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**Learning from Military
Transformations**
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Regional Challenges
*Tommy Ross
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Book Reviews

Addenda: The following information was updated on page 98 of the Autumn 2017 issue: "71 percent of American youth do not meet standards for service."

From the Editor

We open the Winter issue with two views of *Exploring War's Character & Nature*. Emile Simpson's article "Clausewitz's Theory of War and Victory in Contemporary Conflict" considers whether Clausewitz's theory of the nature of war is universal to all armed conflicts. He argues critical aspects of it are not; that means Clausewitz's concept of victory is not universal to all wars, especially not those fought against transnational terrorist networks. F. G. Hoffman's "Will War's Nature Change in the Seventh Military Revolution?" examines how robotics, artificial intelligence, and deep learning may affect the character and nature of war. He defines war's essence as politically directed violence fraught with friction, and argues it will not fundamentally change.

In our second forum, *Learning from Military Transformations*, two essays consider different aspects of military change. Pat Proctor's "Lessons Unlearned: Army Transformation and Low-Intensity Conflict" examines the lessons the US Army drew from its experiences in Bosnia-Herzegovina and Kosovo, and why those lessons did not affect the Army's transformation in the late-1990s. Damon Coletta's "Navigating the Third Offset Strategy" argues the US Department of Defense would benefit by adding a "craftsman" at lower ranks to steer private-sector projects through the Third Offset Strategy.

Our third forum, *Regional Challenges* takes a closer look at developments in Asia, Eastern Europe, and Latin America. Tommy Ross's "Deterrence & Security Assistance: The South China Sea" explores how the United States can apply security assistance to support regional stability in the South China Sea and counter China's assertiveness. Alexander Lanoszka's "The Belarus Factor in European Security" suggests strategists ought to reconsider the nature of the alliance between Belarus and Russia when planning military support for the Baltic states. In "Making Peace: Next Steps in Colombia," Seth Cantey and Ricardo Correa review the long history and dissolution of the FARC insurgency and recommend the next series of steps for US policymakers.

This issue's final forum, *Army Expansibility*, features two articles discussing the US Army's ability to expand in the event of a major war. Rose Keravuori's "Expansibility and Army Intelligence" provides insights into transitioning America's military intelligence resources from counterinsurgency operations to confronting a near-peer competitor. Lastly, Eric Shwedo's "Expansibility and Army Special Operations" examines how the Army might increase its special operating forces without sacrificing quality. ~AJE

Clausewitz's Theory of War and Victory in Contemporary Conflict

Emile Simpson
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ABSTRACT: This article considers whether Clausewitz's account of the nature of war is universal to all wars, in order then to assess how far his concept of victory is universal. While aspects of Clausewitz's concept of war are still universal, others are not. Accordingly, his theory of victory is not universal to all wars, and especially not to wars fought against transnational terrorist networks.

Western strategic thought is still heavily conditioned by the work of the Prussian soldier-scholar Carl von Clausewitz. In his main work, *On War*, he sets out a theory of war and a theory of warfare. The two are intrinsically related; his theory of warfare is designed to work within his theory of war. This article considers first how far Clausewitz's theory of war applies today, and then, considers the applicability of the idea of victory within his theory of warfare.

Clausewitz's Theory of the Nature of War

To assess both continuity and change in war, a standard distinction in contemporary debate is drawn between the nature (permanent features) and character (context dependent features) of war. Although this distinction is commonly misattributed to Clausewitz, he did not use the term "nature" in quite this way. Hence at the end of book 1, chapter 1, he writes: "War is thus more than a mere chameleon, because it changes its nature (*seine natur*) to some extent in each concrete case."[1] If nature is supposed to be unchanging, how can we make sense of this passage?

As Antulio J. Echevarria II sets out, Clausewitz followed a dialectical analytical framework in which the world could be seen either in the abstract, through the lens of reasoning based on pure logic, or in reality, through the lens of reasoning based on practical experience.[2] To understand the nature of a given phenomenon through this dialectical analysis, the abstract perspective is tested against practical reality.

In *On War*, this dialectical analysis produces a narrow and a broad account of what war *is*. Both are set out in book 1, chapter 1, which opens with this definition of war as an abstract phenomenon:

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1   For this translation as well as the original German, "Der Krieg ist also nicht nur ein wahres Chamäleon, weil er in jedem konkreten Falle seine Natur etwas ändert," see Christopher Bassford, "Teaching the Clausewitzian Trinity: A Teaching Note," Clausewitz.com, 2007, https://www .clausewitz.com/readings/Bassford/Trinity/TrinityTeachingNote.htm. Note that Michael Howard and Peter Paret's translation translates *natur* here as "characteristics." Carl von Clausewitz, *On War*, ed. Howard and Paret (Princeton, NJ: Princeton University Press, 1976), 89.

2   One can identify this approach as Kantian or Hegelian. See Antulio J. Echevarria II, *Clausewitz and Contemporary War* (Oxford: Oxford University Press, 2007).

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> War is thus an act of force to compel our enemy to do our will. . . . To secure that object we must render the enemy powerless; and that, in theory, is the true aim of warfare. That aim takes the place of the object, discarding it as something not actually part of war itself.[3]

What Clausewitz does here is to delimit a narrow account of war as a purely military act in which the military objective takes the place of the political aim, which is then classified as being outside war itself. This idealized, abstract view of war is sequential: the focus during war—the true aim of warfare—is on the military objective; only when the military objective is satisfied does the political objective once again come to the fore. In other words, there is a clear line between military action in war and political action in peace.

Clausewitz posits how in the abstract: "If you want to overcome your enemy you must match your effort against his power of resistance. . . . But the enemy will do the same; competition will again result and, in pure theory, it must again force you both to extremes."[4] Crucially, however, Clausewitz notes that a war would only conform to the ideal if it was a single decisive act isolated from its political context, which for that reason, means that no war in reality has ever met this ideal.[5] That said, in the next chapter he notes "many wars have come very close" to the abstract form.[6]

Clausewitz goes on to list several reasons why the nature of war in the abstract is moderated by a variety of factors that affect war in reality, namely: (a) Making the maximum effort to achieve the military objective will often be disproportionate to the political aim; (b) Belligerents will typically not be able to, or want to, mobilize all their forces for one decisive act; (c) The result in war is never final, which frustrates the idea of a neat line between war and peace; (d) Strategic thought is much more a subjective question of weighting probabilities based on one's knowledge of the enemy than an exercise in abstract logic; (e) The political object during the war may or may not motivate the people to support the war; (f) One side may refuse battle or suspend hostilities to wait for a better moment to act; (g) There will often not be "polarity," by which he means symmetry of objective, and when a war is not fought over the same thing, the incentives on either side are clearly different (Clausewitz seems to mean both military and political objectives, but he is not clear on the point.); (h) Defense is the stronger form of war, so the side on the defensive need not make as much effort at the attacking side; (i) Commanders on each side typically have imperfect knowledge of the situation; (j) "No other human activity is so . . . bound up with chance"; And finally, (k) that the means by which war is actually fought involves analysis of moral qualities, above all courage, that are not susceptible to logical analysis, but are far more a question of weighting probabilities, and this aspect makes war "like a game of cards," gambling on probabilistic assumptions, not logic.[7]

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3   Clausewitz, *On War*, 75.
4   Clausewitz, *On War*, 77.
5   Clausewitz, *On War*, 78.
6   Clausewitz, *On War*, 90.
7   Clausewitz, *On War*, 77–86.

Having gone through all these reasons, Clausewitz summarizes:

> War, therefore, is an act of policy. Were it a complete, untrammeled, absolute manifestation of violence (as the pure concept would require), war would of its own independent will usurp the place of policy the moment policy had brought it into being; it would then drive policy out of office and rule by the laws of its own nature, very much like a mine that can explode only in the manner or direction predetermined by the setting.[8]

On this basis, Clausewitz sets up a distinction between absolute and more limited forms of war, which he develops mainly in book 8. Absolute war is only found in the abstract, but provides a pole the further from which one moves, the more limited the war in reality. This polarity sets up a spectrum in which at one end, as noted above, one finds wars that get very close to being absolute, while at the other end, one gets to a vanishing point where war becomes merely "a matter of mutual observation."[9] The more absolute the war—that is, the more war conforms to its "natural tendency," the less there is a distinction between the military and political objective, and so the more the destruction of the enemy comes to the forefront of warfare. Conversely, the more limited the war, the more political considerations will displace purely military considerations in the practice of warfare.[10]

In summary, to understand what Clausewitz means by the nature of war, it is necessary to recognize that there are two ideas of war at play in *On War*. One is the abstract version found in the realm of logic, which Clausewitz identifies as the nature of war. As Clausewitz stresses, "it must be observed that the phrase the *natural tendency* of war, is used in its philosophical, strictly *logical* sense alone and does not refer to the tendencies of the forces that are actually engaged in fighting—including—for instance, the morale and emotions of the combatants."[11]

The other idea of war is the phenomenon produced when the abstract concept of war is modified by reality, to give us real war. This is the idea of war that we reach at the end of book 1, chapter 1, in which Clausewitz presents his well-known image of the "total phenomenon" of war as it appears in reality as a "trinity" comprised of three "dominant tendencies."[12] These three tendencies effectively provide categorical buckets within which to place the various reasons listed above for why war in reality moderates the abstract concept.

These dominant tendencies were: "primordial violence, hatred and enmity, which are to be regarded as a blind natural force"; "the play of chance and probability within which the creative spirit is free to roam"; and "its element of subordination, as an instrument of policy, which makes it subject to reason alone." He continues, "the first of these three aspects mainly concerns the people; the second the commander and his army; the third the government." He summarizes, "these three tendencies are like three different codes of law, deep-rooted in their subject and yet variable in their relationship to one another. . . . Our task,

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8 Clausewitz, *On War*, 87.
9 Clausewitz, *On War*, 488.
10 Clausewitz, *On War*, 88.
11 Clausewitz, *On War*, 88.
12 Clausewitz, *On War*, 89.

therefore, is to develop a theory that maintains a balance between these three tendencies, like an object suspended between three magnets."[13]

We can now answer the problem stated above: that if nature is supposed to be unchanging, how can we make sense of Clausewitz's assertion that "war," as Bassford translates, "changes its nature (*seine natur*) to some extent in each concrete case?" Read in the context of the whole of the chapter, we can clearly see Clausewitz is referring to the modification of the abstract, logical idea of war in practice. Hence this passage is immediately followed by the presentation of the trinity, which identifies categories of reasons why war in its pure form tends to be modified in practice.

Is Clausewitz's Theory of War Universal?

We just saw how the nature of war was, for Clausewitz, war in its abstract form, as distinct from the concept as it appeared in reality. However, in contemporary debate, the "nature" of war in Clausewitz's theory is generally identified with the trinity, rather than the abstract concept. This association is confusing, because Clausewitz himself never identifies the trinity with the nature of war. Rather, he explains the trinity is comprised of the three dominant tendencies representing the various factors that in reality moderate war's abstract nature. Hence, as noted above, he sees the trinity as part of war understood as a total phenomenon, that is, its abstract nature modified in reality by the three dominant tendencies of the trinity.

In my view, it follows from Clausewitz's abstract account of the nature of war that his account of war in *On War* is not universal. Consider again, in more detail, the passage at the start of book 1, chapter 1, in which he identifies war's abstract nature:

> I shall . . . go straight to the heart of the matter, to the duel. War is nothing but a duel on a larger scale. Countless duels go to make up war, but a picture of it as a whole can be formed by imagining a pair of wrestlers. Each tries through physical force to compel the other to do his will; his *immediate* aim is to *throw* his opponent in order to make him incapable of further resistance. War is thus an act of force to compel our enemy to do our will. . . . Force . . . physical force . . . is thus the means of war; to impose our will on the enemy is its object. To secure that object we must render the enemy powerless; and that, in theory, is the true aim of warfare. That aim takes the place of the object, discarding it as something not actually part of war itself.[14]

Three features of this abstract definition make clear that Clausewitz's notion cannot be regarded as universal to all war.[15] First, it demands a two-way fight between one side and another, as the image of the duel makes clear. Hence genuinely multiplayer conflicts, such as the recent war in Syria, are not comprehended.

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13   Clausewitz, *On War*, 89.

14   Clausewitz, *On War*, 75.

15   These factors differ from the debate over the universality of the trinity as it has developed since the 1990s, which tends to focus on the state versus nonstate issue. See Bassford, "Tip-Toe through the Trinity: The Strange Persistence of Trinitarian Warfare," Clausewitz.com, January 5, 2017, https://www.clausewitz.com/mobile/trinity8.htm; and Martin van Creveld, *The Transformation of War: The Most Radical Reinterpretation of Armed Conflict since Clausewitz* (New York: Free Press, 1991). On the debate, see Christopher Daase, "Clausewitz and Small Wars" in *Clausewitz in the Twenty-First Century*, ed. Hew Strachan and Andreas Herberg-Rothe (Oxford: Oxford University Press, 2007).

Second, the idea assumes the enemy is a unified entity. If not already evident in the image of the enemy personified as a wrestler, this assumption must follow from the claim that war is an act of force to compel our enemy to do our will. The assumption here is that the enemy himself is imagined as having a "will" that can be compelled through military action in war to accept a given political outcome. This image fits badly with war against networked terrorist groups, where military action against one part of the network may well have no effect on the network as a whole, precisely because one is not dealing with a unified entity, but a network. To the extent that the wars in Iraq and Afghanistan, as well as the so called war on terror, have involved the use of force against networked terrorist groups, they resist inclusion in Clausewitz's abstract definition of war.

Third, this definition is combat-centric: combat is the only means of war.[16] Of course, Clausewitz is talking about the abstract nature of war here, and he may well accept that diplomacy and other nonviolent means have a role to play in more limited forms of war. But, in *On War,* he devotes virtually no attention to such nonviolent means. To the extent that nonviolent means have been central to various types of conflict, from the Cold War to the kind of contemporary "hybrid warfare" conducted, for example, by Russia—and the fact that such means as economic sanctions and cyber-resources are today increasingly effective as tools of statecraft—they are not accounted for in Clausewitz's abstract definition of war.

In summary, Clausewitz's account of war identifies a two-way military fight between unified entities. These unified entities are primarily imagined as states, as is clear by the association of each part of the trinity with a part of the state at war (i.e. government, people, army). Indeed, even when Clausewitz contemplated insurgency, he assumed that insurgents would fight on behalf of their state.[17] That said, if a nonstate actor is a unified entity rather than a network, one might well see the entity as included within Clausewitz's abstract definition of war.

Yet, if Clausewitz's abstract account of war is not universal, what about his broad concept of the total phenomenon of war in reality, as represented in the trinity: is that universal to all war? A simple answer is no, given how the total phenomenon is but the abstract concept moderated by the trinity, and so is not a universal concept of war for exactly the same reasons as the abstract concept is not. That said, one might nonetheless ask whether the trinity on its own can attach to other types of war, beyond those within Clausewitz's abstract account of war.

The problem one immediately encounters here is, what does one mean by other types of war in the abstract, beyond those identified in Clausewitz's definition? We can say, based on the analysis above, that in a negative sense, these are wars that are not two-way but genuinely multiplayer, in which the enemy is not a unified entity, or in which

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16   That is made explicit in Clausewitz, *On War*, 95.

17   Hew Strachan argues that even Clausewitz's treatment of insurrections is framed in terms of an extension of state-on-state warfare, where the people continue the state's struggle through unconventional means. Hew Strachan, *Clausewitz's On War, A Biography* (New York: Atlantic Monthly Press, 2007), 182. On Clausewitz's view of small wars, see Sebastian Kaempf, "Lost through Non-Translation: Bringing Clausewitz's Writings on 'New Wars' Back In," *Small Wars & Insurgencies* 22, no. 4 (October 2011): 548–73, doi:10.1080/09592318.2011.599164.

combat is not the only means. But, that still does not provide a positive definition. Furthermore, and more importantly, this clarification does not tell us why Clausewitz's account of war in the abstract and other types of war in the abstract should both be understood as war: what is this higher-level account of war's abstract nature? There are two ways to answer this question, which will in turn tell us if the trinity is indeed universal to all types of war.

The first way is to stay within the realm of abstract definitions of war's nature, and thus to come up with a universal definition of war that focuses on an element, or set of elements, that all wars must have in common. While I am skeptical that such a perfect definition exists, the essence of any such definition would be based on the element of collective political violence, notwithstanding that each of those terms is to an extent subjective.

The second way moves outside of the realm of abstract thought and rather traces the conceptual varieties in the meaning of war over time, like a family tree; although, what counts as war will, of course, also be subjective in this approach. This approach does not seek a single universal definition of war. It merely identifies as empirical facts the whole universe of phenomena that have been called war (or their equivalent in other languages), and classifies them according to the way the term was used in historical context. Of course, this approach is subjective too, in that what has been called war has meant different things to different people at different times, not to mention linguistic subjectivity.

The key difference between the first and second approach is that while the first seeks to exclude all differences to achieve a universal definition of war, the second actively looks for differences in its classification. This second approach is fundamentally attuned to distinctions in the sociopolitical context in which war takes place.

Key types of distinction in this regard are legal classifications of war. Before 1945, for example, the idea of a "state of war" demanded, at least in legal theory, declared war between sovereign states. Indeed, the very term "regular war" (as distinct from irregular war) originates in the idea of a state of war. The term was coined by the Swiss international lawyer Emer de Vattel (1714–67), who changed the Latin *bellum solemne* (formal war) in the work of Hugo Grotius (1583–1645), into the French *guerre en forme* (war in due form), which he also called *guerre règlée* (regulated or regular war).[18]

Yet, on the first page of *On War*, Clausewitz expressly dismissed law as irrelevant.[19] He says international law is barely worth mentioning, and that law only has force within the state, which further implies that the type of war he is dealing with is interstate. Clausewitz's dismissal of international law is ironic because it provided the basic category of regular war that was his main focus, that is, two-way fighting between states. Indeed, the idea of war as a duel, or as an analogy to litigation, which is another analogy Clausewitz relies upon, is routinely encountered in the work of international lawyers in the two centuries

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18   Emer de Vattel, *Le Droit de Gens, ou, Principes de la loi Naturelle, Appliqués à la Conduit et aux Affaires des Nations et des Souverains* (Buffalo, NY: W. S. Hein, 1995), 507.

19   Clausewitz, *On War*, 75.

before Clausewitz.[20] In this respect, Clausewitz's account of the nature of war would have surprised no one in his day as a standard abstract description of regular war.

Conversely, Clausewitz wrote nothing about the wars some European powers fought in distant colonies, let alone about measures short of war, which was also a legally defined category outside a formal state of war that tended to come about in the context of the maritime naval and commercial competition between European powers associated with imperial expansion.[21] Given that Prussia did not have an overseas empire, or any serious naval capability, Clausewitz's silence with regards to the imperial dimension of the European experience of war is unremarkable, but does not change the fact that he said nothing about a large expanse of the European experience of war in his day.

Conversely, Clausewitz's dismissal of domestic law is not ironic, since he recognized it had force within the state, but he does not write about war within the state in *On War*. However, today many contemporary conflicts are internal conflicts in which the domestic law of the local state matters a great deal. In Afghanistan, for example, Afghan law governs the detention process, including the evidentiary requirements. More generally, Afghan law significantly restricts what coalition forces can realistically do. If coalition forces are working with a corrupt local official, for example, the local coalition commander, having no authority to do so under Afghan law, cannot directly fire the official.

There is an open-ended range of types of war according to this second approach of sketching a universal account of war. Beyond variety in legal classification, one could look at religious, cultural, economic, social and geopolitical classifications of war, and so on. It seems clear, for example, that religious wars—past and present—have different characteristics to nonreligious wars, and no doubt one could make further distinctions therein. From this perspective, new types of war are not a problem for the coherence of the concept, but responsive to differences in the sociopolitical context in which war takes place. Does the use of autonomous weapon systems, for instance, demand new categorical distinctions in war? Either way, the answer tells us something about what war is or is not.

Furthermore, these historical classifications of war can overlap. A religious war, for example, might be several other types, too, whether regular or irregular, hybrid in its means, or combat-centric, and so on. In short, like a human being, a war can have several aspects to its character—if character is the framework one wants to use to account for variety and change—in contrast to a phenomenon's permanent nature, which really just means common features across examples of the phenomenon as it appears in historical reality.

Finally, note how these two ways of arriving at a universal account of war are not mutually exclusive, but depend on one another. The abstract

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20   For example two centuries before Clausewitz, Grotius writes: "War is the state or situation of those . . . who dispute by force of arms. . . . This agrees very well with the etymology of the word; for the Latin word *bellum* (war) comes from the old word *duellum* (a duel)." Hugo Grotius, *The Rights of War and Peace*, ed. Richard Tuck (Indianapolis, IN: Liberty Fund, 2005), 134–35. On Clausewitz's analogy of war as a form of litigation, which again is a standard idea in international law from Grotius onwards, see Clausewitz, *On War*, 357–58.

21   Clausewitz, *On War*, 98.

account of war tries to find common features across all the presentations of war as it has presented itself in historical reality. Conversely, the historical account demands an abstract standard to identify the edges of its universe of what counts as war. Hence the term "war" is frequently used linguistically in ways everyone would agree are outside this universe because the term is used in a different way, or by loose analogy, or for merely rhetorical impact—a "war on cancer" for example.

We can now return to the question of whether the trinity applies universally to all types of war, regardless of the fact that in *On War* itself, the concept is presented within an abstract account of war that is clearly not universal. In my view, the trinity does apply universally, but not as a universal account of all the normative sources—the dominant tendencies that are similar to codes of law—that inform war in reality. When I say it applies universally, I mean I cannot imagine a proposed abstract universal definition of war that does not present a phenomenon in which the trinity's three dominant tendencies do not apply. However, when I say it is not a universal account of all the normative sources that inform war in reality, I mean there exist other normative sources in war's sociopolitical context, such as geopolitics (as distinct from policy), law, religion, culture, economics, robotics, and so on, that can also potentially inform what a given war *is*.

One might argue that Clausewitz himself acknowledged the possibility that other normative sources from the sociopolitical context in which war took place could inform the character of war beyond those normative sources identified in the trinity. Hence, he writes in book 8 how "the aims a belligerent adopts, and the resources he employs, must be governed by the particular characteristics of his own position; but they will also conform to the spirit of the age and to its general character. Finally, they must always be governed by the general conclusions to be drawn from the nature of war itself."[22] However, whether this was in fact Clausewitz's subjective view is beyond the scope of this article, and not relevant to our purposes. Whether Clausewitz meant it or not, while it is suggested here that the trinity applies to all wars, it is also suggested that the trinity should not be taken as an exclusive account of the normative sources that potentially inform the character of a given war.

Clausewitz's view of war in the trinity, which resists its reduction to scientific models, is a fundamentally important insight. In this light, the most useful way to think about war is to read about its history, and thus come to understand it in different historical contexts that serve as analogies, or distinctions, to the present day. This is an exercise in historical judgement, not scientific logic. It fits with the fact that Clausewitz himself wrote military history, and relied upon it for vicarious experience to inform his analysis in *On War*.[23]

Nonetheless, the scientific mode of approaching war resurfaces from time to time, with predictably negative consequences. Look at Robert McNamara's systems analysis approach during the Vietnam War, for example. The trinity also inhibits "big-hand, small-map" strategy, in which one forgets that war acts upon real people, who have their

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22 Clausewitz, *On War*, 594.
23 On Clausewitz the military historian, see Andreas Herberg-Rothe, *Clausewitz's Puzzle: The Political Theory of War* (Oxford: Oxford University Press: 2007), 32.

own story, and will not simply submit to the use of force as understood through some quasiscientific model. One might think of the failure of neoconservative projects to violently reshape the Middle East in the image of Western democracies, for example.

That said, the trinity has its limits. It says nothing about a range of normative sources that potentially inform the character of war, such as law, religion, and robotics, that lie outside the trinity. These considerations, when they arise, can be fundamental, too. For example, the idea of a criminal enemy is a fundamentally different notion to a noncriminal enemy. That much is clear if one but contrasts the normality of collecting evidence on a battlefield in a counterinsurgency to how odd such a notion typically would be during an interstate war, and what each of those scenarios implies for how that conflict will end. Fighting criminals with force is a form of armed governance, which is a far more open-ended idea than the use of force against regular enemies, who do not fall within one's jurisdiction to invigilate or govern. And this rather fundamental legal difference is but one feature of one normative source outside the trinity.

In sum, while there is still real value in Clausewitz's account of the trinity, one should not make a fetish out of it, nor out of the persona of Clausewitz himself, whose writings are unfortunately all too often treated in a quasireligious manner as if departure from a given canon of interpretation is some kind of sin. That attitude only frustrates clear appreciation of what parts of his theory of war still work, and which do not, or need adaption or extension. *On War* is simply a text, and should be read unsentimentally in its own context, retaining what works, if necessary by adaptation or analogy to new situations, but distinguishing what does not.

Networks, Hierarchies, and Victory in Clausewitz's Theory of Warfare

Clausewitz's theory of war assumes certain types of situations that his theory of warfare was designed to work within. As noted above, the basic situation was a two-way military fight between unified entities, who would typically be states. There is not space here to deal with the entirety of the applicability of Clausewitz's theory of warfare to contemporary conflict. Rather, I will focus on but one element which is particularly relevant today, namely, his concept of victory.[24]

Our start point here is that Clausewitz's abstract definition of war does not account for situations in which the enemy is not a unified entity. Following General Stanley McChrystal's insightful distinction between hierarchical and networked enemies, one can say Clausewitz's definition of war assumes a hierarchical enemy.[25] Against a hierarchical enemy, military action on the battlefield tingles up the nervous system to the political leadership at the top. This connectedness is what ultimately allows military action to translate into political effect in a clear sequence in which war sets conditions for peace. The moment of translation is

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24   For a detailed account of Clausewitz's concept of victory, see Beatrice Heuser, "Clausewitz's Ideas of Strategy and Victory," in Strachan and Herberg-Rothe, *Clausewitz in the Twenty-First Century*.

25   See Stanley A. McChrystal, et al., *Team of Teams: New Rules of Engagement for a Complex World* (New York: Penguin, 2015).

the moment of victory, which comprehends a military and a political dimension; that is, the battlefield result is locked into a political result because the enemy as a whole—the entire hierarchy—recognizes the verdict of battle (whether that verdict is decisive or not).

A hierarchical enemy is presupposed in any strategic theory based on Clausewitz, given how he assumed the enemy to be a unified entity. This assumption provided the basis for his most important strategic concept, the center of gravity, which necessarily presupposed the enemy had a "will," in the sense that it was a unified entity. Thus, Clausewitz envisaged the military strategist striking at the enemy's center of gravity to translate a military result into a political result because it was a physical representation of the center of the enemy's will: "By constantly seeking out the center of his power . . . will one really defeat the enemy."[26] The location of the center of gravity was wherever the enemy's will could be defeated, which would normally require destruction of the enemy's main force, but it could also involve the occupation of the capital, or influencing communal interests in the case of an alliance. In this way, the center of gravity provided for a unified concept of victory: because the enemy's military defeat was translated into a political result binding on the enemy as a whole—for Clausewitz understood the enemy to be a unified whole.

Now consider the position of victory in relation to the networked enemy. When the enemy is not a vertical hierarchy but a relatively flat network, while military action may produce localized political effect against localized contours of political leadership within the network, other parts of the network might well ignore that effect, and keep fighting. This condition makes it very hard to translate military effect into decisive political effect, for the very notion of decision in this context implies that it is binding, not ignored. The United States has degraded the core of al-Qaeda, but many of its franchises are still fighting, or have mutated into new groups. The same can be said about the Islamic State and radical jihadi terrorist networks more broadly.

One can try to force a networked enemy into traditional strategic models based on the hierarchical paradigm of the enemy by treating all people even loosely connected to a network as if they were a single enemy, and make a massive commitment to defeat the entire network militarily. However, this approach has the effect of aggregating constituencies who may not otherwise have strong links to one another, and treating them as if they were a single entity. The chances are, one will inflate the size of the problem and be fighting for a long time while disabling one's own ability to exploit a networked enemy's greatest vulnerability, which is precisely the fact that it can be broken up as a network along the lines of its internal fissures. Against this temptation, a better approach is to disaggregate the various parts of the enemy to understand them on their own terms, which rightly was David Kilcullen's central point in *The Accidental Guerilla*.[27]

If we take an aggregate-and-destroy-the-network approach anyway, victory simply comes to mean physical destruction: there is no need to

26   Clausewitz, *On War*, 596.

27   David Kilcullen, *The Accidental Guerrilla: Fighting Small Wars in the Midst of a Big One* (London: Hurst, 2009).

bind an enemy into a political settlement if they have been physically destroyed, or at least severally degraded to the point of no longer posing a threat worth fighting. So military force can be decisive in this qualified sense against a networked enemy, yes. But, networked insurgents will rarely fight Western forces in conventional battle, preferring to perform hit-and-run attacks while hiding within civilian populations. So one must be clear that the consequences of achieving decision through brute force alone is likely wide-scale loss of civilian life in a manner that may well be morally, if not legally, repugnant to Western publics.

Moreover, the brute force approach assumes a networked enemy can all be targeted militarily in the first place. That is unlikely to be the case if the enemy is a globalized network. Rather, it is a recipe for forever war, which as the name suggests, is never going to be decisive. In short, if one simply treats a networked enemy as if it were a hierarchical enemy, victory becomes a purely military concept without a political counterpart. Victory understood in decisive terms becomes an ever receding light at the end of the tunnel of forever war. Of course, no wars actually have lasted forever; the point is that forever war simply identifies a type of war with no apparent mechanism of decision.

Conclusion

In one sense, *On War* represents Clausewitz's attempt to understand a massive transformation in the character of war as he had experienced it in his lifetime. With the withering Prussian defeat at the Battle of Jena in 1806 in mind, he writes:

> In the eighteenth century…war was still an affair for governments alone. . . . At the onset of the nineteenth century, peoples themselves were in the scale on either side. . . . Such a transformation of war might have led to new ways of thinking about it. In 1805, 1806, and 1809 men might have recognized that total ruin was a possibility—indeed it stared them in the face. . . . They did not, however, change their attitude sufficiently. . . . They failed because the transformations of war had not yet been sufficiently revealed by history.[28]

As Hew Strachan's biography of *On War* tells us, Clausewitz saw as fundamental the social changes of the French Revolution, which produced the citizen-solider and the idea of the nation in arms. Allied to expansive ideological claims, war ripped apart European order from 1789 to 1815. Clausewitz's achievement was to provide a flexible account of war that could comprehend the lived reality of near-absolute war without claiming all wars would always be like this, and might well be far more limited. On this basis, Clausewitz offered military strategists in his day a set of strategic principles to translate military outcomes into political outcomes, that is, a clear account of victory in war.

However, the fragmented, networked enemy, produced by today's information revolution—which might well turn out to be just as transformative as the French Revolution, or the Industrial Revolution— fits badly into Clausewitz's abstract account of war as a two-way military fight between unified entities. This enemy is not new but well-known to the Western tradition of strategic thought in the imperial and small-wars context—though historically known more at a local or a regional level

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28   Clausewitz, *On War*, 583–84.

than at the global-level networks of today's Information Age. But, this latter context was not the type of war about which Clausewitz wrote. The center of gravity concept breaks down in relation to the fragmented, networked enemy. By plugging in modern operational doctrine to the wrong historical tradition, we misunderstand the conflicts we fight in. Regardless of abstract theory, the further the factual reality of early twenty-first century combat—war as it has actually been lived by several thousand Western soldiers—departs from the interstate land warfare of early nineteenth century Europe, the harder it is to understand today's warfare in Clausewitzian terms, even if the trinity in the specific sense suggested above applies universally to all war.

Clausewitz updated the theory of war and warfare to account for the experience of his own day. Today, the same ambition to update the theory of war and warfare in light of lived experience can safely be described as Clausewitzian.

Will War's Nature Change in the Seventh Military Revolution?

F. G. Hoffman

ABSTRACT: This article examines the potential implications of the combinations of robotics, artificial intelligence, and deep learning systems on the character and nature of war. The author employs Carl von Clausewitz's trinity concept to discuss how autonomous weapons will impact the essential elements of war. The essay argues war's essence, as politically directed violence fraught with friction, will remain its most enduring aspect, even if more intelligent machines are involved at every level.

Over 25 years ago, Manuel De Landa wrote in *War in the Age of Intelligent Machines*, that when we move past cruise missiles that merely hit their intended targets to the day when "autonomous weapons begin to select their own targets, the moment the responsibility of establishing whether a human is friend or foe is given to the machine, we will have crossed a threshold and a new era will have begun."[1] More recent works also indicate the era of disruptive technologies, with the potential to change both the nature and character of war, is swiftly approaching.[2] The combined impact of artificial intelligence (AI) and unmanned systems might quickly evolve into the age of autonomy, and consequently raise critical ethical and moral issues. But this article addresses the rising awareness in the national security community about the technologies' prospective impact. This perspective is followed by an examination of the scale of the potential changes caused by lethal weapons in the context of Carl von Clausewitz's invaluable trinitarian framework.

The major technological breakthroughs that could occur in robotics as well as information, cognitive, and material sciences are, by themselves, truly revolutionary.[3] In the context of one construct, such emerging opportunities and challenges reinforce a theory of five military revolutions (see table 1). Defined as uncontrollable, unpredictable, and unforeseeable changes in politics and society, these eras "recast society and the state as well as military organizations. They alter the capacity of states to create and project military power. And their effects are additive."[4] Stopping at five historical cases, the construct alludes to the ongoing sixth revolution, the Information Age.

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1 Manuel De Landa, *War in the Age of Intelligent Machines* (New York: Zone Books, 1991), 46.

2 Jeffrey L. Caton, *Autonomous Weapons Systems: A Brief Survey of Development, Operational, Legal and Ethical Issues*, Letort Papers (Carlisle, PA: Strategic Studies Institute, 2015).

3 James Kadtke and Linton Wells II, *Policy Challenges of Accelerating Technological Change: Security Policy and Strategy Implications of Parallel Scientific Revolutions* (Washington, DC: National Defense University [NDU], 2014).

4 MacGregor Knox and Williamson Murray, eds., *The Dynamics of Military Revolution, 1300–2050* (New York: Cambridge University Press, 2001), 6–7.

Military Revolution	Implications
First Revolution	
Westphalian System	Revenue generation, banking and taxes for financing wars, and professional militaries
Second Revolution	
French Revolution	National mobilization, levy en masse, and large-scale armies with conscription
Third Revolution	
Industrial Revolution	Mass production, standardization, and large-scale economic exploitation
Fourth Revolution	
World Wars I & II	Combined arms, armored blitzkrieg, carriers, bombers, and jets
Fifth Revolution	
Nuclear Revolution and missiles	Nuclear weapons and intercontinental ballistic missiles
Sixth Revolution	
Information Revolution	Command and control, connectivity and instant global reach, imagery, and cyber levy en masse by violent extremists
Seventh Revolution	
Autonomous Revolution	Autonomous weapons, swarms of robotic vehicles in multiple domains, self-organizing defensive systems, automated weapons, big data analytics, and machine and deep-learning programs

Table 1. Military Revolutions[5]

A seventh revolution, the autonomous revolution, looms ahead of us. By combining machines and computers in ways thus far envisioned mostly through science fiction, this era will merge the changes generated by the Industrial Revolution and the Information Age with potentially significant alterations in how war is conducted. Of particular salience in this new era are developments in artificial intelligence, especially machine learning and deep-learning AI, combined with unmanned systems.[6] These developments are the underlying breakthroughs that

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5 This table expands on the information provided by Knox and Murray in *Dynamics of Military Revolution*, 13.

6 Artificial Intelligence means computers executing tasks traditionally left to human cognition and reasoning. Machine learning means computer systems improving their performance by automatically discovering patterns in large amounts of data. Deep-learning software attempts to replicate human brain activity. Adapted from David Schatsky, Craig Muraskin, and Ragu Gurumurthy, "Demystifying Artificial Intelligence: What Business Leaders Need to Know about Cognitive Technologies," Deloitte Insights, November 4, 2014.

make self-driving cars and operational robots possible, with greater functionality and self-learning. Only after examining the progress in AI being made today do functioning androids seem to be more of a reality than like something out a science fiction movie.[7]

The Autonomous Revolution

Senior Pentagon leaders have already grasped the enormous potential of applying AI to enhance decision-making, improve intelligence production, and safeguard computer systems. A common understanding of "autonomy" enables the discussion to proceed. "To be autonomous," a government advisory body notes, "a system must have the capability to independently compose and select among different courses of action to accomplish goals based on its knowledge and understanding of the world, itself, and the situation."[8]

Autonomous systems are not entirely new. During World War II, the Germans employed a torpedo with an acoustic homing seeker that was recognized as the first guided and autonomous weapon.[9] Other weapons during that war also approached some degree of independence. The US Navy and US Army now field defensive missile systems with degrees of autonomy built into their controls. The US Joint Chiefs of Staff identifies this area as a critical trend:

> The next two decades will see significant advances in autonomy and machine learning, to include the emergence of robots working together in groups and as swarms. New and powerful robotic systems will be used to perform complex actions, make autonomous decisions, deliver lethal force, provide [intelligence, surveillance, and reconnaissance] coverage, and speed response times over wider areas of the globe.[10]

The Army forecasted the upcoming revolutionary shifts in technology "may even challenge the very nature of warfare itself."[11] A British assessment noted "the increased capability of robots is likely to change the face of warfare" and some countries may replace large numbers of troops with robots by 2045.[12]

While the potential of AI has been hyped for more than a generation of very halting progress, breakthroughs during the last five years alone suggest an age of autonomy is much closer than previously anticipated.[13] Yet, while legal, ethical, and moral dimensions are being debated,

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7   For a comprehensive and balanced assessment of the moral, political, and military implications, see Paul Scharre, *Army of None, Autonomous Weapons and the Future of War* (New York: W. W. Norton, 2018).

8   Defense Science Board, *Final Report of the Defense Science Board (DSB) Summer Study on Autonomy* (Washington, DC: Department of Defense, 2016), 4.

9   I thank Dr Andrew Ilachinski, *AI, Robots and Swarms: Issues, Questions and Recommended Studies* (Arlington, VA: CNA, 2017), v. For additional detail, see John Campbell, *Naval Weapons of World War Two* (London:, Conway Maritime Press, 1985), 264.

10   Joint Force Development, *Joint Operating Environment JOE 2035: The Joint Force in a Contested and Disordered World* (Suffolk, VA: Joint Chiefs of Staff, 2016), 17.

11   US Army Training and Doctrine Command (TRADOC), *The Operational Environment and the Changing Character of Future Warfare* (Fort Eustis, VA: 2017), 6.

12   Development, Concepts and Doctrine Command, *Strategic Trends Programme: Global Strategic Trends—Out to 2045, 5th ed.* (Shrivenham, UK: Ministry of Defence, 2016), 67.

13   Samuel R. White, Jr., ed., *Closer Than You Think: The Implications of the Third Offset Strategy for the U.S. Army* (Carlisle, PA: Strategic Studies Institute, 2017); and Larry Lewis, *Insights for the Third Offset: Addressing Challenges of Autonomy and Artificial Intelligence in Military Operations* (Arlington, VA: CNA, 2017).

little work addresses operational concepts, organizational and tactical reforms, or verification and validation tests for the emerging systems.

Presently, human cognition is perceived to be superior to autonomous technologies in situations that are complex, ambiguous, and dynamic. We know human beings are very talented at making decisions in closed systems with repeatable data and feedback, including complex games like chess. But our decision-making and cognitive processes can be skewed negatively or produce irrational decisions because of bias, attribution, optimism, framing, and anchoring influences.

The computational power of computers is accelerating, and machines can now defeat humans in intellectual contests. Deep Blue defeated chess master Garry Kasparov more than 20 years ago. Advancing from a system with more than 100,000 replications of previous Go strategies that achieved early victories, a newer AI-based version was merely programmed with the basic rule set and developed its own strategies by playing simulated games over three days. With unorthodox moves, the AI crushed the human Go masters pitted against it.[14] Machine learning even composes quality musical symphonies.[15]

Advances in autonomous systems should continue to outsmart humans where routine, known, "predictable tasks are being performed, where reaction time is critical."[16] One source emphasizes, "Increased automation or autonomy can have many advantages, including increased safety and reliability, improved reaction time and performance, reduced personnel burden with associated cost savings, and the ability to continue operations in communications-degraded or -denied environments."[17] The greatest advantages of autonomy will come from eliminating the need for mundane tasks and augmenting human decision-making, not replacing it. This outlook suggests combinations of humans and machines represent the future. As former Deputy Secretary of Defense Robert O. Work concluded, "Rapid advances in artificial intelligence— and the vastly improved autonomous systems and operations they will enable—are pointing towards new and more novel warfighting applications involving human-machine collaboration and combat teaming."[18] The role of educated humans will begin to concentrate on the higher cognitive tasks of processes such as mission analysis, operational planning, and assessments.

Yet, our appreciation of the implications of the seventh military revolution is weak.[19] Time may not be on our side, as these technologies— with new commercial and military applications—are already available. The Chinese realize the inherent opportunities of these advances, and

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14   Christof Koch, "How the Computer Beat the Go Master," *Scientific American*, March 19, 2016.

15   Yuval Noah Harari, *Homo Deus: A Brief History of Tomorrow* (New York: Harper, 2017).

16   Robert O. Work and Shawn Brimley, *20YY: Preparing for War in the Robotic Age* (Washington, DC: Center for a New American Security, 2014), 24.

17   Brian Hall, "Autonomous Weapons Systems Safety," *Joint Force Quarterly* 86 (3rd Quarter 2017), 87.

18   Robert O. Work, foreword to *DoD Artificial Intelligence, Big Data and Cloud Taxonomy* (Washington, DC: Govini, 2017), 2.

19   See Shawn Brimley, Ben Fitzgerald, and Kelley Sayler, *Game Changers: Disruptive Technology and U.S. Defense Strategy* (Washington, DC: Center for a New American Security, 2013).

are pursuing each of them with varying degrees of emphasis.[20] The People's Liberation Army is also moving beyond informationalization of warfare into smart, or intelligentization of, warfare to pursue the same lines of effort identified by America's science and technology community and national security officials. This focus includes shoring up currently disadvantaged sectors, such as anti-submarine warfare. The Russians think AI has enormous potential, with President Vladimir Putin claiming a state that monopolizes this dimension could dominate the globe.[21] The notion of a Sputnik moment involving AI is only a slight bit of hype, but it does serve to alert us to the dangers of complacency.

The Nature and Character of War

The professional military community generally differentiates between an objective *nature* and a subjective *character* of war by drawing upon Clausewitz.[22] The former describes what war is, and the latter describes how it is actually fought. The nature captures war's essence— the things that differentiate war, as a type of phenomenon, from other things. War's nature is violent, interactive between opposing wills, and driven by politics. War's character, its conduct, constantly evolves under the influence of technology, moral forces (law or ethics), culture, and military culture, which also change across time and place.

