/Joint-Concepts/>.

\_\_\_\_\_. *Joint Concept for Integrated Campaigning*. Washington, D.C.: Joint Chiefs of Staff, March 16, 2018.

\_\_\_\_\_. *Joint Doctrine Development Process*. CJCSM 5120.01B. Washington, D.C.: Joint Chiefs of Staff, November 6, 2020. Accessed August 8, 2022. <https://www.jcs.mil/Library/CJCS-Manuals/>.

\_\_\_\_\_. “Joint Doctrine Development System.” CJCSI 5120.02E. *Chairman of the Joint Chiefs of Staff Instruction*. Washington, D.C.: Joint Chiefs of Staff, November 6, 2020. Accessed November 10, 2020. <https://www.jcs.mil/Doctrine/>.

\_\_\_\_\_. “Joint Doctrine Hierarchy.” *Joint Chiefs of Staff*. Last modified August 23, 2022. Accessed November 11, 2022. <http://www.jcs.mil/Doctrine>.

\_\_\_\_\_. “Joint Doctrine Notes and Guides.” *Joint Chiefs of Staff*. Accessed November 11, 2022. <https://www.jcs.mil/Doctrine/Joint-Docctrine-Pubs/Joint-Docctrine-Notes/>.

\_\_\_\_\_. “Joint Publications Reference Series.” *Joint Chiefs of Staff*. Accessed November 11, 2022. <https://www.jcs.mil/Doctrine/Joint-Docctrine-Pubs/Reference-Series/>.

\_\_\_\_\_. *Joint Training Manual for the Armed Forces of the United States*. CJCSM 3500.03E. Washington, D.C.: Joint Chiefs of Staff, April 20, 2015. Accessed August 16, 2022. <https://www.jcs.mil/Portals/36/Documents/Library/Manuals/m350003.pdf>.

\_\_\_\_\_. “National Defense University Policy.” CJCSI 1801.01F. *Chairman of the Joint Chiefs of Staff Instruction*. Washington, D.C.: Joint Chiefs of Staff, October 14, 2022. Accessed October 16, 2023. <https://www.jcs.mil/Portals/36/Documents/Library/Instructions/CJCSI%201801.01F.pdf>.

\_\_\_\_\_. “Officer Professional Military Education Policy.” CJCSI 1800.01F. *Chairman of the Joint Chiefs of Staff Instruction*. Washington, D.C.: Joint Chiefs of Staff, May 15, 2020. Accessed October 16, 2023. [https://www.jcs.mil/Portals/36/Documents/Doctrine/education/cjcsi\\_1800\\_01f.pdf?ver=2020-05-15-102430-580](https://www.jcs.mil/Portals/36/Documents/Doctrine/education/cjcsi_1800_01f.pdf?ver=2020-05-15-102430-580).

## Joint Publication 1

Joint Chiefs of Staff. *Joint Warfare of the US Armed Forces*, Joint Publication 1. Washington, D.C.: U.S. Government Printing Office, November 11, 1991.

\_\_\_\_\_. *Joint Warfare of the US Armed Forces of the United States*, Joint Publication 1. Washington, D.C.: U.S. Government Printing Office, January 10, 1995.

\_\_\_\_\_. *Joint Warfare of the US Armed Forces of the United States*, Joint Publication 1. Washington, D.C.: U.S. Government Printing Office, November 14, 2000.

\_\_\_\_\_. *Doctrine for the Armed Forces of the United States*, Joint Publication 1. Washington, D.C.: Joint Chiefs of Staff, May 14, 2007.

\_\_\_\_\_. *Doctrine for the Armed Forces of the United States*, Joint Publication 1. Washington, D.C.: Joint Chiefs of Staff, March 20, 2009.

\_\_\_\_\_. *Doctrine for the Armed Forces of the United States*, Joint Publication 1. Washington, D.C.: Joint Chiefs of Staff, March 25, 2013.

\_\_\_\_\_. *Doctrine for the Armed Forces of the United States*. Joint Publication 1. Washington, D.C.: Joint Chiefs of Staff, July 12, 2017.

\_\_\_\_\_. *Volume I, Joint Warfighting*, Joint Publication 1. Washington, D.C.: Joint Chiefs of Staff, June 29, 2020.

\_\_\_\_\_. *Volume II, The Joint Force*, Joint Publication 1. Washington, D.C.: Joint Chiefs of Staff, June 19, 2020.