Colin Gray captures this essence cogently: "There is a unity to all strategic experience: nothing essential changes in the nature and function (or purpose) in sharp contrast to the character—of strategy and war."[23] Clausewitz observed every age has its "own kind of war, its own limiting conditions and its own peculiar preconceptions."[24] In his day, the major changes in conditions were social and political, but he was aware that technological advances generate changes in war character.

Close adherents of Clausewitz remain extremely skeptical that war's objective nature can be modified. They insist war's fundamental nature cannot change. They contend war is inherently human, a clash of wills, politically driven. Technology cannot mitigate its essence, or shed reliable insights to remove its uncertainty. Historian Williamson Murray is skeptical the Information Age can dissipate war's nature, especially battlefield uncertainty. He contends war's nature includes the fog and the friction of war, and that arguments contending its nature can be altered are false.[25] Murray argues, "No amount of computing power can

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20 Elsa B. Kania, "Chinese Advances in Unmanned Systems and the Military Applications of Artificial Intelligence—the PLA's Trajectory towards Unmanned, 'Intelligentized' Warfare" (testimony, *Hearing on China's Advanced Weapons, Before the U.S.-China Economic and Security Review Commission*, February 23, 2017).

21 Associated Press, "Putin: Leader in Artificial Intelligence Will Rule World," AP News Archive, September 1, 2017, http://www.apnewsarchive.com/2017/Russian-President -Vladimir-Putin-says-that-whoever-reaches-a-breakthrough-in-developing-artificial -intelligence-will-come-to-dominate-the-world/id-bb5628f2a7424a10b3e38b07f4eb90d4.

22 Christopher Mewett, "Understanding War's Enduring Nature alongside Its Changing Character," War on the Rocks, January 21, 2014, http://warontherocks.com/2014/01/understanding -wars-enduring-nature-alongside-its-changing-character/.

23 Colin Gray, *Modern Strategy* (New York: Oxford University Press, 1999), 362.

24 Carl von Clausewitz, *On War*, trans. and ed. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976), 593.

25 Admiral William A. Owens, *Lifting the Fog of War*, with Edward Offley (New York: Farrar, Straus, and Giroux, 2000).

not limit the reciprocal nature of war to a clash of opposing trinities, but expressed interaction within the trinity. In short, a change in character could impact an essential element, and could, to a degree, be changed by it. Thus, such a change in the character and the conduct of war could influence war's nature.

An Analytical Framework

To explore the possible dynamics of warfare in an age of autonomy, we can use Clausewitz's remarkable trinity model.[34] The trinity captures the interactive elements at the core of violence: irrational forces of "primordial violence, hatred, and enmity"; nonrational forces per "the play of chance and probability" and the genius of the commander, which produce friction; and purely rational forces from war's subordination to policy and reason.[35] Clausewitz associated each of these elements with actors or components of the state—policy, the military, and the people. These components are the main loci of each factor, but not its only source. Clearly, passions stir the military, and irrational factors affect even the most deliberative policy-making process. But the true trinity and the association with actors is secondary.[36]

The three essential elements interact with each other to influence the most essential nature of war, its primordial violence. The persistence of this framework suggests its strong analytical utility across time.[37] The concept is often presented graphically as a hierarchy that implies fixed relationships in an isosceles triangle.[38] Even avowed disciples of Clausewitz will mistakenly refer to the trinity as a triangle. This representation is at odds with Clausewitz's interactive and nonlinear description of war.[39] Clausewitz insisted:

> These three tendencies are like three different codes of law, deep-rooted in their subject and yet variable in their relationship to one another. A theory that ignores any one of them or seeks to fix an arbitrary relationship between them would conflict with reality to such an extent that for this reason alone it would be totally useless.[40]

The reciprocity between the three elements shapes the violence that makes war so unique, and drives each case contextually. Clausewitz noted "the conduct of any war affects its character, and its altered character feeds back into the political ends that guide its conduct."[41] His description of three suspended magnets represents how the three elements attract and repel each other. This interaction, changing the nature or relationship of the other, is central to understanding Clausewitz's holistic theory of war.

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34   Christopher Bassford and Edward J. Villacres, "Reclaiming the Clausewitzian Trinity," *Parameters* 25, no. 3 (Autumn 1995): 9–19; and Andreas Herberg-Rothe, "Clausewitz's 'Wondrous Trinity' as a Coordinate System of War and Violent Conflict," *International Journal of Conflict and Violence* 3, no. 2 (2009), 204–19, doi:10.4119/UNIBI/ijcv.6.

35   Clausewitz, *On War*, 86; and Echevarria, *Clausewitz and Contemporary War*, 192.

36   Hew Strachan, "A Clausewitz for Every Season," *American Interest* 2, no. 6 (July 2007).

37   Christopher Bassford, "The Strange Persistence of Trinitarian Warfare," in *International Security and War: Politics and Grand Strategy in the 21st Century*, ed. Ralph Rotte and Christoph Schwarz (Hauppauge, NY: Nova Science, 2011), 45–54.

38   Murray, *America and the Future of War*, 47.

39   Clausewitz, *On War*, 89; and Beatrice Heuser, *Reading Clausewitz* (London: Pimlico, 2002), 52–55.

40   Clausewitz, *On War*, 89.

41   Alan Beyerchen, "Clausewitz, Nonlinearity, and the Unpredictability of War," *International Security* 17, no. 3 (Winter 1992/93): 69, doi:10.2307/2539130; and Clausewitz, *On War*, 87.

The other metaphor Clausewitz employed, which is often misunderstood, is a chameleon: "War is more than a true chameleon that slightly adapts its characteristics to the given case."[42] A cursory reading might lead the undisciplined reader to think this metaphor is a reference justifying the idea that war merely changes its color slightly in response to the environment. But a more detailed reading supports an interpretation that the phenomenon can escalate into a substantially different form. Werner Hahlweg translated Clausewitz as this: "War is thus *not only* a genuine chameleon, since it *alters its nature* somewhat in each particular case."[43]

The Impact on War's Nature

The trinity offers a useful analytical framework for understanding how the emerging age of autonomy, the seventh military revolution, can impact the objective and subjective nature of war.

Passion/Enmity. Domestic policy leaders may find AI conducive to targeted cyber and social media strategies that suppress or inflame populations. This element in war is not new, but its impact is now felt more quickly. Because of the public's growing use of social media and the internet as a principal source of information, these technologies become an ideal vector for automated information attacks and influence tactics. Additional automated methods supported by algorithms will increase the mass, frequency, and customization of messages.[44] As noted in a recent US Army War College study, "Human perceptions and the relative value of truth have increasingly become ripe territory for low risk/high impact manipulation of strategic outcomes," which gives small actors with limited resources the promise of disproportionately high strategic effects.[45]

Of course, America's adversaries indicate they may try to do the same. China is blatant about the potential for using AI to control its population: "The Communist Party of China (CPC) hopes AI will have utility in enhancing the 'intelligentization' of 'social management' and protecting social stability."[46] Russia also has few qualms about exploiting its population via state-controlled television and other media outlets for the same purpose.

Extensive use of robots and unmanned systems, however, could not only reduce public interest but more importantly weaken public support for the armed services. The population may feel less engaged or tied to a nation's policy actions if robotic forces are employed. At the same time,

42   Clausewitz, *On War*, 89. Hew Strachan notes Clausewitz actually used "*natur*" and the original text implies something more significant than the Paret and Howard translation does. See Hew Strachan, *Clausewitz's On War: A Biography* (New York: Atlantic Monthly, 2007), 194.

43   Carl von Clausewitz, *Vom Kriege Hinterlassenes Werk des Generals Carl von Clausewitz: vollständige Ausgabe im Urtext, drei Teile in einem Band*, ed. Werner Hahlweg, 19th ed. (Bonn: Dümmlers Verlag, 1980), 213 (emphasis added); Echevarria, *Clausewitz and Contemporary War*, 69; and Antulio J. Echevarria II, "Globalization and the Clausewitzian Nature of War," 317–32.

44   Rand Waltzman, "The Weaponization of Information: The Need for Cognitive Security" (testimony, *Hearing on Cyber-Enabled Information Operations, Before the Senate Armed Services Committee, Subcommittee on Cybersecurity*, April 27, 2017).

45   Nathan P. Freier, "Strategic Insights: Speed Kills, Enter an Age of Unbridled Hyperconnectivity," Strategic Studies Institute, June 9, 2017, http://ssi.armywarcollege.edu/index.cfm/articles/Speed-Kills/2017/06/09.

46   Elsa Kania, "Chinese Advances"; and Elsa B. Kania, "China's Artificial Intelligence Revolution," *Diplomat*, July 27, 2017.

cabinet wars that entail few core national interests are more likely to occur since they may be perceived as politically low-risk. Such conflicts can also be protracted because of the government's desire to keep the nation's sons and daughters out of harm's way. Overall, the impact of these convergent technologies may impair the connection between a population and its government while severing the relationship between the military and the community it serves.

The populace may ultimately see the need to send humans into combat as an indication of policy failure, further restricting the government. The infusion of machinery, the reduction of human decision-making, and the rise of remote standoff warfare could erode the identity of the military as professionals with a unique social responsibility that involves risk and danger. The corrosion of this role might undermine the ideal of the profession of arms, accelerating the impact of the post-heroic age on the military.[47]

Chance/Friction. The introduction of new information-based technologies and robotic systems will not reduce strategic friction or eliminate the potential for chance; however, friction from human sources at the tactical level may be trimmed. Even if machines only clash with other machines, unpredictable interactions with adversaries or a nation's own robots will ensue. Both sides, even when fully autonomous, will contain flaws and vulnerabilities, with avenues for opponents to inject uncertainty deliberately.

At the strategic and operational levels, AI is expected to enhance the clarity of intelligence and reduce human biases in assessing small changes in big databases. Some improvement in decision-making quality can be expected. Yet, one potential impact is a higher chance for miscalculation by decision-makers or headquarters whose information sources or databases are compromised.

At the tactical level, contingency factors emanating from human fatigue or fear will be reduced. That said, new sources of friction will be introduced by mechanical failure, algorithmic degradation, and learning and adapting in a way inconsistent with intent. Moreover, the second order effects of the nonlinear developments of deep learning AI being introduced at this time are entirely unknown.

Artificial intelligence and computer support are not necessary to remove human judgment at any or all levels of warfare decisions, but may be used simply to improve the efficacy of human judgement. Such technology could be used to eliminate wasted human cognitive capacity on mundane tasks. The challenge for warfighting applications involves building learning systems that recognize when to break the algorithms and the rule set inherent to their programing. Within this decision point resides the human genius of warfare. Thus, decision-making in the age of autonomy will rely upon human-machine teaming.

Since warfare is an exercise in organizational learning and adaptation, the ability of AI to automatically update programming with the results of each engagement or operation should be a positive influence. The availability of this information will promote faster learning and

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47   Edward N. Luttwak, "Towards Post-Heroic Warfare," *Foreign Affairs* 74, no. 3 (May/June, 1995): 33–44.

dissemination of experiences than existing human-based methods. Thus, if learning and adaptation are positively correlated with success in warfare, AI should help.

At the tactical level, machine learning will also support human decision-making, and begin to displace some decision-making as deep learning is introduced. As Work once pointed out, "learning machines are going to give more and more commanders *coup d'oeil*."[48] Warfare will become less human-centric as it becomes more automated and autonomous. This capability can absolve commanders and their staffs from menial tasks, enabling the application of creative strengths to more critical tasks.

Another possible change may influence the Clausewitzian ideal for intuition and coup d'oeil—"the quick recognition of a truth that the mind would ordinarily miss or would perceive only after long study and reflection."[49] Clausewitz observed "this type of knowledge cannot be forcibly produced by an apparatus of scientific formulas and mechanics; it can only be gained through a talent for judgment, and by the application of accurate judgment to the observation of man and matter."[50] Natural talent and judgment in his day were gained by exposure to actual war as well as to critical study.

In the seventh military revolution, a commander's intuitive grasp of the battlespace will be augmented, but rarely displaced entirely, by intelligence and decision support systems that are AI enabled. The natural and experientially developed coup d'oeil of the human will be replaced—or at least augmented by—a data-infused, automated, "cyber d'oeil" that supports human decision-making at all levels of warfare. This evolution will not happen overnight, and there will be instances of "artificial stupidity" along the way as AI matures.[51]

Those who embrace Clausewitz's description of the role of the commander and intuition will question the algorithms' ability to respond to creativity and to override the rules.[52] Or, probably more important, they will consider how AI will help senior commanders create new rules, especially in relation to new circumstances in the evolution of warfare.[53]

Clausewitz argued a military commander could gain talent "through the medium of reflection, study and thought" without experiential learning.[54] Will deep learning programs now provide that rapid recognition, that discernment of truth, and augment deep study and reflection? While Clausewitz emphasized many attributes—determination, courage, and presence of mind—the one he prized the most for a commander was combat experience. Does a deep learning program substitute for seasoning and experience?[55]

48   Work, quoted in Freedberg, "War without Fear."

49   Clausewitz, *On War*, 102.

50   Carl von Clausewitz, *On War*, ed. Beatrice Heuser (Oxford: Oxford University Press, 2007), 97.

51   Sydney J. Freedberg Jr., "Artificial Stupidity: Learning To Trust Artificial Intelligence (Sometimes)," *Breaking Defense*, July 5, 2017.

52   Clausewitz, *On War*, 136.

53   Echevarria, *Clausewitz and Contemporary War*, 119.

54   Clausewitz, *On War*, 146.

55   Clausewitz, *On War*, 122.

Reason/Political Direction. At the strategic level, politics will remain the womb in which war develops.[56] Unmanned precision strike platforms may lessen the human and domestic political costs of going to war, and make it easier for leaders to go to war. As Chris Coker has noted, political leaders may "become so intoxicated by the idea of precise, risk-free warfare that we believe what we want to believe."[57] We can expect decision-making to be perhaps more challenged by the blurring modes of warfare and the speed of events. Cyber and hypersonic missile attacks will compress decision-making time lines for both strategic and operational leaders. In such situations, the necessity for preplanned delegation and engagement authorities is clear.

Analysts have for several decades been aware that the role of human decision-making will be increasingly challenged by advanced automation and artificial intelligence.[58] Years ago US Marine Corps General James E. Cartwright "predicted that 'the decision cycle of the future is not going to be minutes. . . . The decision cycle of the future is going to be microseconds."[59] This sheer speed, across the critical infrastructure of both society and the armed forces, may be the most profound change forced by advanced forms of cyberwarfare.

The instantaneous decision-making implied in high-intensity operations, in cyberspace, and in the employment of missiles and unmanned vehicles moving at velocities greater than the speed of light have led to warnings about "hyperwar."[60] This need for speed raises important questions: does this radically accelerated decision-making take civilians and policy out of the conflict, and thus is political direction simply delegated to machines, is it weakened or entirely eliminated in the process? If so, would not the nature of war be changed, or just its conduct, because both political direction and human guidance would be weakened?

The potential for disinformation and cyberwarfare to stress traditional forms of strategic control is growing higher, and war may escalate more rapidly than in the past. Suspicions about the influence of cyberintrusion into everyday operations will breed mistrust in our most basic command systems. This doubt could also permeate civil society if future adversaries attack banks, air traffic control systems, hospital records, and civilian targets. Even if directed only at government targets, the loss of accurate information could breed instability in times of crisis.[61]

Clausewitz provides an "intellectual armory" of analytical weapons, especially his wondrously useful trinity, to examine the dynamics of war.[62] Looking at the foregoing discussion, the character of warfare will clearly change, and these changes could significantly influence the Clausewitzian elements that frame our understanding of war's nature.

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56   Clausewitz, *On War*, 149.

57   Christopher Coker, *Humane Warfare* (London: Routledge, 2001), 150.

58   Thomas K. Adams, "Future Warfare and the Decline of Human Decisionmaking," *Parameters* 41, no. 4 (Winter 2011–12): 7–19.

59   Quoted in Peter W. Singer, "Tactical Generals: Leaders, Technology, and the Perils," *Brookings Institution*, July 7, 2009.

60   John R. Allen and Amir Husain, "On Hyperwar," *Proceedings* 143, no. 7 (July 2017): 30–37.

61   David C. Gompert and Martin Libicki, "Cyber Warfare and Sino-American Crisis Instability," *Survival* 4, no. 56 (Summer 2014): 7–22.

62   Peter Paret, *Clausewitz and the State: The Man, His Theories, and His Times* (Princeton, NJ: Princeton University Press, 1985), 5.

But to benefit from Clausewitz's trinity, we should appreciate its existence in a state of tension not equilibrium.[63]

Strategic	Tactical
Reason/Direction	
Speed for decisions may increase to compress cycles. Conflict initiation increases possible with perceived low costs. Cyber disinformation possibilities greater with increased opportunities. Political subordination may degrade if self-learning robots act independently.	Tactical defensive systems respond in critical time periods, displacing human decisions to initiate warfare. Technology possibly makes more rational decisions with less "human" genius.
Chance/Genius	
Inherent nature retained as machines clash and unknowingly interact with adversaries. Miscalculation potential increased for decision-makers unprepared for high-speed decision-making. Clear intelligence possible with reduced human biases.	Contingency factors emanating from human fatigue or fear will be reduced. Algorithms and machine learning will reduce the need for humans' tactical decision-making.
Passion/Enmity	
Passions exploited by cyberbots and social media strategies suppress or manipulate populations. Media shaped by AI becomes more potent, frequent, and diverse. Postheroic warfare syndrome cases rise.	Civic engagement may decrease if robotic forces are winning or losing in battle. Long wars become easier to sustain if there are fewer human casualties.

Table 2. Summary of How Autonomy Impacts the Nature of War

To sum up this discussion, autonomy will change the nature of war in several ways. First, it could weaken the role of political direction by forcing response delegation to lower echelons for faster forms of attack. Autonomy can lessen the ability of governments to gain the support and legitimacy of their populations, while making it easier for foreign governments to manipulate their adversary's populations. More significantly, deep-learning forms of AI will augment the intuition and judgment of experienced commanders. At the same time, automated

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63   Rob Johnson, "The Changing Character of 'Liberal' War" (paper, Liberal Way of War Conference, University of Reading, Reading, Berkshire, United Kingdom, July 2012).

technologies could reduce popular support for professional military institutions, which paradoxically could free governments to employ force more readily since the political consequences are reduced. As with the earlier ages, friction and uncertainty will endure.[64] Possibly, the age of autonomy will even introduce new forms of friction while reducing human factors in tactical contexts.

The Unchanging Elements

We should not anticipate battles devoid of human contestants, with swarms of robots directed by their own superior intelligence. As long as humans are responsible for directing war, for writing code, and for fielding and maintaining machines, warfare will remain an instrument of policy and the province of warriors. Those warriors may have machine augmentation, delegate decisions to cyberassistants, and operate more remotely; but they will be directing the fight. The most significant elements of war—violence, human factors, and chance—will certainly remain. So, too, will fog and friction.[65] Despite brilliant machines, we can count on the continuity of friction and contingency. War's essence as politically directed violence will remain its most enduring aspect, even if more machines are involved at every level. Both friction and "the flash of the kingfisher" will remain fundamental to war.[66]

Conclusion

While we remain at least a decade or more away from deep-learning AI becoming a reality, we should recognize its significant impact. As this examination suggests, the nature and character of war will be changed. The interaction of each factor or tendency of the paradoxical trinity will be affected in some way. Numerous implications for the conduct of war will emerge. We will neither anticipate nor control every one of these implications as AI matures along an expected "thorny path."[67] We should be wary of hysteria or hype about AI: predictions about this aspect of computer development have been predicted for decades.[68] But complacency about its impact is not warranted.

In the upcoming military revolution of autonomy, we will have to consider new sources of combat power and assess how they impact each level of war. The biggest impacts will be at the tactical level; however, landpower may be the least impacted of the domains of warfare given its intimate interactions with populations and combatants. Yet, landpower is not immune from unmanned systems and autonomy; both the opportunity and the threat they pose will only grow. Those who are prepared to employ autonomy smartly will be at a competitive advantage as this age unfolds.

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64   Echevarria, *Globalization and the Nature of War*.

65   Barry D. Watts, *Clausewitzian Friction and Future War*, McNair Paper 68 (Washington, DC: NDU Press, 2004), 78, 86; and T. X. Hammes, "The Future of Conflict," in *Charting a Course, Strategic Choices for a New Administration*, ed. Richard D. Hooker, Jr. (Washington, DC: NDU Press, 2016), 17.

66   T. E. Lawrence, *Seven Pillars of Wisdom: A Triumph* (New York: Anchor, 1991), 193.

67   M. L. Cummings, *Artificial Intelligence and the Future of Warfare*, Research Paper, (London: Chatham House, 2017).

68   Rodney Brooks, "The Seven Deadly Sins of AI Prediction," *MIT Technology Review*, October 6, 2017.

Lessons Unlearned: Army Transformation and Low-Intensity Conflict

Pat Proctor

ABSTRACT: This article examines the US Army's experiences and lessons learned during military interventions in Bosnia and Herzegovina and Kosovo. It explores why these lessons did not affect the Army transformation, directed in the late-1990s by James M. Dubik, John W. Hendrix, John N. Abrams, and Eric K. Shinseki.

Military interventions in the Balkans during the late 1990s demonstrated the US Army was ill-prepared for low-intensity conflicts.[1] Likewise, a growing chorus of critics warned the future portended not Gulf War-style, high-intensity conflicts but an increasing number of low-intensity conflicts.[2] Army transformers, steeped in a culture that emphasized preparation to fight high-intensity conflicts over all other activities, ignored these warnings and continued the Army's "transformation" toward an even more deployable, high-tech, networked force built to fight two nearly simultaneous "major regional contingencies" (high-intensity conflicts against conventional adversaries). This transformation culminated in the creation of interim brigade combat teams (BCTs). In the end, however, the two "major regional contingencies" America would fight were not against conventional adversaries but against insurgents in Afghanistan and Iraq. And, the US Army was unprepared to fight them.

The Army of the early 1990s was still basking in the glow of Operation Desert Storm, the stunningly successful liberation of Kuwait from the Iraqi Army.[3] The surprising results of the Persian Gulf War seemed to validate the Army's high-tech, post-Vietnam War approach to rebuilding—supplanting the superior numbers of the Soviet Army with superior American technology.[4] The focus of Army transformers in the wake of the Gulf War was how to fight similar future conflicts better by exploiting information technology in what was commonly referred to as a "revolution in military affairs" (RMA). Transformers predicted that, in future wars, the Army would have "near 'perfect,' near-real-time

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1   The term "low-intensity conflict" refers to operations ranging from humanitarian assistance and disaster relief to counterinsurgency and counterguerrilla operations. This is an imperfect choice, but I have chosen to avoid terms such as operations other than war, military operations other than war, or stability and support operations—in vogue during the period this study considers. Of course, "low-intensity conflict" comes with its own baggage, but other terms, such as "small wars" miss the fact that such operations might be large yet still have a character quite distinct from that of high-intensity conflicts.

2   The term "high-intensity conflict" describes combat against a conventional military force of industrial-age or greater technological ability.

3   Keith L. Shimko, *The Iraq Wars and America's Military Revolution* (New York: Cambridge University Press, 2010), 3027–40, Kindle.

4   Shimko, *Iraq Wars*, 167–78.

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intelligence . . . sufficient lethality with precision strike systems, and massing of lethal effects" to defeat any adversary.[5]

But the reviews for Desert Storm were not all glowing. Army transformers were concerned about taking nearly half a year to buildup sufficient logistics, equipment, and combat forces to eject Saddam Hussein from Kuwait. And, if the ground war had continued much longer than 100 hours, the Army might well have run out of critical supplies such as fuel and spare parts.[6] Transformers believed the Army had to become more deployable and more sustainable.

Yet transformation would occur in the context of shrinking budgets and a shrinking force. With the collapse of the Soviet Union, Congress cashed in the "peace dividend"; defense spending fell and the Army shrank from 2.1 million soldiers before Desert Storm to 1.4 million soldiers by the end of the drawdown in the mid-1990s.[7] The Army stood down four of 16 divisions and eliminated one corps in Europe.[8]

Moreover, while the Army was shrinking, the demands upon it were increasing dramatically. Between 1988 and 1992, the US military participated in 12 separate United Nations peacekeeping or humanitarian missions.[9] By 1994, nearly 21,000 soldiers were operating in 70 different countries.[10] The National Defense University's *Project 2025* concluded the future held more of the same "demographic pressures, religious and ethnic passions, and environmental constraints [that would] continue to encroach upon and at times threaten [US] interests."[11] The future seemed to promise not high-intensity, Gulf War-style conflicts but a growing number of low-intensity conflicts.

And more low-intensity conflicts did come. In the final days of his presidency, George H. W. Bush sent American forces to Somalia to assist a teetering humanitarian assistance mission led by the United Nations. Under President Bill Clinton, the mission in Somalia expanded until 1,200 Soldiers from the 10th Mountain Division and the 75th Ranger Regiment were engaged in what General Anthony Zinni, US Central Command (CENTCOM) commander, would later call a "counterinsurgency operation, or . . . some form of war."[12] In the cataclysmic, 17-hour battle (October 3–4, 1993) immortalized in the book and movie *Blackhawk Down*, 84 American soldiers were wounded and 18 were killed along with 500 or more Somalis. The US forces were unceremoniously withdrawn five months later.[13]

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5   Deputy Chief of Staff for Doctrine, *Reader's Guide: FM 100-5, 1986–1993 Comparison* (Fort Monroe, VA: Deputy Chief of Staff for Doctrine, Training and Doctrine Command [TRADOC], [1993]), 1.

6   Shimko, *Iraq Wars*, 2994–98.

7   Allan R. Millett, Peter Maslowski, and William B. Feis, *For the Common Defense: A Military History of the United States from 1607 to 2012* (New York: Free Press, 2012), 11766–70, 11805–13, 12157–72, Kindle.

8   Millet, Maslowski, and Feis, *Common Defense*, 12157–72.

9   Millet, Maslowski, and Feis, *Common Defense*, 12124–34.

10   Gordon R. Sullivan and James M. Dubik, *War in the Information Age* (Carlisle Barracks, PA: Strategic Studies Institute, US Army War College, 1994), 13.

11   Institute for National Strategic Studies *Project 2025* (Washington, DC: National Defense University, 1992), 61–63.

12   "Ambush in Mogadishu," Frontline, https://www.pbs.org/wgbh/pages/frontline/shows /ambush/interviews/zinni.html.

13   Shimko, *Iraq Wars*, 2888–901; Millett, Maslowski, and Feis, *Common Defense*, 12260–98.

The disastrous outcome of the war in Somalia should have caused the Army to question the limitations of the RMA-fueled transformation in which it was engaged.[14] Instead, the debate over the lessons of Somalia became embroiled in political recriminations. Defense Secretary Les Aspin Jr. was blamed for—and later resigned over—his failure to send armor to Somalia. The Clinton administration was blamed for *mission creep*. And Samuel Huntington led a chorus of national security experts questioning the wisdom of "nation building."[15]

Meanwhile, the Army continued to march headlong toward ever more optimized, networked, high-precision capabilities. The Department of Defense undertook a bottom-up review that predictably concluded the US military needed to be prepared to fight two major regional contingencies—large, high-intensity conflicts.[16] To prepare for these conflicts, the future Army began prototyping and experimentation with Force XXI, the 4th Infantry Division at Fort Hood, Texas.[17]

Army Chief of Staff General Gordon R. Sullivan predicted the future force would "be able to locate enemy forces quickly and precisely," distribute that information "among all committed forces," and "observe, decide, and act faster, more correctly and more precisely" than the enemy.[18] This force would also fix the Army's deployability problems by better "projecting and sustaining combat power."[19] The concept paid lip service to the need to fight across the range of military operations—against enemies ranging from "agrarian war lords" and "industrial armies" to an "Information Age peer"—but was clearly designed to dominate a high-intensity conflict environment.[20] The unspoken assumption was that an Army that excelled at high-intensity conflict would have no problem operating in a low-intensity conflict.

Low-intensity conflict, on the other hand, was a neglected area of US military thought in the early 1990s. The Army's concept of low-intensity conflict—captured in *Military Operations in Low-Intensity Conflict*, Field Manual (FM) 100-20, and *Operations in a Low-Intensity Conflict*, FM 7-98—had serious flaws, such as an epigraph stating "peacekeeping isn't a soldier's job, but only a soldier can do it."[21]

Army doctrine on low-intensity conflict also suffered from the contemporary relegation of insurgency and counterinsurgency to special operations forces (SOF). Restricted by Congress's post-Vietnam aversion to military interventions, the Reagan-era model for insurgency

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14   Shimko, *Iraq Wars*, 3027–40.

15   Millett, Maslowski, and Feis, *Common Defense*, 12260–98.

16   John Sloan Brown, *Kevlar Legions: The Transformation of the US Army, 1989–2005* (Washington, DC: US Army Center of Military History, 2011), 1989–2005, Kindle.

17   John L. Romjue, Susa Canedy and Anne W. Chapman et al., *Prepare the Army for War: A Historical Overview of the Army Training and Doctrine Command, 1973–1998* (Fort Monroe, VA: TRADOC, 1998), 31–32.

18   Sullivan and Dubik, *War in the Information Age*, 15.

19   See Headquarters, US Department of the Army (HQDA), *Decisive Victory: America's Power Projection Army*, white paper (Washington, DC: HQDA, October 1994), 8–9.

20   HQDA, Decisive Victory, 11; Sullivan and Dubik, *War in the Information Age*, 15; and Shimko, *Iraq Wars*, 3504–3507.

21   John B. Hunt, "OOTW: A Concept in Flux," *Military Review* 76, no. 5 (September–October 1996): 3–10; HQDA, *Military Operations in Low-Intensity Conflict*, Field Manual (FM) 100-20 (Washington, DC: HQDA, 1990); and HQDA, *Operations in a Low-Intensity Conflict*, FM 7-98 (Washington, DC: HQDA, 1992), 4-1–4-9. This quote has been attributed in various sources to former UN Secretary-General Dag Hammarskjöld or military sociologist Charles Moskos.

and counterinsurgency in places like Honduras and El Salvador was to use small special forces elements. This SOF mission was codified by the *Goldwater-Nichols Department of Defense Reorganization Act of 1986.*[22] The US Army abdicated responsibility for insurgency and counterinsurgency to SOF through the manuals, which proclaimed the activities were tasks best reserved for the elite units and that America's proper role in counterinsurgency was only to support a host nation.[23] This philosophy dangerously assumed a host nation existed and had the capability to combat an insurgency.

Counterinsurgency receded even more from Army doctrine during 1993: counterinsurgency was not even listed with other operations that occur in "conflict" environments, the ill-defined gray area between war and peace.[24] The dubious phrase "operations other than war" also replaced "low-intensity conflict."[25]

Justifying this diminution of low-intensity conflict in favor of a laser focus on exploiting the RMA to prosecute high-intensity conflicts better, Sullivan argued "we cannot optimize the force for a single threat. We must instead build a force with the capability to win in the most important contingencies, while retaining the versatility, flexibility, and residual force to win across the range of uncertainty inherent in our forecasts of the future."[26] Elsewhere, he wrote "nation-building is not an Army issue, but the Army is prepared to support those agencies of the government which are directly concerned with that task."[27] He also declared, "The Army exists to fight and win the nation's wars."[28] This perspective sheds much light on "operations other than war" replacing "low-intensity conflict" in Army doctrine. Rather than "nation-building," high-intensity conflicts were "the most important contingencies."[29] Low-intensity conflicts were an unwelcome but unavoidable tax on Army resources.

In the aftermath of the Cold War, Yugoslavia shattered along ethnic and religious lines into four separate countries.[30] In and around Bosnia and Herzegovina, militia forces and criminal gangs—armed with everything from small arms to armored vehicles from the former Yugoslav army—engaged in brutal acts of ethnic violence against each other as well as murder and ethnic cleansing against civilian populations. These actions killed as many as 250,000 people and rendered over 2 million more people refugees or internally displaced.[31]

As the fighting grew, so did concern in European capitals that the fighting might spread to the neighboring Balkan states. In February 1992, in an effort to halt the fighting, the United Nations established

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22   David Fitzgerald, *Learning to Forget: US Army Counterinsurgency Doctrine and Practice from Vietnam to Iraq* (Stanford, CA: Stanford University Press, 2013), 79–81.

23   FM 7-98, 3-2.

24   FM 100-5, 2-0–2-1.

25   Hunt, "OOTW."

26   Gordon R. Sullivan and Andrew B. Twomey, "The Challenges of Peace," *Parameters* 24, no. 3 (Autumn 1994): 4–17.

27   Sullivan and Twomey, "Challenges of Peace."

28   HQDA, *Decisive Victory*, 2.

29   Sullivan and Twomey, "Challenges of Peace."

30   Robert F. Baumann, George W. Gawrych, and Walter E. Kretchik, *Armed Peacekeepers in Bosnia* (Fort Leavenworth, KS: Combat Studies Institute Press, 2004), 2–3.

31   Baumann, Gawrych, and Kretchik, *Armed Peacekeepers*, 1, 4.

a multinational protection force that eventually assigned 38,000 troops, from 37 countries, across more than 7,000 bases in the former Yugoslavia. But the weak mandate for the force, its lack of cohesion, and the potpourri of caveats from the contributing nations rendered this force impotent; it was largely a spectator to the violence rather than an enforcer of the peace.[32]

No ethnic or religious group was innocent in the conflict; all engaged in violence against civilians and ethnic cleansing. But the Bosnian Serbs were guilty of some of the worst atrocities of the war, including the murder of 7,000–8,000 Bosniaks at Srebrenica in full view of Dutch peacekeepers, 100 of which were taken prisoner.[33]

In 1994, the United States and the North Atlantic Treaty Organization (NATO) began to escalate military pressure gradually—primarily through air strikes. In December 1995, the warring parties signed the Dayton Accords, ending the fighting and delineating lines between the warring parties in Bosnia and Herzegovina.[34] A provision of the Dayton Accords was an international Implementation Force (IFOR) that would, among other things, establish and enforce a zone of separation, protect the civilian populace, and create the conditions for reestablishing civil governance.[35]

The NATO force had a much more robust mandate and many fewer national caveats than the UN effort; with the additional effectiveness, the Implementation Force could compel compliance from each faction. V Corps Commander, and future commander of US Army Training and Doctrine Command (TRADOC), Lieutenant General John N. Abrams commanded US Army Europe (USAREUR) (Forward) in Bosnia.[36] The core of the US contingent, Task Force Eagle, was the division headquarters for the 1st Armored Division with two armored brigades, an aviation brigade, and attached enablers such as engineers, field artillery, military intelligence, and military police. Altogether, the United States contributed 17,500 troops to the 60,000 soldiers of the IFOR.[37]

The US support to Bosnia and Herzegovina during Operation Joint Endeavor looks eerily similar to the stability phase of Operation Iraqi Freedom. The Balkan state was divided into three multinational divisions. American forces assumed control of the northern region and assumed varying degrees of authority over forces from countries including Russia, Turkey, Poland, and Denmark.[38] Prior to deployment, US forces went through rigorous training, including a "mission readiness exercise" at the Combat Maneuver Training Center in Hohenfels, Germany.[39] After arriving in Bosnia and Herzegovina, Task Force

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32 Baumann, Gawrych, and Kretchik, *Armed Peacekeepers*, 27.

33 Baumann, Gawrych, and Kretchik, *Armed Peacekeepers*, 27–28, 50; and Millett, Maslowski, and Feis, *Common Defense*, 12378–96.

34 Millett, Maslowski, and Feis, *Common Defense*, 12366–75, 12403; and Baumann, Gawrych, and Kretchik, *Armed Peacekeepers*, 29–30.

35 US Army Europe (USAREUR), *Military Operations: The US Army in Bosnia and Herzegovina*, Army in Europe (AE) Pamphlet 525-100 (Heidlberg, Germany: USAREUR, 2003), 16.

36 USAREUR, AE Pamphlet 525-100, 16-17.

37 Baumann, Gawrych, and Kretchik, *Armed Peacekeepers*, 37, 94, 120.

38 AE Pamphlet 525-100, 20–21; and Baumann, Gawrych, and Kretchik, *Armed Peacekeepers*, 94.

39 AE Pamphlet 525-100, 12–13.

Eagle executed operations and logistics from forward operating bases. Units tried to balance force protection with the need to interact with the population, developing a tactic of four-vehicle convoy operations. Intelligence personnel and linguists were always in short supply.[40]

Army leaders raised in the doctrine and tactics of high-intensity conflict struggled to meet the intellectual challenge of operating in an environment where mission success required dealing with civilians, establishing civil governance, practicing the "art of street diplomacy," and exercising a nuanced application of force under strict rules of engagement. Officers struggled to untangle a complex web of history and family ties, as well as ethnic and religious conflicts, to weave together a political, economic, and social solution. Young platoon leaders and company commanders were called upon to balance intimidation and negotiations, dismantle illegal militia checkpoints, and understand and interpret their mandate from vague international accords drafted by diplomats half a world away. And as soon as a unit finally understood its area of operations and how to do all of these things, it rotated out to be replaced by the next unit.[41]

Yet instead of addressing its unpreparedness to fight a low-intensity conflict, the US Army focused on what Operation Joint Endeavor revealed about continued problems with the deployability of the Army. Moving more than 9,000 people and 20,000 short tons of US equipment into Bosnia and Herzegovina had required nearly 400 trains with more than 7,000 railcars; 1,400 sorties of cargo aircraft; 400 buses; and 200 commercial truck convoys; as well as 42 military convoys. The deployment was further complicated by flooding along the Sava River on December 28, 1995.[42]

During that year a Congressional panel, on the roles and missions of the Armed Forces, concluded that peace operations and operations other than war ranked among the four most "significant security challenges and opportunities in the years ahead."[43] The Joint Force's response to this commission report, *Joint Vision 2010*, was a defiant reaffirmation of the RMA and the US military's focus on high-intensity conflict.[44] *Joint Vision 2010* was even more explicit than the Army XXI vision in arguing that operations other than war were a lesser included military activity for "forces optimized for wartime effectiveness."[45] But, more important, *Joint Vision 2010* posited an idea that became a focal point of the debate over transformation well into the Iraq War: future adversaries would seek "asymmetry" by using "information technology" to negate US military advantages rather than duplicate them capability-for-capability.[46]

General Dennis J. Reimer assumed his duties as the 33rd Chief of Staff of the Army in June 1995 and immediately endorsed the Army's high-intensity conflict focus. Reimer continued to build Force XXI

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40   Baumann, Gawrych, and Kretchik, *Armed Peacekeepers*, 95–96.

41   Baumann, Gawrych, and Kretchik, *Armed Peacekeepers*, i–iii, 126–27.

42   AE Pamphlet 525-100, 17–20.

43   Commission on Roles and Missions of the Armed Forces, *Directions for Defense: Report of the Commission on Roles and Missions of the Armed Forces* (Washington, DC: US Department of Defense, 1995), ES-4; and Millett and Maslowski, *Common Defense*, 12192–97.

44   Millett, Maslowski, and Feis, *Common Defense*, 12192–97.

45   US Joint Chiefs of Staff (JCS), *Joint Vision 2010* (Washington, DC: JCS, 1995), 17.

46   JCS, *Joint Vision 2010*, 10.

and, in February 1996, began the Army After Next program, a series of semiannual wargames augmented by continuous experimentation.[47] Projecting to the year 2025, the Army After Next succeeded Force XXI by achieving and maintaining "dominance" across every "domain" of warfare—the "air-, land-, sea-, space-, and cyber-domains"—through "knowledge and speed."[48]

The fact that the human domain was conspicuously absent from the concept was not lost on the growing chorus of transformation critics who were beginning to question the Army's approach. Commenting on the insufficiency of current operations-other-than-war doctrine, Dr. John W. Jandora, Special Operations Command, insisted "military planning . . . must move beyond the Cold War mind-set and its preoccupation with standing, conventional forces" to consider the social, economic, and political aspects of the battlefield.[49] Historian Jeffrey Record was more direct in his criticism of transformation: "Our present strategy portends an excessive readiness for the familiar and comfortable at the expense of preparation for the more likely and less pleasant."[50]

As the debate grew, urban operations became a focal point of discussion. As early as 1995, scholars like Stephen Blank and Earl Tilford began to point to the Russian debacle in Chechnya as an alarming example of a modern military force humbled by guerilla forces fighting in an urban environment, among a civilian population.[51] But debate over urban operations did not truly gain momentum until the Army After Next project stumbled across the problem during a wargame at the US Army War College.

A December 1998 report described the problem: every time the "red team" (enemy) was faced with the technologically superior US force of 2025, it would "dive into cities." The enemy chose this course "for both operational and political ends." The operational ends were to negate the "advantages in speed and mobility" and "diminish the effect of a US information advantage because forces are more difficult to locate, target, and assess." The political ends were to embroil the local population in the conflict. The wargame report noted "urban operations will require a much higher degree of integration with local societies than has been the US experience heretofore."[52]

This tactic was asymmetry rearing its head in a way that *Joint Vision 2010* had not anticipated—the enemy forcing the Army to fight a low-intensity conflict. Major General Robert Scales, commandant of the US Army War College, began to wrestle with this problem the following year.

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47 Dennis J. Reimer, "Where We've Been—Where We're Headed: Maintaining a Solid Framework While Building for the Future," *Army*, October 1995, reprinted in *Soldiers Are Our Credentials: The Collected Works and Selected Papers of the Thirty-third Chief of Staff, United States Army*, ed. James Jay Carafano (Washington, DC: Center for Military History [CMH], 2000), 3; and Chapman et al., *Prepare the Army*, 52.

48 TRADOC, *Knowledge and Speed: Battle Force and the US Army of 2025* (Fort Monroe, VA: TRADOC, 1998), 8–10.

49 John W. Jandora, "Threat Parameters for Operations Other Than War," *Parameters* 25, no. 1 (Spring 1995): 55–67.

50 Jeffrey Record, "Ready for What and Modernized against Whom? A Strategic Perspective on Readiness and Modernization" (paper presented, annual strategy conference, US Army War College, Strategic Studies Institute, Carlisle Barracks, PA, 1995), v.

51 Stephen J. Blank and Earl H. Tilford Jr., *Russia's Invasion of Chechnya: A Preliminary Assessment* (Carlisle Barracks, PA: Strategic Studies Institute, 1995), 12.

52 TRADOC, *Knowledge and Speed*, 19.

Scales acknowledged cities presented a challenge to the Army because of the "millions of people that house [the enemy's] political, cultural, and financial centers of gravity." But his solution—sitting outside the city and waiting for the enemy to quit—missed the most important facet of this asymmetry: control of these "millions of people" and the "political, cultural, and financial centers of gravity" they represented was essential to the political ends that prompted US military intervention.[53]

Other Army transformers likewise tried to dismiss the problem of urban operations. Army After Next experimenters Robert Hahn and Bonnie Jezior prescribed a dizzying array of high-tech salves—from jet packs to robots—for the urban operations problem.[54] For these analysts, cities were simply complicated terrain that obstructed movement and obscured vision rather than complex, human environments essential to the political purpose of future wars.

Lester Grau and Jacob Kipp, at the Command and Staff College, would not let Army transformers wish away the problem of urban operations: "Urban combat is increasingly likely, since high-precision weapons threaten operational and tactical maneuver in open terrain." But their analysis continued to the heart of the "asymmetry" produced by urban operations: enemies would choose to fight in cities because they could "mobilize the city's resources and population to their purposes." For Grau and Kipp the inescapable quality of a city that made it a difficult and unavoidable military problem was the population of the city as the political objective of war. In light of this central fact, they insisted, both the Russian approach in Grozny—destroy the city—and the approach suggested by Scales—avoid the city—suffered from "an utter disconnect between the political objective. . . . and the military means."[55]

The problem of urban operations was sufficiently dire to prompt General John Abrams, commander, TRADOC, to commission a study. The results, from the Combined Arms Center did not offer Army transformers any solace. Roger Spiller echoed Grau's and Kipp's argument that the essential property of a city was its nature as a "human environment" and used historical examples to show how a city becomes an even more complex problem as it begins to collapse under the stresses of war. He quipped that Army transformers had taken to calling anything they did not understand "asymmetry." He added, "That asymmetric warfare would be associated with urban warfare is significant." He urged the Army to stop the transformation until it could come to grips with the problem of urban operations.[56]

Bosnia and Herzegovina revealed the depths of the Army's unpreparedness to fight in "human environment[s]."[57] Despite promises before the deployment that Operation Joint Endeavor would only last a year, Army forces conducting operations other than war in the Balkans

53   Robert H. Scales Jr., *Future Warfare: Anthology* (Carlisle Barracks, PA: Strategic Studies Institute, US Army War College, 200), 211.

54   Robert F. Hahn II and Bonnie Jezior, "Urban Warfare and the Urban Warfighter of 2025," *Parameters* 29, no. 2 (Summer 1999): 74–86.

55   Lester W. Grau and Jacob W. Kipp, "Urban Combat: Confronting the Specter," *Military Review* 89, no. 3 (July–August 1999): 9–17.

56   Roger J. Spiller, *Sharp Corners: Urban Operations at Century's End* (Fort Leavenworth: US Army Command and General Staff College, 2000).

57   Spiller, *Sharp Corners*.

seemed to have no idea how to produce a durable political solution to the conflict, and Bosnians of all factions feared the departure of international forces might lead to renewed fighting.[58] The 1st Infantry Division replaced the 1st Armored Division in November 1996, the mandate for IFOR was extended, and the IFOR became the Stabilization Force.[59] In 1997, General Eric K. Shinseki assumed command of the Stabilization Force and the 1st Armored Division again assumed Task Force Eagle.[60] They were followed by the 1st Cavalry Division and the 10th Mountain Division before returning for a third rotation.[61] The mission continued until 2004, well into the Iraq War.[62]

Reflecting on his experience as a battalion commander in Bosnia and Herzegovina, Colonel Tony Cucolo, struck at the heart of the problem. He wrote the "prevailing attitude among some senior leaders" was that solving political problems in Bosnia and Herzegovina "was 'out of [the Army's] lane.'"[63] Rather than seeking a political solution, the Army's "measures of effectiveness," to borrow a term from operations-other-than-war doctrine, were avoiding US casualties, preventing wide-scale ethnoreligious violence, and keeping the operation off of televisions back in the United States. By these measures, Operation Joint Endeavor was an overwhelming success.[64]

Brigadier General James Dubik confronted this problem in an unpublished thought piece that he wrote in March 1999 while serving as the deputy commander of operations for Task Force Eagle. Discussing how to "reduce the time our military forces would have to be involved or the size of the military force required after initial intervention" in low-intensity conflicts, Dubik suggested the initial entry force in such operations be followed by a hypothetical "national judicial force" that would wrest the nonmilitary, illegal levers of power from the leaders that the United States wished to supplant.[65] It is telling that Dubik's solution to the problem was that some force other than the US Army should arrive and assume the duty of navigating the political dimensions of the low-intensity conflict. This idea would reemerge a few years later, when he was charged with a critical element of Army transformation.

Professional Army critic Ralph Peters disagreed, insisting that navigating the political dimension of low-intensity conflict was the Army's job—a job it refused to prepare to do: "Our military is determined to be unprepared for missions it does not want, as if the lack of preparedness might prevent our going. We are like children who refuse to get dressed for school." Nonetheless, "when the President is out of options and key

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58   Baumann, Gawrych, and Kretchik, *Armed Peacekeepers*, 121, 123.

59   AE Pamphlet 525-100, 21–22.

60   Baumann, Gawrych, and Kretchik, *Armed Peacekeepers*, 188, 204.

61   AE Pamphlet 525-100, 27.

62   Baumann, Gawrych, and Kretchik, *Armed Peacekeepers*, iii; and Jim Garamone, "US Peacekeepers Finish Bosnia Mission, Case Colors," DoD, December 1, 2004, http://archive.defense.gov/news/newsarticle.aspx?id=24700.

63   Tony Cucolo, "Grunt Diplomacy: In the Beginning There Were Only Soldiers," *Parameters* 29, no. 1 (Spring 1999): 110–26.

64   TRADOC, *Multiservice Procedures for Humanitarian Assistance Operations*, FM 100-23-1 (Fort Monroe, VA: TRADOC, 1994), 4-5–4-6.

65   James Dubik to LTG Thomas Burnett, thought paper, "Thought Paper-Similarities. Haiti and Bosnia," March 12, 1999, James M Dubik Papers, Bosnia and Herzegovina, folder 5—unpublished thought papers, box 29—Task Force Eagle and Multinational Division North Operation Joint Forge, B-H 7 Jan 1999–circa 1999, Army Heritage and Education Center (AHEC), Carlisle, PA.

interest groups or foreign leaders are clamoring for American action, we are going to go to school." Peters added, "The military must be ready for reality, not for its fantasy war."[66]

While the debate between critics and transformers continued, events developed in Serbia that dramatically impacted transformation and short-circuited the debate. In March 1999, NATO began a sustained bombing campaign aimed at ending Serbian President Slobodan Milosevic's ethnic cleansing of Albanians in Kosovo. But, as the campaign wore on, it became clear that bombing was not going to be sufficient. The Serbs had adopted precisely the tactics transformation's critics had envisioned; among other tactics, the Serbian Army was hiding in urban centers among the civilian population.[67]

Yet it was not this asymmetry, but rather deploying the Army to the conflict, that changed the course of Army transformation. To counter Serbian tactics, the US Army deployed AH-64 Apache attack helicopters, along with associated logistics and force protection support, to a base in Albania from which to launch more effective attacks against Serbian armor. The deployment soon devolved into a debacle. Facilities in and around the airfield were insufficient for the massive logistic requirements of the aviation unit. Two Army aviators were killed and their helicopters destroyed in a training accident while preparing for the specific requirements of the operation. By the time the aviation unit was in place and ready to operate, the war was over—Operation Allied Force had ended and Slobodan Milosevic had capitulated.[68] Things got worse when a succeeding American armored force, Task Force Falcon, deployed into Kosovo to execute stability operations as part of Operation Joint Guardian. Streets were clogged with refugees and bridges could not support 70-ton M1 Abrams tanks; the deployment ground to a crawl.[69]

Critics used the episode to argue that the Army was too heavy and too slow, rapidly becoming irrelevant to modern warfare.[70] This event had an especially large impact on Army transformation since the operation was overseen by Lieutenant General John Hendrix, commanding general, V Corps, US Army Europe and Seventh Army, who later became the commander of US Army Forces Command, and because on June 22, 1999, only weeks after this fiasco, Shinseki became the 34th chief of staff of the Army.[71]

From the beginning of his tenure, Shinseki had a very clear vision for the future of Army transformation.[72] He would create a whole new

66   Ralph Peters, "Heavy Peace," *Parameters* 29, no. 1 (Spring 1999): 71–79.

67   Millett, Maslowski, and Feis, *Common Defense*, 12417–441.

68   R. Cody Phillips, *Operation Joint Guardian: The US Army in Kosovo* (Washington, DC: CMH, 2007), 14–17.

69   Phillips, *Operation Joint Guardian*, 14–30.

70   Hunter Keeter, "Cody: Apache Units Need Equipment, Training," *Defense Daily*, July 2, 1999, 1; "Kosovo Fallout: Army Readiness under Intense Scrutiny," Armed Forces Newswire Service, July 2, 1999; "Army Says Apaches Were Ready for Action in Kosovo," *Helicopter News* 25, no. 13 (July 16, 1999); Shimko, *Iraq Wars*, 3448–62; and "The NATO Capability Gap," *Strategic Survey* 100, no. 1 (1999): 15–21, doi:10.1080/04597239908461105.

71   Phillips, *Operation Joint Guardian*, 14–30; and Eric Shinseki, "The Army-Intent of the Chief of Staff," *Joint Force Quarterly*, 22 (Summer 1999): 113–14.

72   Brown, *Kevlar Legions*, 4385–86.

organization, the Interim Force.[73] The first purpose of the Interim Force was to provide an organization for testing the tactics and structure of an eventual Objective Force. But the force also had another purpose: to cure the Army's deployability woes.[74] The Interim Force—equipped with medium-weight, 20-ton armored vehicles—would fill the gap between heavy forces, which were lethal, mobile, and survivable, but took months to get to a theater of operations, and light forces, which were rapidly deployable but not survivable or self-sustaining beyond a few days. The Interim Force would have the deployability of light forces and be able to leverage the technology from the RMA to provide the lethality and staying power of heavy forces. Moreover, this transformation was not going to happen in 2025. Shinseki wanted the first interim BCTs fielded in three years.[75]

To head the actual training, manning, and equipping of the teams, Shinseki chose Dubik. The first two brigades chosen for the transformation were at Fort Lewis, Washington. One armor brigade and one light infantry brigade were selected so the new doctrine could benefit from the best practices of each type of force. Hendrix and Abrams directly supervised Dubik's efforts.[76]

In a massive bureaucracy like the Army, adopting a new combat system—let alone an entirely new type of unit—usually takes a decade or more. In that respect, the creation of the interim BCTs in only three years was a masterpiece of strategic leadership worthy of its own study.[77] But on a more fundamental level, the effort must be judged a failure. The brigades did successfully bridge the deployability gap between light and heavy forces; but they failed to bridge the more profound capability gap: a lack of competency in low-intensity conflict.

The Interim Force was unequivocally designed for high-intensity conflict. Even with the benefit of hindsight, when asked directly if the interim BCTs were intended to address shortfalls in executing operations other than war, Shinseki still insists they were intended to dominate "conventional" operations.[78] Dubik, as well as the documentary evidence from the time confirms this stance. The organizational and operational concept, which served as the blueprint for developing the interim BCTs, repeatedly claimed the units would be a "full spectrum, combat force."[79] But the concept also acknowledged the interim BCT was "designed and optimized primarily for employment in small scale contingency operations" (smaller high-intensity conflicts).[80] These teams could only succeed in "stability and support operations" (low-intensity conflicts) with significant "augmentations." Moreover, even with augmentation,

73   John Sloan Brown (former director, General Eric K. Shinseki's Special Staff Study Group and former chief, Center for Military History), interview with author, December 15, 2016; and Brown, *Kevlar Legions*, 4462–83.

74   James M. Dubik, *The Army's "Twofer": The Dual Role of the Interim Force*, Land Warfare Paper 39 (Arlington, VA: Association of the US Army, 2001).

75   Eric K. Shinseki, "Address to the Eisenhower Luncheon" (speech, 45th Annual Meeting of the Association of the United States Army, 12 October 1999).

76   James M. Dubik (former deputy commanding general for transformation, TRADOC), interview with author, November 17, 2016.

77   Harold Kennedy, "Army Approaches Decision on Interim Combat Vehicle," *National Defense*, September 1, 2000.

78   Eric K. Shinseki (former chief of staff, US Army), interview with author, October 21, 2016.

79   Dubik, interview.

80   HQDA, *Operations*, FM 3-0 (Washington, DC: HQDA, 2001), 1-14–1-17.

they were only capable of serving in stability and support operations "as an initial entry force and/or as a guarantor to provide security for stability forces."[81] This concept was the reemergence of Dubik's national judicial force, a hypothetical "other" force that would arrive to do the dirty work of navigating the political dimension of low-intensity conflict so that the Army would not have to do so.[82]

The concept paid little attention to concerns over urban operations and asymmetry, repeatedly insisting the design to dominate in "urban and complex terrain" and acknowledging the future operating environment would entail "asymmetry."[83] But the conflation of "urban and complex terrain" is telling. The organizational and operational concept never connected urban operations to dealing with a population or the loss of information dominance. Moreover, "urban and complex terrain" was simply terrain that was complicated, an obstacle to movement and observation that would be overcome by superior mobility and networks.[84] Likewise, asymmetry was stripped of its messy association with urban operations, guerilla warfare, and civilian populations. Instead it was defined in terms of enemy technologies that could deny access to a theater of operations or produce mass US casualties.[85] The interim BCT was a giant leap toward greater deployability and lethality, but it did not solve the problem of low-intensity conflict, particularly the political dimension, which transformation's critics identified as the true asymmetry of urban operations.

In fact, the Army never solved the problems of low-intensity conflict or its political dimension. Thus, when the twin towers fell on September 11, 2001, the stage was set for a slow-motion military disaster. The apparent "cheap win" in Afghanistan through special operations forces and airpower further validated transformers' convictions that technology could supplant numbers.[86] The Army that invaded Iraq in March 2003 was tragically ill-prepared for the character of warfare that it ultimately faced. While the depleted Iraqi Army rapidly melted before the advance of the vastly superior American Army, it did not disappear. Instead, the Iraqi soldiers hid among the population, evading America's high-tech surveillance and precision strike capabilities. Once Saddam's regime was toppled, the Iraqi Army reemerged, not as a conventional military threat but as an insurgency that severely challenged America's halting efforts to establish a new Iraqi government. Other adversaries

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81   TRADOC, "The Brigade Combat Team, Organizational and Operational Concept," January 6, 2000, Fort Monroe, VA, 1-13, James M Dubik Papers, Box 2—Official Correspondence Email Traffic Received from 20 to 5 January 2000, Folder 7—Official Correspondence-Email Traffic Received in January 2000 (part 19 of 20), AHEC.

82   Dubik, "Thought Paper-Similarities."

83   TRADOC, "Brigade Combat Team," 1-13; and TRADOC, "Chapter 2 Assessment of Operational Environment," Fort Monroe, VA, November 2, 1999, 1-14, James M Dubik Papers, Box 2—Official Correspondence Email Traffic Received from 20 to 5 January 2000, Folder 6—Official Correspondence-Email Traffic Received in January 2000 (part 18 of 20), AHEC.

84   TRADOC, "Brigade Combat Team," 1-13.

85   TRADOC, "Assessment of Operational Environment," 1-14.

86   Millett, Maslowski, and Feis, *Common Defense*, 12781–84.

also emerged, including Shia militias, Sunni extremists, and foreign terrorist groups.[87]

America continues to pay the price for its Army's initial unpreparedness for the low-intensity conflict in Iraq. The Army also remains engaged in other low-intensity conflicts in Syria and Afghanistan. The Army has resumed its headlong march toward ever-greater capability to fight high-intensity conflicts. Since the end of the Vietnam War, the Army has been asked to fight less than 30 total days of high-intensity conflict. In this same period, it has been asked to fight dozens of low-intensity conflicts, many running years in duration. It is time that the Army reshaped itself not only to fight and win the nation's battles but to fight and win the nation's wars—including the messy postconflict stability phase of future wars.

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87   Michael R. Gordon and Bernard E. Trainor, *Cobra II: The Inside Story of the Invasion and Occupation of Iraq* (New York: Pantheon Books, 2006); Thomas E. Ricks, *Fiasco: The American Military Adventure in Iraq* (New York: Penguin Books, 2006); Dexter Filkins, *The Forever War* (New York: Random House, 2008); Bob Woodward, *State of Denial: Bush at War, Part III* (New York: Simon & Schuster, 2006); James A. Baker III et. al., *Iraq Study Group Report: The Way Forward—A New Approach* (Washington, D.C.: United States Institute of Peace, 2006); and Michael R. Gordon and Bernard E. Trainor, *The Endgame: The Inside Story of the Struggle for Iraq, from George W. Bush to Barack Obama* (New York: Pantheon, 2012).

Navigating the Third Offset Strategy

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ABSTRACT: This article suggests adding a "craftsman" at lower ranks to steer private-sector projects through the Third Offset Strategy. This strategy was established by experienced leadership at the Pentagon to increase military acquisitions of automation and artificial intelligence technology.

When President Barack Obama's administration implemented its transition of executive authority, there was an extra measure of drama: What would happen, after the change election of 2016, to Defense Secretary Ashton Carter's legacy on defense innovation, namely, his signature Third Offset initiative? The vision had been to reorient American defense policy toward filling the ends-means gap created by two ill-fated wars in the Middle East, the global financial crisis of 2008, and congressionally mandated defense budget cuts known as the Sequester.

To defend the country's extended interests, while containing operational burdens on American servicemembers, the secretary reached for, but ultimately failed to grasp, the triumphal legacy of two formative events in twentieth-century defense policy: the advent of nuclear weapons and the revolution in military affairs (RMA). Drawing upon technologies for automation and artificial intelligence (AI), the Third Offset was supposed to raise the capability of smaller units in stabilization and counterinsurgency operations, while driving advances in conventional forces to deter regional competitors and while maintaining politically feasible budget targets.[1]

Sixty years earlier, facing long conventional odds in Europe, nuclear weapons had evened the game.[2] The nuclear arsenal, capable of destroying first tens then hundreds of cities in the Soviet Union within hours, compensated, or offset, NATO's conventional deficit in the Fulda Gap for defending Western Europe against the Red Army.[3] Once the Soviets invested in their own arsenal, however, the effectiveness of the First Offset was called into question: Why would the United States launch nuclear weapons against the Soviet army in Germany when Moscow

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1 Theodore R. Johnson, "Will the Department of Defense Invest in People or Technology?," *Atlantic*, November 29, 2016.

2 The classic treatment from political psychology is Robert Jervis, *The Meaning of the Nuclear Revolution: Statecraft and the Prospect of Armageddon* (Ithaca, NY: Cornell University Press, 1989). For an analysis along the lines of constructivism, at the nexus of ideas and foreign policy, see Campbell Craig, *Glimmer of a New Leviathan: Total War in the Realism of Niebuhr, Morgenthau, and Waltz* (New York: Columbia University Press, 2007).

3 Robert R. Bowie and Richard H. Immerman, *Waging Peace: How Eisenhower Shaped an Enduring Cold War Strategy* (New York: Oxford University Press, 1998); and Neil Sheehan, *A Fiery Peace in a Cold War: Bernard Schriever and the Ultimate Weapon* (New York: Random House, 2009).

could respond with a massive nuclear attack against the United States?[4] To provide the American president with better options, the Pentagon, beginning during Jimmy Carter's administration, initiated what would become the Second Offset—a digital revolution in military affairs.

The Second Offset exploited advances in computer processing and aerospace technology to build a nonnuclear counterpunch against a Soviet invasion of Europe—for example, in the early years before precision-guided munitions were fully developed, the US Army formulated AirLand Battle doctrine, which aimed to cripple a Soviet-armored offensive by reaching over the front lines and pummeling Russian forces at their staging areas.[5] Within a decade, this scheme leveraged novel technologies for precision-guided munitions, standoff weapons, electronic countermeasures, and remote sensing for intelligence, surveillance, and reconnaissance. The Cold War ended before it was necessary to employ the Second Offset in a major war, but Iraqi dictator Saddam Hussein was likely surprised at how efficiently post-RMA allied forces destroyed his regular army and elite Republican Guard, built around massive buys of Soviet equipment.[6]

Success of the Second Offset, designed as it was for dismembering industrial-age conventional armies, did not bring about the end of history. Rather, it inspired US adversaries to devise ways around the RMA, to plan operations such as the terrorist attacks on September 11, 2001, or unorthodox campaigns like the Iraqi insurgency of 2005–06 that would damage US interests without providing a convenient target set for modern air power. While the Pentagon and the Army have adapted in many ways to complexity after 9/11, violent nonstate actors are still evolving.[7] The Islamic State presented a multidimensional threat in Iraq and Syria, with terrorist tentacles lashing out at societies in the United States and Europe. Moreover, major powers such as Russia, China, and Iran have demonstrated ingenuity in shaping so-called gray-zone conflicts according to their strategic interest.

Shortly after ascending to the Obama cabinet, with barely two years remaining to transform defense policy, Secretary Carter put his imprimatur, and precious political capital, behind the Third Offset. There was likely no one better suited for this challenge. During his graduate days, Carter studied physics under Stanford's Sidney D. Drell, who introduced Carter to the technical and public policy challenges of nuclear arms control. One of the future secretary's earliest contributions, a report for Congress's Office of Technology Assessment, discussed the perils of transformative missile defense, betting a significant chunk of

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4   Lawrence Freedman, *The Evolution of Nuclear Strategy* (London: Macmillan, 1981), 313–24; and Bruce M. Russett, "The Calculus of Deterrence," *Journal of Conflict Resolution* 7, no. 2 (June 1963): 97–109, doi:10.1177/002200276300700201.

5   Stephen Biddle, *Military Power: Explaining Victory and Defeat in Modern Battle* (Princeton, NJ: Princeton University Press, 2004); James W. Pardew Jr., "The Iraqi Army's Defeat in Kuwait," *Parameters* 21, no. 4 (Winter 1991–92): 17–23; and John L. Romjue, *From Active Defense to AirLand Battle: The Development of Army Doctrine, 1973–1982* (Fort Monroe, VA: US Army Training and Doctrine Command, 1984).

6   Daryl G. Press, "The Myth of Air Power in the Persian Gulf War and the Future of Warfare," *International Security* 26, no. 2 (Fall 2001): 5–44, doi:10.1162/016228801753191123; Stephen Biddle, "Victory Misunderstood: What the Gulf War Tells Us about the Future of Conflict," *International Security* 21, no. 2 (Fall 1996): 139–79, doi:10.1162/isec.21.2.139; and Pardew, "Iraqi Army's Defeat."

7   Fred M. Kaplan, *The Insurgents: David Petraeus and the Plot to Change the American Way of War* (New York: Simon & Schuster, 2013); and Greg Jaffe and David Cloud, *The Fourth Star: Four Generals and the Epic Struggle for the Future of the United States Army* (New York: Crown Publishers, 2009).

the defense budget on a grand scheme to knock Soviet missiles out of the sky before they could reach the United States.

Further along his path to cabinet rank, Carter researched cooperative defense at Harvard's Kennedy School and subsequently served as the Pentagon's "chief technology officer," the undersecretary for Acquisition, Technology, and Logistics (AT&L). During the short hiatus between his service as deputy secretary of defense (Pentagon Number Two) and his appointment to succeed Secretary Chuck Hagel, Carter published an article in *Foreign Affair* entitled "Running the Pentagon Right."[8] The article laid out his vision for rapid defense acquisition to meet urgent and fluid survival requirements of American service personnel, now struggling on unconventional battlefields across the globe.

Despite this extraordinary level of preparation, plus empathy in the bureaucracy and Congress for the enormity of the innovation-challenge at the Pentagon, several signs soon spelled trouble for military automation and the AI-based Third Offset. Under ordinary bureaucratic conditions, any gravity defying, rapid offset would need impressive success stories to survive the opposition's control in Congress and the loss of the White House. For the Third Offset, superior performance in defense acquisition did not materialize before the 2016 election. Republicans on the House and Senate Armed Services Committees fretted over relatively miniscule investments, well under $100 million, in Defense Innovation Unit-Experimental (DIUx) initiatives. This progress occurred despite the secretary of defense personally christening the first office in the Silicon Valley, far from the Washington lobby but at the epicenter of transformational innovation nurtured in small- and medium-sized enterprises.[9]

Before its first annual review, DIUx was under new management, and Congress probed modest requests to multiply similar defense innovation hubs in Boston, MA; Austin, TX; and beyond even as it criticized the geographical tether to Silicon Valley.[10] The National Defense Authorization Act (NDAA) for Fiscal Year 2017, at one point in the mark-up stage, denied DIUx 20 percent of its authorization (75 percent of its research and development funds) until Carter detailed results from initial taxpayer contributions and a long-term plan for the organization.[11] In addition, Congress coupled the power of the purse with its authority to reorganize the Defense Department. Within two years, NDAA 2017 abolished the undersecretary position for Acquisition, Technology, and Logistics, vesting defense technology development duties, to the dismay of the incumbent undersecretary, in a new, coordinate office for Research and Engineering.[12]

    8   Ashton B. Carter, "Running the Pentagon Right," *Foreign Affairs* 93, no. 1 (January/February 2014): 101–12.

    9   Aaron Mehta, "Leadership, Structural Changes for DoD Silicon Valley Office," *Defense News*, May 11, 2016; and Patrick Tucker, "As Pentagon Dawdles, Silicon Valley Sells Its Newest Tech Abroad," *Defense One*, April 22, 2016.

    10 Sydney J. Freedberg Jr. and Colin Clark, "DIUx: Will Carter's Innovation Unit Survive Trump?," *Breaking Defense*, November 16, 2016.

    11 Fred Kaplan, "The Pentagon's Innovation Experiment," *MIT Technology Review* (January/February 2017); and Scott Maucione, "Lawmakers Demand Answers on DIUx Plan," Federal News Radio, December 6, 2016.

    12 Sydney J. Freedberg Jr., "Pentagon Wrestles with How to Break Up ATL," *Breaking Defense*, April 18, 2017.

Lacking a single, fixed adversary, over the long haul, the US defense establishment has little choice but to conceive the Third Offset, beyond any suite of technologies, as a transformation in the *process* of harnessing innovation to meet new enemies wherever and whenever they arise. Unlike previous initiatives, success of the Third Offset cannot be scheduled in clear milestones for adopting specific equipment such as nuclear-tipped missiles, precision navigation, stealth, or today's automation. The Third Offset, then, diverges from its two historical precedents.

For the historical cases, acquisition success can be attributed to a deft, top-down approach in which efforts of thousands of talented specialists were orchestrated from on high by legendary defense establishment figures such as Leslie Richard Groves, during the Manhattan Project, and William J. Perry during the RMA. By contrast, the present offset calls for less of a virtuoso conductor—not a singular fleet admiral directing from the flagship—and greater cultivation of a rough-and-ready network of riverboat captains. In order to see why this is so, it helps to understand the nature of each of the prior offset challenges and why top-down strategy worked as well as it did as recently as rapid acquisition of mine-resistant, ambush-protected (MRAP) vehicles at the end of the Iraq War.

Somewhere between fielding MRAPs and initiating DIUx, the nature of the technology acquisition challenge confronting the Pentagon changed. From directors perched at the Pentagon to intrepid couriers who can navigate labyrinthine byways connecting innovation at commercial enterprises with future military operations—the agent, or agents, who will deliver solutions over the next epoch changed as well. While the type of small and medium-sized suppliers needed are coming into view, it may, unfortunately, be a while before a new breed of riverboat pilots for the Pentagon take to their craft. Beyond patent skepticism in Congress, bureaucratic inertia, another political concern, poses the biggest obstacle to technological advance via the Third Offset.

Top-Down Success: Riding the Post-World War II Model

The top-down approach to the Third Offset is difficult to reform in part because it can claim major success during America's superpower days in the last half of the twentieth century. Careful orchestration from national leadership and judicious use of bureaucratic states of exception attracted talented American technologists. Elite laboratories, or skunk works, supplied novel ideas and experimentation at moments when nuclear warheads, ballistic missiles, and space-enabled communication and control networks were needed to revolutionize US defense capabilities against a relatively well-described adversary.

The approach actually dated from America's desperate attempt to catch Germany after entering into World War II late and following Japan's abject demonstration of US unpreparedness at Pearl Harbor. Vannevar Bush, with no government experience—indeed, a certain disdain for New Deal bureaucracy and regular order—shot through the underbrush of Washington offices to convince first President Franklin D. Roosevelt, and eventually key Congressional committees, to fund the fabled Office of Scientific Research and Development. Assembling the right talent from universities and tech-savvy industries skirted agency

red tape and delivered novel wartime solutions—improvements in radar and proximity fuses—before the enemy could respond, clearly saving American lives.[13]

Ironically, the electrical engineer Vannevar Bush did not immediately sense the world-altering potential of the Manhattan Project. He feared that the sprawling constellation of atomic labs was scaling too quickly and that the physicists would not deliver a practical weapon. The Manhattan Project, though, turned out to be the leading edge of an historic phenomenon that, while remaining culturally consistent with the American way of war, sharply altered the relationship between science and global power. For a number of critical technologies—nuclear, aerospace, and computing—the time lag between scientific discovery and military application essentially collapsed.[14] Although the ascendancy of Bush was short-lived, the central message of his famous essay *Science: The Endless Frontier* endured.[15]

Following its mobilization and outright defeat of the Axis powers in World War II, the US government would commit unprecedented public investment toward advancing—and steering—science and engineering. For the nuclear and space age, this support would elevate and shape the role of physicists in national security. J. Robert Oppenheimer, Hans Bethe, Herbert York, and Edward Teller among other eminent names linked the country's first rank physics departments with strategic challenges of the day. The younger range of this intriguing list included Sidney Drell, who in the 1980s directed Stanford's Linear Accelerator Center (SLAC) and the university's Center for International Security and Arms Control. This combination of interests and responsibilities, made prevalent by the First Offset, placed Drell in a position to engage fellow physicist and Russian hero-dissident Andrey Sakharov in what became riveting public correspondence on the consequences of nuclear war and the potential for stalled arms control negotiations in the early 1980s.[16]

Drell personifies a link between the First Offset and today's offset strategy. At Stanford, Drell introduced the future secretary of defense, as a young physics postdoctoral student, to questions of nuclear strategy that inherently combined scientific and political considerations. From the press record and Ash Carter's writings over three decades later, it is still difficult to gauge how much the psychological foundation set at Stanford matters for leadership decisions after so many years. Secretary Carter was effusive with praise and gratitude nearly everywhere he visited, including Stanford and Silicon Valley.[17]

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13   G. Pascal Zachary, *Endless Frontier: Vannevar Bush, Engineer of the American Century* (Cambridge, MA: MIT Press, 1999).

14   This was Robert Gilpin's premise in *France in the Age of the Scientific State* (Princeton, NJ: Princeton University Press, 1968).

15   Vannevar Bush, *Science: The Endless Frontier* (Washington, DC: Office of Scientific Research and Development, July 1945).

16   Herbert F. York, *Arms Control: Readings from* Scientific American (San Francisco, CA: W. H. Freeman, 1973); and Philip Taubman, "The Friendships of Sid Drell," *Stanford Magazine* (March/April 2017), 40–41.

17   Jessi Hempel, "DOD Head Ashton Carter Enlists Silicon Valley to Transform the Military," *Wired*, November 18, 2015; and Ashton Carter, "Rewiring the Pentagon: Charting a New Path on Innovation and Cybersecurity" (speech, Drell Lecture, Stanford University, Palo Alto, CA, April 23, 2015), https://www.defense.gov/News/Speeches/Speech-View/Article/606666/drell-lecture-rewiring-the-pentagon-charting-a-new-path-on-innovation-and-cyber/.

Nevertheless, the literature on presidential personality types and the oft-studied connection between formative experiences and subsequent big decisions make it reasonable to guess that some of the context and feel of the nuclear offset—including its repercussions through the 1980s—passed to the current strategy.[18] Such conveyance would have been accomplished in part according to an extraordinary history of how the original community of national security physicists recruited the next generation.

Biographers and researchers weighing psychological factors behind the Third Offset have a second critical juncture to study. Professor Carter entered the executive branch for the first time in 1993 as assistant secretary of defense for international security policy. He soon had the opportunity to work for, and develop a close relationship with, William Perry, another mentor with Stanford ties, when Perry, who had been deputy secretary of defense, became President Bill Clinton's second secretary of defense (1994–97). Perry's background was closer to the old Vannevar Bush mold—in engineering and technology management. As undersecretary of defense for research and engineering during Jimmy Carter's administration, Perry had been at the forefront, implementing Secretary Harold Brown's initial commitment to the second, conventional, offset in response to nuclear stalemate in Europe.[19]

Returning to government, now at the very highest levels of the Pentagon, Perry wanted to ensure that technological accomplishments of the revolution in military affairs—remote sensing, precision guidance, space communications, and stealth, among others—would continue to advance after the Cold War. The American people and their representatives in Congress demanded a peace dividend—indeed, defense spending as a percentage of gross domestic product dipped, at one point, below pre-Pearl Harbor levels—but in the vacuum created by the collapse of Soviet power, pockets of chaos marked by ethnic slaughter and economic misery set off alarm bells and redoubled calls for American engagement.[20]

The Pentagon's solution for escaping this strategic vice—dwindling budgetary support and domestic political will coupled with rising global demand for lethal operations "other than war"—was twofold: buy time by crafting military advice for the president that, in its totality of public and private channels, dampened White House enthusiasm for using the RMA to burnish US hegemony and pacify emerging hotspots around the world. Second, for those missions entering the Pentagon lists—and they were several covering Somalia, Haiti, Bosnia, Kosovo, Afghanistan, and Iraq—apply the RMA to limit costs, especially in terms of the number of troops deployed and the number of casualties taken.[21]

18   James David Barber, *The Presidential Character: Predicting Performance in the White House* (Englewood Cliffs, NJ: Prentice Hall, 1972); and Fred I. Greenstein, *The Presidential Difference: Leadership Style from FDR to Clinton* (NY: Free Press, 2000).

19   William J. Perry, *My Journey at the Nuclear Brink* (Stanford, CA: Stanford University Press, 2015), 33–44; and Andrew F. Krepinevich, "Cavalry to Computer: The Pattern of Military Revolutions," *National Interest*, no. 37 (Fall 1994): 30–42.

20   Robert D. Kaplan, "The Coming Anarchy," *Atlantic* (February 1994), captured the early 1990s Zeitgeist. For the Clinton administration's management of the strategic conundrum, see Derek Chollet and James Goldgeier, *America between the Wars: From 11/9 to 9/11* (New York: Public Affairs, 2008).

21   Gideon Rose, "The Exit Strategy Delusion," *Foreign Affairs* 77, no. 1 (January/February 1998): 56–67.

In order to deliver the Second Offset, it was less a question of unmasking nature or prodding the leap from physics breakthrough to weaponization and more a challenge of adapting existing technology for defense functions. This meant getting the most out of defense contractors to reduce cost overruns and program delays, even as the programs themselves became exponentially more complex and market competition at the prime contractor level less meaningful.[22] Precious few organizations—Boeing or Lockheed at the end of industry consolidation—understood how to integrate subsystems successfully and profitably under government regulations for accountability. The armed services, putative customers for these behemoth high-tech programs, needed to prepare themselves, and they had to keep political leadership at the Pentagon on board. Support for each major platform incorporating smart technology was negotiated with Congress over several budget cycles. At the same time, weapons and their platforms, old and new, required a wave of upgrades, sensors, and computers that had never before been acquired.

During the Second Offset, the armed forces learned by doing, as they took day-to-day responsibility for holding the primes and the nest of subcontractors accountable for ambitious promises, without causing too much disruption that would bankrupt corporations now too large or too specialized to fail. Finally, revolutionary characteristics of these systems meant the services would not be able to employ them or to reduce the costs of force projection without devising new training, tactics, and procedures, implying a novel, intricate, and more enduring relationship between military operators and civilian defense contractors.[23]

The second Pentagon offset that William Perry at one point led and Ash Carter, during his inaugural service in high office, had the opportunity to study had its own version of top-down orchestration. All the moving pieces among the defense contractors had to fit together through system integration, and the systems themselves had to align with the special operational test beds prepared for them in the armed services. In order to bring this plan to fruition, leaders at the Pentagon needed to develop a sixth sense, knowing which instruments in the grand enterprise were out of tune—knowing when and how deeply to intervene in the process—and finally, once at the nub of the problem, knowing how radically to accept risk and impose states of exception upon meticulously designed bureaucratic protocols before the overarching symphony would get back on track.

Second Offset leadership shared essentials with Eliot Cohen's *Supreme Command*: prudential, probing, curious, and, it must be said, brashly hierarchical.[24] As evidenced in Cohen's Anglo-American case studies of wartime leadership, Lincoln and Churchill, the ones most

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22   David S. Sorenson, *The Politics of Strategic Aircraft Modernization* (Westport, CT: Praeger, 1995), 157–210.

23   Steven J. Zamparelli, "Contractors on the Battlefield; What Have We Signed Up For?" (research report, Air War College, Air University, Maxwell Air Force Base, AL, March 1999). This was precursor to general expansion of contractor services coincident with U.S. military operations in Iraq and Afghanistan. Deborah D. Avant, *The Market for Force: The Consequences of Privatizing Security* (Cambridge: Cambridge University Press, 2005); and Eugene Gholz and Harvey M. Sapolsky, "Restructuring the U.S. Defense Industry," *International Security* 24, no. 3 (Winter 1999/2000): 5–51, doi:10.1162/016228899560220.

24   Eliot A. Cohen, *Supreme Command: Soldiers, Statesmen, and Leadership in Wartime* (New York: Free Press, 2002).

familiar to his readers, it was fine, even auspicious, if tension, tinged with frustration and fear, reared up among military professionals toward civilian authority. Truly constructive "unequal dialogue" could not occur without friction, and unambiguous civilian control was critical to transforming the military organization, so it could adapt and survive against an evolving threat.[25]

Interpreted in light of civilian leadership developments over two historic offsets, Secretary Carter's prime empirical example for demonstrating how to run the Pentagon right takes on starkly contrasting significance from what he intended. The tale of how the Defense Department acquired and fielded the mine-resistant, ambush-protected vehicle to save American lives from improvised explosive devices in the latter stages of the Iraq War was presented in *Foreign Affairs* as if it were proof of concept for other urgently needed technologies. During Secretary Carter's subsequent tenure, even if it were truncated to a mere twenty-four months, the Third Offset was supposed to succeed along lines laid by the MRAP program to guide the Pentagon from the top. It turns out, however, that the MRAP life cycle, rather than the dawn of a new acquisition strategy for automation and AI, should be viewed as a reiteration of technique perfected during the Second Offset.

True, the core challenge with MRAP was not about digital hardware, software development, or systems integration as had so often arisen during the RMA. The trouble was how to build a functional solution and get it out to the battlefield in time. Yet, just how the civilian Office of the Secretary of Defense accomplished the feat of speed recalled the orchestral (albeit drawn out) masterpieces of Second-Offset productions—RMA technologies that enabled AirLand Battle, net-centric warfare, even prompt global strike.

Now, unlike much of the Second Offset, the beating heart of the MRAP gambit was, at least at first, a relatively small defense contractor, Force Protection International (FPI), which was independent from the great defense mergers of the 1990s. FPI was just large enough, in other words, to produce an armored vehicle that would thrive in a combat environment but small and agile enough to react instinctively toward raw, informal demand signals issued from the very top levels of the Pentagon. Being sufficiently small, FPI did well to profit and to innovate without scaling so fast to capture rapidly expanding demand. This success, in turn, attracted competing suppliers toward entering the market. Only a few years after the first contract for Cougar MRAPs, defense mergers and regular orders rapidly caught up to FPI.[26]

Carter's top-down account of the MRAP success described how undersecretaries for acquisition across two administrations exercised supreme command over the bureaucracy. In the mold of the Second Offset—with authoritative urgency, insight at the nexus between political balancing and military organization, and uncanny judgment—they

25   Indeed, one way of comprehending the offsets is a peacetime version of Cohen's supreme command: civilian directed states of exception to whip a hidebound military into condition, so it may respond and defeat an emergent challenge.

26   Seth T. Blakeman, Anthony R. Gibbs, and Jeyanthan Jeyasingam, "Study of the Mine Resistant Ambush Protected (MRAP) Vehicle Program as a Model for Rapid Defense Acquisitions" (master of business administration professional report, Naval Postgraduate School, Monterey, CA, December 2008), 6–11.

reached past ordinary checks-and-balances to pave the way for MRAP's rapid construction and fielding. In doing so, they dramatically accelerated the pace of acquisition in order to save lives in Iraq. Pentagon leadership also accepted calculated risk that relatively high level government officials could allocate sufficient time and accumulate program-specific expertise in order to hold FPI and other MRAP contractors accountable.

Finally, the locus of defense acquisition for the high-priority, fast-track MRAP vehicle shifted from the armed services to the civilian Office of the Secretary of Defense. Accordingly, like an experimental drug for terminal patients, MRAPs entered the battlefield without standard testing and laborious training, tactics, and procedures. Over the long run cropped up certain inefficiencies. As operations evolved, employing MRAPs presented a steep learning curve for each new unit, and rather quickly—in terms of the life cycle of a major defense program—service demand for fast-track MRAPs fell off, raising a question about Secretary Carter's inaugural message: Was MRAP so clearly a positive model for rapid acquisition during the imminent automation and AI offset?[27]

The Pentagon's Missing Cadre

Interpreted through the lens of the Second Offset, the MRAP case qualifies as a success story of applying top-down modes for rapid acquisition the way the secretary of defense's office directed digital integration to revolutionize military operations during the 1980s and 1990s; however, Secretary Carter's exemplar has not borne fruitful lessons for the contemporary offset. Unlike the first two quantum leaps in defense acquisition—nuclear weapons and the RMA—this Third Offset is less about obtaining specific AI technology and more about the architecture by which technological innovation is cultivated, harvested, and sustained for the services, who now face rapidly evolving "pacing competitors" and unconventional foes.[28]

Initial speeches by the Pentagon's "big three"—Secretary Carter, Deputy Secretary Robert O. Work, and Undersecretary for Acquisition, Technology, and Logistics Frank Kendall—along with Carter's high profile visit to Stanford in April 2015, amplified a bold vision from top civilian leadership: today, much relevant innovation for cutting-edge military operations happens in the private sector, at small and medium-sized companies steeped in the start-up culture made famous by Silicon Valley.[29]

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27   Jen Judson, "30 Years: MRAP—Rapid Acquisition Success," *Defense News*, October 25, 2016; Richard H. Van Atta, R. Royce Kneece Jr., and Michael J. Lippitz, *Assessment of Accelerated Acquisition of Defense Programs*, P-8161 (Alexandria, VA: Institute for Defense Analyses, September 2016), 18–25; and Alex Rogers, "The MRAP: Brilliant Buy, or Billions Wasted?," *Time*, October 2, 2012.

28   Cheryl Pellerin, "Deputy Secretary: Third Offset Strategy Bolsters America's Military Deterrence," U.S. Department of Defense, October 31, 2016, https://www.defense.gov/News/Article /Article/991434/deputy-secretary-third-offset-strategy-bolsters-americas-military-deterrence/.