## Joint Publication 2-0

Joint Chiefs of Staff. *Doctrine for Support to Intelligence Operations*, Joint Publication 2-0. Washington, D.C.: Joint Chiefs of Staff, June 30, 1991.

\_\_\_\_\_. *Joint Intelligence*, Joint Publication 2-0. Washington, D.C.: Joint Chiefs of Staff, June 22, 2007.

\_\_\_\_\_. *Joint Intelligence*, Joint Publication 2-0. Washington, D.C.: Joint Chiefs of Staff, October 22, 2013.

\_\_\_\_\_. *Joint Intelligence*, Joint Publication 2-0. Washington, D.C.: Joint Chiefs of Staff, May 26, 2022.

### **Joint Publication 3-0**

Joint Chiefs of Staff. *Doctrine for Joint Operations*, Joint Publication 3-0. Washington, D.C.: U.S. Government Printing Office, September 9, 1993.

\_\_\_\_\_. *Doctrine for Joint Operations*. Joint Publication 3-0. Washington, D.C.: Joint Chiefs of Staff, February 1, 1995.

\_\_\_\_\_. *Doctrine for Joint Operations*. Joint Publication 3-0. Washington, D.C.: Joint Chiefs of Staff, September 1, 2001.

\_\_\_\_\_. *Joint Operations*. Joint Publication 3-0. Washington, D.C.: Joint Chiefs of Staff, September 17, 2006.

\_\_\_\_\_. *Joint Operations*. Joint Publication 3-0. Washington, D.C.: Joint Chiefs of Staff, March 22, 2010.

\_\_\_\_\_. *Joint Operations*. Joint Publication 3-0. Washington, D.C.: Joint Chiefs of Staff, August 11, 2011.

\_\_\_\_\_. *Joint Operations*. Joint Publication 3-0. Washington, D.C.: Joint Chiefs of Staff, January 17, 2017.

\_\_\_\_\_. *Joint Operations*. Joint Publication 3-0. Washington, D.C.: Joint Chiefs of Staff, October 22, 2018.

\_\_\_\_\_. *Joint Campaigns and Operations*. Joint Publication 3-0. Washington, D.C.: Joint Chiefs of Staff, June 18, 2022.

### **Joint Publication 3-04**

Joint Chiefs of Staff. *Information in Joint Operations*, Joint Publication 3-04. Washington, D.C.: Joint Chiefs of Staff, September 14, 2022.

### **Joint Publication 3-12**

Joint Chiefs of Staff. *Cyberspace Operations*, Joint Publication 3-12. Washington, D.C.: Joint Chiefs of Staff, February 5, 2013.

\_\_\_\_\_. *Cyberspace Operations*, Joint Publication 3-12. Washington, D.C.: Joint Chiefs of Staff, June 8, 2018.

\_\_\_\_\_. *Joint Cyberspace Operations*, Joint Publication 3-12. Washington, D.C.: Joint Chiefs of Staff, December 19, 2022.

### Joint Publication 3-13

Joint Chiefs of Staff. *Joint Doctrine for Information Operations*, Joint Publication 3-13. Washington, D.C.: Joint Chiefs of Staff, April 9, 1998.

\_\_\_\_\_. *Joint Doctrine for Information Operations*, Joint Publication 3-13 (Second Draft). Washington, D.C.: Joint Chiefs of Staff, December 14, 2004.

\_\_\_\_\_. *Information Operations*, Joint Publication 3-13. Washington, D.C.: Joint Chiefs of Staff, February 13, 2006.

\_\_\_\_\_. *Information Operations*, Joint Publication 3-13. Washington, D.C.: Joint Chiefs of Staff, November 27, 2012.

\_\_\_\_\_. *Information Operations*, Joint Publication 3-13. Washington, D.C.: Joint Chiefs of Staff, November 20, 2014.

### Joint Publication 3-14

Joint Chiefs of Staff. *Joint Doctrine for Space Operations*, Joint Publication 3-14. Washington, D.C.: Joint Chiefs of Staff, August 9, 2002.

\_\_\_\_\_. *Space Operations*, Joint Publication 3-14. Washington, D.C.: Joint Chiefs of Staff, January 6, 2009.

\_\_\_\_\_. *Space Operations*, Joint Publication 3-14. Washington, D.C.: Joint Chiefs of Staff, May 29, 2013.