29   Ashton Carter, "Remarks by Secretary Carter at the Drell Lecture, Cemex Auditorium, Stanford Graduate School of Business, Stanford, California," U.S. Department of Defense, April 23, 2015, https://www.defense.gov/News/Transcripts/Transcript-View/Article/607043/remarks -by-secretary-carter-at-the-drell-lecture-cemex-auditorium-stanford-grad/. For Beltway analysis and reaction to this claim, see "Implementing Innovation Series: Defense Innovation in a Change-Resistant Ecosystem," Center for Strategic and International Studies (CSIS), webcast of a discussion on Jeffrey P. Bialos, Christine E. Fisher, and Stuart L. Koehl, *Against the Odds: Driving Defense Innovation in a Change-Resistant Ecosystem* (Washington, DC: Center for Transatlantic Relations, 2017), held on May 19, 2017, https://www.csis.org/events/implementing-innovation-series-defense -innovation-change-resistant-ecosystem.

This culture, specifically its propensity for innovation, has been, despite repeated attempts around the globe, devilishly difficult to replicate, especially in the private sector.[30] Given extraordinary performance requirements, enmeshed in a thicket of regulations characteristic of the monopsony of military procurement, transplanting Silicon Valley's ingenuity into government programs is more challenging. For defense officials to raise investment unicorns in the military sector, they have to work like successful venture capitalists who somehow manage to read subtle indicators of both future supply and consumer demand.[31] Which obscure suppliers are on the cusp of introducing novel capability at an affordable price? Which capabilities solve an emergent problem for the military client? Which innovations match a complex and rapidly evolving demand signal?

The triumph of neoliberalism and global capital over planned economies at the end of the twentieth century reinforced the expectation, especially in America's leading innovation economy, that governments are poor judges of up-and-coming suppliers. Conventional wisdom, in business literature as well as political economy, waves officials off the temptation to pick industry winners and instead advises governments to less obtrusively, or transparently, set the conditions for productive innovation.[32] Part of the reason central authority has such trouble picking winners is that it has no way of replicating the complex demand signals of the free market. Even if a supplier's technology works, customer demand is not guaranteed.

Shifting, as Secretary Carter attempted, from free-market expansion to regulated, often classified, production for military use adds another layer of complexity to the problem of replicating natural innovation. Senior officials at the Pentagon are not well-positioned to camp out in the private sector, and when they have the opportunity, they find themselves tongue-tied by a classification apparatus designed to prevent information on American vulnerabilities from seeping into the hands of potential adversaries.

Without a serviceable problem definition, innovative businesses, especially recently arrived start-ups, cannot move forward with novel design or production.[33] Innovator-suppliers who persist through the military's large-scale procurement system begin to think and act less like swaggering Valley start-ups and more like the stereotypical, button-down suspects—fastidiously preserving their reputed competency within a Byzantine defense acquisition processes counter to the freewheeling innovation coveted by the Third Offset.

30   Mark Zachary Taylor, *The Politics of Innovation: Why Some Countries Are Better than Others at Science and Technology* (Oxford: Oxford University Press, 2016); and Josh Lerner, *Boulevard of Broken Dreams: Why Public Efforts to Boost Entrepreneurship and Venture Capital Have Failed and What to Do About It* (Princeton, NJ: Princeton University Press, 2009).

31   Here, "unicorn" refers to the rare start-up that achieves a high valuation very early, before compiling a sales record. The Third Offset wants to adopt unicorns from outside the regular process of defense acquisition. Unfortunately, the defense establishment has nothing in the organization to find unicorns *before* America's agile competitors, such as nonstate actors.

32   Taylor, *Politics of Innovation*; William Easterly, *The Tyranny of Experts: Economists, Dictators, and the Forgotten Rights of the Poor* (New York: Basic Books, 2013); Peter Evans, *Embedded Autonomy: States and Industrial Transformation* (Princeton, NJ: Princeton University Press, 1995); and Michael E. Porter, *The Competitive Advantage of Nations* (New York: Free Press, 1990).

33   CSIS, webcast; Brian Fung, "The Huge Issue That's Keeping Silicon Valley and the Pentagon Apart," *Washington Post*, June 10, 2016; and Tucker, "Pentagon Dawdles."

Governments without deep pockets who wish to emulate US productivity in the private sector have tackled communication gaps between novel suppliers and fluid demand with custom networks. In the case of Mexico's federal system, for example, an alphabet soup of centralized government-sponsored organizations cooperates with local governments, linking small suppliers to large foreign and domestic corporations, universities, and investors in a loosely coordinated effort to cultivate Mexican expansion into the innovative aerospace sector.[34]

The most salient success story in Josh Lerner's *Boulevard of Broken Dreams* comes from Israel, which following the US-led digital revolution in consumer electronics and military affairs, transformed its economy and its defense industry into an accomplished small-cap exporter of high-tech goods and services. Lerner attributed Israel's startling success to government sponsored networks knitting civilian and military sectors together, translating demand signals from the grassroots, and buffering Israeli ministries from direct investments.[35]

In the much larger United States, could the Pentagon scale Israeli-style networks between government agencies and venture capitalists, investors and entrepreneurs, as well as emergent suppliers and customers in the armed services? The story of defense- and private-sector synergy while building the internet indicates it should be possible.[36] According to Linda Weiss in *America Inc.?*, the US military was present at the creation to provide demand and initial funding for specialized computer networks. At a later stage, smaller companies, who closely resemble agile suppliers sought in today's Third Offset, saw applications for the novel defense infrastructure. These companies led second-stage innovation, investing for commercial sales, and creating off-the-shelf applications, which during the Second Offset, "spun back around" to an innovative military for purchase and adaptation.

Universities, as part of the Vannevar Bush legacy after World War II, funded applied research during the Cold War in part through federal defense contracts.[37] By the 1980s, many of the same tier I research institutions in higher education were also taking up the slack in basic research occasioned by sharp reductions in private sector support. At the birth of the internet, then, university activities attracted the interest of both defense offices and industry clusters for development, testing, and technology acquisition. Academic research groups built working relationships on both sides of the military-civilian divide, forming the substrate through which the technology "spin-around" proceeded.

Simply replicating such change, however, will not reduce the obstacles bedeviling the Third Offset. Spin-around may have functioned well in the case of the internet during the Second Offset, and there is reason to believe that spin-around in such areas as robotics, artificial

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34 Mónica Casalet, "Meeting Growth Challenges of Mexico Aerospace: The Querétero Cluster," *Space & Defense* 9, no. 1 (Spring 2016): 39–53. For more on the role of social networks in science and technology innovation, see Taylor, "How Nations Succeed—Networks, Clusters, and Standards," chap. 6 in *Politics of Innovation.*

35 Lerner, *Boulevard of Broken Dreams*, 155–57.

36 Spin-around and the development of the Internet are recounted in Linda Weiss, *America Inc.? Innovation and Enterprise in the National Security State* (Ithaca, NY: Cornell University Press, 2014).

37 Jonathan Cole, *The Great American University: Its Rise to Preeminence; Its Indispensable National Role; Why It Must Be Protected* (New York: PublicAffairs, 2009).

intelligence, and neuro warfare could *eventually* enhance America's position. Unfortunately, Secretary Carter's vision made clear that macrolevel innovation over generations will not suffice for equipping US servicemen and servicewomen at the fraying edges of the American-led liberal order.[38]

Though it may be crucial over the long haul, spin-around does not happen quickly enough to address fluid challenges under globalization: adversaries demonstrate a knack for quickly devising asymmetric responses to conventional US task forces, blunting their effectiveness without provoking the United States into full mobilization. If Third Offset technology is to keep pace, Pentagon reformers will have to find a way to accelerate *spin-on*, the current process by which the armed services obtain relevant innovation from small to midsize firms in the private sector and deliver it to forces in the field.

A new system—what Acquisition Undersecretary Kendall called a new architecture—for discovering and extracting ideas circulating in the venture capital world will have to fill the gap between military operators' specialized needs and equally complex consumers' demands. To succeed at rapidly delivering private sector innovation, which today includes global innovation, Third Offset architecture requires a unique cadre, a human link, still missing from the organization Secretary Carter prepared for the transition to a new administration.

National commitment to a Third Offset fueled by the private sector creates an unprecedented call for a type of acquisition officer at lower levels of the hierarchy, the intrepid riverboat captain. This metaphor is apt in the sense that nineteenth-century pilots understood themselves to be part of a larger profession: they acquired expertise in principles of navigation and system management; they recognized themselves as part of a corporate body infused with a certain *esprit*; and they accepted a burden of social responsibility.[39] Without their quasi profession delivering staples and occasional luxuries along the young country's riverine circulatory system, disparate regions of the sprawling democracy would not have flourished as one nation.

In Samuel Huntington's treatise on the soldier and the state, professionalism was handmaiden to *autonomy* for the officer corps, allowing consummate professionals to apply their skill on behalf of civilian authorities who inevitably viewed the world from a contrasting perspective. Indeed, certain independence of action was crucial to the effectiveness of river pilots in serving the successful political economy of patrons living not on the highway but at both ends of their journey. River pilots were the human link communicating supply with demand, the medium of exchange that permitted mutually beneficial trade across disparate cultures.

Unlike Huntington's archetype, though, the best riverboat captains, as much as scientific managers, were also craftsmen.[40] Huntington shied away from this metaphor. After all, craftsmen were inscrutable, their successes unaccountable. The source of their genius could not be

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38   Gideon Rose, "Out of Order? What's Inside," *Foreign Affairs* 96, no. 1 (January/February 2017).

39   Samuel P. Huntington, *The Soldier and the State: The Theory and Politics of Civil-Military Relations* (Cambridge, MA: Belknap Press of Harvard University Press, 1957).

40   Huntington, *Soldier and the State*, 28.

intellectualized or codified in any text. No formal school could hone their talent. Most important, the fruits of their labor could not be harvested efficiently under imposition of far-reaching agencies from a highly-organized state. Bureaucracies enabled professionals but trapped, and eventually suffocated, artisans.

Even so, without an administrative bureaucracy to enforce standard procedure on the river, the boat captain substituted flexible, customizable guidance of professionalism, and where this could not apply, he indulged freewheeling characteristics of the craftsman. The river offers a rich metaphor for policy in the era of the Third Offset as a symbol for freedom, adventure, and enterprise. The byways of contemporary innovation hide obstacles to the uninitiated, but the flow of ideas nevertheless binds great cities of contrasting cultures. Intrepid pilots who know the river travel between civilizations. Cultural barriers to communication that regularly stymie professionals or virtuosos in other walks of life become permeable before the unique skill set and life experiences of riverboat captains.

A similar communication among cultures and economies is critical to success of the Pentagon's Third Offset, which is reliant upon continuous delivery of relevant, private-sector innovation the armed services can adopt. A fatal flaw in the last administration's defense policy, which undercut acquisition reforms on a scale unseen since the Goldwater-Nichols Department of Defense Reorganization Act of 1986, is the missing cadre. The Third Offset is, tragically, a technology supply policy through terra incognita for the Pentagon. As of this writing, none of several organizations within the executive branch or mandated by Congress to supplement defense acquisitions can play the crucial mediating role in rapidly delivering science and technology from the private sector to the services' entrepôts in such a manner that the innovations can be manufactured for battlefield advantage.

Individuals and specialized organizations within the Department of Defense have been chartered to explore, mine, and bring home novel solutions wherever they may find them. The undersecretary of defense for Acquisition, Technology, and Logistics taps semi-independent, direct reporting agencies such as the Defense Advanced Research Projects Agency and the Rapid Innovation Fund (that cooperates with small business innovators). Below the undersecretary, an assistant secretary of defense for Research and Engineering controls a phalanx of offices for attracting, finding, and testing promising projects. When the identified technology has the potential to reduce risk or to save defense dollars on a high priority mission, the assistant secretary may form bureaucratic alliances with the rest of AT&L. The Defense Threat Reduction Agency, for example, focuses on matters related to weapons of mass destruction, and belongs to a neighboring assistant secretary within AT&L. In fact, with a research and development budget of $25 billion, research and engineering under AT&L wields sufficient convening power to forge cooperation across the Department of Defense, federal departments such as Homeland Security, and at least in principle, research departments in private industry.[41]

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41   See also Alan Shaffer, "Communities of Interest: Collaborating on Technology Challenges," *Defense AT&L* 44, no. 2 (March–April 2015): 32–37.

The trouble with all these organizational fixes is, despite the flow of ideas, the topmost level of Pentagon bureaucracy tightly steers the rudder. The results of such programs consistently align with Secretary Carter's essay on "Running the Pentagon Right." If the secretary of defense wants something for troops in the field, organizational reform at the tactical level provides remarkable facility for reaching down and across agencies to find the right prototype technology. As long as the solution is already knocking around the acquisition system—similarly to the MRAP at a nondescript, small-scale contractor—senior leaders can pull hard, through (or around) regular development and testing phases, to make an express delivery. These emergency overrides, though, despite the commanding, virtuoso performance from top civilians, cannot anoint a technical solution conceived outside the beltway family; the prototypes far upriver remain out of sight, and out of reach, no matter how sophisticated or lavish the offices in Washington.

The missing element of the Third Offset strategy is a midlevel cadre that can navigate the currents and lock through the dams that exist between innovative science and technology, sprouting in garages, makeshift offices, and university campuses far from the nation's capital, and the military acquisition system. Unfortunately, bureaucratic slack that would grant autonomy for such middle managers can barely be located in the current budget environment. When dollars are tight and stakes are high, senior decision makers instinctively grasp for greater control. Centralizing authority and consolidating lines of communication create narrow channels for the sake of efficiency.[42] In the case of the Third Offset, this natural inclination to institutionalize the revolution, or manufacture a constant state of exception, is misguided: while top-down virtuosity reliably rallies bureaucracy around the leader's priorities, it simultaneously stifles creativity and improvisation among midlevel agents who must respond and conform to the leader's call.[43] The Pentagon's highly structured efforts at community-building maintain accountability at the price of groupthink, establish the lockage priority, and ultimately limit the flow of private-sector innovations that are vital to success of the Third Offset.

When thick institutions must accommodate multiple cultures and process a steady influx of novel information from divergent professions, the most productive principal to agent relations often balance competing considerations.[44] The military agents of science and technology, our riverboat captains, work best if they enjoy unusually high autonomy. Freed from a suffocating web of monitoring and punishment—classic instruments of fine control from a distant principal—the pilots venture into the hinterland. They navigate time and space to acquire the language of local innovators so that the Third Offset finally has a way to translate

42   Alex Mintz and Karl DeRouen, *Understanding Foreign Policy Decision Making* (Cambridge: Cambridge University Press, 2010), 25–30.

43   Aaron Mehta, "Pentagon Budget Maintains Support for Tech Innovation," *Defense News*, May 25, 2017; Freedberg and Clark, "DIUx"; Aaron Mehta, "DIUx Offers $36 Million in FY16 Contracts," *Defense News*, October 14, 2016; and Sydney J. Freedberg Jr., "DIUX Lite: Carter Announces New Innovation Unit in Austin," *Breaking Defense*, September 14, 2016.

44   Huntington, *Soldier and the State*; Peter D. Feaver, *Armed Servants: Agency, Oversight, and Civil-Military Relations* (Cambridge, MA: Harvard University Press, 2003); and Damon Coletta, "Principal-Agent Theory in Complex Operations," *Small Wars & Insurgencies* 24, no. 2 (2013): 306–21, doi:10.1080/09592318.2013.778016.

its unique, mostly classified demand signal into a problem definition that is intelligible and actionable for private-sector business models.

Riverboat captains, even if captains by courtesy, are simultaneously recognized in the admirals' navy. When they return to home port with exotic cargo—innovative designs that could disrupt routines in Washington—they easily move through the Pentagon and relate to the services' highest ranks. Due to the captains' high professionalism in the Huntingtonian sense—mission critical expertise, widely recognized *esprit de corps*, and deep-seated commitment to social responsibility—four-star combatant commanders and civilian mandarins at the Pentagon may welcome their reports without dreading their own bureaucratic future, for there is little threat that the crew of a Third Offset venture would stage a mutiny.[45]

Balanced principal-agent relations, recommended persuasively by Huntington for military advice to civilian government during the height of Cold War tensions, could now be replicated within the defense bureaucracy to address a contemporary crisis in the Pentagon's Third Offset strategy.[46] Conceding customary leverage—access, monitoring, rewards, and punishments—to grant autonomy at lower ranks does leave defense policy at the principal's level open to being led by the nose. For a similar reason, Huntington dedicated tracts of his great work to redefining military professionalism for American statecraft, so experts, such as those discovering and delivering commercial science and technology, could ply their trade without substituting personal preferences for democratically sanctioned authority.

Much authority now rests with civilian and military admirals in charge of the leviathan that is the defense acquisition process. They run the Pentagon right for many years and ascend the ranks by administrating a tight ship. They hold their directorates accountable, embracing their crew tightly and submitting them to the discipline of regular order. When they do, though, they crowd out any possibility for Huntington's brilliant insight into these situations. As a result, the cadre is almost entirely beached, caught in unending command churn of furnishing capabilities, requirements, and resources. In the dominant ethos of defense acquisition, mere captains do not judge risk; they *avoid* it. Highly constrained agents of today's Third Offset weed first-time innovators out of technology development contracts. Our captains dare not venture. They never invite start-up entrepreneurs on commercially competitive terms, in the very language that nurtures much of twenty-first century innovation, nor do they provide navigational guidance to ferry revolutionary commerce from the hinterland of small and medium-sized enterprises to the mooring ring of Pentagon acquisition.[47]

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45   Kaplan, *Insurgents*.

46   Huntington, *Soldier and the State*.

47   DIUx and the Pentagon responded to the shortfall by recruiting reservists as new riverboat captains. It remains to be seen whether short-term, temporary duty is sufficient to bridge the culture gap between the military services and tech start-ups producing innovation relevant to the Third Offset. The reservists, to reach outside customary bureaucracy, may need assistance from active duty science and technology cadres or directorates combining requisite *autonomy* and *access* to commands that influence regular order in defense acquisition. Compare reporting by Mehta, "DIUx Offers $36 Million"; Scott Maucione, "DIUx Still Chugging Along in the Trump Administration," Federal News Radio, April 20, 2017; Freedberg, "DIUx Lite"; and Aaron Mehta, "DIUx Expects to Transition Programs in Next Two Months," *Defense News*, April 25, 2017.

The range of challenges facing American servicemembers continues to expand, becoming more complex as acquisition budgets flatline. Running the Pentagon to make the latest offset right will require judicious, rather than directed, relations with trusted agents of those anxious chiefs in Washington. Many intrepid riverboat captains, endowed with hard-won skills and freedom to navigate frontiers where modern innovation thrives, are needed.

Deterrence & Security Assistance: The South China Sea

Tommy Ross

ABSTRACT: This article identifies how the United States can apply security assistance to support regional security in the South China Sea in order to counter China's assertive expansion strategy.

As China continues to emerge as a global leader, its ambitions to redefine the global order and challenge existing geopolitical power dynamics will ensure that, whether or not President Donald Trump and his administration so choose, the focal point of US foreign policy will continue its migration east. And—given the complexities of the history, overlapping cultural and ideological claims, economic dimensions, and geography—the South China Sea is likely to be the proving ground that brings the Trump administration some of its most vexing, and consequential, foreign policy tests.

A successful approach to China must carefully balance national security, economic, cultural, and ethical policy priorities of the United States, which include but are not limited to those at stake in the South China Sea. Yet, there is no question a more assertive military and defense posture in the South China Sea is sorely needed, particularly as a complement to sustained diplomacy.

The Obama administration began dipping its toes in these fraught waters as part of its "Rebalance" strategy; the Trump administration has an opportunity to expand US military engagement in the region to generate far more consequential outcomes by strengthening regional coalitions and deterring China's frequent provocations. Key to a more effective regional military engagement will be a more sophisticated and robust approach to security assistance.

Regional Significance

While other challenges such as North Korea's nuclearization or the Islamic State's metastasis may pose a more immediate and direct threat to US security, the emergence of China—the world's most populous nation and second-largest economy—as a world power will be far more consequential for the long-term economic and security prospects of the United States. The critical question during this emergence is whether China will responsibly contribute to the existing international order or aggressively seek to subvert it. The South China Sea has emerged as the arena in which that question is most consistently and tangibly tested.

China's activities in the South China Sea can directly impact US interests in the region and serve as proxy for broader global concerns. These activities undermine the international order and the legal architecture, which serves as an organizing construct and stabilizing

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force in support of international trade, law enforcement, conflict resolution, and diplomacy. This strategy is by no means limited to the South China Sea, but it does reach its fullest expression there.

Territorial encroachments could enable China to impose conditions on economic activity in the South China Sea, through which over $5 trillion in trade transits each year. We have already seen China press such advantages to enact economic punishments on its neighbors.[1] China's action to militarize contested features within the region extends their defensive perimeter several hundred miles beyond their borders, an enviable advantage in any potential military conflict. While US strategy should not be driven solely by military considerations, given the aggressive actions and rhetoric China has directed toward Japan, Taiwan, and other nations, ignoring such considerations would be foolish.

China's diplomatic, economic, and military actions in the South China Sea have a dual impact. They directly affect US interests in the region, and they serve as proxies for China's broader efforts to challenge and to undermine the accepted and stable international frameworks around the globe. Regardless of the strategic value to the United States *per se*, China's pursuits matter greatly to America's key allies and partners in the region. For that reason alone, China's actions in the South China Sea ought to be a priority for the United States, lest America risk further slippage in its regional standing as a great power, security guarantor, and valuable trading partner.

For allies in the region, such as Thailand and the Philippines, as well as key emerging partners, such as Indonesia and Vietnam, the South China Sea presents nearly existential crises. It is a place where the Chinese military and coast guard—as well as civilian "blue-hulled" paramilitary units in the Chinese maritime militia—harass the region's citizens, disrupt maritime economic activity, and press territorial claims they view with historic justification. For other key allies and partners outside the immediate region—such as Japan, Australia, and India—the region matters as a potential platform for Chinese aggression as well as the commercial risks of closed or constrained trade routes. If the United States is unable to exert leadership on the priority concerns voiced by these key regional actors, the actors' willingness to support American priorities will diminish.

China's encroachments are thus an assault on US leadership across Asia, succeeding in not only undermining America's relationships with key allies and partners but also turning these parties against each other. Recent moves by Vietnam and the Philippines to strengthen their bilateral ties with China, as well as renewed sparring between the two, indicate this pattern. As a result, America's global network of like-minded partners, which the recently released National Defense Strategy calls "crucial to our strategy, providing a durable, asymmetric strategic advantage that no competitor or rival can match," is eroding.[2]

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1   AFP, "China Blocked Exports of Rare Earth Metals to Japan, Traders Claim," *Telegraph*, September 24, 2010.

2   US Department of Defense (DoD), *The National Defense Strategy of the United States of America: 2018* (Washington, DC: DoD, 2018).

Strategic Gaps

Successive administrations have sought to assert US leadership in Asia and to respond to China's destabilizing actions through a holistic set of policies that extend far beyond the security realm. Perhaps the most consequential long-term policies within the Asia-Pacific region are economic, and how the Trump administration positions the United States after withdrawing from the Trans-Pacific Partnership and maneuvers around China's ambitions for a regional trading arrangement will be a crucial determinant. Nimble diplomacy is also critical to a successful strategy. Broad and sustained efforts, such as seeking resolutions for the region's many territorial disputes, as well as narrower concern toward such pursuits as a constructive course with Philippine President Rodrigo Duterte, offer important avenues for influencing regional actors.

Such initiatives, however, are not sufficient for the United States to remain a critical guarantor of security or the premier security partner in the region. Ultimately, a strong regional security coalition bound by common objectives and committed to common action is required to prevent Chinese coercion from dissolving the rules-based order that prevents an every-country-for-itself approach to territorial disputes, which could potentially end in broad military conflict. In the near term, therefore, America's security policy in the Asia-Pacific region must play a robust supporting role, even if it does not occupy center stage.

The Obama administration undertook a significant rebalance in the military realm, investing in a multifaceted approach to promote partnerships in the area, deter Chinese aggression, and maintain American leadership. These investments were weighted toward efforts largely too esoteric for, or invisible to, regional citizenries and even, to some degree, their governments. The Defense Department, for example, reshaped its long-term development and acquisition strategy, led by the Third Offset, to focus on high-end military capabilities that maintain US superiority over near-peer adversaries. This strategy also seeks to counter anti-access/area-denial (A2/AD) strategies used by China and others. The US military has also focused on developing new operational concepts such as the Joint Concept for Access and Maneuver in the Global Commons and other efforts of the Strategic Capabilities Office, often praised by Secretary of Defense Ashton B. Carter.

While critical to America's ability to win future wars, these efforts do little to visibly demonstrate America's presence or leadership in the region. Moreover, when states such as China rapidly change the political and geographical landscape by reclaiming features and taking other actions in the South China Sea, long-term, less visible military capabilities will arrive too late. Indeed, the mismatch between American and Chinese strategies has challenged the United States and its regional partners to manage the situation daily. As Dr. Ross Babbage notes in a recent report, "Beijing has employed a very sophisticated strategy and operational concept that could be implemented without challenging US alliance commitments or directly confronting U.S. or allied forces."[3] His diagnosis is scathing:

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3   Ross Babbage, *Countering China's Adventurism in the South China Sea: Strategy Options for the United States and Its Allies* (Washington, DC: Center for Strategic and Budgetary Assessments, 2017), 30.

Western governments have lacked a coherent strategy or game plan for achieving well-defined allied goals. Their actions in response to Beijing's assertive steps have almost always been reactive, involve very limited and highly predictable activities in domains determined by the Chinese, and could be readily ignored by Beijing. The result has been that the Western allies have passed the initiative and momentum to Beijing, ceded a large area of strategically important maritime territory, acquiesced to a flouting of international law, and repeatedly conveyed an impression of weak allied will, distraction, and disorganization.[4]

There will surely be disagreement about the degree of Babbage's criticism, but its overall message is hard to argue. What the United States has largely lacked is a strategy that, on one hand, provides a consistent and visible reminder of US commitment to the region that keeps the Chinese military off-balance while, on the other hand, avoids escalation by avoiding direct confrontation with China or impinging upon its key redlines. A more sophisticated strategy must include several elements that range from creative options for military operations to expanded information operations; particularly important is a more prominent and sophisticated approach to security assistance.

Security Assistance in Southeast Asia

During peacetime, combatant commanders have three primary tools to support visible regional engagement: posture, operations, and security cooperation. The Rebalance enhanced each of these tools to varying degrees. Posture and presence have been a main focus, with the major expansion and reconfiguration of US force deployments in the Asia-Pacific region. Freedom of Navigation operations and joint patrols by the United States and its partner navies, have also become a centerpiece of the US Pacific Command's (USPACOM's) presence in the region. Security cooperation, however, remains the most underdeveloped of these tools, and has tremendous potential for shaping the Asia-Pacific theater to achieve US objectives.

While most effective when used in concert with other tools, security cooperation maintains a range of benefits the other tools do not. First, only through security cooperation—including the sale of equipment, the provision of equipment and training, the enhancement of critical institutions, and the continual exchange of concepts and personnel—can the United States help partners measurably improve their military capabilities. Able partners can diminish risk to US forces and, at least partially, check China's ability to exploit other partners' weaknesses. Second, security cooperation is highly attractive because of the benefits it brings to partners, and is therefore one of the most effective tools for strengthening relationships and coalitions. Finally, and critically in the Asia-Pacific region where misunderstandings can quickly become flash points, security cooperation is generally far less provocative and risk inducing than tools such as the Freedom of Navigation operations. Security cooperation can work gradually and broadly to reshape the region's security environment without producing single points of confrontation.

Yet, despite these benefits, the security assistance resources in the region have been limited, and available resources have been applied in

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4   Babbage, *Countering China's Adventurism.*

ways that largely failed to produce tangible advances toward US strategic priorities. Looking upon the South China Sea, and its associated policy challenges, with a fresh perspective, the new administration will find a tremendous opportunity to apply security cooperation in the region more effectively for near-term gains.

Current Assessment

Security assistance in Europe and the Middle East spiked in the last fifteen years as a result of the terrorist attacks on September 11, 2001; wars in Afghanistan and Iraq; Russia's resurgent aggression; and the constantly shifting landscape of extremism and insurgency in the Middle East. Meanwhile, the Rebalance notwithstanding, the region's meager allotment of assistance resources has hardly changed.

The entire Asia-Pacific region, for example, generally receives about one percent of the budget for Foreign Military Financing (FMF), the State Department's flagship security assistance program.[5] In Fiscal Year 2015, the Southeast Asian countries that border the South China Sea received $74.75 million from the program: the Philippines received $50 million, while Indonesia and Vietnam received the remaining allocation.[6] On one hand, this amount represents a doubling of the region's 2011 funding of $36.2 million.[7] On the other hand, the total equates to the program's administrative costs.

Seeking to implement the Obama administration's Rebalance strategy, the State Department announced a few new regional investments, including more FMF funding for Southeast Asian nations and a $25 million Southeast Asia Maritime Law Enforcement Initiative. Moreover, late in Obama's administration, Carter launched the Southeast Asia Maritime Security Initiative (MSI), to remedy the neglect and aimlessness that had characterized regional security assistance, and to foster more visible engagement in the region. Promoted as a 5-year, $425 million effort, MSI significantly increased US investments in the region and more than doubled the annual Foreign Military Financing program with the five primary partner nations of Indonesia, Malaysia, the Philippines, Thailand, and Vietnam.[8] This investment is important, particularly as an indication of the Defense Department's increased commitment to the region. But even after these new investments, the entire region still receives less security assistance funding than it did when the Rebalance began.[9]

While funding totals are an important measure of security assistance, their impact in the region should not only be measured by monetary value but also by their impact on partners' military capabilities, the strength of bilateral and multilateral relationships, and the deterrence

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5   Eddie Linczer, "The Role of Security Assistance in Washington's Pivot to Southeast Asia," *American Enterprise Institute* (AEI), August 26, 2016, https://www.aei.org/publication/the-role-of-security-assistance-in-washingtons-pivot-to-southeast-asia/.

6   US Department of State (DoS), *Congressional Budget Justification: Department of State, Foreign Operations, and Related Programs: Fiscal Year 2017 (Washington, DC: DoS, 2016).*

7   "Foreign Military Financing Account Summary," US Department of State, January 20, 2017, https://2009-2017.state.gov/t/pm/ppa/sat/c14560.htm.

8   Linczer 2016. According to the AEI report, FMF expenditures for the five nations total $76 million per year; MSI will add an average of $85 million per year to that sum.

9   Council on Foreign Relations, "America's Pivot to Asia Actually Led to Drop in Security Assistance for Southeast Asia," *Huffington Post*, July 7, 2017.

of provocative behavior. In other words, security assistance should be measured by how successfully it advances US national security strategy. On that scale, America's assistance in the region also has a mixed record.

Certainly there have been individual success stories. Counter-terrorism assistance to the Filipino military's long campaign against the Abu Sayyaf Group in Mindanao is generally regarded as having transformed Filipino special operations forces and delivered a strategic victory against the militants. The National Coast Watch Center in Manila has provided the Philippines with a potential platform to expand its maritime domain awareness efforts across multiple government agencies. And Defense Institution Reform Initiative efforts to support the Indonesian Ministry of Defense as it enhances its defense strategy and planning processes have made important strides.

Despite these success stories, there is little to suggest any overall strategic direction. Modest assistance budgets have been divided across a broad range of programs, each with a different objective. Administration budget justification materials and other data indicate counterterrorism, counternarcotics, counterproliferation, military professionalization, and maritime law enforcement have all been priorities funded through dozens of different programs and implementers.[10] This approach thinly distributed funds while risking redundant or contradictory programming. Moreover, that such investments have rarely focused directly on the emergent key security challenges in the region of Southeast Asia, stability and free commerce in the South China Sea, creates a sense of strategic aimlessness.

A New Strategy

Neglect and aimlessness will not deliver the strategic outcomes our security interests in the region demand. A new approach is needed. While the amount of resources devoted to the effort is important, the most critical factor is ultimately the strategy driving security cooperation in the region. America's military engagements with, and assistance to, partners in Southeast Asia must be driven by a coherent medium- to long-term strategy that understands and accounts for objectives, motivations, and vulnerabilities of China and partner nations. Like other military preparations, such planning must address scenarios based on potential reactions by regional stakeholders or other developments. Such planning must also include thoughtful approaches to strategic communications with partners that are not always strategically aligned with US objectives as well as stakeholders, like China, that may misunderstand America's intentions.

The building blocks for such an approach exist in the form of collaborative programs such as MSI, extensive analysis of regional stakeholders and security challenges, growing interest among partners in achieving a just and stable regional order, and bipartisan, interagency commitment to the effort. A handful of practical, feasible steps could

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10   See, DoS, *Congressional Budget Justification: Department of State, Foreign Operations, and Related Programs, Fiscal Year 2018* (Washington, DC: DoS, 2017); DoD, *FY 2016 Section 1211(a) Report to Congress on DoD Assistance to Foreign Security Forces* (Washington, DC: DoD, 2016); and additional assistance data available at www.ForeignAssistance.gov.

transform US engagement in the region and dramatically improve the return on our security assistance investments.

Strategic Security Assistance

First, security assistance must be reoriented to focus far more sharply on specific, strategic results. The United States should endeavor to deliver capabilities to partners, especially those that might complicate or replicate China's A2/AD capabilities that could be reasonably employed during a regional contingency. This focus cannot, as it has previously, prioritize delivering hardware and neglect developing institutional capabilities, such as personnel management and logistics systems, that are vital to successfully employing such hardware. America's assistance must be planned to deliver truly viable capabilities rather than just showpiece equipment. Surely our potential adversaries can discern the difference.

Such assistance should be informed by careful analysis of potential contingencies, including possible US military responses, to identify realistic roles for partners' militaries. Partner nations bordering the South China Sea region are in most cases smaller, less sophisticated, and often oriented toward a narrower range of missions. These partners may not be capable of defeating China in a direct conflict, but they can contribute meaningfully to contingency operations. A regional network of interoperable capabilities can form the basis of an effective military coalition. Moreover, specific capabilities can complicate an adversary's war plans by denying or challenging access, enabling other actors (like the United States) through logistics and intelligence support, defending key infrastructure, and delaying enemy advances until help can arrive. If improved partner capabilities accomplish one or more of these objectives, the chances of a successful US or coalition contingency operation increase substantially and risk to US forces diminishes. Capabilities that can expand the range of America's options for overcoming China's A2/AD capabilities would have a significant impact, and assistance efforts should be targeted there.

In addition, Pacific Command stands to realize significant strategic gains by more carefully considering the timing and messaging that accompanies assistance, particularly in relation to provocative actions by China. Take, for example, the construction of airfield infrastructure for a partner air force, which might be used by US fighters in a contingency. Such assistance addresses logistics requirements vital for successful contingency operations, which is beneficial to the partner and the United States. How much more of a strategic impact would the construction of an airfield have, though, if it were framed as a direct response to, and initiated within weeks of, the groundbreaking of Chinese reclamation activities on a contested feature of the South China Sea? Timing, a variable US assistance efforts have largely ignored, is critical.

Relevant Capacity-Building

During a contingency, China's worst nightmare might not be the full and unbridled firepower of the American military but an interoperable and effective coalition of American and regional militaries, seamlessly integrating their infrastructure and capabilities into synchronized action. The demonstration of such coordination and interoperability during peacetime, therefore, should serve as a powerful deterrent against

potential Chinese provocations. Yet the truth is, our partners in Southeast Asia are not interoperable—not with the United States, not with each other—nor are they currently capable of effective coalition action.

Pacific Command should increase its focus on the intersection of security assistance and real-world operations, building regional capacity for coalition warfare and exercising key capabilities and operational concepts. In practice, such an effort would not simply entail more or larger multilateral exercises but creative approaches to engagements that generate more frequent and more robust bilateral and multilateral operations in the South China Sea and in other key maritime regions.

For instance, joint patrols, either by the United States and one or more partners or by multiple partners without the United States, develop interoperability and habits of collaboration while enhancing maritime domain awareness and law enforcement in areas of mutual interest. Recently, Indonesia, Malaysia, and the Philippines agreed to conduct such coordinated patrols in the Sulu Sea, which is an area abutting the South China Sea that has seen significant threats from pirate and militant groups.[11] The United States has a substantial interest in fostering this collaboration and could provide direct assistance to the mission, particularly in the form of intelligence or logistics support. Coast guards and navies from each partner may also need assistance deepening interoperability and extending time at sea. Targeting security assistance toward this mission would create an immediate impact, while building the foundation for future multilateral collaboration.

America would also benefit by working with regional partners to develop multilateral frameworks that institutionalize regional collaboration. Successful examples of this approach abound in the context of the North Atlantic Treaty Organization, where members have increasingly pooled limited resources to achieve shared capabilities. The Movement Coordination Center Europe (MCCE), for instance, helps partners coordinate strategic lift assets to maximize efficiency and cost savings. In concrete terms, the coordination allows one nation to ship supplies on the plane or vessel of another member nation if there is available space.[12] Other examples range from the Alliance Ground Surveillance system—a similar consortium pooling intelligence, surveillance, and reconnaissance assets—to combining the resources of multiple member nations to purchase US weapons technologies.

These models offer a compelling path for Southeast Asian nations to tackle shared challenges in a cost-efficient manner while reducing operating costs and providing a platform for deepening interoperability and trust. Given the immense logistical challenges associated with responding to events, such as humanitarian disasters or terrorist attacks, across thousands of islands and thousands of miles, developing a shared logistics initiative along the lines of MCCE should take top priority.

Finally, exercises should play an important role but repeating the same annual exercises with no apparent strategic rationale is unlikely to pay strategic dividends. As much as broad-based exercises such as the Rim

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11   Arlina Arshad, "Jakarta, KL and Manila To Start Joint Patrols in Sulu Sea," *Straits Times* (Singapore), August 5, 2016.

12   "Welcome," Movement Coordination Centre Europe, January 16, 2018, http://mcce-mil.com.

of the Pacific and Cobra Gold can contribute to building relationships, more targeted exercises offer greater operational value. These exercises offer an important platform to develop and test operational concepts and should thus be framed according to specific assumptions about coalition participants and scenarios. Exercises also often bring opportunities to develop necessary infrastructure and deepen knowledge about key areas of operation. Furthermore, such exercises offer an opportunity to demonstrate new capabilities in the region. While the US military has rarely taken such an approach, it certainly deserves a place in the commander's playbook as a tool for deterrence or strategic messaging.

Provocation Planning

A playbook containing a range of realistic options for responding to potential scenarios is becoming increasingly important for Admiral Harry B. Harris Jr., the commander of US Pacific Command. As China's provocations become increasingly frequent and aggressive, Harris and his leadership at the Defense Department and in the White House need a robust set of options to allow the United States to respond in ways that uphold the international rule of law, reassure allies and partners of US resolve, and deter future provocations. While this playbook should include a diverse range of tools, there is great and unrealized potential for refining tools that involve assistance to and collaboration with partners. Such engagement-focused tools are often, though not always, less escalatory and, given the common resolve they demonstrate, may have more impact.

A variety of such options drawing on the concepts articulated above should be further developed to expand the commander's playbook. Joint patrols are one such option discussed repeatedly at USPACOM headquarters, and some steps have been taken to expand such efforts.[13] However, sufficient partner capability and interoperability necessary for joint patrols often lags well behind ambitions. Rather than continuing to discuss joint patrols as a hypothetical possibility, Pacific Command should accelerate efforts to prepare partners for participating in such patrols. In addition to providing important elements of required assistance such as patrol boats and equipment—particularly interoperable communications equipment—US assistance must also emphasize operator and unit training, logistics and maintenance support, and bilateral exercises that put operating concepts into practice.

Joint patrols require commencing capacity-building activities now to ensure partners will be capable of participating in such patrols when desired in the future. Other tools could be available without such capacity-building; however, the United States should undertake additional planning and analysis to ensure such resources can be employed in an effective and timely manner. Building upon the previous example, the Seabees or other military engineering units could easily construct an airfield or a small port facility, but the impact of such action

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13   Harry B. Harris Jr., "Department of Defense Press Briefing by Adm. Harris in the Pentagon Briefing Room," US Pacific Command, February 25, 2016, http://www.pacom.mil/Media /Speeches-Testimony/Article/673521/department-of-defense-press-briefing-by-adm-harris-in -the-pentagon-briefing-room/; HQ Pacific Air Forces Public Affairs, "PACAF Airmen Stand up Air Contingent in Philippines," US Pacific Command, April 18, 2016, http://www.pacom.mil/Media /Article/723604/pacaf-airmen-stand-up-air-contingent-in-philippines/; and David B. Larter, "Carrier Group Returns to South China Sea Amid Tensions," *Navy Times,* April 14, 2016.

would increase dramatically if undertaken in direct response to China militarizing a contested feature.

Executing such an activity requires planning now by identifying preferred locations, securing permissions from partner nations, and developing concrete concepts of operations for executing and messaging the activity. Another powerful option for the playbook might be conducting a "snap" exercise, in which US forces carry out an unscheduled training demonstration with little warning. Given the provocative nature of snap exercises, they, too, require careful planning. Still, as China's activities become more aggressive, the commander's playbook must be filled with a spectrum of fully developed, executable options to match a variety of scenarios.

Army Involvement

Admittedly, the new approaches discussed heretofore are not easy, and they are made all the more challenging by the need for partners to commit, with the United States, to these courses of action. A shared sense of commitment cannot be taken for granted among a group of diverse nations who each has a history of uneasy relations with the United States. However, what is clearly a challenge can too easily become an excuse. Partnerships are forged through consistent engagement and through exploration of mutual interests and benefit. Many Southeast Asian partners would likely argue that the United States has too often sought to leverage regional nations to advance US interests without fully considering the strategic objectives and priorities of the nations themselves. To overcome relationship challenges, the US should work to identify priorities shared by partners, avoiding a mismatch between US and partner commitments.

Whether intentional or not, Pacific Command's engagement in the region has often represented such a mismatch. With a focus on the maritime arena, US Navy and Marine Corps forces, along with their regional counterparts, have inadvertently become the dominant players in the region. Pacific Command has also prioritized engagement between US and partner air forces. Left out, particularly in maritime security engagements and assistance, have been the region's armies, despite the fact that the army is the dominant military service in each of the primary regional partners.

Meanwhile, there is a growing recognition that the Army's role in confronting Chinese provocations and responding to a contingency must expand. In fact, Harris has commented, "I think the army should be in the business of sinking ships with land-based surface-to-ship missile systems . . . What the Army brings traditionally is what they always bring, which is mass and firepower and capability."[14] Yet, as the Army works to expand its role in the region, there has been little recognition that these same capabilities—mass and firepower based ashore but aimed at the sea—could be contributed by partner armies in the region as easily as by the Army itself. Ideally, a warfighting coalition would demonstrate the same interoperability and scope of partner contributions in the armies' domain as demonstrated by the other services.

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14   Franz-Stefan Gady, "US Admiral: US Army Needs to Create Ship-Killing Units for South China Sea," *Diplomat*, November 17, 2016.

Andrew F. Krepinevich Jr., in his *Foreign Affairs* article "How to Deter China," detailed a concept for establishing coastal defenses around the South China Sea that notably recognizes the role partners might play.[15] While Krepinevich's specific vision has its opponents, it points the way to an assistance initiative with partners that would be attractive to their army-dominated militaries and, as Krepinevich notes, align with investments many partners have already signaled they intend to make. Krepinevich even identifies specific systems, such as coastal radars, short-range interceptor missiles, and short-range, precision-guided rockets and mortars. Likewise, Harris named high mobility artillery rocket systems and Paladin howitzers as two systems US forces might deploy to the region, and there is no reason they should not be considered for transfer to foreign partners. One of the key benefits of expanding engagement with regional armies in support of a coastal defense mission is that many of these systems are in relatively wide circulation globally and thus can feasibly be shared without the significant technology security hurdles that complicate many foreign weapons transfers.

In addition to building coastal defense capacity, the Army can play a leading role in executing each of the concepts discussed above. Already, the Army's innovative Pacific Pathways program has proven to be an effective tool for rotating Army units through the region. The Army should consider how that program and other regular exercises might be used for more strategic purposes, such as training partners in coastal defense operations or demonstrating new operational capabilities. Additional potential resides in reorienting the Army National Guard's State Partnership Programs in the region to undertake more operationally relevant activities, such as joint intelligence collection missions or amphibious warfare trainings, with their host counterparts.

Military Diplomacy

Forging the depth of partnership required to support a more sophisticated US regional strategy will require substantially enhancing military diplomacy in the region in addition to increasing the focus on regional armies. Under Carter's leadership as the Secretary of Defense, the Defense Department took several important steps in this direction, notably through Carter personally and persistently engaging in forums like the ASEAN Defense Ministers Meeting (ADMM-Plus) and the Shangri-La Dialogue. Secretary of Defense James Mattis began his tenure by traveling to the Asia-Pacific region, signaling he understands the importance of continuing these partnerships. Continued, and additional, engagement at all levels will be important to nurturing such relationships throughout the region.

Additionally, Pacific Command should look for opportunities to elevate the level of bilateral staff talks, not only to signal the importance of each partner in the region but also to help break through the respective bureaucracies to secure commitments for new initiatives. Annual naval staff talks, for example, are held by the US Seventh Fleet and include key partners from Indonesia, Malaysia, the Philippines, and Singapore. Elevating these talks from the Seventh Fleet to the Pacific Fleet—in essence, elevating the partnership from the three-star to the four-star

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15   Andrew F. Krepinevich Jr., "How to Deter China," *Foreign Affairs* 94, no. 3 (March/April 2015), 78–86.

level—could pay significant dividends in terms of partners' perceptions and US access to key leaders. Each service's approach to bilateral staff talks across the region varies, but all include opportunities to expand and to elevate these engagements with key partners.

As China continues to escalate provocative behavior in the region, a robust playbook representing options that are feasible and cover a spectrum of scale, risk, and method will be essential for the commander of USPACOM, the secretary of defense, and the president. The strategic approach presented above provides a series of related and mutually reinforcing concepts rather than a selection of limited choices to fill out that playbook.

To summarize, a more sophisticated approach to security cooperation in the region brings four valuable benefits: low cost, international engagement, limited risk of escalation, and expansion of military options. Partnerships that distribute contributions to regional security cost the US less than other strategies. Empowering other nations in the region to participate in their security engages them in forging regional solutions that align with their strategic objectives and priorities and strengthen regional security architectures. Such solutions also allow the United States to act decisively without haphazardly escalating tensions. Finally, well-targeted capacity-building investments will create additional military options for the US and partners in future scenarios, improving America's strategic position. The approach detailed here is only one part—and indeed not the most important part—of a broader strategy required not only for the region but also to address global concerns about China's assertiveness. Yet, if the United States fails to adopt a more strategic approach to engagements with regional partners and allies, it will be ceding key ground to a China that is clearly asserting its ambitions in the region and beyond.

The Belarus Factor in European Security

Alexander Lanoszka
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ABSTRACT: This article challenges strategists to reconsider long-held assumptions associated with the alliance between Belarus and Russia when planning military support for the Baltic states.

Since the Russian annexation of Crimea in early 2014, security experts have been busy exploring the nature of the current threat environment facing East Central Europe as well as identifying appropriate policy responses that the North Atlantic Treaty Organization (NATO) and its local members could adopt. Much of the existing analysis has focused on so-called hybrid warfare, the anti-access/area denial (A2/AD) capabilities Russia brings to bear in the region, and gaps in NATO's deterrent capabilities. Yet experts have paid insufficient attention to Russia's only formal ally in the region, Belarus. At best, they assume Belarus will participate in—if not just diplomatically support—any military aggression that its senior ally would undertake in the region. At worst, they neglect to mention it altogether, with the implicit understanding that the Belarusian military would be too weak and the political leadership in Minsk too deferential to the Kremlin to be of any consequence.

Such expectations regarding Belarus might be wrong, however. Military-to-military contacts between Belarus and Russia are not as strong as some analysts assume. More importantly, Belarusian President Alyaksandr Hrygorevich Lukashenka has diverged from Russia on key issues relating to territorial disputes in the former Soviet space. He provided halting diplomatic support to Russia on Georgia and even bucked the Kremlin's approach toward Ukraine. Indeed, because of his country's positioning between NATO and Russia, he is likely to be risk-averse with regards to military conflict. He may even fear entrapment, believing that Russia might drag Belarus into a war he would prefer to avoid. Not only would a war risk Belarusian resources and lives but it could also create the conditions under which Lukashenka loses power.

Analysts are thus mistaken to believe the alliance between Belarus and Russia represents a dynamic whereby the strong do what they can and the weak suffer what they must. Should Belarusian leaders not want conflict with NATO, they can create costs for Russia. Even if Russia tries to impose its will on Belarus, either by withholding economic subsidies or by dislodging Lukashenka from power, then it would do so at potentially great expense. Any effort to undermine the Belarusian regime could spark a backlash among members of society. Since such an effort would suggest Russia is destabilizing Belarus for military purposes, it would also escalate tensions with NATO.

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Whatever the plausibility of a Russian-led regime change in Belarus, the prospect of having to deal with a reluctant and militarily deficient ally could affect Russia's cost-benefit calculations in challenging the territorial and political order in East Central Europe. For its part, NATO should prepare for varying levels of Belarusian involvement. Holding Belarusian assets at risk may not be necessary if Minsk is able to hamper Russian war plans. But if Russia succeeds in eliciting Belarusian cooperation, NATO might feel compelled to target those Belarusian bases that Russian troops could use as staging areas, thereby further escalating a crisis. Belarus presents a complicating factor for both sides with respect to crisis diplomacy and warfighting in the region.

Belarusian Foreign Policy since Independence

Called the last "outpost of tyranny" in Europe, Belarus became an independent state in 1991 amid the dissolution of the Soviet Union. Lukashenka has ruled the country since 1994 thanks to electoral fraud as well as the violent suppression of political opposition and media.[1] With a domestic policy subject to international condemnation for its authoritarianism, Lukashenka has historically pursued a close relationship with Russia, even describing himself as a "most loyal ally" to the Kremlin.[2] The two countries forged their alliance through agreements— the Treaty on Friendship, Good Neighborhood, and Cooperation of 1995 and the 1997 Union Treaty—that Lukashenka signed with then-Russian President Boris Yeltsin. These treaties have provided the framework for their security cooperation and joint military planning.[3]

Closeness with Russia served more than just a political-military purpose, however. For Belarusian leaders, it preserved a certain level of welfare despite highly unfavorable structural conditions that characterized the national economy. At least throughout the 1990s, Belarus maintained high living standards relative to other members of the Commonwealth of Independent States—the non-Baltic countries that used to form the Soviet Union.[4] Integration with Russia has helped Belarus sidestep otherwise difficult questions concerning its lack of independent energy sources and highly militarized, state-managed economy. Moreover, partnering with Russia has allowed Belarus to obtain natural gas at reduced rates, effectively subsidizing the latter's economy. Some Belarusian policymakers recognized that these subsidies would compromise the country's autonomy, but they nevertheless calculated that economic engagement with the West was too risky when the costs of disengagement from Russia were certain to be high.[5]

1   David R. Marples, "Outpost of Tyranny? The Failure of Democratization in Belarus," *Democratization* 16, no. 4 (August 2009): 756–76, doi:10.1080/13510340903082986.

2   Clelia Rontoyanni, "Union of Belarus and Russia: The Role of NATO and the EU," in *Security Dynamics in the Former Soviet Bloc*, ed. Graeme P. Herd and Jennifer D. P. Moroney (London: RoutledgeCurzon, 2003), 113.

3   Alena Vysotskaya Guedes Vieira, "The Politico-Military Alliance of Russia and Belarus: Re-Examining the Role of NATO and the EU in Light of the Intra-Alliance Security Dilemma," *Europe-Asia Studies 66*, no. 4 (June 2014): 557–77, doi:10.1080/09668136.2014.899769.

4   Rontoyanni, "Union of Belarus," 113.

5   Andrew Wilson and Clelia Rontoyanni, "Security or Prosperity? Belarusian and Ukrainian Choices," in *Swords and Sustenance: The Economics of Security in Belarus and Ukraine*, ed. Robert Legvold and Celeste A. Wallander (Cambridge, MA: MIT Press, 2004), 43–44.

After Vladimir Putin became the Russian president in 2000, relations between the two countries continued to develop. For example, cooperation in air defense deepened, which culminated in an air defense treaty in 2009. Yet distrust and acrimony between the two governments accompanied the growth of such linkages. Lukashenka was lukewarm to Putin's suggestions that the six oblasts making up Belarus should become part of the Russian federation. He rejected other Russian proposals for greater fiscal integration between the two countries.[6] Moreover, the two countries publicly disputed over how to price surplus natural gas that Belarus had hitherto imported from Russia at a reduced rate and then exported at a higher rate. The negotiations had become so testy between Belarus and the Russian supplier Gazprom that the company cut gas supplies to Belarus in early 2007.[7]

In 2009, Belarus also boycotted a summit it chaired for the Collective Security Treaty Organization (CSTO)—a regional multilateral security alliance also comprised of Russia, Armenia, Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan.[8] The purpose of this meeting was to decide upon an initiative to create a combat-capable force called the Collective Operational Reaction Forces (CORF) that the CSTO would deploy to any one of its member-states in a crisis situation. Ultimately agreeing on the formation of CORF, Belarus first dragged its feet, exposing the tensions that began to mark its relations with Russia and other CSTO members. These signs of discord were not the only ones, however. Belarus has generally been ambivalent about Russia's pattern of interventionism in the former Soviet space.

Notwithstanding these disagreements, close ties with Russia have influenced Belarus' relations with NATO and the European Union. Lukashenka has criticized NATO expansion and even echoed Putin's disapproval of Ukraine's bid for membership in that alliance. Indeed, in 2002, its declared military doctrine observed the "expansion of military blocs and alliances [were] to the detriment of the military security of the Republic of Belarus."[9] By contrast, Belarusian diplomacy towards the European Union is predicated more on cynical opportunism than on heightened threat perceptions.[10] Belarus has used its relationship with the European Union as a "bargaining chip"—an outside option that could offer some alternative economic goods if Russia withholds support.[11]

Yet the European Union has sometimes lost patience with Belarus, and its human rights record, leading to sanctions imposed in 2004. An effort to improve relations between the supranational organization and Belarus stalled when Lukashenka's regime imprisoned political activists and dissidents after the 2010 presidential elections. New sanctions were imposed on Belarus during the ensuing period and Lukashenka

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6 Wilson and Rontoyanni, "Security or Prosperity?," 47–49; and Pavel K. Baev, *Russian Energy Policy and Military Power: Putin's Quest for Greatness* (London: Routledge, 2008), 147.

7 Vieira, "Politico-Military Alliance," 567–68.

8 John A. Mowchan, *The Militarization of the Collective Security Treaty Organization*, Issue Paper 6-09 (Carlisle Barracks, PA: Center for Strategic Leadership, 2009), 5.

9 Quoted in Steven J. Main, *The Military Doctrine of the Republic of Belarus* (Camberley, Surrey: Conflict Studies Research Centre, 2002), 6.

10 Thomas Ambrosio, "The Political Success of Russia-Belarus Relations: Insulating Minsk from a Color Revolution," *Demokratizatsiya* 14, no. 3 (2006): 417. To be sure, the EU has supported Belarusian pro-democracy groups in the past.

11 Vieira, "Politico-Military Alliance," 575.

was excluded from the Warsaw Summit of the Eastern Partnership initiative.[12] Following the October 2015 presidential elections, a report by the Organization for Security and Cooperation in Europe determined very limited progress was made in Belarusian efforts to have elections operate more democratically. The European Union subsequently lifted most permanent sanctions while retaining the arms embargo.[13]

Analytical Neglect of Belarus

Although the Belarus-Russia alliance features greater nuance than commonly presumed, the current literature on security in East Central Europe superficially engages with Belarus. In discussing the A2/AD capabilities that Russia has at its disposal in that region, Stephan Frühling and Guillaume Lasconjarias barely mention Belarus. They note that Belarus represents the rare instance in which Russia has gained "strategic influence" before assuming Belarusian forces might fight alongside their Russian counterparts in exploiting the so-called Suwalki Gap—a corridor that lies between the Russian exclave of Kaliningrad and Belarus, thereby forming the only mainland connection between Poland and Lithuania.[14] Still, they later imply Belarusian neutrality would improve NATO's odds of achieving favorable battlefield outcomes.[15] Another analysis of the A2/AD problem neglects Belarus entirely.[16] One think-tank report arguing for improving NATO's regional deterrent posture only mentions Belarus in reference to Kaliningrad.[17] A major essay, and the subsequent forum it inspired, on how NATO should address Russia never mentions Belarus.[18] Discussions of Russian military doctrinal thinking or regional strategies often exclude Belarus.[19]

Some analysts have done better. Luis Simón recognizes the importance of Belarus for NATO defense planning, writing that "although Minsk is politically close to Moscow, it still maintains an important degree of military autonomy in the sense Russian armed forces do not have a significant presence in Belarusian territory; nor

    12   Vieria, "Politico-Military Alliannce," 558–59.

    13   Robin Emmott, "Europe Ends Sanctions on Belarus, Seeks Better Ties," Reuters, February 15, 2016; and Organization for Security and Co-operation in Europe (OSCE) and Office for Democratic Institutions and Human Rights (ODIHR), *Republic of Belarus, Parliamentary Elections, 11 September 2016: OSCE/ODIHR Election Observation Mission Final Report* (Warsaw: OSCE / ODIHR, 2016).

    14   Stephan Frühling and Guillaume Lasconjarias, "NATO, A2/AD and the Kaliningrad Challenge," *Survival* 58, no. 2 (April–May 2016): 103, 105, doi:10.1080/00396338.2016.1161906.

    15   Frühling and Lasconjarias, "NATO, A2/AD," 107.

    16   Alexander Lanoszka and Michael A. Hunzeker, "Confronting the Anti-Access/Area Denial and Precision Strike Challenge in the Baltic Region," *RUSI Journal* 161, no. 5 (November 2016): 12–18, doi:10.1080/03071847.2016.1253367.

    17   Edward Lucas and A. Wess Mitchell, *Central European Security after Crimea: The Case for Strengthening NATO's Eastern Defenses*, Report Number 35 (Washington, DC: Center for European Policy Analysis, 2014), 5.

    18   Matthew Kroenig, "Facing Reality: Getting NATO Ready for a New Cold War," *Survival* 57, no. 1 (February–March 2015): 49–70, doi:10.1080/00396338.2015.1008295; and Steven Pifer et al., "Forum: NATO and Russia," *Survival* 57, no. 2 (April–May 2015): 119–44, doi:10.1080/00396338 .2015.1026090.

    19   Kristin Ven Bruusgaard, "Russian Strategic Deterrence," *Survival* 58, no. 4 (August– September 2016): 7–26, doi:10.1080/00396338.2016.1207945; Dmitry (Dima) Adamsky, *Cross-Domain Coercion: The Current Russian Art of Strategy*, Proliferation Papers 54 (Paris, France: Institut Français des Relations Internationales Security Studies Center, 2015); and Alexander Lanoszka, "Russian Hybrid Warfare and Extended Deterrence in Eastern Europe," *International Affairs* 92, no. 1 (January 2016): 175–95, doi:10.1111/1468-2346.12509.

are they in a position to transit Belarusian territory or airspace freely."[20] Nevertheless, his analysis proceeds to suggest that growing defense ties between these two countries (as of 2014) should lead NATO defense planners to assume that they would cooperate with each other.[21]

Interestingly, a well-cited RAND study on wargames in the Baltic region that found Russia could quickly conquer Baltic territory barely acknowledges Belarus. To the extent that Belarus would play a role, according to these wargames, it would be to "subject [NATO forces] to long-range artillery and flank attacks" from its side of the Suwałki Gap should those forces attempt to enter the Baltic region from Poland.[22] Another recent wargame held in Warsaw acknowledged Belarus could be a flashpoint in a future crisis between Russia and NATO. Indeed, it envisioned a scenario where Russia dislodges Lukashenka from power and installs in his place a general who proceeds to invite troops from Russia—a scenario that might have drawn inspiration from reports of Russian plans to send unusually large numbers of railway carriages into Belarus in 2017 ahead of joint military exercises in September.[23]

That many expert analyses of regional security relations overlook Belarus might reflect how NATO views non-NATO territory differently because of its interest in defensive operations. But this neglect might also reflect how Belarus has neglected its own military, weakening it so much relative to Russia that experts feel they can make simplistic assumptions about Belarusian behavior in a future crisis. When Belarus achieved independent statehood, it acquired a strong military force that had previously formed the Belarusian Military District in the Soviet Union. Because of its geographical positioning in what would have been the rear of the frontline forces of the Warsaw Pact, the inheritance included an extensive array of heavy weapons, an oversized army of 240,000 military personnel, as well as education facilities and high-tech factories capable of making components for military equipment.[24]

But the military industry that Belarus inherited from the Cold War was inappropriate for its particular defense needs. As in Ukraine, Belarusian factories did not close the production cycle independently, thus they remained dependent on access to Russian military-industrial enterprises for various weapon components.[25] Given these structural problems, Belarus had to downsize the size of its military four-fold. Nevertheless, the government continued subsidizing, and retaining control over, defense production. Doing so helped avoid any social dislocations that would have ensued in a national economy disproportionately centered on military production. To maintain the viability of its defense industry, Belarus oriented its military production

20   Luis Simón, "Assessing NATO's Eastern European 'Flank,'" *Parameters* 44, no. 3 (Autumn 2014): 71.

21   Simón, "Assessing NATO," 72.

22   David A. Shlapak and Michael W. Johnson, *Reinforcing Deterrence on NATO's Eastern Flank: Wargaming the Defense of the Baltics* (Santa Monica, CA: RAND Corporation, 2016), 4.

23   Arseni Sivitski, "Belarus at the Centre of Russia-NATO Wargame Simulation," *Belarus Digest*, February 13, 2017; and Arseni Sivitski, "Will Russia Occupy Belarus in 2017?," *Belarus Digest*, November 29, 2016.

24   Siarhei Bohdan, *Belarusian Army: Its Capacities and Role in the Region*, Analytical Paper 4 (London: Ostrogorski Centre, 2014), 6–7.

25   Hrihorij Perepelitsa, "Military-Industrial Cooperation between Ukraine, Belarus, and Russia: Possibilities, Priorities, Prospects," in Legvold and Wallander, *Swords and Sustenance*, 132–33.

to Russia more so than to its own army, thereby adding to its reliance on Russia for obtaining financial resources. Consequently, Belarus limited its own possibilities for accessing other technologies from alternative providers.[26] The European Union's arms embargo on Belarus since 2011 compounds this problem.[27]

The Belarusian military thus atrophied since the country gained independence. Defense spending has been low, never taking up more than 1.48 percent of the gross domestic product during the 2000s.[28] With badly aging equipment and a military in sore need of a modernization program that the country can ill-afford, one analysis surmises Belarus "would not be capable of repulsing a serious incursion across its border."[29] The Belarusian armed forces have undertaken some restructuring, with the army featuring not only ground forces but also an air force, air defense systems, and special operations forces.[30] Yet the combat credibility of that air force is dubious even if about half of the active personnel in the 48,000 strong army are in the air force and air defense.[31] Nevertheless, Belarus has sought to improve its air defenses and to replace older combat aircraft with Sukhoi Su-30SMs by 2020.[32] Whether it will succeed in these efforts remains unclear.

Though this military deficiency might indicate Belarus would have no choice but to follow the Kremlin's lead, it could also be evidence of Belarusian foot-dragging on efforts to enhance interoperability. Lest it would be dragged into an undesirable conflict, Belarus might be trying to limit military integration with Russia. Moreover, that Russian forces may have to traverse Belarusian territory or to use Belarusian bases presents opportunities and challenges for NATO planners—for example, Russian movements within Belarus would allow NATO more time to detect potentially aggressive behavior. Still, Belarusian cooperation is not a given.

Political Discord between Belarus and Russia

Strong reasons exist to be skeptical that Belarusian leadership would kowtow to Russia on foreign policy matters. The best inference one can make regards Lukashenka's primary interest to hold onto power. Though Lukashenka may share Putin's dislike of Western-leaning regimes and prodemocracy movements, he has been reluctant to support Putin's willingness to destabilize other former Soviet republics. Lukashenka withheld full recognition of the two breakaway republics of Abkhazia and South Ossetia from Russia—something Russia did following its five-day war with Georgia in August 2008—and continued to respect Georgia's territorial integrity.[33]

26   Perepelitsa, "Military-Industrial Cooperation," 135–41.
27   "Embargoes and Sanctions on Belarus," GOV.UK, March 3, 2016, https://www.gov.uk /guidance/arms-embargo-on-belarus.
28   Bohdan, "Belarusian Army," 10.
29   *The Military Balance 2016* (Abingdon, Oxfordshire: Routledge, Taylor & Francis / International Institute for Strategic Studies [ISS], 2016), 182.
30   Bohdan, "Belarusian Army," 8.
31   *Military Balance 2016*, 182.
32   *The Military Balance 2017* (London: ISS, 2017), 203.
33   Vieira, "Politico-Military Alliance," 563; and Oksana Antonenko, "A War with No Winners," *Survival* 50, no. 5 (October 2008): 26–27.

Belarus and Russia also diverged in their stances towards Kurmanbek Bakiyev's deposal during the second Tulip Revolution (2010) in Kyrgyzstan. Shortly after granting asylum to Bakiyev, Lukashenka implicitly condemned Russia for tolerating the turmoil that unseated the Kyrgyz leader. Russia had supported regime change in Kyrgyzstan, having disliked Bakiyev for accepting large loans from Moscow while allowing the United States to keep using the Manas air base to support its operations in Afghanistan.[34] Amid a recent debt dispute with Russia, Lukashenka reportedly said "right now fraternal Ukraine is fighting for its independence. We cannot afford to fight. We are a peace-loving people."[35] Indeed, shortly after the Russian annexation of Crimea, Lukashenka carefully maneuvered between Russia and Ukraine. Despite recognizing Russia has de facto control over Crimea, he has cooperated with the post-Maidan government in Kyiv. Lukashenka even attended the inauguration of President Petro Poroshenko in June 2014. He criticized the ousted former President Viktor Yanukovych for having fled from Ukraine.[36]

Russian access to Belarusian military assets and territory should also not be overstated. Russia used the Baranovichi air base between 2013 and 2016, but Russia wishes to have its own air base partly to compensate for shortcomings in Belarus' own contributions to their joint air defense system. Russia currently uses two other facilities: the Gantsevichi Radar Station and a Russian Navy communications point near the town of Vileyka.[37] Yet these facilities are not military bases per se and recent diplomatic tensions have prevented a greater Russian military presence in Belarus.[38] Belarus has even renewed efforts to bolster its air defense system so as to obviate further Russian deployments of fighter jets on its own air bases.[39] Thus, notwithstanding statements about loyalty to Russia, Belarusian leaders have been unwilling to host forward-deployed Russian forces. This reluctance persists despite how Belarus has seen an expanding NATO presence on its western borders since the 2016 Warsaw Summit.

Lukashenka might wish to forestall a greater Russian political presence for reasons connected to his own political survival. After all, he may not wish for Belarus to be the next Crimea since, as Arkady Moshes notes, some similarities exist between the two former Soviet territories.[40] To begin with, sections of the Belarusian population have sympathies,

34   Kathleen Collins, "Kyrgyzstan's Latest Revolution," *Democracy* 22, no. 3 (July 2011): 156, doi:10.1353/jod.2011.0040. On the divergence, see Vieira, "Politico-Military Alliance," 563; and "Belarus Ready To Accept Bakiyev—Report," RT, April 18, 2010.

35   "Brother Ukraine Is Fighting for Its Independence—Belarus President," *Moscow Times*, January 27, 2017.

36   Alena Vysotskaya Guedes Vieira, "Ukraine's Crisis and Russia's Closest Allies: A Reinforced Intra-Alliance Security Dilemma at Work," *International Spectator* 49, no. 4 (December 2014): 97–111, doi:10.1080/03932729.2014.964520. See also Andrew Wilson, "Belarus Wants Out," *Foreign Affairs*, March 20, 2014.

37   "Kremlin Pushes for Russian Airbase in Belarus after Presidential Elections," *Belarus in Focus*, April 22, 2016, http://belarusinfocus.info/society-and-politics/kremlin-pushes-russian-airbase -belarus-after-presidential-elections.

38   *Military Balance 2017*, 203.

39   Siarhei Bohdan, "Thwarting Plans for a Russian Airbase, Minsk Strengthens Its Air Force," *Belarus Digest*, October 12, 2016.

40   Arkady Moshes, *Belarus' Renewed Subordination to Russia: Unconditional Surrender or Hard Bargain?*, Policy Memo 329 (Washington, DC: PONARS Eurasia, 2014). According to Moshes, another similarity in 2014 is that Russia had a military presence in Belarus; however, that military presence was limited and inadequate for grabbing territory and seizing strategic assets within Belarus.

if not an affinity, for Moscow. Russian broadcast media also has a large presence in Belarus. Though state censorship can prevent Moscow from exploiting that presence to advance its own preferred narrative in Belarus, Belarusians could still access Russian programming on the internet. Hence some Belarusians were able to view an incendiary documentary about Lukashenka aired in Russia in 2012. This information war erupted between the two governments during a dispute over export duties on the crude oil that Belarus was receiving from Russia.[41] Moreover, just as with the Ukrainian military in Crimea and eastern Ukraine, the integration of Belarusian armed forces with some parts of the Russian military raises questions of loyalty. As one report observes, "unlike the security agencies or police, the army is not [Lukashenka's] closest ally" and suffers from his mistrust.[42]

Belarus might thus be exposed to the so-called hybrid warfare that Russia allegedly practiced in Ukraine. Specifically, Belarus may be subject to Russian provocations at the subconventional level, and self-deterred from responding forcefully out of a desire to avoid militarily confronting a superior foe in Russia.[43] So in 2016, Belarus unveiled a new military doctrine—its first since 2002—explicitly discussing the concept of hybrid war. This doctrinal innovation reflected fear that adversaries could use subversion to destabilize, if not to unseat, the Belarusian government.

Though the Arab Spring and the Color revolutions in the former Soviet space might have inspired such fears, invocations of hybrid warfare suggest at least some concern of Russian interference.[44] To be sure, a Crimea-like scenario is far-fetched. Russia probably does not want further political instability on its borders, and an agreement between the two governments in April 2017 to resolve an oil and gas dispute could mean that Putin sees few acceptable alternatives to supporting Lukashenka.[45] The perceived hybrid threat could also be mostly Western in origin since the Belarusian minister of defense obliquely asserted "all the wars of the past 10–15 years were in effect hybrid wars."[46]

Yet the European Union's only media presence in Belarus is through the Polish-funded Belarusian language television channel Belsat. Thus Russia has more opportunities to subvert its ally because of their common language and ties to members of Belarusian society. Still, Ukraine was a much more open society wracked by greater ethnic grievances than Belarus. Because the Belarusian state is repressive and controls media tightly, Russia might have trouble identifying aggrieved individuals willing to revolt against the heavy-handed Belarusian government.

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41   Joanna Szostek, "Russian Influence on News Media in Belarus," *Communist and Post-Communist Studies* 48, no. 2–3 (June–September 2015): 125.

42   Bohdan, "Belarusian Army," 8.

43   See Lanoszka, "Russian Hybrid Warfare." For a critique of Western notions of hybrid warfare, see Andrew Monaghan, "The 'War' in Russia's 'Hybrid Warfare,' " *Parameters* 45, no. 4 (Winter 2015–16): 65–74.

44   On Russian perceptions of Western hybrid war, see Rod Thornton, "The Changing Nature of Modern Warfare," *RUSI Journal* 160, no. 4 (September 2015): 42.

45   Siarhei Bohdan, "Belarus Has Obtained Gas and Oil Concessions from Russia: But What Did Russia Get in Exchange?," *Belarus Digest*, April 11, 2017.

46   Andrei Ravkov, "All Wars of the Past 15 Years Can Be Called Hybrid Wars," *Belarusian Telegraph Agency*, February 24, 2016.

The new Belarusian military doctrine does have a traditional military bent. The language emphasizing increased mobility and readiness throughout the entire country, however, implies some concern about Russia. Minsk may be hedging against multiple threats, whatever their origin.[47] Moreover, Lukashenka disavowed the use of military force abroad by stating "we will never fight on someone else's territory because we are committed to a defensive military doctrine."[48] Though incentives not to broadcast a desire to mount armed aggression exist, the weak posture of the Belarusian military makes this doctrine credible. Belarus might have trouble participating in Russian military actions against NATO countries, preferring instead to engage those countries' forces only if NATO were to strike first.

The military deficiency could also reflect a fear of Russian entrapment emerging from the so-called alliance dilemma. Whereas providing too weak of a commitment to an ally might render that ally so insecure as to fear abandonment, too strong of a commitment might embolden an ally to undertake a riskier foreign policy than it would otherwise adopt. Entrapment ensues when such risk-taking behavior provokes an undesirable war, compelling the participation of the committed state.[49]

By limiting its defense ties with Russia, Belarus may be trying to reduce the likelihood of being ensnared in a conflict involving NATO but instigated by Russia. The ramshackle state of the Belarusian military suggests it cannot fight a large-scale war with NATO forces. One analysis concludes Belarus does not have the offensive capabilities to attack NATO forces single-handedly, or even in tandem, with Russia.[50] From Lukashenka's perspective, a lost war could weaken his power. This fear is well-founded: political science research has found the tenure of nondemocratic warfighting leaders greatly depends on their victories.[51] Lukashenka's risk-aversion to anything that might undermine his rule could mean he would prefer to be a bystander than undertake any revisionism of his own.

Strategic Implications

Many security analysts tend to neglect Belarus when assessing the balance between NATO and Russia. They commonly assume Belarus would assist Russian efforts to close the Suwałki Gap, thus preventing NATO forces in Poland from reinforcing and resupplying the Baltic countries on the ground. Such assumptions may be unwarranted. Belarus has reluctantly supported the Kremlin's responses to territorial and political disputes within the former Soviet space. Belarus provided halting diplomatic support to Russia in its 2008 war against Georgia, and it expressed sympathy for Ukraine amid its war with Russia. Lastly, given

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47   Yauheni Preiherman, "Belarus Prepares to Adopt New Military Doctrine," *Eurasia Daily Monitor* 13, no. 40, February 29, 2016.

48   Quoted in Jaroslaw Adamowski, "Belarus Unveils New Military Doctrine amid Armenia's Criticism," *Defense News*, April 18, 2016.

49   Glenn H. Snyder, *Alliance Politics* (Ithaca, NY: Cornell University Press, 1997). See also Vieira, "Politico-Military Alliance."

50   Bohdan, "Belarusian Army," 15. To be sure, Belarus has participated in joint military exercises with Russia and will continue to do so, at least through the medium term. Bohdan, "Belarusian Army," 24–25.

51   Alexandre Debs and H. E. Goemans, "Regime Type, the Fate of Leaders, and War," *American Political Science Review* 104, no. 3 (August 2010): 430–45, doi:10.1017/S000305541000019.

Lukashenka's strong preference to maintain power, and the poor state of the Belarusian military forces, Belarus might even fear entrapment by Russia in a war with NATO. If so, a militarized crisis between Russia and NATO may not involve Belarus. Belarusian nonparticipation would help NATO to isolate and to hold hostage the enclave of Kaliningrad, while hampering Russian efforts to close the Suwałki Gap.[52]

For some readers, this policy implication may be an overstatement since they may still ask whether Belarusian foreign and defense policy matters at all. Russia could compel Belarus to accept Russian troops on its territory regardless of Minsk's interests in a war against NATO. Yet consider the hypothetical scenario whereby Belarus does assert its desire for neutrality during a crisis—a plausible course of action given Lukashenka's distaste for territorial revisions in the former Soviet space and the weakness of the Belarusian military—aside from withholding diplomatic support, Belarus could delay efforts to enhance interoperability or provide supporting forces. These actions could frustrate Russian calculations to help NATO. Nevertheless, if Russia responds by undertaking such extreme measures as a direct intervention in Belarusian domestic affairs, then this move could backfire because opponents of both Lukashenka and Putin could mobilize in response. Such a move could also be escalatory if NATO interprets—rightly or wrongly—any effort to curtail Belarusian sovereignty as intending to gain a major military advantage over Poland and the Baltic states.

NATO thus should not assume Belarus would play only a supporting role for Russia. Although Minsk might not derail the Kremlin's regional ambitions, it could still frustrate them to NATO's benefit. Moreover, Belarus is also a complicating factor for NATO: efforts to extract security assurances from Belarus could prove meaningless, if not counterproductive. Indeed, NATO should not try to distance Belarus too far from Russia (if at all possible) because doing so could cause the Kremlin to retaliate lest it loses a treaty ally. With respect to planning war, NATO should think through several contingencies. For one, defense planners need to consider their readiness to fight a Belarus that appears to be a reluctant and hesitant Russian ally. For another, how NATO should prepare defensive operations could differ if it expects Belarus to provide frontline forces fighting alongside Russian forces, frontline forces fighting for uniquely Belarusian objectives, frontline forces mounting a diversionary attack, or supporting forces handling rear-area security or pacification. Rather than take for granted certain notions of the Belarus-Russia alliance, analysts should be more mindful of the various ways Belarus could impact the regional security environment, however subtly.

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52   Frühling and Lasconjarias, "NATO, A2/AD," 107.

Making Peace: Next Steps in Colombia

Seth Cantey and Ricardo Correa

ABSTRACT: After a brief history of the longest-running insurgency in the Western Hemisphere, this article contextualizes recent developments in the transition of the Revolutionary Armed Forces of Colombia (FARC) to legal politics in Colombia. The authors also provide policy recommendations for the US Department of Defense.

O n August 24, 2016, the Colombian government and the Revolutionary Armed Forces of Colombia announced a peace accord to end the world's longest civil war. Over the next month, lawmakers in Bogotá publicly backed the agreement, FARC leadership ratified it, and a signing ceremony took place in Cartagena. Polls suggested a strong majority of Colombians would vote "yes" in a plebiscite on October 2.[1] Instead, Colombians rejected the deal by less than half of one percent.[2]

That same year, the parties returned to the table and reached what is widely considered a better deal. President Juan Manuel Santos and FARC leader Rodrigo "Timochenko" Londoño signed a revised accord on November 24, the Colombian congress unanimously endorsed it later that month, and on December 13 Colombia's constitutional court ruled that there need not be a second referendum.

Although legal challenges have continued, and political and military hurdles remain, after 53 years, more than 220,000 casualties, and 7.6 million refugees, FARC is laying down its arms.[3] Colombia is ending its war.[4]

Because the inventory of death and destruction goes far beyond atrocities perpetrated by FARC, some might argue assigning so much significance to the demobilization of a single group would be disingenuous. There is truth to this claim. Other insurgencies responsible for mass killing and violations of human rights have included the April 19 Movement (M-19), the National Liberation Army, the Popular Liberation Army, and lesser known groups. Paramilitaries like the United Self-Defense Forces of Colombia have massacred entire villages believed to support guerrillas. The state itself has committed war crimes.

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1   "Colombians Would Vote in Favor of Peace in Plebiscite—Poll," Reuters, September 9, 2016.
2   Helen Murphy and Julia Symmes Cobb, "Colombia's Peace Deal in Limbo after Shock Referendum," Reuters, October 3, 2016.
3   Dayra Carvajal, "As Colombia Emerges from Decades of War, Migration Challenges Mount," Migration Policy, April 13, 2017, www.migrationpolicy.org/article/Colombia-emerges-decades-war-migration-challenges-mount.
4   "Court Says Colombia Can Speed Peace Laws through Congress," Reuters, December 13, 2016.

Nevertheless, FARC has been at the epicenter of political violence in Colombia since its inception. The organization has carried more political and military weight than other guerrilla groups, and at times it has governed vast swaths of territory. This actor prompted the rise of such counterinsurgency and paramilitary forces as the United Self-Defense Forces, which caused much damage during the conflict. In classical strategic terms, FARC has been the center of gravity in Colombia's long war.

For all the weight of this moment, the disappearance of FARC as a military force will not end problems stemming from violence or politics in Colombia. Poverty, drug trafficking, and common crime will endure; neoparamilitary groups will undermine state authority; and unforeseen obstacles will arise. These challenges require understanding the historical context and thinking clearly about the future. To that end, this article outlines Colombia's war, analyzes peace processes in recent decades, and recommends policies the US Department of Defense could implement to facilitate Colombia's transition toward peace.

Colombia's War

Colombia's confrontation with FARC is rooted in *La Violencia*, a period of civil war between liberals and conservatives in the mid-twentieth century. The assassination of the Liberal presidential candidate Jorge Eliécer Gaitán on April 9, 1948, marked the beginning of a catastrophic decade characterized by events similar to what Colombia has suffered more recently: internal displacement, land dispossession, and brutal political violence.

Early in the conflict, a peasant named Manuel Marulanda Veléz and some of his close family members took up arms, moving back and forth between the departments of Quindío and Valle del Cauca west of Bogotá.[5] Before long, Marulanda was leading dozens of liberal guerrillas and coordinating with groups led by the Colombian Communist Party. By the late 1950s, he had fully embraced communist politics and was practicing guerilla tactics.[6]

In 1958, political elites implemented a power-sharing agreement, the National Front, whereby the Liberal and Conservative Parties would alternate power every four years until 1974. This agreement extricated Colombia from *La Violencia* but excluded anyone not politically aligned with the traditional parties. Those on the far left felt betrayed by Colombia's elites, especially as they saw leftist politics take root elsewhere in Latin America. The following year, Fidel Castro would lead the Cuban Revolution (1956–59) and begin his decades-long rule.

In 1964, the government began a military offensive designed to subdue restive settlements of communist farmers in Marquetalia, Guayabero,

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5   Born Pedro Antonio Marín, the founding father of FARC, took his nom de guerre from a union worker who was tortured to death by the government of Laureano Eleuterio Gómez in 1953. Marulanda was also known as Tirofijo, or Sureshot, for his aim with a rifle early in the conflict.

6   Garry M. Leech, *The FARC: The Longest Insurgency* (Halifax: Zed Books, 2011), 13. For a brief period in 1959 and 1960, Marulanda demobilized and reincorporated into civilian life. When his friend Jacobo Prías Alape (alias "Charro Negro") was killed, he returned to arms. Patricia H. Micolta, "Illicit Interest Groups, Social Capital, and Conflict: A Study of the FARC," in *Social Capital and Peace-Building: Creating and Resolving Conflict with Trust and Social Networks*, ed. Machaelene Cox (London: Routledge, 2008), 78.

El Pato, and Rio Chiquito. From the government's perspective, these populations threatened the stability of the state, and armed residents' refusal to recognize authority undermined the government's monopoly on the use of force. The government's attacks had the unintended effect of galvanizing local support for resistance.

In 1966, some 350 guerrillas who had fought the Colombian army in 1964 held the Second Guerilla Conference of the Southern Bloc. The movement agreed to be called the Revolutionary Armed Forces of Colombia and chartered a socialist agrarian platform that called for revolutionary change.[7] From that moment forward, FARC's Marxist ideology was clear, and its association with Colombia's Communist Party was public.

Until the late 1970s, FARC's growth was relatively modest. Dramatic expansion during the mid- and late 1980s resulted from decisions made at the Seventh Guerrilla Conference (1982), when the group decided to reorganize from a large guerrilla band into a formal army. In addition to ambushes, members would attack police and military units in strategically important areas, including small urban centers. To expand geographically, FARC would delve further into kidnapping for ransom and extortion.

The organization also became deeply involved in the drug trade, especially in cocaine, during the 1980s. Early involvement was tangential, through the taxation of drug traffickers, but FARC eventually moved directly into the production chain. Manufacturing and trafficking drugs, kidnapping, and extortion served as key sources of finance to reinforce the group's presence throughout the country. These activities became even more important as funding from external actors, especially Cuba and the Soviet Union, faded at the end of the Cold War.

The FARC's transformation by the Eighth Guerrilla Conference (1993) was substantial. During the conference, the group drew up ambitious military plans that assumed continued growth over the next five years and established a plan to govern the country after taking power. This plan would influence the negotiating agenda when the government and the FARC held formal talks from 1999 until 2002.

During those talks, and amid an ongoing war, both sides strengthened their military power. Increased defense spending and US assistance through Plan Colombia, which began in 1998, fortified the Colombian armed forces, who had clearly gained the upper hand by 2002. At some 18,000 soldiers, however, FARC had never been larger. Both sides believed they were in positions of strength, but the condition most conducive to successful talks—what negotiation theorists call mutually hurting stalemate—was absent. The government believed its offer was more than sufficient to end the war. The FARC sought more than the state could grant.

When talks broke down in early 2002, Colombia changed its approach to fighting the guerrillas. The newly modernized military retook territory key to the security of large populations, the national economy, and citizen perception. Guerrillas were driven from towns and villages where they

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7   "Revolutionary Armed Forces of Colombia—People's Army," Stanford University, August 15, 2015, http://web.stanford.edu/group/mappingmilitants/cgi-bin/groups/view/89.

had influence and reverted to a previous organizational structure. For years, FARC had operated as a formal military, concentrating soldiers in large formations. Now under pressure, small bands were employing hit and run tactics again. From 2002 to 2008, state advances were frequent, vicious, and sometimes illegal, but they had their intended effect. Over that period, more than half of all FARC soldiers deserted or were killed or captured.