\_\_\_\_\_. *Space Operations*, Joint Publication 3-14. Washington, D.C.: Joint Chiefs of Staff, April 10, 2018.

\_\_\_\_\_. *Space Operations*, Joint Publication 3-14. Washington, D.C.: Joint Chiefs of Staff, October 26, 2020.

### Joint Publication 3-26

Joint Chiefs of Staff. *Counterterrorism*, Joint Publication 3-26. Washington, D.C.: Joint Chiefs of Staff, November 13, 2009.

\_\_\_\_\_. *Counterterrorism*, Joint Publication 3-26. Washington, D.C.: Joint Chiefs of Staff, October 24, 2014.

\_\_\_\_\_. *Homeland Security*, Joint Publication 3-26. Washington, D.C.: Joint Chiefs of Staff, August 2, 2005.

\_\_\_\_\_. *Joint Combating Terrorism*, Joint Publication 3-26. Washington, D.C.: Joint Chiefs of Staff, July 30, 2020.

### **Joint Publication 3-27**

Joint Chiefs of Staff. *Homeland Defense*, Joint Publication 3-27. Washington, D.C.: Joint Chiefs of Staff, July 13, 2007.

\_\_\_\_\_. *Homeland Defense*, Joint Publication 3-27. Washington, D.C.: Joint Chiefs of Staff, July 29, 2013.

\_\_\_\_\_. *Homeland Defense*, Joint Publication 3-27. Washington, D.C.: Joint Chiefs of Staff, April 10, 2018.

### **Joint Publication 3-33**

Joint Chiefs of Staff. *Joint Force Capabilities*, Joint Publication 3-33. Washington, D.C.: Joint Chiefs of Staff, October 13, 1999.

\_\_\_\_\_. *Joint Task Force Headquarters*, Joint Publication 3-33. Washington, D.C.: Joint Chiefs of Staff, February 16, 2007.

\_\_\_\_\_. *Joint Task Force Headquarters*, Joint Publication 3-33. Washington, D.C.: Joint Chiefs of Staff, July 30, 2012.

\_\_\_\_\_. *Joint Task Force Headquarters*, Joint Publication 3-33. Washington, D.C.: Joint Chiefs of Staff, January 31, 2018.

\_\_\_\_\_. *Joint Force Headquarters*, Joint Publication 3-33. Washington, D.C.: Joint Chiefs of Staff, September 19, 2022.

### **Joint Publication 3-85**

Joint Chiefs of Staff. *Joint Electromagnetic Spectrum Operations*, Joint Publication 3-85. Washington, D.C.: Joint Chiefs of Staff, May 22, 2020.

### **Joint Publication 5-0**

Joint Chiefs of Staff. *Doctrine for Planning Joint Operations*, Joint Publication 5-0. Washington, D.C.: Joint Chiefs of Staff, April 13, 1995.

\_\_\_\_\_. *Joint Operation Planning*, Joint Publication 5-0. Washington, D.C.: Joint Chiefs of Staff, December 26, 2006.

\_\_\_\_\_. *Joint Operation Planning*, Joint Publication 5-0. Washington, D.C.: Joint Chiefs of Staff, August 11, 2011.

\_\_\_\_\_. *Joint Planning*, Joint Publication 5-0. Washington, D.C.: Joint Chiefs of Staff, June 16, 2017.

\_\_\_\_\_. *Joint Planning*, Joint Publication 5-0. Washington, D.C.: Joint Chiefs of Staff, December 1, 2020.

\_\_\_\_\_. *Joint Doctrine for Campaign Planning*, Joint Publication 5-00.1. Washington, D.C.: Joint Chiefs of Staff, January 25, 2002.

\_\_\_\_\_. *Joint Task Force Planning Guidance and Procedures*, Joint Publication 5-00.2. Washington, D.C.: Joint Chiefs of Staff, September 3, 1991.

\_\_\_\_\_. *Joint Task Force Planning Guidance and Procedures*, Joint Publication 5-00.2. Washington, D.C.: Joint Chiefs of Staff, January 13, 1999.

### **Joint Publication 6-01**

Joint Chiefs of Staff. *Joint Electromagnetic Spectrum Management Operations*, Joint Publication 6-01. Washington, D.C.: Joint Chiefs of Staff, March 12, 2012.