In this context, an important development in 2008 went mostly unnoticed by the public. Signs emerged that the FARC was slowing, and in some cases reversing, government advances. Casualties in the ranks of the armed forces multiplied as civilians remained caught in the crossfire. Increasingly, analysts began to believe that defeating the FARC militarily would be prohibitively costly in humanitarian and financial terms. As former presidential candidate and FARC hostage Ingrid Betancourt would later write, "Despite the government's undeniable military achievements, the country was still moored by FARC's presence."[8]

These two stages of the war—the debilitation of FARC from 2002 to 2008 and the inability of the state to defeat the group definitively from 2008 to 2010—were the structural conditions that led Santos to consider negotiations when he took office in 2010. Colombia, he judged, had reached a mutually hurting stalemate. Both sides were suffering the costs of war; neither could end it through force. The time had come again to seek peace through dialogue.

Failed Negotiations

The prospect of a negotiated solution to Colombia's internal conflict first arose during the administration of Belisario Betancur Cuartas (1982–86). Exploring the possibility of dialogue has been a constant across administrations ever since, and successes were achieved with the M-19, the Popular Liberation Army, and the Socialist Renewal Current (a faction of the National Liberation Army), as well as with smaller organizations like the indigenous guerrilla movement Quintín Lamé. Until recently, however, talks with FARC, and the broader National Liberation Army, have been a series of failures.

Betancur sought peace especially with M-19 and FARC. Dialogue with the former broke down quickly, but significant advances were made with the latter. After agreeing to a truce in 1984, for example, FARC formed the Patriotic Union, a Leftist political party that included guerrillas who had laid down arms. The same talks contributed to political and administrative reforms that had roots outside the peace process, including the introduction of local elections for mayors.

The paramilitary phenomenon emerged around this time, in part because a negotiated settlement threatened the interests of key sectors in society. The military had tentatively cooperated with Betancur's peace initiative but harbored doubts about guerrilla intentions that contributed to unraveling the peace process. Local politicians, landholders, and drug traffickers, in contrast, opposed talks outright and sought to combat FARC free of legal constraints. As the conflict took on this new dimension, skirmishes between the parties led to larger confrontations.

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8   Ingrid Betancourt, "At War over the Right Kind of Peace," *New York Times*, December 5, 2016.

Talks between the government and FARC were waning by 1987; the process officially died in December 1990.

A perverse consequence of this early attempt to achieve peace through dialogue was the annihilation of the Patriotic Union in the late 1980s. More than 3,000 of its members, including congressmen, city councilmembers, and mayors, were assassinated.[9] Through direct action, or by failing to protect individuals, the state was responsible for a large number of these assassinations. Other responsible actors included paramilitaries, local political bosses, and drug traffickers. This history contributes to the trepidation some guerrillas feel about giving up arms, and it has framed recent discussions about security guarantees for FARC.

By 1997, after unsuccessful negotiation attempts between FARC, the National Liberation Army, and President César Gaviria Trujillo (1990–94), the war had become a humanitarian disaster, civilians its principal victims. The perceived lack of respect for basic human dignity among the warring parties catalyzed a popular movement, the Citizen Mandate for Peace, to call for a return to the negotiating table. Meanwhile, paramilitaries acted without restraint, often with the quiet approval of politicians and the state's military and intelligence apparatus. Guerrilla kidnappings increased to the highest levels in history, extortion was rife, and entire communities were caught in the crossfire.

Andrés Pastrana Arango was elected president (1998–2002) because he was perceived to be the person most likely to negotiate a settlement with FARC. In January 1999, his administration began formal talks with the group in San Vicente del Caguán. The state's greatest initial concession was logistical: the dialogue took place in a demilitarized zone (DMZ) measuring some 42,000 square kilometers (roughly the size of Switzerland), where FARC could reside without fear of a military presence.[10] The substance of the agenda was expansive: it included 12 main points and more than 100 subpoints that ranged from the social and economic structure of the state to environmental policy. It was a recipe for endless negotiation.[11]

Talks also suffered from procedural problems. From the beginning, Pastrana conveyed the image of a government, as he explained in his memoir, "willing to do anything for peace."[12] The president routinely extended deadlines and made other concessions to FARC for little or nothing in return. Well-intentioned attempts to build good will convinced FARC that the president was weak. The group learned that it could test the government, freeze talks, and issue ultimatums without fear of repercussions. The continued growth of paramilitary forces beyond the DMZ complicated the picture, in part because FARC correctly believed that the government could have done more to combat it.

The Caguán peace process lasted three years, ending abruptly on February 20, 2002, after FARC hijacked an airplane and kidnapped

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9   John Otis, "Guerrilla Politics: Colombia's FARC May Soon Be on the Ballot," *Public Radio International*, September 25, 2013, https://www.pri.org/stories/2013-09-25/guerrilla-politics-colombias-farc-may-soon-be-ballot.

10   US General Accounting Office (GAO), *Narcotics Threat from Colombia Continues to Grow* (Washington, DC: GAO, 1999), 10.

11   Harvey F. Kline, *Chronicle of a Failure Foretold: The Peace Process of Colombian President Andrés Pastrana* (Tuscaloosa: University of Alabama Press, 2007), 71.

12   Andrés Pastrana Arango, *La palabra bajo fuego* (Bogotá: Planeta Colombiana, 2005)*, 142.*

one of its passengers, Senator Jorge Eduardo Gechem Turbay. This event, in the wake of myriad challenges to the peace process, united the government and public opinion against FARC, which was more confident in its numbers and capacity than ever before. It was the final blow to a battered process that, by this time, few believed had any prospect of success.

The failure at Caguán led to a situation in Colombia where even talking about negotiations with FARC became taboo. Most Colombians believed the government had bent over backwards to accommodate the group—that it had done so to a fault—and that the guerrillas had negotiated in bad faith throughout the process. The alternative they now sought was *mano dura*, a hard line against FARC whereby the newly-modernized military would confront the group directly and mercilessly.

After the election of Alvaro Uribe Vélez (2002–10), the public began to believe that military defeat of the insurgency was possible, and it increasingly accepted the government's refrain that FARC had long abandoned politics in favor of narco-terrorism. This perspective set the stage for a loosening—and sometimes breaking—of the rules of war. Alleged government ties to paramilitaries and "false positive" scandals, like that in Soacha in 2008, crowded the headlines. Though in his second term Uribe made overtures to the National Liberation Army, and even tentatively to FARC, his eight years in office were overwhelmingly characterized by military attacks on the guerrillas. Uribe was effective: on his watch, the FARC's ranks fell to some 7,000 soldiers.[13]

When Santos took the oath of office in 2010, many believed he would continue Uribe's hard line against FARC. As Uribe's minister of defense from 2006–09, Santos had overseen dramatic military gains in the war. In his inaugural address on August 7, 2010, however, he suggested that there may be another way, that "the door to negotiations was not locked" and could be opened if the guerrillas demonstrated a real desire for peace.[14] In this context, with public opinion firmly against renewed talks, Santos quietly initiated back channel contacts with FARC to see if the parties could return to the table.

Dialogue in Havana

Discrete contacts preceded conversations with guerrilla representatives in Cuba, where formal negotiations would continue when they went public in 2012. Though it may have been possible to negotiate elsewhere, talks in Colombia were unthinkable: the memory of Caguán remained a nightmare. Legal risks for FARC negotiators in many countries were considerable. Negotiations in Venezuela, which had given aid to the insurgents, would have been unpalatable to the Colombian public. Of all potential locations, Cuba was the logical choice. Its government was sympathetic to the FARC's politics, yet the island had begun its own political and economic transition. As a host, Cuba had credibility in the eyes of all critical stakeholders.

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13   Claire Felter and Danielle Renwick, "Colombia's Civil Conflict," Council on Foreign Relations, January 11, 2017, https://www.cfr.org/backgrounder/colombias-civil-conflict.

14   "Discurso complete de posesión de Juan Manuel Sanatos [Complete text of Juan Manuel Santos's Inauguration Speech], *Semana* (Bogotá), August 7, 2010.

In contrast to Caguán, the agenda in Havana was limited and well-defined. Topics included (a) agricultural reform; (b) political participation and democratic opening; (c) cessation of hostilities and guerrilla demobilization; (d) the problem of illicit drugs; (e) victims' rights; and (f) implementation, verification, and popular endorsement of the agreement. At no point did the talks consider anything that could undermine the sovereignty of the state or alter its political, economic, or social structure. The dialogue was reformist but with the tradeoffs required to end the war.

Reaching agreement on the details of incorporating former FARC members into legal politics, and especially how they would be represented in institutions such as Colombia's congress, posed a serious challenge. So too did reaching agreement on punishment for those responsible for war crimes and crimes against humanity. These two issues—FARC political representation and "transitional justice"—were the principal impediments to the settlement. They were, and continue to be, the areas critics of the accord target most effectively, arguing that FARC impunity and influence through legal politics are the opposite of justice.

Leading the "No" campaign throughout this process have been former presidents Uribe, the man most responsible for FARC's diminution leading up to negotiations, and Pastrana. These men and the conservative opposition they represent argue that dialogue with FARC should be limited to terms of surrender, not extended to political compromise. For months before and after the initial accord, and en route to the public referendum on October 2, 2016, they campaigned vigorously against the agreement, often stretching the truth to its breaking point. Nevertheless, most analysts, world leaders, and Colombians believed their efforts would fail. In the weeks leading to the October referendum, polls suggested that a two-to-one split in favor of the accord was more likely than its defeat.

As with other geopolitical surprises in 2017, the analysts and experts were wrong. Many reasons contributed to the upset, but a development one week before the vote merits special mention. For months, Santos had explained that public rejection of the accord would mean a return to war, but preceding the vote the FARC's leader, Timochenko, told a newspaper that FARC would not return to war regardless of what happened in the referendum. That statement, widespread hatred of FARC, a vigorous No campaign, and perhaps the national assumption that the measure would pass created apathy. Only 37 percent of eligible voters cast a ballot in perhaps the most important referendum in Colombia's history. The tally was 49.8 percent for, 50.2 percent against.[15]

Six weeks after the referendum failed, the government and FARC signed a revised deal that clarified dozens of ambiguities in the text and incorporated more than 50 substantive changes in line with opposition proposals. Among these, the new agreement provided assurances to land owners regarding property guarantees, specified that FARC would provide a balance sheet of assets to be used for victims' reparations, clarified the government could use aerial spraying to eradicate illegal crops, prohibited foreign judges from participating in a forthcoming

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15   Daniela Gonzalez, "Colombia's Vote against Peace Was Far from a Failure," *Stanford Politics*, February 1, 2017.

special tribunal, and reduced the amount of funding the FARC's political party would receive to compete in upcoming elections.

These changes strengthened the accord in many respects, but the most important parts of the agreement remained unchanged. Cosmetic modifications notwithstanding, on the core questions of political representation and transitional justice, neither the government nor FARC were willing to budge. According to the current agreement, like the initial one, the political party that succeeds FARC will participate in elections with ten seats guaranteed in congress—five in the lower house and five in the senate—for two congressional terms (until 2026). Rather than face prison time, those responsible for war crimes and crimes against humanity will have restrictions placed on their movements, contribute to victims' reparations, and otherwise serve their communities for periods of five to eight years.

Recommendations for US Defense Policy

In November 2016, Colombia's congress endorsed the revised agreement unanimously.[16] Colombia's constitutional court has since approved congressional ratification of the accord, as well as a fast-track mechanism that enables quicker passage of legislation than possible during the normal legislative process. In the months since, thousands of FARC guerrillas have congregated in more than two dozen demilitarized zones to begin the process of demobilization.

The momentum of the process is on the side of those advocating for an end to war, but progress is not irreversible. Rulings by Colombia's constitutional court in May 2017 paved the way for opponents of the accord to string out the process of implementation ahead of 2018 presidential elections, introducing further uncertainty into the process and complicating efforts to fully transition away from political violence.[17] In this context, the US Department of Defense should implement policies that signal its commitment to support Bogotá through and beyond the end of Colombia's war. Adoption of the following recommendations will do that, thereby strengthening the state, reducing the likelihood of renewed insurgency, and paving the way for peace.

Continue robust assistance to Colombia's armed forces. Over the past two decades, US aid to Colombia has exceeded $10 billion, much of which has taken the form of security assistance. As the war winds down, calls for the United States to scale back support for the Colombian armed forces have begun in both countries. These calls should be resisted. In the coming months and years, Colombia will need to expand the state's presence to areas where it has been historically weak, counter recent spikes in coca cultivation, and combat criminal and other illegal

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16   The vote was 130-0 in the 166-member lower house and 75-0 in the 102-member senate. The conservative opposition led by Alvaro Uribe's Centro Democrático abstained. Helen Murphy, "Colombian Peace Deal Passed by Congress, Ending 52-Year War," Reuters, November 30, 2016.

17   On May 17, 2017, Colombia's constitutional court overturned part of the peace accord's legal framework, which prevented making decisions on laws and reforms en masse and required modifications only occur by changing the agreement with government approval. A high-ranking FARC official, responded, "The court's decision doesn't help the implementation of the accord, it opens the doors to a return to war." James Bargent, "Colombia Court Ruling Spells Trouble for FARC Peace Process," InSight Crime, May 19, 2017, https://www.insightcrime.org/news/analysis /colombia-court-ruling-spells-trouble-farc-peace-process/.

networks that seek to fill the void left by FARC.[18] While nonsecurity assistance will be at least as important as security assistance going forward, Colombia's armed forces will be essential to maintaining stability in postconflict environments.

President Barack Obama's commitment in March 2016 to aid Colombia to the tune of $500 million per year over the next five years would represent further substantial investment in a country that has been a leading recipient of US aid for years.[19] Properly allocated, however, and subject to proper conditions, addressed in further detail below, the investment would be money well spent. It would facilitate Colombia's transition to peace, end war in the hemisphere, and reinforce relations with a strategic ally. Military leaders in the Southern Command in particular, who have strong relationships with Bogotá, should advocate for continued and robust security assistance.

Advocate for limiting the internal role of the Colombian military. Although security assistance must continue, the Department of Defense should use its political and financial leverage, and the good will it has built with Bogotá in recent years, to advocate for a more limited internal role for the Colombian military. For decades, Colombia's army has conducted law enforcement in some of the areas most affected by the war, a condition justified by circumstance. Law enforcement is not a proper role for any army, however, or for any other branch of the military. Militaries are trained to use overwhelming violence to defeat enemies, not minimal violence to police communities. Differences in culture, training, and tack between military and police forces can and do lead to disparities in outcomes on the ground—including, perhaps most importantly, civilian trust in state authority.

As Colombia moves into a postconflict environment, the Department of Defense should encourage augmenting police forces throughout the country, especially in the areas most affected by the war. Simultaneously, the Defense Department should push for a gradual reduction of the military's role in the daily lives of average citizens and an increased focus on the traditional role of militaries: external defense. This transition will not happen overnight but should be constantly monitored and reassessed. Security assistance to Colombia should increasingly reflect this prioritization. If Bogotá does not make progress in this regard as Colombia consolidates peace, policymakers should condition subsequent security assistance on such progress.

Condition security assistance on increased respect for human rights. One of the key policy debates coming out of Colombia's war will involve a basic question about ends and means. Did loosening the military's rules of engagement under the Uribe administration, which contributed to

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18   Coca production, up 18 percent from 2015–16, is at the highest point since 1994. Associate Press, "Colombia's Coca Production Soars to Highest Level in Two Decades, US Says," *Guardian*, March 14, 2017.

19   Daniel Kurtz-Phelan and Dan Restrepo, "Colombia's Tenuous Peace Needs U.S. Support," *Foreign Policy*, May 17, 2017; and Arlene B. Tickner, *Colombia, the United States, and Security Cooperation by Proxy* (Washington, DC: Washington Office on Latin America [WOLA], 2014). This figure includes military and nonmilitary spending, but dollar amounts allocated to support the armed forces are substantial: $143 million for international narcotics control and law enforcement, $44.6 million from the defense budget for counterdrug programs, $38.5 million in foreign military financing, and $21 million for nonproliferation, antiterrorism, demining, and related programs. Adam Isacson, "'Peace Colombia': What's New about It?," Washington Office on Latin America, February 15, 2016, https://www.wola.org/analysis/peace-colombia-whats-new-about-it/.

decimating FARC but involved gross violations of human rights, play a decisive role in ending the war? Even if the answer to that question is yes, human rights violations perpetrated by the Colombian military have not come without significant costs. In some parts of Colombia, trust in the armed forces is no higher than in the illegal groups that share their battlespace. Rebuilding that trust will take time, and will be a tenuous process, but it will be essential for the proper functioning of the state in the years to come.

The Department of Defense, along with the Department of State and others, can take several steps to encourage increased respect for human rights among Colombia's armed forces. First among these is the conditioning of security assistance. The key tools in this regard are the Leahy laws, introduced in 1997 and expanded in 2011, which require the United States to restrict security assistance to police and military units engaged in human rights violations.[20] Importantly, this tool is a scalpel, not an axe, that allows the continuation of assistance to units not engaged in human rights violations within the same country. That distinction is appropriate, but to avoid scenarios where some units have more flexibility (implicit or explicit) regarding respect for human rights, US defense officials working with their Colombian counterparts must remain vigilant and foster a culture of reporting that can detect indirect violations of the policy.

Other steps that would encourage increased respect for human rights include the promotion and funding of sensitivity training, especially vis-à-vis race and gender; working with counterparts to design financial and promotional incentives that promote human rights; and the trials of officials who have allegedly overseen or committed human rights violations.[21] American officials might also consider postponing plans to have members of the Colombian military train officers in other countries until Colombia has renewed its track record of consistent respect for human rights.

Assist the expansion of state presence throughout Colombia. Colombia will need to expand its presence into areas where it has been historically weak. US counterparts should assist Bogotá and local governments to bring courts, education, healthcare, housing, infrastructure, and other services to all parts of the country, especially those most affected by the war. These endeavors do not fall within the authority of the Department of Defense, nor should they, but a now-famous 2013 statement by US Secretary of Defense James Mattis (then-commander of US Central Command) looms large: "If you don't fund the State Department fully, then I need to buy more ammunition ultimately."[22] The secretary's message here is that war and peace are about more than bullets and bombs. Defense officials should continually reinforce this message in Washington, Bogotá, and throughout Colombia, recognizing that the military component of peacemaking is one of many.

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20 10 U.S.C.; Foreign Assistance Act of 1961, Pub. L. No. 87-195, 22 U.S.C. 2378d, § 620M (2017); and National Defense Authorization Act for Fiscal Year 2018, Pub. L. No. 115-91 (2017).

21 Many of the hardest-hit populations in Colombia's war have been Afro-Colombian and indigenous, and these populations have disproportionately suffered human rights abuses at the hands of the state.

22 Joseph K. Grieboski, "A Real National Security Budget Would Fully Fund State Department," *The Hill*, March 23, 2017, http://thehill.com/blogs/pundits-blog /international/325320-a-budget-that-emphasizes-national-security-would-fully-fund.

On the security front, expanding state presence will involve confronting criminal groups that may or may not have political roots (especially in the paramilitary United Self-Defense Forces), but that all have an interest in contesting state control of local territory and the state's monopoly on the use of force. The most important organization in this regard is the Gaitanista Self Defense Forces of Colombia, which operates primarily in Colombia's northern departments. Taking on this group will require both military and police action, which should be supported by the United States through the provision of funding, training, and intelligence. Defense officials in both countries should be careful not to let Colombia slip into the bad habits that once characterized the war with FARC. Though a serious problem, this organization does not pose a threat to Colombia along the lines that FARC once did, nor is such a threat posed by any existing group foreseeable.

Augment support for guerrilla reintegration. Among the principal challenges Colombia faces as it transitions from war is the reintegration of former guerrillas into civilian life. Former guerrillas will sometimes face resentment from fellow citizens and potential employers. Knowledge of weaponry, surveillance, combat, and other skills relevant to war will make these individuals attractive to drug traffickers and organized criminal networks like those mentioned above. Although the peace accord provides transition assistance of $6,100 to each former guerrilla for the first two years of the transition, reports suggest that some illegal armed groups are offering up to triple that amount. When former guerrillas realize that they can make more money for themselves and their families by breaching the accord, even if not by returning to the fray of political violence, incentives to do so will be strong.

To mitigate these risks, the Department of Defense should support Bogotá in its allocation of welfare, job training, mental health counseling, and security guarantees to those who have chosen to give up arms. The Defense Department's role in some of these areas will be more direct than others, but the success of these programs will bear directly on Colombia's long-term security environment. The Departments of Defense and State should also plan for the contingency that resources currently allocated for these programs will be insufficient. Though it would be unwise to advertise the availability of additional funds if necessary—this would create incentives for existing resources to not complete the job and give ammunition to critics who object to any aid for former FARC members—the United States and Colombia should do what it takes to ensure the success of the reintegration effort.

Push for a comprehensive truth and reconciliation commission. Truth and reconciliation will be necessary for the construction of a durable peace. As a longtime partner of Bogotá, and a key actor in Colombia's war for decades, the Department of Defense should work closely with Colombia and other countries (especially Ecuador and Venezuela, to the extent possible) to release previously classified information about the conflict. This communication should happen as soon as possible, consistent with the requirements of national security. The guiding principle of the process should be transparency. Extensive interviews with former combatants, victims, political leaders, and others will be required. Ample resources from the Department of Defense and elsewhere should be dedicated to psychological support, the construction of a formal record of the

conflict, such as through the creation of a national museum, and other programs aimed at national reconciliation. Commissions like these have been integral to ending various civil wars, including those in a majority of countries in South America. It should come as no surprise that truth and reconciliation will be essential to end the world's longest civil war.

Conclusion

As Colombia moves toward presidential elections in mid-2018, President Santos and all Colombians dedicated to ending the war must work expeditiously to carry out the terms of the recent peace accord so its benefits may be felt by all Colombians. The United States should back this effort in word and in deed, providing political, diplomatic, military, financial and technical support for implementation on the ground. The more the parties can do to consolidate peace now, the less likely the accord is to be successfully challenged before or after presidential elections.

The impending absence of large-scale political violence in Colombia suggests the country is poised for significant positive change. What comes next is the need to focus on solving the problems that remain: corruption, healthcare, education, infrastructure, employment, social security, poverty, inequality, economic diversification, and more. Each of these challenges is serious, and the current states of some are dire, but addressing all of them will be made easier by the absence of war. For the first time in more than half a century, that reality is upon us.

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Expansibility and Army Intelligence

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Abstract: This article provides insights valuable to transitioning America's military intelligence resources from counterinsurgency operations to the force necessary for responding to a near-peer competitor in a major war.

The US Army has arguably not fought a capable state adversary since World War II. Now, after decades of conducting limited interventions, the expansibility and adaptability of military intelligence capabilities are in question. In a potential major war, the fight will focus on decisive operations and owning terrain, but it will also have to deal with the added complexities of globalization, advanced technologies, state-sponsored hybrid adversaries, and nonstate irregulars.[1] This article examines how US military intelligence would expand in the event of a major war that required the Army to double in size and capability.

The Army's Military Intelligence Corps would have to expand accordingly through a doubling of expeditionary military intelligence brigades and theater intelligence brigades, while incrementally expanding support at the strategic level. But, such an expansion would also affect "intelligence federations" within the intelligence community, which includes the Army Reserve, National Guard, civilians, and contractors, as well as its coalition partners.

Assumptions

In addition to doubling the Army, another major assumption is that the continental infrastructure of the United States, though vulnerable to cyberattack and sabotage, will remain relatively safe from massive kinetic attacks from long-range missiles. The architecture and communication systems that make sharing intelligence possible may be degraded, but they may not be completely destroyed.

Third, US Army forces will be dedicated explicitly to each theater of operations in question. Hence, a two-front scenario, such as one involving Country A in European Command's area of responsibility and Country B in Pacific Command's area of responsibility, would require military intelligence to increase linguists, cultural experts, and foreign area officers for Countries A and B, who are knowledgeable in those theaters of operations. Military intelligence forces would need to be flexible and modular, able to shift resources between combatant commands throughout the theater intelligence brigade structure to

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1 David Johnson, *Redefining Boundaries for the 21st Century Land Force* (Carlisle, PA, US Army War College, December 10, 2016), briefing slides..

reinforce each region.[2] Joint intelligence operations will continue to be conducted with operators and analysts from the Army, Navy, Air Force, Marine Corps, and Coast Guard.

Fourth, decision-makers will select the right force structure for a major war. Military intelligence currently supports the Army service component at the command, corps, theater, division, and lower levels. To expand in a major war, military intelligence support would remain consistent with active duty divisions and therefore expand in concert with them. Staying within the bounds of current units, and within the constraint of doubling brigade combat teams, intelligence units would then double at the expeditionary brigade, theater intelligence brigade, and strategic levels, which would all increase by seven.[3]

Expanding Military Intelligence

The Office of the Director of National Intelligence describes the intelligence community as "a federation of executive branch agencies and organizations that work separately and together to conduct intelligence activities necessary for the conduct of foreign relations and the protection of the national security of the United States."[4] The largest restructuring of the intelligence community since its inception came from implementing the recommendations in the *9/11 Commission Report*. Among many changes, the one with the greatest impact unified "the many participants . . . and their knowledge in a network-based information-sharing system that transcends traditional governmental boundaries."[5] Vertical stovepipes became more horizontal due to a new paradigm of intelligence sharing that ensured each organization was not an independent entity but rather an integrated, coordinating part of a greater community of 17 federal organizations.[6]

Lieutenant General Mary Legere (Retired), a former Army G-2, defines the intelligence federation as a "national and tactical community of interests that includes the Interagency, a coalition of the willing, and your formal and informal intelligence organizations, as well as others that can contribute to your mission."[7] Building a solid federation means aligning the national mission to the tactical objective, having good end-to-end federation doctrine, and exercising the federation from the top down and then back up. The federated intelligence enterprise—with increased analysis, predictions, and value to decision-makers—is the starting point in a major war.

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2   MG George Franz (commanding general, US Army Intelligence and Security Command), interview by author, November 14, 2016.

3   Other assumptions for this study: six Army Service Component Commands for the six Geographic Combatant Commands; combat support units above corps will increase slightly; combat support units at corps level and below would double, consistent with the increase in combat units. Corps would increase from three to six. Divisions would increase from 18 to 36. Total BCT expansion would be from 57 to 114.

4   "Frequently Asked Questions," Office of the Director of National Intelligence (ODNI), February 28, 2017, https://www.dni.gov/index.php/about/faq?start=2.

5   National Commission on Terrorist Attacks Upon the United States (9-11 Commission), *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks upon the United States* (Washington, DC: 9-11 Commission, 2004), 400.

6   "Members of the Intelligence Community," ODNI, February 28, 2017, https://www.dni .gov/index.php/intelligence-community/members-of-the-ic.

7   LTG (Ret) Mary A. Legere (former US Army G-2), interview with author, October 30, 2016.

During interviews for this study, intelligence leaders repeatedly mentioned three areas that require special attention in order to expand the Army intelligence corps: (1) shortages of airborne intelligence, surveillance, and reconnaissance (ISR) assets; (2) limited processing, exploitation, and dissemination (PED) capacities; and (3) insufficient human intelligence and counterintelligence capacities.

The insatiable appetite for ISR, "a continuous, recursive operation focused on the collection of relevant information that is analyzed to create intelligence to inform the commander's visualization," would continue.[8] To increase collection of the necessary intelligence ISR brings, the US Army would need multimission aircraft capable of acquiring signals intelligence and full-motion video while simultaneously operating as a shooter, which would mean an increased production of airborne platforms that could exponentially expand the capacity to collect intelligence.[9]

Processing, exploitation, and dissemination is "the execution of the related functions that converts and refines collected data into usable information, distributes the information for further analysis, and provides combat information to commanders and staffs."[10] In wartime, there will be an exponential need to refine data into usable intelligence for further analysis and dissemination, necessitating increased stateside PED battalions.

In terms of human intelligence and counterintelligence, there has always been the challenge of having trained personnel with the requisite language skills and cultural knowledge to collect intelligence through interpersonal means and to thwart our enemies' intelligence gathering. Human intelligence provides crucial knowledge not only of enemy capabilities but also of their intentions. As a current commander on the ground and consumer of intelligence put it, "there is nothing better than a human eyeball answering the commander's priority intelligence requirements."[11]

Expanding Skills and Capabilities

An obvious solution to expanding capacity is to acquire and to retain personnel with the right balance of skills. Many intelligence military operational specialties are currently considered low density—a few soldiers with the specialty are required within the organization or unit, and without those essential skills, various tasks and missions could not be completed. These specialties span six basic intelligence skill sets, or collection disciplines, of signals intelligence (SIGINT), imagery intelligence (IMINT), measurement and signature intelligence

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8 Headquarters, US Department of the Army (HQDA), *The Stryker Brigade Combat Team Infantry Battalion*, Field Manual 3-21.21 (Washington, DC: HQDA, 2003), 3-1. For more on the ISR enterprise and the increased demand for it, see Government Accountability Office (GAO), *Intelligence, Surveillance, and Reconnaissance: DOD Can Better Assess and Integrate ISR Capabilities and Oversee Development of Future ISR Requirements*, GAO-08-374 (Washington, DC: GAO, 2008).

9 MG Mark R. Quantock (former director, J-2, US Central Command), interview with author, November 9, 2016.

10 COL Constantin Nicolet, *201st Expeditionary Military Intelligence Brigade* (Ft. Lewis, WA: Military Intelligence Readiness Command, leader professional development brief, February 28, 2017), briefing slides.

11 MG Paul J. LaCamera (deputy commanding general, XVIII Airborne Corps), interview with author, November 2, 2016.

(MASINT), human-source intelligence (HUMINT), open-source intelligence (OSINT), and geospatial intelligence (GEOINT).[12]

Growing the intelligence workforce will be a difficult and complex challenge. The intelligence corps will be competing for manpower with all other branches, so in terms of rapid expansibility, leaders must define which intelligence disciplines will be needed immediately, which would be needed within 90 days, and what the force could wait on.[13] There will be a call for bigger, better, and faster intelligence from the beginning of the US Army's preparations for war, yet the availability of skills will need to be prioritized. During the first 90 days, leaders would have to rank the hard-to-get and hard-to-develop intelligence disciplines in terms of depth, complexity, training, and certification against those disciplines that are acquired faster or require less skill. Structuring a pipeline by first placing the right people in the specialties that take longer to develop would allow more risk in lower-skill sets that can be slowly filled.

Currently, intelligence has difficulty filling high-demand, low-density specialties in the signal and human intelligence disciplines. The skills required for signal and cyber are more complex than ever as the technical aspects of those missions have increased. For human and counterintelligence, seasoned soldiers with more life experience generally perform better, making recruiting a young soldier to be a successful agent difficult. After recruiting for these high-demand, low-density specialties, the intelligence corps will eventually need to expand all intelligence disciplines.

While training acts as a choke point, technology can help in an expansion. Intelligence leaders will need to shorten the training pipelines for a quicker throughput of qualified soldiers.[14] In the absence of enough qualified, cleared, and trained people, intelligence will need automated tools that can do what people currently do. Specific areas where intelligence could develop new automated tools include the insatiable appetite for ISR, the need for more PED, and the explosion of raw data.

Humans cannot be taken out of the intelligence process, but technology can provide increased throughput and reduce the cognitive burden on analysts. Doing so would allow analysts to manage the volume and variety of intelligence data and the reporting necessary to answer intelligence requirements while reducing the risk of missing key and essential information. Incorporating new technologies that automate processes will also free up personnel for other tasks. The Army needs to optimize the use of current sensors and baseline systems, but then it must adapt those systems, or commission new systems, for unanticipated needs, all while ensuring commonality of architecture and interoperability for sharing.[15]

Synchronizing the efforts of multiple intelligence agencies to limit duplicated efforts is essential. The recent conflict in Iraq demonstrated that, at the onset of war, most national agencies shifted their attention from around the world to Iraq. An initial lack of deconfliction and

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12   "Frequently Asked Questions," ODNI.

13   BG Karen H. Gibson (former director, CJ2, Combined Joint Task Force-Operation Inherent Resolve), interview with author, November 11, 2016.

14   Quantock, interview.

15   Franz, interview.

coordination meant several different agencies were duplicating collection and analytical efforts, adding to inefficiency while decreasing capacity.[16] The National Intelligence Support Plan is an effort to integrate theater and national intelligence capabilities, to synchronize intelligence operations, and to identify gaps in supporting a combatant command's mission.[17] A well-defined intelligence support plan between units, between tactical and higher-level headquarters, and with strategic-level intelligence agencies deconflicts intelligence tasks and synchronizes capabilities among the various players.

Army Reserve

One of the assumptions identified at the beginning of this paper was a recall of all individuals in the Army Reserve and National Guard to active duty. As the reserve component becomes fully mobilized, the current units of action (7,500 soldiers) in the Military Intelligence Readiness Command would be activated.

According to the current commander, Brigadier General Christie Nixon, doubling quickly is not a viable option for the reserve component.[18] In one proposal, the Reserve would add two additional expeditionary military intelligence brigades and one additional theater brigade, which would augment intelligence support by about 2,100 soldiers.

In order to understand intelligence in the reserve component, one needs to understand the Military Intelligence Readiness Command, a new paradigm of reserve support formed in 2005. Aggregating 75 percent of intelligence forces in the Reserve, the functional command provides "operational intelligence support to nearly every national intelligence agency and combatant command, and conducts multi-discipline intelligence operations in support of Army Service Component Commands and worldwide contingency operations."[19]

Select units and theater support battalions are operationally aligned with Intelligence and Security Command theater intelligence brigades and units, while the expeditionary brigades are aligned with corps.[20] Mission and vision alignment among the regular Army, Reserve, and National Guard at the theater level is imperative and will need to continue to enable a quick expansion that balances the right skills and mitigates gaps.[21]

What is compelling about the Military Intelligence Readiness Command is its ability to provide units for current operations under its Title 10 mission requirements while providing significant support to civilian agencies, particularly the Defense Intelligence Agency.[22] In a major war, the type of support currently provided by the command

16 Legere, interview.

17 US Joint Chiefs of Staff (JCS), *Joint and National Intelligence Support to Military Operations*, Joint Publication 2-01 (Washington, DC: JCS, 2012), IV-5.

18 BG Christie L. Nixon (commander, Military Intelligence Readiness Command), interview with author, November 30, 2016.

19 Nixon, interview; and "Military Intelligence Readiness Command," US Army Reserve, January 30, 2017, http://www.usar.army.mil/Commands/Operational-Functional/MIRC/.

20 Nixon, interview.

21 Franz, interview.

22 LTC Bryan L. Bain, *Army Reserve Military Intelligence: Time for Change*, Civilian Research Project (Carlisle, PA: US Army War College, 2010), 10.

will need even greater communication and connectivity. These communication hubs will be vulnerable to kinetic attacks, cyberattacks, and degradation through overburdening the system.

The processing and analysis system, the Distributed Common Ground System-Army, gathers intelligence from all echelons, enables operational visualization, provides situational awareness, and disseminates data.[23] Before a conflict, the system needs to be standardized for interconnectivity between military intelligence agencies and the entire intelligence community. Leaders will also need to reduce Reserve support at the strategic level and to national intelligence agencies, which could arguably be provided by civilian hires, to meet the intelligence requirements of the fighting force.

In preparation for a major war, decision-makers should build Army Reserve capacity; specifically, military intelligence could be supported by increasing the number of processing, exploitation, and dissemination platoons for full motion video and interrogation capabilities.[24] Three interrogation battalions in the reserve component are not sufficient to provide interrogators and interrogation facilities theater entry capability that is generally essential to mission success.

With the active component losing its interrogation capacity, the Army's entire interrogation capacity will soon reside in the reserve component. Planners also need to include reserve forces into combatant command theater contingency plans so that time-phased force deployment data gets sourced with these units.[25] The conversation regarding the flow of resources should occur during the planning phase, so mobilizing necessary reserve support becomes easier.

A current challenge is tracking the outflow of both active duty and reserve intelligence personnel. Human Resources Command and the Military Intelligence Readiness Command need to ensure an accurate roster of departing personnel and their associated skills. These personnel typically get placed into the Individual Ready Reserve, which "consists of a pool of individual soldiers who have been trained, through their service in the active forces or in the Selected Reserve, and are available for mobilization in time of war or national emergency."[26] Having a list of former intelligence personnel who have been trained and who are easily reached in time of war provides a straightforward way to expand quickly.

Shortening the training pipeline is another imperative for rapid expansion. Civilian capabilities allow reservists to bring context and knowledge from the private sector for a more nuanced understanding on the ground. Yet this "dual life" makes it difficult for reserve soldiers to maintain certifications because the lengthy training and certification times surpass even the limiting factor of funding.[27] Instead of adding standards and certificate requirements, decision-makers need to be realistic about essential skills and balance the intelligence corps's

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23   "Distributed Common Ground System-Army," Distributed Common Ground System-Army, February 1, 2017, https://dcgsa.army.mil/about/.

24   Nixon, interview.

25   Nixon, interview.

26   Secretary of the Army, memorandum, "Army Directive 2017-09 (Management of the Individual Ready Reserve)," Washington, DC, February 6, 2017, 1.

27   Nixon, interview.

resources where risks are the greatest. In a major war, a firm grounding in the truly essential skills of certain specialties and on-the-job training will be the winning strategy.

National Guard

The National Guard military intelligence force of just under 11,000 professionals resides at the strategic level in the 300th Military Intelligence Brigade (Linguists), at the operational level in two new expeditionary brigades (the 58th and the 71st), and in the eight division headquarters in the G-2.[28] At the tactical level, the National Guard also uses military intelligence companies within the 28 brigade combat teams. Accordingly, the National Guard primarily holds division G-2 positions, analysis and control elements, and military intelligence companies that deploy in support of the brigade combat teams. In wartime, this intelligence structure would expand by two additional expeditionary brigades, increasing the National Guard intelligence force by about 1,400. The 300th Brigade (Ling) would grow to the size of the theater intelligence brigades with a linguist battalion aligned to each. This expanded brigade would provide interrogation, signal, and human-intelligence support to the Intelligence and Security Command as necessary in the appropriate theater.

The National Guard is postured for the possibility of full mobilization and would rely on the regional training institutes in Utah and Georgia that operate under the One Army School System with the US Army Intelligence Center and School at Fort Huachuca. Whereas one of the largest constraints among active duty, reserve, and National Guard soldiers is institutional training, one key to expanding the intelligence force would be minimizing the training timeline while maintaining the quality of instruction. Increasing the course load while shortening the timeline for Advanced Individual Training would train the specialties in highest demand: intelligence analysts, human intelligence collectors, cryptologic linguists, and counterintelligence agents. As a member of the Army intelligence enterprise, the National Guard will need to continue to provide sufficient Secure Internet Protocol Router Network (SIPRNet) bandwidth to remain on the secret-level network 24/7 for training or accommodating a large reach-back expansion. The communications pipelines will have to expand for increased support in a major war.[29]

The National Guard would continue to train and to maintain military intelligence readiness prior to such a conflict. The federal military intelligence mission allows the National Guard to build readiness while supporting preparedness for state missions. With full mobilization authority from the president, the National Guard will mobilize to support the fight as well as support homeland defense and homeland security missions in support of a governor, the Department of Homeland Security, and US Northern Command. Based on federal and state requirements, the National Guard will manage the force to provide optimal support to both the conflict and the homeland.[30]

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28   COL Greg Hadfield (director, National Guard Bureau Chief's Action Group), interview with author, November 30, 2016.

29   Hadfield, interview.

30   "Intelligence," National Guard, January 30, 2017, https://www.nationalguard.com /careers/intelligence.

Once law enforcement is able to provide homeland defense and security requirements, however, National Guard assets are transitioned to forward mobilization.

Civilians

An advantage military intelligence has over other Army branches is the depth of its federated enterprise. The current estimated total workforce of civilians, contractors, and uniformed soldiers working in the national intelligence community is 183,000.[31] Within that pool, contractors are estimated at 58,000 personnel, or 32 percent of the total workforce.[32]

One possibility for rapidly expanding at the strategic level, and perhaps even at the operational level, is to increase the civilian component of the Army intelligence enterprise. This solution avoids the exigent physical and health standards of the Army as well as the more laborious process of recruiting people into the military. Specifically designating civilian positions that need not be forward deployable has some basic advantages, such as relieving the government of educational benefits or costly Veterans Affairs benefits after the conclusion of a war. Furthermore, these civilians can work reach-back intelligence support from safe locations within the United States and select locations overseas. Minimizing the number of uniformed soldiers working in national intelligence while maximizing their presence at the tactical and operational levels will put more uniform-wearing intelligence specialists down at the fighting-force level.

Contractors

In addition to expanding civilian roles in the Army intelligence enterprise, expertise could be added from the intelligence contracting industry.[33] Defense firms have personnel with the full set of intelligence skill sets and requisite clearances. Military intelligence leaders can use them to fill agency gaps, to complete emergent taskers, or to focus on developing future technology solutions. Many of these companies hire former military intelligence analysts and employ current members of the Reserve—an estimated 20 percent of contractors are also Reserve soldiers.[34]

Defense companies have also built sensitive compartmented intelligence facilities (SCIFs) for intelligence communications. Certain intelligence disciplines, like the high-demand, low-density specialties mentioned previously, cannot be built quickly. Cooperation with private industry will help mitigate these gaps in the force until the Army recruits and trains replacements.

The contractor workforce will need to augment any support that does not exist in the current forward-deployed Corps structure. Currently, knowledge management, intelligence systems architecture,

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31   Tim Shorrock, "Five Corporations Now Dominate Our Privatized Intelligence Industry," *Nation*, September 8, 2016.

32   Shorrock, "Five Corporations."

33   Quantock, interview.

34   Nixon, interview.

and dissemination are not present within the corps-level G-2 staff.[35] Such staffs are busy conducting intelligence analysis; processing, exploitation, and dissemination with minimal dissemination outside of the corps structure; and briefing the theater commander. Hence, the auxiliary duties of knowledge management and intelligence systems architecture could be assumed by contractors or a civilian workforce.

The difficulty in predicting where future conflicts will occur limits decision-makers' ability to know what linguistic and cultural expertise capabilities should be built in advance.[36] Contracting this type of specialty to defense firms will increase the availability of native speakers, who also understand the unspoken language, such as body language, and the cultural context of the society.[37] These cultural skills are hard to acquire through language school alone. By using contractor expertise, the intelligence corps can easily draw upon a linguist or cultural expert without maintaining such expertise when it is not necessary.[38]

Two obstacles to expanding the contractor workforce rapidly are funding and vetting. The typical planning, programming, budgeting, and executing of the governmental budgetary process is too lengthy, creating a major choke point. Overseas Contingency Operations funds, or war funds, is a strategic resource that could be used to fund contractors more efficiently in a major war.[39] Further extending the timeline for expansion, the current individual security clearance process takes over two years. Part of this constraint comes from a legitimate need to run thorough background checks on contractors due to past leaks and security breaches, which skews and slows the clearance process. During wartime, however, risk calculators will need to be adjusted to meet urgent demands while maintaining the appropriate security posture.

Coalition Partners

In a major war, the United States would most likely participate as a member of a coalition or an alliance. Cultivating the intelligence corps within that coalition will help America follow its doctrine of "by, with, and through" others.[40] Some of our current coalition partners in the Middle East have already started to develop a more robust intelligence corps and strategic intelligence agencies.[41] It is important for the United States to encourage those activities, as our coalition partners would not only know their backyards best, but their intelligence forces also act as a force multiplier to speed military intelligence expansion through other means.

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35   Gibson, interview.

36   As Secretary of Defense Robert Gates stated, "When it comes to predicting the nature and location of our next military engagements, since Vietnam, our record has been perfect. We have never once gotten it right." Micah Zenko, "100% Right 0% of the Time: Why the US Military Cannot Predict the Next War," *Foreign Policy*, October 16, 2012.

37   Quantock, interview.

38   Gibson, interview.

39   Franz, interview.

40   GEN Joseph Votel (commander, US Central Command), discussion with author, October 2017.

41   Legere, interview.

Conclusion

During the past decade of conflicts, American tactics, techniques, and procedures, as well as networks, were cleared for intelligence sharing. While the first step is to ensure intelligence agreements with security classification guides are in place, preferably prior to a conflict, they must be continually refined. Early investments can occur with open-source sharing, analytic exchanges, training, and exercises, and then expanded by collaboration among multiple intelligence disciplines. Dedicated coalition intelligence sharing will naturally grow as relationships and partnerships deepen.[42]

The key at the beginning of a war is to establish the network and the classification guidelines to support coalition operations, and then to engineer those requirements into an information technology architecture for coalition communications. Resource management officials from all countries need to collaborate early to define a new coalition-sharing architecture.[43] Military intelligence leaders will need to be ready to implement new laws, policies, and authorities to ensure intelligence sharing with partners is successful.

The essential mission of military intelligence is to collect and to analyze all relevant information that supports command decision-making in wartime. In coordination with doubling the size of the Army to meet a potential near-peer threat, military intelligence would also need to expand quickly and effectively to perform its mission.

To expand intelligence, leaders would need to address the challenges of doubling the expeditionary brigades and the theater intelligence brigades while incrementally expanding intelligence support at the strategic level. Smartly expanding personnel resources in the right competencies is important, but it is not the only concern. Leaders will also need to address system shortfalls in processing, exploitation, and dissemination; intelligence, surveillance, and reconnaissance; and human intelligence capabilities, as well as develop technological tools to increase throughput and synchronize intelligence plans throughout the intelligence federation.

Leaders must take full advantage of the Army Reserve, National Guard, civilians, and contractors, as well as coalition partners to reach the necessary expansion goals. Each of these components adds value to a coordinated intelligence federation and must be leveraged to expand intelligence capacity quickly during a major war.

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42   Gibson, interview.
43   Quantock, interview.

Expansibility and Army Special Operations Forces

Eric P. Shwedo

ABSTRACT: This article examines how Army Special Operations might prepare to expand in the event of a major war by resolving impediments to growth, improving recall procedures, and developing plans to expand training capacities.

Although the US Army Special Operations Command maintains education and training programs to ensure soldiers have the skills to be successful in any environment, it currently lacks the scale needed to fight a major war. Over the past 15 years, the US military has focused on counterinsurgency and stability operations. Accordingly, there has been less preparation and training for major combat operations against a peer or near-peer competitor. Even though the nature and intensity of a major war will determine how much risk can be assumed, recommendations for developing special operations capacities can be flexible and scalable so situations can be met with appropriate responses. Moreover, several factors preclude assuming the doubling of the Army, introduced in previous articles in this series, would equate to doubling Army special operations forces (SOF).

Even so, enlarging SOF in the face of a major war will require significant adjustments by each of its regiments. These forces may accept risk by reducing steady-state and shaping activities. Theaters' special operations commands can assess where the presence of special operations forces can be reduced and the risk associated with those decisions.

Although the rapid growth of the Army will proportionately expand the recruiting pool for SOF, maintaining the unique capability of this force requires little compromise in core skills or the SOF Truths. These truths provide a foundation for constructing the special operations force; without them, there is nothing unique about SOF. These values will help set proper parameters when planning to accelerate the training pipelines:

- Humans are more important than hardware.

- Quality is better than quantity.

- Special operations forces cannot be mass produced.

- Competent special operations forces cannot be created after emergencies occur.

- Most special operations require non-SOF assistance.

Maintaining the viability of these truths while increasing the size of special operations units in the face of an existential threat is a daunting task. Even so, some mitigating actions can ensure the SOF Truths guide the expansion process. If there is a major war, there will be two overarching concerns guiding changes to training: the Special

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Operations capability actually required to defeat the threat and the risk associated with any changes.

The Key to Success

The concepts, growth patterns, and training proposals provided in this article, and previously expressed by several members of the US Army Special Operations Command (USASOC), are only ideas on which forecasting can begin. The emphasis going forward should be on planning. When discussing planning the Army's future, Chief of Staff General Mark A. Milley quoted British historian Michael Howard in saying "you don't have to get it right, you just have to be less wrong than your enemy."[1] Today's planning should increase the Army's chances of being "less wrong."

Special Forces

Selecting the right person for special operations has always been a trademark of the force. During World War II, William J. "Wild Bill" Donovan established the Office of Strategic Services, which was a precursor to today's Special Forces.[2] He took a novel approach to recruitment because he wanted only the best operators, regardless of their demographics. Because Donovan did not limit the recruiting pool, fully one-third of all Office of Strategic Services personnel came directly into the organization from the civilian world.[3] During the 1950s, special forces heavily recruited eastern European immigrants to fill its ranks to train partisan fighters in the event of an invasion by the Soviet Union into western Europe.[4] In a major war, the United States would likely call upon today's special forces to conduct similar types of operations.

Although Special Forces are proficient in several missions, their expertise in unconventional warfare will set them apart in a major war. With an area of operations that could extend from the Baltics to Vietnam, unconventional warfare will be a force multiplier that can "buy down risk" as the United States enlarges the conventional force.[5] During this time, special forces will also need to be expanded quickly. Previous models for increasing the number of special forces operators will assist planners to some degree, but growth for a contemporary major war will be exceptional in many ways.

From 2008 to 2012, special forces grew by one battalion per year. The growth of the 4th Battalion was the first major increase in the force since 3rd Special Forces Group was reactivated in 1990.[6] Today's active duty Special Forces group consists of three line battalions, one

1   GEN Mark A. Milley, "Changing Nature of War Won't Change Our Purpose," US Army, October 4, 2016, https://www.army.mil/article/175469/changing_nature_of_war_wont_change _our_purpose.

2   "Office of Strategic Services: The OSS Primer—The Beginning," US Army Special Operations Command, December 28, 2016, http://www.soc.mil/OSS/the-beginning.html.

3   Giles Raymond DeMourot, "A New Center for Global Engagement: A Revamped CVE Effort Engenders Skepticism," LinkedIn, January 8, 2016, https://www.linkedin.com/pulse /new-center-global-engagement-revamped-cve-effort-raymond-demourot.

4   "10th SFG (A) History," USASOC, December 16, 2016, http://www.soc.mil/USASFC/ Groups/10th/history.html.

5   Robert Warburg (USASOC G9 office), interview by author, December 7, 2016.

6   "3rd SFG (A) History," USASOC, December 10, 2016, www.soc.mil/USASFC/Groups /3rd/3rdSFG(A)History.html.

sensitive activities battalion, and one support battalion. A group in the National Guard consists of three line battalions and one support battalion.[7] The Army Special Operations Command built this new force structure by increasing the number of students going through Special Forces Assessment and Selection (SFAS) and the Special Forces Qualification Course.

Although an informative model, this process may not prepare enough operators to respond sufficiently in a major war. Although situational assessments would be continuous, a possibility that the majority of available active duty Special Forces would deploy in short order exists. Thus, as the National Guard groups are activated, they could deploy to the battlespace or replace active duty personnel conducting vital operations in other locations. And, a major war would likely necessitate a World War II deployment model where very few personnel would rotate back home.

Based on interviews with multiple staff officers at USASOC and the Special Warfare Center, this article will examine an initial expansion of two special forces groups, which would be difficult even if it occurred in a time of relative peace. Adding the potential for significant casualties, increasing this force becomes exponentially more complex. But Army Special Operations Command can take a series of steps to infuse personnel into the groups until the Special Warfare Center can ramp up production at SFAS and the qualification course.

The obvious first step is a Department of Defense-wide stop-loss. This action will halt approximately 540 special forces soldiers from leaving the Army each year.[8] Next, the Army should recall eligible veterans who separated within the last five years. If one-third of those recalled are qualified to join a tactical formation, 900 personnel would be added quickly to the ranks. Those who may not be qualified physically could potentially fill other positions in training or headquarters.

The next step is to reintegrate most of the 630 special forces soldiers who work in billets external to the regiment.[9] Special Forces Command already tracks these personnel and should assess which of their positions could be replaced with contractors and soldiers who require limited duty. Although not optimal for headquarters or the training pipeline, as many as 50 percent of the personnel in other billets could potentially be transferred to deployable units. This number discounts those on limited duty and those too senior to return to groups. These two steps could increase special forces by over 1,200 operators, which would be more than enough to fill three battalions. These steps, however, are only short-term solutions until recruitment, selection, and training can accelerate.

The Special Warfare Center selects the right candidates by ensuring they have all the Army SOF attributes: integrity, courage, perseverance, personal responsibility, adaptability, team player, and capability.[10] All

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7   LTC Larry Henry (USASOC National Guard office), email message to author, February 23, 2017.

8   LTC Joseph Long (commandant's office, special forces, US Army John F. Kennedy Special Warfare Center and School [SWCS]), interview by author, December 8, 2016.

9   USASOC, *Current Operations, Army Special Operations Forces (ARSOF) Worldwide by Command* (Fort Bragg, NC: USASOC, December 7, 2016).

10   LTG Charles T. Cleveland, *ARSOF Next: A Return to First Principles (Fort Bragg, NC: ARSOF, [2015]),* 35.

USASOC regiments emphasize risk should never be assumed during the assessment and selection process, which is the best indicator of a candidate's success and the least time-intensive part of the training pipeline.[11] Even if the quantity of personnel entering the Army during major war should, at a minimum, double, special forces recruitment should remain integrated across the force to maintain the needed quality and quantity of Army special operations forces. The growth should provide enough prospects to negate any temptation to change special forces's entrance standards. Increasing the mechanisms to conduct targeted recruiting will maintain high-quality candidates for the Special Operations Recruiting Battalion. Any SOF growth scenario will also require proportionate resourcing of the Special Operations Recruiting Battalion.

When evaluating the qualification course, understanding the capability needed on the imminent battlefield is important. The utmost skillset Green Berets bring to the fight is an unsurpassed expertise of unconventional warfare. This competence should not be depleted during preparations for a major war. Therefore, the Special Warfare Center may consider streamlining other portions of the course.

Ideally, nothing changes in the qualification course. Since that goal may not be feasible, several alternate approaches—such as limiting the language requirement to two members of each detachment, temporarily removing universal military freefall for all graduates, reducing the time between selection and the qualification course, or training during the few free weekends—could be considered. These implementations could be feasible, however, any training cuts should be thoughtful and based upon many situational factors, from the force requirement in theater to the casualty rates among special forces units.

Army Special Operations Command can begin preparing for a major-war by first evaluating the impact of training 500–1,000 additional students a year. Expanding the training capacity of the Special Warfare Center will take time. Key areas include training equipment sets, ranges, Robin Sage lanes, and critical portions of the qualification course. The center must also train a larger cadre that will include recalled personnel and contractors. Although none of these factors have a short-term fix, planning to overcome the limited resources should begin.

Second, the Army could assign a reserve component unit with a secondary duty to form the core of a new special forces group.[12] The Guard has 10 special operations detachments. These detachments are generally 30 personnel led by a special forces colonel that support organizations such as special operations commands in theater and NATO.[13] Given some guidance, and a minimal amount of equipment, these units could expedite the formation of a new special forces group.

Finally, the Army could ensure an accelerated method is in place to process and evaluate personnel quickly. With a recall to active duty, assessing and optimizing the abilities of those recalled will be important.

11   COL Larry Niedringhaus (G-3 office, USASOC), email message to author, February 23, 2017.

12   COL Samuel Ashley (G-8, USASOC), interview by author, December 7, 2016.

13   Joseph Trevithick, "Maryland Now Has a Special Forces Unit Dedicated to Countering Russia," War is Boring, May 15, 2016, https://warisboring.com/maryland-now -has-a-special-forces-unit-dedicated-to-countering-russia/.

This task may seem small, but if USASOC has a plan, its staff can concentrate on more pressing issues.

US Army Civil Affairs and Psychological Operations

Psychological operations and, to a lesser degree, civil affairs share a common lineage with special forces. In 1952, Major General Robert A. McClure consolidated unconventional warfare into the Psychological Warfare Center at Fort Bragg.[14] The 10th Special Forces Group, which was formed from the Special Operations Division of the same headquarters, was established as the first special forces unit at this time.[15] In 1956, the Psychological Warfare Center became the US Army Special Warfare Center School.[16]

Civil affairs also has a long history of working with SOF. In 1955, the Army established the Civil Affairs/Military Government Branch. With the establishment of the US Army Civil Affairs and Psychological Operations Command, civil affairs became a member of USASOC in 1985.[17] In 2006, the Army transferred the US Army Civil Affairs and Psychological Operations Command from USASOC to Forces Command. US Army Civil Affairs and Psychological Operations Command retained all reserve component civil affairs and psychological operations units. All active component psychological operations, which are now known as military information support operations, and the 95th Civil Affairs Brigade became subordinate to USASOC.

Addressing the deficiencies in civil affairs and psychological operations will be similar to the recommendations for special forces. A stop-loss, recall, efforts to return soldiers to tactical units, and accelerated recruiting are well suited to expanding psychological operations and civil affairs personnel; however, distinct manning issues reside in the reserve component. Even though these reserve units are not special operations forces, tracking their trends and issues is important for the Special Warfare Center because the center is responsible for all civil affairs and psychological operations training and doctrine.[18] Notably, civil affairs and psychological operations personnel in the reserve component are not required to attend a selection process nor language training.

Civil Affairs

Clearly invaluable in the past 15 years of war, civil affairs personnel provide unique support to "the warfighter by engaging the civil component of the battlefield," which will be crucial in a major war.[19] Civil affairs specialists maintain expertise in all facets of governance

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14   "Special Forces: The Early Years," Special Forces Association, January 7, 2017, http://www.specialforcesassociation.org/about/sf-history/; and Headquarters, US Department of the Army (HQDA), *Army Special Operations Forces Unconventional Warfare*, Field Manual (FM) 3-05.130 (Washington, DC: HQDA, 2005), J-1.

15   "History of Special Forces," National Guard, December 28, 2016, https://www .nationalguard.com/special-forces-history.

16   Cleveland, *ARSOF Next*, 24.

17   US Army, "Special Operations: John F. Kennedy Special Warfare Center and School," Military.com, December 19, 2016, http://www.military.com/special-operations/john-f-kennedy -special-warfare-center-and-school.html.

18   LTC Les Parks, *Civil Affairs* (Fort Bragg, NC: United States Army Civil Affairs and Psychological Operations Center [CAPOC], Fort Bragg, February 15, 2017), briefing slides; and MG Eric P. Wendt, *USAJFKSWCS Academic Handbook Fiscal Year 2015* (Fort Bragg, NC: SWCS, 2015), 12.

19   HQDA, *Civil Affairs Operations*, FM 3-57 (Fort Bragg, NC: SWSC, 2011), 1-6.

that helps engage local populations in developing a "stable and viable civil administration."[20] With the possibility of great urban decimation and displaced populations, civil affairs must grow at the same rate as the rest of the force.

In 2007, the 95th Civil Affairs Battalion was expanded into the 95th Civil Affairs Brigade due to increased demand for their capabilities.[21] In 2011, another unit, the 85th Civil Affairs Brigade, was formed to provide rapid deployment of language, regional, and cultural support.[22] Since the beginning of the Global War on Terror, civil affairs units have been among the most deployed in the US military. On the reserve component side, there are four civil affairs commands aligned to support regional combatant commands.[23]

Despite a heavy deployment tempo, active duty civil affairs units are currently experiencing a decline. The 85th Civil Affairs Brigade and two of its battalions were deactivated in January 2018.[24] This decrease in personnel will put additional strain on the civil affairs force and their doctrinal requirement to provide one company for every brigade combat team and Joint special operations task force.[25]

Units currently meet the requirements for active component Army Special Forces; however, the 95th Civil Affairs Brigade also supports all Joint special operations.[26] Therefore, in the event of a major war, the active component of civil affairs would have to be augmented to support all of the special operations components that would be deployed. Moreover, civil affairs would not have the capacity to cover the special operations of the National Guard, the US Navy and Marine Corps, numbered task forces, nor interagency operations.[27] This aspect means active duty civil affairs units will have to grow at a much faster rate than the units they will be required to support in a major war.

To alleviate some of these issues, USASOC may want to add SOF civil affairs capacity to the reserve components. Additionally, such personnel should be required to meet the same training and language requirements as active duty servicemembers in the same roles.

In the reserve component, the number of units are less of an issue than how the units are manned. Currently, civil affairs units are almost fully manned. Nevertheless, this statistic does not account for personnel who have not completed civil affairs training or whose rank or skill mismatches with staffing requirements.[28] These deficiencies are significant because they result in civil affairs units having many unqualified personnel despite being "fully manned."

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20 "What is Civil Affairs," Special Operations Recruiting Battalion (SORB), December 18, 2016, http://www.sorbrecruiting.com/SORB_CA.html.

21 "95th Civil Affairs Brigade (Airborne)," US Army Special Operations Command, December 16, 2016, http://www.soc.mil/95th/95thhomepage.html.

22 "85th Civil Affairs Brigade," GlobalSecurity.org, December 17, 2016, http://www.global security.org/military/agency/army/85ca-bde.htm.

23 "What is Civil Affairs," SORB.

24 Todd Pruden, "85th Civil Affairs Brigade Inactivated," *Fort Hood Sentinel*, February 8, 2018.

25 COL Jonathan Mapley-Brittle, email message to author, February 27, 2017.

26 Mapley-Brittle, interview by author, February 26, 2017.

27 Mapley-Brittle, interview.

28 G-1, *Delta Report* (Fort Bragg, NC: CAPOC, December 31, 2016), spreadsheet; and Mapley-Brittle, interview.

Reserve civil affairs units are also substantially over strength in the ranks of E1–E4.[29] Likewise, readiness rate distortions occur because the ranks of E5 through O4 are more depleted than some numbers would convey. These two factors account for significant manning issues.

In addition to the previously mentioned solutions, allowing the Reserves to make civil affairs an accessions branch so soldiers could directly join may assist with manning issues.[30] Because any civil affairs soldier that transitions to active duty will need to pass selection and language requirements, the active component would not be affected by this change. If this recommendation is implemented, however, the Army may want to consider changing the active duty SOF civil affairs military occupational specialty code to track their unique capabilities.[31]

Military Information Support Operations

A fully integrated psychological operations force is essential in major combat operations. Active duty military information support and reserve component psychological operations units have the ability to "develop campaigns to move an audience from one behavior to another using culturally relevant steps and programs."[32] Psychological Operations was able to do just this during the Persian Gulf War. In a concerted effort of leaflets, radio broadcasts, and loudspeaker appeals for surrender, they helped convince 44 percent of the Iraqi military to surrender.[33] This outcome is one of many examples of how a correctly apportioned psychological operations force can enhance every operation.

Reserve psychological operations units face manning issues similar to those faced by their civil affairs brethren, but they also have unit shortages. In 2014 the Army approved new rules of allocation for psychological operations, which changed the support structure for such units.[34] For the reserve component, a psychological operations group supports a corps. Under this construct, the Army is short one group. A psychological operations battalion supports a division; however, there are currently eight battalions supporting 16 divisions. Finally, 32 tactical psychological operations companies support 56 brigade combat teams, not including the support provided to the US Marine Corps.[35]

These numbers are surprising, but since not all brigades are deployed at once, the psychological operations groups have found ways to keep supporting warfighters. In a major war scenario, gaping holes will appear in this support. This environment means psychological operations has a wide divide between the current and projected force structure. This issue is complicated further by the attrition rate in the reserve component, which results in an annual loss of almost 18 percent of personnel to expired terms of service or to transfers to other units.[36]

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29 LTC Les Parks (G35, CAPOC), interview by author, February 24, 2017.

30 Parks, interview.

31 Mapley-Brittle, interview

32 Cleveland, *ARSOF*, 27.

33 Ed Rouse, "The Gulf War," Psywarrior, December 27, 2016, http://www.psywarrior.com/gulfwar.html.

34 David Farrington, email message to author, February 27, 2017.

35 David Farrington, *Psychological Operations Current Structure* (Fort Bragg, NC, SWSC, December 7, 2016), spreadsheet.

36 G-1, *Delta Report*.

The only positive side of the high attrition rate is the potential for an effective recall to active duty.

On the active duty side, the biggest gap in support is created with only one battalion dedicated to supporting every Joint Special Operations Task Force. Thus, psychological operations cannot support the current force structure. As with civil affairs, USASOC may want to add reserve psychological operations units to the special operations forces to make up for current shortages.

To increase the number of students in training, the qualification course leadership may find opportunities to improve efficiency. It is important to understand, however, that cultural awareness is a hallmark of Army special operations that is even more crucial in psychological operations. This characteristic means cuts to the training curriculum come with great difficulty. Nevertheless, some steps taken now can increase the likelihood of proper psychological operations support. First, consider more incentives to keep psychological operations soldiers in the force. Second, increase unit structure to levels that support the current force. Finally, if psychological operations manning is still lagging, USASOC may need to revert to the previous rules of allocation until additional personnel can be trained.

Ranger Regiment

Rangers have a long and heroic history. They have honed advanced infantry capability not found anywhere else in the world. To maintain their advantage, the Ranger regiment recruits from the rest of the Army to ensure it has the best infantry officers and noncommissioned officers available. Enlisted personnel come straight from advanced individual training or apply from other units and are required to pass a rigorous selection process.

The Ranger Assessment and Selection Program 1 (8 weeks) is for enlisted to junior noncommissioned officers, and Program 2 (5 weeks) is for noncommissioned officers, warrant officers, and officers.[37] Although the regiment would need to assign more assets for selecting soldiers, the time required for this process is not as burdensome as that required for the rest of the Army SOF community. Potentially, the Ranger regiment could match the growth rate of the rest of the Army and expand to six maneuver battalions in addition to achieving current efforts for the special troops and the military intelligence battalions.[38]

Despite having the least amount of obstacles to expansion in Army SOF, issues still exist. First, USASOC must decide if the six maneuver battalions would be structured as one, or possibly two, O6 commands. Second, because all recruitment for officers and senior noncommissioned officers comes from in-service sources, the Ranger regiment may get resistance from units losing soldiers. Third, the expansion also has to account for the high potential of combat losses, which could slow growth significantly.

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37   MAJ Gregory Escobar (75th Ranger Regiment RS35), email message to author, February 27, 2017.

38   COL Brandon Tegtmeier (commander, 75th Ranger Regiment), interview by author, January 16, 2017.

There are mitigating actions to help increase the size of the Ranger regiment until recruitment and selection can increase capacity. As with the rest of Army SOF, a stop-loss, recall to active duty, and adding contractors to be selection cadre could help. Rangers, however, have one advantage over the rest of Army SOF—most Rangers rotate into conventional infantry units and back again. The regiment loses approximately 200 infantry soldiers per year either to regular rotations to other units or to expiring terms of service. Assuming 50 percent attrition of recalled personnel, a five-year recall would allow the Army to fill about 500 infantry billets in the regiment quickly.[39] Many of the soldiers should be suitable for integrating into the maneuver battalions; however, physically limited soldiers could support selection billets or fill other noncombat roles. Because recruitment will need to be accelerated during a major war, one potential time-saving method for the Special Operations Recruiting Battalion would involve integrating psychological evaluations and other Ranger selection criteria into advanced individual training.[40]

Special Operations Aviation Regiment

The Army special operations aviation force has been flying sensitive missions for the Army since Task Force 160 was formed in 1981, after the failed rescue attempt of US hostages in Iran. The unit, dubbed the Night Stalkers, provides a unique deep penetration, special operations capability and unparalleled skill during hours of darkness. The unit has been involved in every major US operation since Grenada. Beginning as a battalion-sized organization, it has experienced sizable growth since its inception. Today there are five battalions—four maneuver battalions and one training battalion—as well as one Gray Eagle unmanned aerial system company manned, trained, and equipped by the Army Special Operations Aviation Command.[41]

As the only rotary-wing unit that is allocated to not only Army SOF but all special operations forces, the 160th Special Operations Aviation Regiment (Airborne) will need to expand significantly for major war.[42] With two additional special forces groups, twice as many Rangers, and undetermined growth in the special operations forces of the US Navy and Marine Corps, ideally Night Stalkers would also double in size; however, there are three categories of huge challenges to growth: "iron [aircraft], personnel, and sustainment."[43]

Encountering similar recruiting and training issues as other regiments, the 160th has the greatest impediments to growth because they have the most unique equipment requirements of the five regiments. No other country can match the technological capability that resides in the 160th. They receive already advanced aircraft and improve them—for example, the Army buys a CH-47 Chinook helicopter for approximately

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39   Escobar, interview.

40   MSG Kevin Nelson (noncommissioned officer in charge, force modernization, 75th Ranger Regiment), email message to author, February 15, 2017.

41   LTC William Garber, *Command Brief for Foreign Officers* (Fort Bragg, NC: US Army Special Operations Aviation Command [USASOAC], February 2, 2017), briefing slides.

42   LTC Mark Johnson, email message to author, February 21, 2017.

43   LTC Hunter Marshall (G-8, USASOAC), interview by author, February 1, 2017; and LTC William Garber (G-3, USASOAC), interview by author, February 1, 2017.

$14 million. The aviation command transforms that aircraft into a special operations version, MH-47, at the cost of an additional $22 million.[44]

Current orders to replace the unit's helicopters will be filled between 2017 and 2026.[45] Many issues associated with increasing current production will only extend the production timeline when competing against the rest of the Army.[46] As noted, there is no easy way to mitigate the lack of aircraft, and the possibility of significant combat losses further complicates increasing such capabilities.

To compensate for lack of aircraft, the Night Stalkers will need to scrutinize what missions truly need a SOF aviation capability. Forward deployed units have done this to some degree, but a rigorous process for allocating the specialized aviation assets is needed. Additionally, Special Operations Command needs to pursue greater aviation integration between special operations and conventional forces.[47] Potentially, USASOC could establish a reserve component force to support SOF aviation requirements that do not necessitate 160th expertise. Currently, there are Army Reserve units that perform similar functions, but there is no established relationship and these assets will likely not be available during a major war. These measures may alleviate some capacity issues, but manning will continue to be challenging.

From 2010 to 2016, the Army has underassessed the entire force by a total of 730 aviators, the equivalent of more than two brigades.[48] This lack of personnel has had a ripple effect in SOF aviation recruitment. Conventional units are now more reticent to allow their pilots to apply for the 160th. So, the first step in fixing the regiment's manpower issues is fixing such issues in Army aviation as a whole.

Unlike the Ranger regiment, most pilots do not leave the 160th for parts of their career. Although this practice retains experience within the unit, it may also be a fatal flaw. With the exception of a recall to active duty, there is no ready-made source of pilots. If a five-year recall to active duty were implemented, the 160th would garner up to 180 pilots, assuming a 33 percent acceptability rate.[49] This influx of personnel is a good start, but it is onetime.

Army Special Operations Aviation Command may want to consider the Ranger model allowing pilots to transition into, and out of, the 160th, which would have multiple benefits.[50] First, this policy allows the cross pollination of expertise into the conventional Army. Second, the policy provides a pool of personnel to draw from in the case a major war develops. Finally, units may be less apprehensive about allowing pilots to be selected for the 160th since their experience will create a positive long-term effect for the conventional force. Ultimately, if the 160th considers forcing pilots, crewmembers, and maintainers to serve in the conventional force, they will also have to increase the capacity of

44   Marshall, interview.

45   Ashley, interview.

46   LTC Robb C. Mitchell, "Rapid Expansion and the Army's Matériel: Is There Enough?," *Parameters* 47, no. 3 (Autumn 2017): 101–10.

47   Garber, interview.

48   Hunter, interview.

49   LTC Troy Worch (G-1, USASOAC G1), interview by author, February 1, 2017.

50   Hunter, interview.

the training battalion significantly. By investing appropriately now, any short-term issues caused by conventional service will be alleviated.

Much like manpower, unit sustainment cannot be overlooked. Unlike conventional combat aviation brigades, the 160th does not have an aviation support battalion. Battalion maintenance companies and the aviation maintenance support office, which is manned mostly by nondeployable contractors, provide much of this capability.[51]

Key aspects of the 160th's support package, such as the ability to overhaul aircraft away from its home station, are lacking. In the current fight, this deficiency is not a problem. But during extended deployments, the unit will need some expeditionary capability. Next, the unit depends on the supported SOF unit for bulk logistics requirements, which could not be maintained with current SOF sustainment assets. Thus, organizational change or planned augmentation to special operations sustainment battalions during complex operations, such as major war, may be needed.[52] Finally, with the possibility of the Special Operation Aviation Regiment being pushed forward to remote locations, the unit will need a fuel testing capability it does not currently possess.

This section only identifies a few of the disparate topics affecting special operations aviation. Any detailed investigation on expanding the regiment will need to address the above topics as well as others—such as the Aviation Foreign Internal Defense program, training pipeline efficiencies, expanding the training battalion, and size requirements for the Gray Eagle fleet.

Conclusion

Longtime Army special operators may look at this article with skepticism, which is understandable since shortcuts run counter to everything they have learned. More important, any plan to get Army special operations to the battlefield quickly runs the risk of breaking the SOF Truths regarding mass production and creating special operations after emergencies occur. This article, however, makes these recommendations using the perspective of an existential threat to the United States.

With America facing greater military competition, as well as friction from Russia and China, an escalation of force from one of many situations is not unthinkable. Army Special Operations Command must ensure plans and mechanisms to address major war scenarios are in place. To quote *ARSOF Next*, Army special operations forces must be prepared when the nation once again asks them to "respond to strategic and operational change much faster than other military elements or government agencies by transforming."[53]

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51   LTC Robert Patton (USASOAC G4), interview by author, February 1, 2017.
52   Johnson, email.
53   Cleveland, *ARSOF Next*, 27.

Commanding Military Power

Robert L. Bateman

I distinctly recall the warning given by my first instructor in computer programming. "Remember," he said, "the computer will do exactly as it is told. It will 'compute' any values you place into it, in exactly the manner that you tell it to. So if it's garbage that goes in, it's garbage that comes out." I did not know at the time that this is such a truism among computer scientists that it even has an acronym, GIGO.

War By Numbers, written by the head of the DuPuy Institute Christopher Lawrence, consists largely of graphs and charts that purport to demonstrate the effects of various factors upon combat success ratios. The book does not attempt to develop a new theory of war, per se, but claims that, its author "establishes what we know about conventional combat and why we know it. By demonstrating the impact of a variety of factors have on combat he moves such analysis beyond the work of Clausewitz and into modern data and interpretation" (back cover). No matter how you slice it that is a pretty lofty claim.

Unfortunately, in reaching for this "understanding" Lawrence exclusively uses databases created by the DuPuy Institute and formulas that are uniquely their own. And that is the insurmountable problem with *War By Numbers*, one that undercuts any claim it might have to move beyond Clausewitz. In this book there is a near complete lack of transparency and, therefore, also of reproducibility of the research or the means of analysis. The endnotes that do exist (and some chapters have only five or eight) are almost completely self-referential to yet other DuPuy Institute studies (available for a fee of course). In other words, we cannot tell what has gone into their computer analysis at all, and we have no insights as to what their computer algorithms may be. Thus, we cannot tell if there have been any mistakes, we have no idea what the quality of the research supporting those databases might be, or in almost all cases even what the original historical sources might have been. All of this information is proprietary to the institute, and if you want access, it will cost you tens of thousands of dollars, though what a customer might get for that money is unclear.

Like Isaac Asimov's character Hari Seldon and that other wonderful manipulator of reality, the *Wizard of Oz*, Lawrence hides his workings (and data) behind a curtain. In essence what he has done is produce charts and tables that show how the DuPuy Institute's computer-based projections match the "historical reality." But there is no way to determine if there is real and viable source material underneath these projections, or if some of the numbers have been fudged in order to make the outcome appear to match what they alone declare was the historical reality. Thus, a reader is effectively required to believe their de facto assertion, "trust us, we know more than you do."

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In short, what this book amounts to is a massive piece of corporate advertisement for the real money-maker for the Dupuy Institute, their contracted studies. It is a 374 page infomercial. But the kicker is that it is one that you are expected to pay for the privilege of reading.

In distinct contrast, there stands a new work of theory. It is supported with reproducible research, as well as a call for other academics to further the examination of the theory through the case studies presented. Ryan Grauer's *Commanding Military Power* is a solid work fusing evidence with a theory that seeks to explain. It is a book that professional soldiers, academic historians (and for that matter amateur historians), international relations specialists and politicians should read, consider, and as far as possible replicate and develop.

One of the most fruitful methods of advancing our incomplete understanding of war, in all permutations, is to introduce new intellectual concepts borrowed from other fields to help us make sense of the chaos of war. Clifford Rodgers quite successfully advanced the understanding of "military revolutions" by importing the genetic/biological idea of "punctuated equilibrium" in the 1990s. Clausewitz himself borrowed from then-developing ideas from the field of physics when he used the concept of "friction." Now Grauer, leaning upon the work of organizational theorists, (a field which heretofore dealt almost exclusively with business, economics, and political science) does the same to great effect.

In *Commanding Military Power*, Grauer initially observes that "from a theoretical perspective, no extant model of military power incorporates armed forces capacities to cope with and overcome the effects of uncertainty in combat" (9). To fill this gap he proposes something he calls "command structure theory." Simply stated, Grauer proposes that the best way to examine historical conflicts is to study and analyze the means that armed forces used to organize and manage information and uncertainty on the battlefield. This method, he argues, allows one to understand how much combat power that force may be able to generate in a given conflict. By adjusting components of command structure, such as the ratios of subordinates to leaders, the degree of centralization in decision making, and the communications network used to transmit and process data, a military force can match its structure to the particular environment in which it is fighting.

In developing his arguments, he examines four unique case studies, at least for Western readers. The first is a campaign from the Russo-Japanese War, the second is from the Chinese Civil War, while the third and fourth both come from the latter phases of the Korean War. Each case study is well researched, leans heavily upon primary sources, and is worth reading alone. But more importantly, because they are studies with reproducible research, they are open to critique and revision. Indeed, that is much of the point of the work. Grauer is explicit in this. Unlike Lawrence, he clearly invites readers and scholars to cross-check his work, unpack and engage with the theory he presents, and take that theory to the next level by applying it to other historical case studies for comparison and refinement. That is how scholarship is supposed to work.

Commentary and Reply

On "Military Force and Mass Migration in Europe"

Claude A. Lambert

This commentary responds to Matthew N. Metzel and John M. Lorenzen's article "Military Force and Mass Migration in Europe" published in the Autumn 2017 issue of Parameters *(vol. 47, no.3).*

In "Military Force and Mass Migration in Europe," Matthew N. Metzel and John M. Lorenzen convincingly articulated the seriousness of Europe's migration problem and its potential to destabilize US allies and partners in the region. They proposed solid recommendations for addressing the consequential challenges of mass migration but only briefly touched upon potential actions and activities to conduct before an orchestrated crisis begins.

Specifically, the authors did not highlight coercive engineered migration, which is a potential problem in the European theater. As Kelly M. Greenhill explains, "Those cross-border population movements that are deliberately created or manipulated in order to induce political, military and/or economic concessions from a target state or states" have been historically underrecognized, and their threat is underappreciated (*Strategic Insights* 9, no. 1 [Spring–Summer 2010]: 116–17). In short, coercive engineered migration can be considered a tool for operating in the gray zone—that awkward and uncomfortable space between traditional conceptions of war and peace.

In the European theater, Russia expertly uses unconventional warfare, or gray zone techniques, to deal with states and regions on the periphery of its federation, and it seems they are leveraging coercive engineered migration techniques to great effect. During and after Russia's violent annexation of Crimea, for example, there were reports of ethnic Russians moving into the peninsula. As of January 2017, upwards of 150,000 people have moved to Crimea, mainly from Russia, but also from other Eurasian states. At the same time, roughly 150,000 former residents, out of a total population of 2.3 million people, have left Crimea. This sudden and sizable demographic shift, driven mainly by migration, seems to be solidifying Russia's control of the peninsula.

In particular, liberal democracies are predominantly vulnerable to such events because, as Greenhill states, they have "codified commitments to human rights and refugee protection through" the Geneva Convention. International human rights and humanitarian laws establish "normative standards" for judging actions, obligating "states to meet the responsibilities" (*Weapons of Mass Destruction*, 136).

Thus, the migration threat seems to present a larger dilemma to US allies and partners in Europe than criminal or terrorist organizations embedding themselves in, or recruiting from, vulnerable or migrant

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populations. So, how can the US, its allies, and its partners seize the initiative, strengthen NATO's security posture and get "left" to counter this threat? What military capabilities might augment or complement the other elements of national power to identify and deter this phenomena?

Lastly, in addition to the authors' recommendation of "establishing a planning team focused on studying the problem of mass migration in Europe," intelligence and systems analysis resources would be needed to adequately assess the likelihood of a coercive engineered migration event (*Parameters*, 61). Rational strategic approaches to the problem require a common, compelling, and adaptive operating picture to orient and counter the threat quickly. Additionally, this viewpoint cannot be insular; it must account for the widest perspectives from the intelligence community as well as US agencies, allies, and partners since such migration is often concealed or "embedded within mass migrations strategically engineered for dispossessive, exportive, or militarized reasons" (*Strategic Insights*, 117). As the authors' rightly note, dealing with this complex challenge requires all of the elements of national power— particularly if an event is engineered by a revisionist actor to exploit their interests while obscuring their designs, methods, and intentions.

The Author Replies

Matthew N. Metzel

I greatly appreciate the interest and response of the reader concerning our recent article on the mass migration crisis in Europe and its impact to the security posture of our NATO allies. The reader correctly identified coercive engineered migration as a possible cause for at least some number of the spike in migrant activity that has recently plagued Europe. During initial research, I spent considerable time exploring this possibility, but a respected academic advisor steered us away from making this a central point of our argument. To be fair, Europe's spike in migrant activity from the Middle East and North Africa region involves a wide range of complex international factors, some of which may include coercive engineered migration from one or more nation-states; however, the degree of influence or the involvement of any particular nation-state is often difficult to quantify with any level of certainty.

The reader will note that we referenced Greenhill's academic concept of international actors employing "weapons of mass migration" against their enemies. Our research identified convincing evidence that terror groups were using the migration crisis to purposefully gain entry into Europe for strategic purposes. There is less convincing data that Russia (or any other nation-state) has played a direct or indirect role in orchestrating or leveraging the migration crisis. However, we do not rule out this possibility and invite the reader to join us on a potential future article that explores this concept further.

Book Reviews

Rebooting Clausewitz: On War **in the 21st Century**

By Christopher Coker

Reviewed by Dale C. Eikmeier, Assistant Professor, US Army Command and
Staff College

C arl von Clausewitz's *On War* may look more impressive on our
bookshelves, but Christopher Coker's *Rebooting Clausewitz 'On
War' in the 21st Century* will be more useful. Coker argues forcefully that
Clausewitz is not only relevant in the twenty-first century but still the
world's greatest war theorist, and those interested in the study of war
still need to understand his work. Coker believes that by "rebooting"
Clausewitz, his greatness as a theorist can be better recognized and
more fully understood. Just as modern physicists do not read Sir Isaac
Newton but also still know and understand his laws and principles,
military professionals and civilian members of the defense community,
need not wade through *On War* but must also understand Clausewitz's
theory of war.

To be clear, Coker is not advocating ignoring *On War*. He believes *On
War* is the most complete text on the phenomenon of war. And despite
the criticisms of Basil Liddell Hart, Martin van Creveld, John
Keegan, and others, Coker argues Clausewitz is still unsurpassed.
Admittedly *On War* is a "dense philosophical forest that few of us have
the ability or inclination to navigate alone" (prologue). Herein lies the
contribution of Coker's work. Military professionals, and war theory
instructors, now have a guide and do not need to navigate the
Clausewitzian forest.

Coker's work brings Clausewitz to life for a student audience. And let's
face it, when it comes to understanding Clausewitz, we are all students.
Coker departs from the traditional scholarly approach to Clausewitz
and uses a series of fictional seminar discussions between Clausewitz
and modern audiences. This is where he takes risks, but it is also the
strength of his book. The idea is to reach military and security
professionals that run from anything Clausewitz. The result is a
well-researched, well-sourced, highly informative, yet entertaining
analysis and explanation of Clausewitz's theories applied to the
contemporary environment.

The first fictional seminar is with cadets at the US Military Academy.
The venue is deliberate. Coker and his fictional, albeit accurately sourced,
Clausewitz admit that *On War* was for senior military members and
policymakers, and thus too advanced for cadets with little contextual
experience to appreciate it. However, Coker believes the foundation
for understanding Clausewitz's theories needs to be set early, hence the
cadet forum. The West Point discussion lays out the basics required
for understanding *On War*. The discussion covers what is theory, the
why and how of theory, and finally, what theory achieved. The cadets'
questions place Clausewitz's theories in the current era with Clausewitz
attempting to answer and reconcile his nineteenth-century experience
with the twenty-first century. With the instructor as moderator, and
linking the cadets' modern worldview with Clausewitz's explanations, he
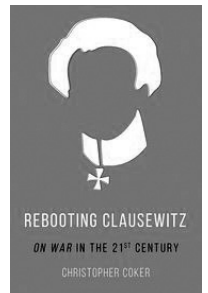
addresses many modern criticisms. The seminar-formatted discussion demonstrates the continued relevance of Clausewitz in the modern era.

The next seminar, takes place in a fictional Washington, DC, think tank in the context of the Iraq and Afghanistan Wars. Participants include Clausewitz, a journalist, a national security scholar and author, and a retired Marine Corps general. This panel represents many of the current critiques against Clausewitz and modern war. Topics include strategy, political purpose and its role in strategic planning, intelligence, the fog of war, and of course, the center of gravity. Even modern concepts such as the revolution in military affairs and "shock and awe" make cameo appearances. Many readers will find this section the most relevant as it explores the enduring qualities of Clausewitz's nineteenth-century theories against twenty-first century realities.

The final seminar, at the Military History Circle in London, focuses on the value of military history. According to Coker, Clausewitz used history to backup ideas with illustrative examples, ground theory in experience, illustrate a theory's possible truth, and prove a theoretical proposition. The discussion, more accurately described as an interrogation of Clausewitz, covers diverse subjects such as Newtonian and quantum physics, causality, mathematical predictions, the role of technology, and moral content. In these discussions, Clausewitz rebuts, explains, corrects, or accepts the validity of the criticisms, and thus provides the reader a point-by-point analysis of many modern critiques of Clausewitz.

Coker departs from the fictional seminar format in the chapter "What if Clausewitz Had Read Darwin." Here he adds balance by acknowledging Clausewitz's shortcomings and failings. Coker claims Clausewitz's theories may be illuminating, but not illuminating enough, because the objectives were too ambitious and at the same time too modest. To address these shortcomings, Coker "sticks his neck out" and "reboots" Clausewitz through the lens of Darwinism. This section is Coker's most significant and original contribution to both war theory and the study of Clausewitz. Coker postulates that had Clausewitz read Darwin (which was published 36 years after Clausewitz's death), he might have asked different questions on the nature of war. Coker applies Clausewitz to the Darwinian framework of origins, mechanisms, ontogeny, and functions, identifying where Clausewitz is silent and where he contributes to the body of knowledge.

Coker concludes with a chapter titled "If Not Clausewitz, Then Who?" The only other candidates, according to Coker, that address the theory are Sun Tzu and Thucydides. He describes Sun Tzu's work as a list of aphorisms divorced from context while Thucydides was an historian, not a theorist, who raised questions without answering them. For these reasons, Clausewitz is the gold standard *On War* theory which, if not read, should at least be understood.

Coker's fictional seminars and analysis give nineteenth-century theory twenty-first century legs. Thus *Rebooting Clausewitz* is not only a useful guide for both novice and experienced scholars but also an essential companion to *On War*. While *On War* may rest on the bookshelf, *Rebooting* will likely be on the desktop, dog-eared and tabbed.

On Tactics: A Theory of Victory in Battle

By B. A. Friedman

Reviewed by William F. Owen, Co-founder and Vice President of IJ Infinity Group

Annapolis, MD: Naval
Institute Press, 2017

256 pages

$29.95

Bottom line up front, you should read this book. That said, while I do recommend it, it is not without some serious issues.

The book is an attempt to construct a theory of tactics. The author justifies this ambitious goal on the basis that this has not been done to date. He simply states, "There has never been a true tactical theorist" (1). That might be correct, and possibly for a very good reason, but it would also be fair to state that many people have written very insightfully and usefully about tactics.

What is good, and possibly excellent, is that the author understands well enough, and advocates for, an understanding of tactics based in their utility to strategy and thus policy. He does so from the strategic theory primarily provided by Clausewitz. In that regard, and in my opinion, he cannot be faulted. This alone makes the work a notable and worthy addition to the library. Thus the basic argument of the book is that strategy can only be done as tactics, and tactics needs a body of theory as rigorous and useful as that which Clausewitz provided for strategy. He then goes on to provide a series of tenets, not principles, which should provide the basis of a theory of tactics. These tenets are grouped into JFC Fuller's framework of moral, mental, and physical categories. Any British officer will know these categories have long formed the United Kingdom's definition of combat power expressed as conceptual, physical, and moral. It is noteworthy that combat power is not tactics in the British framework.

This is where the problems begin because the author never explains how and why he made the choices he did, and he makes some extremely odd choices. For example, why Fuller? Fuller's theoretical body of work is far from infallible, and its utility is much debated. This might be said to be a matter of opinion, but Fuller is far more widely criticized and his ideas are far less certain than some imagine. In the case of conceptual, moral, and physical, the physical presides over all else. Ask any logistician. Sadly, the book is devoid of any real discussion of logistics.

While the author cites Foch's 1903 *Principles of War* there is no discussion of the core functions—surely one of the most widely used tactical frameworks Foch ever developed and discussed as a campaign planning tool linking strategy with tactics in one coherent form. Foch is also absent from the discussions on so-called mission command and attack by infiltration all of which were featured in this 1903 work.

While *On Tactics* champions the human element of war, Jim Storr's *Human Face of War* is cited exactly once despite being directly relevant to almost everything the author has to say, especially when it comes to firepower, maneuver, shock, and surprise. Friedman may wish to assert there are no true tactical theorists, but Jim Storr is about as close as you can get, and his work also notably addresses and discusses items such as the core functions plus a great deal more relevant to tactics.
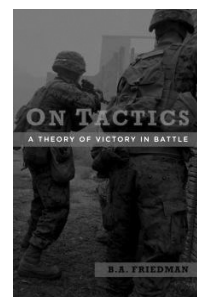
Robert Leonhard's work *The Principles of War for the Information Age*, and his wider body of work, is far too summarily dismissed despite its wealth of relevance to what the author is trying to say and its provision of excellent conceptual frameworks that would have served this work well.

Hans Delbrück's Clausewitz conjecture, which is critical to connecting strategy with tactics, is wrongly cited. He never mentions Clausewitz and is relegated to a section on counterinsurgency instead of being central to what Friedman says about strategy having to serve tactics. The author simply seems unaware of this fairly major point.

The main problem with this work is that the author is, either by accident or design, clearly intent on not being seen as standing on the shoulders of those who have tackled the subject before him even when they have skillfully and comprehensively presented many of the points he wishes to make.

This should not detract from the basic utility of the book, but tactics is not a little known subject. What creates "victory" is a vast field of literature. It is a practical skill presided over by considerable physical limitations, and there is a massive body of literature which covers it, some risibly poor but some excellent and useful.

As strategy can only be done as tactics (ends and means) the true results of tactics lie in their effect on policy. That said, there is no worthwhile discussion on rules of engagement whose sole purpose it is to align tactics with policy (means with ends), which is the very point the author wants to champion. Given their centrality to modern operations, this is another odd choice.

Despite all my criticism, very little—or nothing—in the book is actually incorrect or misleading. Most of the major problems are those of omission that would have served the writer's wider cause.

On Tactics contains some excellent sections, and truly insightful observations, most of which will be obvious to most readers. *On Tactics* addresses a number of issues with precision and skill and says much that practitioners can agree with. If you are new to the subject, then you will be provided with a strong starting point that is unlikely to set you on the wrong path. *On Tactics* more than passes the mark for making soldiers curious about their profession and should be read by all those who are.

Clausewitz

By Bruno Colson

Reviewed by Vanya Eftimova Bellinger, Visiting Professor, US Army War College
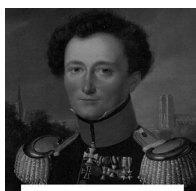
Bruno Colson

Clausewitz

PERRIN

Paris: Perrin, 2016

513 pages (in French)

€27.00

At the very end of absorbing the new biography of Carl von Clausewitz, Bruno Colson cites the great French philosopher Rene Girard. For Girard, the Prussian military theorist's seminal treatise *On War* allows the French to see their history and national hero Napoleon through different eyes (391). The same could be said for Colson's book. While written in French and primarily intended for a Francophone audience, this biography enables a wider circle of readers to see Clausewitz not just as the Prussian officer and the German patriot, as he is often portrayed.

From the pages of Colson's book, Causewitz emerges as a man who wrote in German but whose mindset radically transcended his homeland's physical and intellectual borders. He was edified by the great promises of the Enlightenment and often clashed with the world shaped by the French Revolution. Despite his deep personal resentments against Napoleonic France, he advocated moderation after its defeat, for he understood the political necessity of winning the peace. This ability to see the world and war in complex and global contexts, beyond a narrow national, militaristic, and momentary framework, transformed Clausewitz from a Prussian officer into one of the West's most influential strategic thinkers.

Bruno Colson, a professor at the Universite de Namur (Belgium), is also the author of *Napoleon On War*, a comprehensive collection of texts and authenticated quotes by Napoleon on his vision of war, published in English in 2015. In it, Colson built upon the framework of Clausewitz's seminal treatise to organize Napoleon's ideas, and accordingly invited comparison between the two.

Scholars often study Clausewitz's life solely as the blueprint for *On War*. Colson writes mostly about the man, and while discussing Clausewitz's prolific oeuvre, he trusts readers to make connections and form conclusions. As a military historian, Colson is at his best when he describes the battles Clausewitz participated in and analyses his possible role and contributions. The chapter devoted to his time as a prisoner of war in France, "A *Bildungsreise* in the Enemy's Country," reveals many new details, as the French police kept the foreign officers under close surveillance and the records are still preserved. Napoleon personally read the reports and often left delightful comments about these, in his words, *officiers fanfarons* (braggarts), although regretfully he never mentioned Clausewitz by name (89).

In 1815, by Waterloo, while the Duke of Wellington's Anglo-Dutch Army and the rest of the Prussian Army fought against Napoleon, the Prussian III Corps held Marshall Emmanuel de Grouchy by Wavre. The decision to retreat in the face of an enemy twice as strong would darken the image of Clausewitz, chief of staff of the III Corps, in the times of the buoyant German Empire and militaristic Third Reich. While devoid of glory, this was nevertheless the prudent course of action, for it preserved his men's lives, especially since the main battle was already won. Hard choices like these, Colson argues, make Clausewitz appear modern and close to our understanding about what war is fought for (385).

Contrary to popular modern academic assertions, Colson disputes the notion that a sudden crisis occurred in Clausewitz's thinking around 1827, causing him to rethink and rewrite his seminal theory. Famously in the note of July 10, 1827, published as a preface of *On War*, the military theorist asserted there were two types of war: one with the objective to overthrow the enemy and "render him politically helpless" and the other with limited objectives, such as forcing the enemy to the negotiating table. As stated in the note, Clausewitz envisioned a careful rewriting of his treatise in order to explore the two types throughout its pages.

For Colson, this groundbreaking idea pertained less to a sudden change of mind but was instead a product of a long and careful reconsideration (384). Clausewitz's diverse experiences between 1793

and 1815, which Colson meticulously emphasizes on the biography's pages, revealed the complexities of real war and how narrow, misguided, and counterproductive "the imagination of war as a series of victories and victory battles" was (385). Again, Clausewitz demonstrated he was an individual who was well ahead of his time and could, through a careful thought process, project both timeless and innovative concepts.

Colson's *Clausewitz* deserves to find its English-language publisher and wider audience. It is a carefully researched and well written scholarly work. Yet thanks to its dynamic and accessible style and lively details, it reads like a gripping novel. To assist its readers, the French publisher *Perrin* also offers clever props such as a short chronicle of Clausewitz's life, year by year, and an index of geographical locations with their nineteenth-century names and statehood, followed by the modern ones. An American edition would probably require some amendments to accommodate an audience less knowledgeable of European history.

More On War

By Martin van Creveld

Reviewed by F. G. Hoffman, National Defense University

The Israeli historian Martin van Creveld established his reputation as a scholar decades ago. His early works, especially *Command in War* and *Supplying War: Logistics from Wallenstein to Patton*, became and remain mandatory requirements for any professional military library. These works combined solid history with clear, blunt, and enduring insights. More recently van Creveld has written on cultures of warfare and about the changing face of war. These books spoke more to contemporary context in Israel. But with *More On War* van Creveld returns to military theory and provides an occasionally provocative update to Sun Tzu and Carl von Clausewitz.

In his introduction, the author asserts a number of shortfalls in the published writings of the two major strategic theorists from whom we extract the most meaning today:

- neither "has anything to say about the causes of war or the purposes for which it is fought (3)
- both "tend to make war appear more rational and more subject to control than it is" (4)
- both "come close to ignoring the implements of war, (i.e. the field broadly known as military technology)" (5)

These statements will surely surprise students of war familiar with Clausewitz's concepts about the pervasive presence of passion, enmity, fog, and friction at all levels of war. But it *is* true that Clausewitz chose not to pay attention to the role of technology in war. Clausewitz lived in an age where military technology was static and equally available to protagonists. Scholars, including Hew Strachan in *Clausewitz's On War: A Biography*, argue the longevity of Clausewitz is precisely because he ignored the transitory changes of technology for the more critical role of politics, moral forces, and the human dimension.

Military strategists will find van Creveld's strategy chapter to be particularly valuable. In this most original chapter of the book, and the least tied to the canon, van Creveld contrasts the polar tensions of any "strategy in action." These include

- maintenance of aim versus flexibility;
- concentration versus dispersion;
- battle versus maneuver;
- breakthrough versus envelopment;
- advance versus retreat; and
- strength versus weakness.

In this chapter the real major choices available to commanders, like direct versus indirect, annihilation versus dislocation, or attrition versus exhaustion are not adequately addressed. Readers should see Antulio J. Echevarria's *Military Strategy: A Very Short Introduction* for these strategic options. This is an interesting approach to military strategy, ideal for use in classroom and Joint Professional Military Education settings; however, its connection to Sun Tzu and Clausewitz is limited.

More On War contains numerous creative chapters that seek to extend our understanding of theory in its contemporary context. Given the classical theoreticians were seemingly land-centric, van Creveld adds a chapter on war at sea. However, the chapter does not apply the key elements of policy, fog and friction, culminating points, or centers of gravity to naval warfare.

Other contributions include chapters that Sun Tzu would have been intensely interested in. These include a chapter on air, space, cyber war, as well as one on nuclear war. Air power has been the subject of intense development for many years, but few of its advocates find use in Clausewitz. Both Colonel John Boyd's and John Warden's writings were suffused with connections to Clausewitz. *On War's* centers of gravity, friction, fog of war, and decision-making were central to Boyd's understanding of war. Warden used the term "center of gravity" several dozen times in *Air Campaign*, and explicitly cited Clausewitz nine times. Neither embraced every element of the classics, but both found value in starting with them to make their own arguments about generating military effects. Several writers in the last decade have worked to apply the traditional theories to new domains like cyber—such as Craig Greathouse's useful comments in "Cyber War and Strategic Thought: Do the Classic Theorists Still Matter?" in *Cyberspace and International Relations*. Likewise, Denmark's Jeppe T. Jacobsen's work *The Cyberwar Mirage and the Utility of Cyberattacks in War—How to Make Real Use of Clausewitz in the Age of Cyberspace*, has relevance. Van Creveld could have exploited those insights to underscore the utility of the canonical theories to these modern dimensions.

Another innovation was the author's inclusion of a chapter on law. The security field has taken an interest in lawfare partially due to apparent Chinese exploitation of legal maneuvers as part of their "Three Warfares" concept. There is more work needed in this area, and readers seeking ideas should review the writings of the Heritage Foundation's expert on China Dean Cheng.

In the conclusion, those opening misinterpretations of Clausewitz and Sun Tzu come full cycle. The author adopts a Hegelian technique and offers a synthesis more in keeping with the fundamental teachings:

- "A great many things have not changed, nor do they seem about to change. The challenge war presents and the demands it makes to those who wage it do not change either"(196–97).

- "The fundamental principles of strategy are dictated less by the tools it uses than by its own nature" (198).

- "War is a flexible and inventive beast. Like some mythical shape-shifter, it will adapt itself without giving up its essential nature" (199).

These conclusions are far more consistent with the perspectives, one from the East and one from the West, that frame our basic understanding of war. There is a reason that Clausewitz remains relevant today. Both Sun Tzu and Clausewitz can be accused of being both endlessly frustrating and consistently invaluable. After reading *More On War*, their continued utility will be self-evident. No one else has been able to grasp the essence of war so succinctly—even if seemingly convoluted at times. Sun Tzu may be even more valuable in an emerging era of great-power competition with an Asian rival, and the greater odds of surprise and deception today.

Their value is augmented, not replaced by van Creveld's chapters on the various domains and dimensions of war that today's practitioners must contend with. The author deserves credit for helping modern students of war apply classical thinking to contemporary times. Some readers might be concerned that van Creveld has committed heresy. However, as Colin Gray once quipped "*On War* is not 'Holy Writ.'" It is simply the best distillation of historically based theory we have.

More On War is recommended for those with a bent for thinking and for specialists in the various domains like airpower or cyber that are still searching for their own Prussian sage.

REGIONAL STUDIES

China's Military Transformation

By You Ji

Reviewed by Andrew Scobell, Senior Political Scientist, RAND Corporation
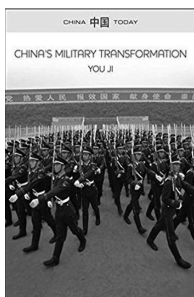
Cambridge: Polity, 2016

284 pages
$22.95

One of the world's leading experts on the People's Liberation Army (PLA) has produced an important book. Readers should be clear at the outset: *China's Military Transformation* is not a comprehensive or up-to-date assessment of the PLA under People's Republic of China (PRC) President and Central Military Commission Chair Xi Jinping who has dominated Chinese politics since 2012. Moreover, this volume does not provide a thorough overview or analysis of the organizational reforms of China's national defense establishment announced in late 2013 and underway in earnest since 2015. Those seeking an up-to-date assessment of China's defense reforms must look elsewhere. This

reviewer highly recommends the fine occasional paper authored by Phillip C. Saunders and Joel Wuthnow, *Chinese Military Reforms in the Age of Xi Jinping: Drivers, Challenges, and Implications* (Washington, DC: National Defense University Press, 2017).

So what is *China's Military Transformation* about? The study is an illuminating and authoritative examination of some major facets of the PLA under the tenures of Xi Jinping's two immediate predecessors— Jiang Zemin (1992–2002) and Hu Jintao (2002–12). This book is perhaps best described as the long delayed sequel to You's earlier volume, *The Armed Forces of China*, published by IB Tauris in 1999. The book under review makes good use of in-country interviews and primary Chinese language sources to solidly address "a select spectrum of PLA reform" (22). You pens illuminating chapters on civil-military relations, the PLA's role in national security policymaking, and developments in aerospace, maritime, and the paramilitary People's Armed Police. There is also a particularly fascinating chapter on the evolution of military strategy since 1949. What is missing, however, is comparable coverage of the PLA's strategic rocket force or ground forces.

Despite these omissions, a particular strength of the study is the rare combination of authoritative analyses of both the hard and soft power dimensions of the PLA. Most examinations of China's military modernization focus almost exclusively on hardware—numbers and capabilities of new and anticipated weapon systems and platforms— while overlooking key softer elements such as strategy and civil-military relations. On the question of military allegiance to the Chinese Communist Party (CCP), You makes the important but overlooked observation that "the PLA has little incentive or need to disobey the Party" because the military is a highly privileged organization that tends to be well resourced by the CCP (29).

A recurrent theme permeating this volume is that over the years the United States—both in its policies, military activities, and own defense transformations—has been an underappreciated impetus for change in China's military. The PLA has undertaken three waves of modernization since 1949. The first wave, which occurred in the 1950s, was in response to the Korean conflict when PRC leaders realized the serious limitations of the World War I-era Chinese forces when confronting the World War II-era US military on the battlefield. The second wave of PLA modernization occurred in the 1980s when China emerged from its Maoist-era trance to an embarrassing performance in a short border war against Vietnam in 1979. This prompted the PLA undergo extensive reforms and downsizing with the US military as its prime exemplar.

The third wave of PLA reforms began in the 1990s prompted by the recognition that, despite considerable military reform over the pre-vious decade, China's armed forces remained far from the equal of the armed forces of any other great power. What was particularly shocking for top Chinese political and military leaders were the impressive high-tech displays of the US military prowess in the 1991 Persian Gulf War, the 1995–96 Taiwan Strait crisis, and the 1998–99 air campaign against Kosovo, which included the accidental US bombing of the PRC embassy in Belgrade (125–35). (Many in China believe that this was an intentional act.)

Where the PLA's aircraft carrier program is concerned, You focuses on the array of aspirational maritime operational requirements carriers are intended to meet, while omitting the fact that this program has also been driven by a deep desire to compete with and counter the impressive aircraft carriers of the US Navy (201–14). American carriers have signaled on multiple occasions US power projection capabilities and persistent presence in the western Pacific, including during the Taiwan Strait crisis noted above. The combined impact of these displays provided the impetus for the PLA to launch the shift from mechanized forces toward an Information Age defense establishment. Not surprisingly, the model for this effort was the US military.

You writes with considerable insight as well as from personal experience—he literally grew up in the PLA because his father was a general and he was raised in a military compound. This book is required reading for PLA watchers and anyone seeking to understand the process of China's incomplete military transformation.
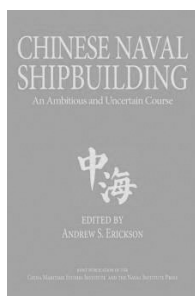
Chinese Naval Shipbuilding: An Ambitious and Uncertain Course

By Andrew S. Erickson

Reviewed by Carl O. Schuster, Visiting Professor, Hawaii Pacific University

Annapolis, MD: China Maritime Institute and The Naval Institute Press, 2016

332 pages

$28.83

China's expanding fleet and operations have raised questions about its future capabilities and intentions. However, few examine China's other maritime components, its merchant marine, coast guard, maritime militia, and the shipbuilding industry that supports them all. That industry experienced an unprecedented 13-fold increase in capacity from 2002 to 2013—one encompassing more than just shipyards. Naval shipbuilding integrates heavy industry, electronics and information technology, and and large-scale propulsion systems to construct weapons platforms that balance human habitation, fuel, ordnance, aviation support, and seakeeping requirements to meet a nation's operational and strategic needs. As such, it provides insight into the future plans and intentions of the People's Liberation Army's Navy (PLAN). In writing *Chinese Naval Shipbuilding*, Dr. Andrew Erickson and his team have made a vital contribution to understanding China's ability to build and maintain its maritime forces, especially the PLAN.

China's shipbuilding industry is the world's largest, constructing more ships, and a greater variety of them, than any other. It has given Beijing the world's third largest merchant marine and the largest fishing fleets. China also has the world's largest coast guard and is on track to possess the world's second largest navy by 2020. But numbers alone do not tell the story. Via a combination of imitative innovation, extensive study of foreign developments, and heavy investment in technology, China has leapfrogged several stages of combat systems, sensor, and weapons developments.

An industry and scientific community once devastated by war and the Cultural Revolution has evolved from producing copies of obsolescent post-World War II designs 40 years ago to one manufacturing and

installing the latest sensors, weapons, communications, and information technology into hulls that incorporate the most recent advances in stealth features and shipbuilding techniques. By 2025, PLAN will qualitatively match, or be closely equivalent to the United States Navy. Rapid though that improvement has been, it is the result of an evolutionary design process driven by a combination of changing strategy and mission requirements as defined by the PLAN's Naval Research Institute; and the Naval Armaments Research Institute's (PLAN's research and development community's) judgements.

During the last 30 years, China has modernized its doctrine as well as its military equipment to meet the nation's evolving national security requirements. The brief Sino-Vietnamese War (1979) exposed the limitations of Mao's "People's War Doctrine," forcing a reevaluation of China's approach to war. The resulting active defense doctrine of the mid-1980s extended the PLAN's mission to one of active defense of the near seas. The "near seas" consisted of the seas near China's coast out to the "First Island Chain"—Spratly Islands, Indonesia, Philippines, Taiwan, and the Japanese Islands. The distance and level of PLAN's naval operations has been expanding slowly and steadily since. From a defensive mission, the PLAN now must safeguard China's overseas interests, protect its sea lines of communications, and contribute to international security. That last mission is exemplified by the PLAN joining the UN-mandated Indian Ocean anti-piracy operations in 2008. Then civil strife and conflicts forced the evacuation of thousands of Chinese citizens from African and Middle Eastern countries. In addition to providing valuable logistical and operational experience, the deployments strengthened China's diplomatic and strategic engagement with Africa, the Middle East, and ultimately Europe. The PLAN is now a permanent fixture and exercise partner in those waters.

China's technological base initially struggled to keep pace with fleet requirements but caught up within the last decade via foreign acquisition and derivative development. Post-2009 PLAN warships are no longer equipped with 1950s-era radars and weapons systems. They carry new longer-ranged surface-to-air missiles derived from Russian designs but largely retain the PLAN's initial focus on anti-surface ship warfare, with newer and more deadly anti-ship cruise missiles. Ships commissioned since 2012 have Vertical Launch Systems for their missiles, accelerating their combat engagement cycles and increasing their ordnance load.

To improve power projection, China acquired a derelict ex-Soviet aircraft carrier in 1998. Commissioned in September 2012, the ski-ramp equipped *Liaoning* has served as a fleet training and doctrinal development tool, enabling the integration of naval aviation into fleet operations. Future carriers will incorporate a conventional takeoff and landing system, giving the carrier greater striking power, range and flexibility. The PLAN started installing land attack cruise missiles on surface ships and submarines in 2013. But, anti-submarine warfare (ASW) capabilities remained underdeveloped. More ships were capable of embarking ASW helicopters but the ships were limited to hull-mounted sonars until variable depth sonars and towed arrays became available in 2014.

The submarine force has seen similar evolutionary upgrades since the late 1980s. Hull designs became more streamlined and propulsion systems more powerful and reliable. In the 1990s, Chia acquired Russian

Kilo-class submarines with anechoic coatings that reduced vulnerability to active sonar detection and battery technology that increased underwater speed and endurance. China also purchased air-independent-propulsion technology a decade ago. It then incorporated all those technologies in its *Yuan*-class conventional submarines. However, for prestigious reasons, the Communist Party rejected using foreign technology in its nuclear-powered submarine program with costly results. China's early nuclear powered submarines, the Xia ballistic missile and *Han*-class attack submarines were underpowered, noisy, and difficult to operate. Their problems forced a 20-year hiatus in nuclear submarine construction. The nuclear-powered *Jin*-class SSBNs and *Sang*-class SSNs built since 2011 have better sensors and more reliable power plants, but they retain their predecessor's noisy acoustic signatures.

Dr. Erickson's team has written the most comprehensive study of China's shipbuilding industry extant. The book's maps and tables clarify and strengthen the narrative. *Chinese Naval Shipbuilding* presents a detailed, in-depth assessment of the PLAN's future. Relying extensively on Chinese-language sources, the authors base their analysis on intimate knowledge of the economic, political, and strategic factors underpinning China's maritime activities from the PRC's beginnings. They discuss economic factors most other books ignore. They note China's slowing economy will constrict future defense funding growth and Beijing eventually must shift resources from construction to maintenance as expanded naval operations increase the wear on fleet units. Funding global operations will also come at the expense of construction monies. Well organized, insightful, and succinctly written, this is a must-read for serious students of China's maritime and economic developments.

Beyond Crimea: The New Russian Empire

By Agnia Grigas

Reviewed by Richard J. Krickus, Distinguished Professor Emeritus at the University of Mary Washington and former Oppenheimer Chair for Warfighting Strategy at the US Marine Corps University.

In August 1993, as a convoy of Russian trucks rumbled through the cobblestoned streets of old-town Vilnius, the last one carried an ominous message: "We will be back!" The locals who applauded the exit of their "elder brothers" took comfort in the thought that never again would Russian tanks traverse the byways of Lithuania. Confidence along these lines later surged when the Baltic democracies entered the North Atlantic Treaty Organization and rejoiced in the safe harbor of Article 5.

But President Trump caused alarm in Eastern Europe when, on a spring trip abroad, he failed to reaffirm Washington's commitment to collective defense. What's more, when German respondents were asked whether or not their country should safeguard the security of the Baltic democracies in face of Russian armed aggression, most answered "No!" Not surprisingly, citizens of other former Soviet Russian republics are especially unnerved by the thought that, after the 2008 war in Georgia and the Crimean putsch several years later, they will be the next victims of "little green men."
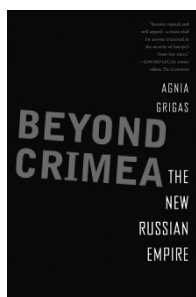
To put these concerns in perspective, Agnia Grigas has written an important book, *Beyond Crimea: The New Russian Empire*, which explains why these concerns prevail throughout much of the old Soviet space. Well written and powerfully argued, this book rests on extensive research and interviews of people residing in the "near abroad." Grigas's narrative justifies speculation among Russian experts that Vladimir Putin is bent on the "re-imperializaton of Russia." Toward this end, he hopes to exploit the 25 million ethnic Russians and over 100 million Russian speakers, "the compatriots," who once resided in the Union of Soviet Socialist Republics, were considered a financial liability by Moscow upon the Soviet Empire's demise, and became an asset as the Russian economy grew with a spike in oil prices. They served as a vital component in Putin's campaign to restore the Russian empire and, in turn, disembowel both the European Union and NATO. This aspect of Putin's foreign policy has not received the attention it deserves by American security analysts, and Grigas's book ably fills this gap. Simultaneously, her unmasking of this bold strategic campaign will be useful to those who are considering the pros and cons of a reset in relations with Russia, which is one of the major elements of President Trump's foreign policy.

The people who are the central focus of her book represent a significant segment of residents in Central Asia, the Baltics, Ukraine, Georgia, and other former political entities that were once subjects of various Russian empires—Czarist, Soviet, and today. Putin's campaign involves seven stages:

1. Soft power. The Russian language, the Russian Orthodox Church, and extensive media outlets and business enterprises under Moscow's control that penetrate all the societies in question

2. Humanitarian polices. Real and alleged human rights violations to promote turmoil within targeted societies

3. Compatriot policies. Honoring former Soviet policies such as pensions for the elderly and educational opportunities for the young

4. Passportization. Compatriots without citizenship status who have passports and retain the opportunity to return "home"

5. Information warfare. "Aggressive use of propaganda to destabilize, demoralize, or manipulate the target audience and achieve an advantage over an opponent including by seeking to deny, degrade, corrupt or destroy the opponent's sources of information" (44)

6. Protection. Scrutinizing the soft power represented above to display hard power

7. Annexation. Formal or de facto annexations of the territories where compatriots reside

Beyond Crimea is a valuable source for defense and foreign policy analysts and practitioners who are taking stock of the pros and cons of resetting relations with Russia, which according to conventional wisdom may be sabotaged by America's preoccupation with our 2016 presidential election. But that distraction will have little bearing on Putin's drive to impose Russia's influence upon the former entities of the Union of Soviet Socialist Republics. To a significant degree, because of Putin's skillful exploitation of the compatriot issue, he has successfully disrupted

the Euro-Atlantic Alliance. Among other things, he has forestalled—perhaps permanently—Georgian and Ukrainian efforts to join the EU and NATO while fostering serious discord between the Europeans and Americans. American strategists who are working to counter this campaign of disruption should read this book and consider some of the author's countermoves while acknowledging some disturbing facts.

First, the West must appreciate that Putin's campaign is real and not a flight of Cold War fancy. We must not adopt the realist perspective that all of these countries "belong" to Russia, and it is foolhardy to think otherwise. Furthermore, Grigas observes it is a profound intellectual mistake to accept the Kremlin's view of the status and nature of the compatriots. In her interviews, she found people so identified may favor Russian TV and share feelings of solidarity with other former Soviet citizens but prefer living in their new homelands and not Putin's Russia.

That said, the West must recognize that scenario is being outplayed in Europe's hybrid warfare with Russia. Putin's drive to restore Russia's imperial outreach is showing results as many eastern-bloc countries in the EU and NATO have sought closer ties with Moscow. Furthermore, the Americans and the Europeans have assumed that when the ball is in the soft-power court, they are favored to win, but the fact may be just the opposite as recent events indicate. In response, the West should develop aid programs, including education and training, for many of the countries that are Putin's target. The EU and NATO must "create information alternatives to Russian propaganda" and prepare "for Russia's hybrid warfare" (255–56). This means "countering transnational paramilitary groups, as well as engaging separatist territories and frozen-conflict zones" (256). At the same time, Grigas has words of criticism for the countries at risk. They are not paying sufficient attention to legitimate grievances of their compatriots regarding arms, drugs, human trafficking, terrorism, organized crime, and collapsed economies.

Prominent scholars, such as Steven Blank, and diplomats, such as Michael McFaul, have justifiably applauded Grigas's book, but one cannot ignore one of its shortcomings—that is, not spending more time on the role organized crime plays in the Kremlin's reimperialization campaign. Russian criminal organizations, often with the complicity of indigenous mafias, play a critical role in corrupting the economic and political systems of all former Soviet entities. They continue to exploit the transition period from communism to a free market where even otherwise patriotic cultural, economic, and political elites are vulnerable to kompromat because of dodgy practices on their part or maturing legal systems. In short, Russian bankers and business tycoons are so entangled with organized crime figures it is impractical to deal with them as separate entities. The same holds true of the oligarchs and their involvement with Russian security institutions. Clearly, more work must be done on this score, but that is the subject of another book.

Finally, in light of the disarray that afflicts the Euro-Atlantic Alliance today, there is no reason to be optimistic that the Western response to Putin's reimperialization campaign will be up and running any time soon. Planners at the Departments of State and Defense must rectify that situation as soon as possible

NATO's Return to Europe: Engaging Ukraine, Russia, and Beyond

Edited by Rebecca R. Moore and Damon Coletta

Reviewed by Elie Perot, PhD candidate, Institute for European Studies (IES), Vrije Universiteit Brussel (VUB)

The troubles in Ukraine have compelled NATO to shift its attention back to the Old Continent. After years during which collective defense was not at the front stage of the Alliance's preoccupations, the renewed focus on this mission is a small revolution. In brief, NATO is back in Europe and back to its original raison d'être.

But, to what extent is this true, and to what extent should it be the case? To put it differently, in the wake of the Ukraine crisis, how has NATO struck a balance between diverging geographical priorities and between its three self-assigned missions (i.e., collective defense, crisis management and collective security)? And what should the future equilibrium look like? These are the questions to which *NATO's Return to Europe: Engaging Ukraine, Russia, and Beyond* intends to provide an answer.

As indicated by the editors, the book's chapters can be grouped under three broad sections. The first one focuses on the major strategic issues facing NATO today. The opening chapter by John R. Deni argues NATO's current force posture is ill-prepared to deter conventional aggression by Russia as a consequence of the continuous decrease of allies' armed forces—despite the adaptation and reassurance measures recently adopted. As underlined by Schuyler Foerster in the subsequent chapter, however, the continuing relevance of extended deterrence for NATO should not let us forget that such a strategy inevitably raises perennial credibility concerns and dilemmas. Foerster warns against extending the deterrence guarantee towards NATO's partners such as Ukraine and Georgia, as this would result in a "dilution" of the guarantee. In turn, Andrew T. Wolff weighs the prospects for further enlargement of NATO to encompass Ukraine. Contemplating the respective trade-offs entailed by Ukraine's membership, or by the present status quo, the author argues then in favor of a third option, which would be to renounce enlargement of NATO—an appeasement signal sent to Moscow—while establishing another type of relationship with Kiev to encourage democratic reforms.

In the fourth chapter, Magnus Petersson examines to what extent the global and the regional ambitions of NATO are pushing the Alliance into incompatible directions. Expeditionary strategy and territorial defense are two approaches that complement one another, as both presuppose a certain degree of interoperability and offensive capabilities. In a similar vein, Sten Rynning shows several lessons learned by NATO in Afghanistan can be put to good use in future contingencies: the need to share the same politico-strategic vision among Allies, the necessity to adopt a comprehensive approach, and the requirement of close coordination with operational partners.

The second section of the book deals with NATO's partnership policy and security cooperation with Russia. Ivan Dinev Ivanov assesses

the relationship between the various patterns of institutionalization of NATO's partnership agenda and the compliance of the Alliance's partners with its security policies. Of particular interest is the description of NATO's central partnership dilemma between extending the "liberal security order" in Europe, for example, to Ukraine or Georgia and keeping a stable relationship with Moscow. Continuing this discussion, Rebecca Moore shows that, although the Ukraine crisis has made clear that NATO's Article 5 does not extend to its partners, the Alliance should not be intimidated into renouncing the liberal order through its partnership policy. The last chapter of this section, by Damon Coletta, delves into the opportunities for NATO-Russia technical cooperation, in particular on missile defense. Hindered in many ways since the Ukraine crisis, technical cooperation is nonetheless partially ongoing and it should be expanded in order to generate positive spill-over effects for the relationship between NATO and Russia.

The final group of contributions is more eclectic. Huiyun Feng focuses on the impact of the Ukrainian crisis on the Russia-China-US triangle. If the Russian intervention in Ukraine has contradicted the principles of noninterference and of the respect of state sovereignty defended by China, the crisis has also brought Russia and China— driven by a common rivalry with the United States—to forge closer ties in the economic, military, and political realms. Finally, the conclusion of the book, by Stanley R. Sloan, puts the significance of the Ukrainian crisis for NATO into a broader historical perspective by analyzing the evolution of the Alliance's identity through time. The volume closes on the idea of building a stronger "transatlantic community" through a deeper cooperation between NATO and the European Union.

In terms of analysis, *NATO'S Return to Europe* delivers a very robust and updated overview of the Alliance's current strategic situation. One may notice some overlap between contributions, although this may be unavoidable in an edited volume. Individually, the chapters do not provide a direct answer to the overall theme of the book, but by reading the chapters successively, the reader may sketch an overarching conclusion.

In terms of policy prescription, some recommendations advanced by different contributors may not accord with one another, notably because of a divergence in their assessments of Moscow's benign or hostile intentions. From different diagnostics follow distinct remedies. Gauging which of these policy options are sound is ultimately a matter of political judgement, but the necessity of "a Schuman Plan of some sort" between NATO and Russia may raise more skepticism than more conventional proposals contained in the book (212).

Some readers may regret no specific chapter has been devoted to the very issue on which the book ends, namely the relationship between NATO and the European Union. One could argue that some of today's hottest policy proposals, the creation of a "military Schengen," for example, precisely revolve around this complex relationship.

In any case, these are minor reservations. The book should be of great value and interest for practitioners and students of transatlantic relations.

Technology & War

Nanoweapons: A Growing Threat to Humanity

By Louis A. Del Monte

Reviewed by Robert J. Bunker, Adjunct Research Professor, Strategic Studies Institute, US Army

The author of *Nanoweapons*, Louis A. Del Monte, has a corporate background in microelectronics, sensors, and integrated circuits at the micro- and nano-technology levels. He has also written earlier books on artificial intelligence and time travel (theoretical) to which this book on the subject of nanoweaponry is, in many ways, a natural progression. The subject focuses on nano (one billionth of a meter), as opposed to micro (one millionth of a meter), technology manipulation and the increasingly evident weaponization potentials this offers to states, corporations, terrorist organizations, and potentially even brilliant—yet amoral and unstable—individuals.

The 246-page work is divided into acknowledgements, an introduction, three thematic parts (The First Generation of Nanoweapons, The Game Changers, and The Tipping Point) spanning 12 chapters, an epilogue, three appendices, notes, glossary, and an index.

Nanotechnologies—unbeknownst to most of us—are becoming ubiquitous in the consumer, industrial, and medical industries with a product value exceeding $1 trillion dollars (43). Further, they have a projected value of $6 trillion by 2025, which would place their product valuation at about 7 percent of the entire global economy (34). In addition, active American (leader), Chinese (a near follower), and Russian (a distant third) nanoweaponry programs exist at the classified level (67). While the majority of information pertaining to these programs is shrouded in secrecy, Del Monte has been able to synthesize enough disparate open source intelligence together to create basic outlines of US military service initiatives as well as those belonging to a number of other nations—both potentially belligerent as well as allied (45–75, 191–203).

The initial generations of nanoweapons as discussed in the work clearly function as enhancers of present conventional—even nuclear—weaponry as well as sensors, body (or tank) armor, and a host of other forms of matériel. For example, nanoparticles added to explosives or even nukes are able to enhance their efficiency and destructive yield and, in some instances, even allow for their miniaturization (11, 47–48). It is not this component of the work, however, which is its real importance. Rather, it is the potential longer-term technological trends some decades away where the strategic implications of this advanced weaponry form become significant. These are derived from the projected emergence of advanced computers with artificial intelligence, such as singularity computers, that will, at some point, exceed the combined intellect of humanity coupled with the development of self-replicating smart nanobots (139–42).
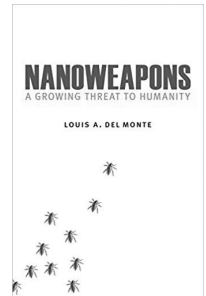
My impression from the book, in which I agree with the author's primary concerns, is that nanoweaponry is rapidly becoming the third rider beside nuclear and biological weapons in a potential technological apocalypse. This form of weaponry offers a new set of horrors that can be inflicted upon humanity. The subject matter appears very science fiction-like and is reminiscent of Frank Herbert's 1982 novel *The White Plague* in which a molecular biologist creates a designer bioweapon that becomes a scientific reality, which exceeds even the early projections of that genre.

That said, a basic criticism of *Nanoweapons* is that essentially no literature review was conducted related to the small number of earlier works on the technology predating this effort. While K. Eric Drexler's celebrated 1986 text *Engines of Creation* is highlighted—as are other important nanotechnology related events and over 150 notes (typically Internet citations) related to data points, technologies, and governmental programs—specific topical works are ignored. For instance, no mention is made of Daniel and Mark A. Ratners' *Nanotechnology and Homeland Security*, Jurgen Altmann's *Military Nanotechnology*, or Margaret Kosal's *Nanotechnology for Chemical and Biological Defense.* Another criticism is that Del Monte—by his own admission—is a technologist and not well versed in policy, or for that matter, international affairs (187). So when he makes military and arms control suggestions or envisions the international system of 2050, he is not always authoritative in his arguments.

Even with these inherent criticisms, given the glaring dearth of unclassified works on nanoweaponry, the book fills an important and critical gap in an emerging and little-understood area of twenty-first century military science. The area is one that the author, accurately proposes will result in the rise of powerful nanoweaponry-armed states (and, potentially, even corporations), and where a misstep with this cutting edge technology could someday potentially result in an extinction-level event equivalent to that of a strategic nuclear exchange taking place between the Russia and the United States.

The Future of War: A History

By Lawrence Freedman

Reviewed by Robert J. Bunker, Adjunct Research Professor, Strategic Studies Institute, US Army War College
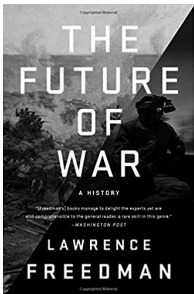
New York: Public
Affairs, 2017
400 pages
$30.00

Lawrence Freedman, the author of *The Future of War: A History*, is an Emeritus Professor of War Studies at King's College London and has had a long and illustrious career, which he points out is by no means over. His is a familiar name to the *Parameters* readership—due both to his decades long series of highly acclaimed books written on war and strategy and his contributions to this journal; see, for instance, *Beyond Surprise Attack* (Summer 2017) which draws upon *The Future of War*—the focus of this review.

The work has been written as a historiography of future-war thinking and projections—not as a projection of future (around mid-twenty-first century) warfare itself. It predominately draws upon the perspectives

of the United Kingdom and the United States, due to their sequential positions as dominant global powers, and encompasses thought, theory, and military affairs related to the late mid-nineteenth century into the contemporary and emerging eras (xix). The book is divided into three parts: the Franco-Prussian War of 1870–71 through the end of the Cold War (1989), 1990s through contemporary issues, and developing and future concerns. These three historical sequences are dominated by multi- and then bi-polarity (such as great powers and superpowers); unipolarity (the United States as the last remaining superpower), state-fragility, and the rise of violent nonstate actors; and resurgent multi- or bi-polarity along with the concurrent emergence of high-tech weaponry. The book is well referenced, has an extensive bibliograpy, and an index for keyword and name searches.

The approach utilized in *The Future of War: A History* is one that:

> locates the writing on future war in the concerns of the time. The aim is not just to assess how prescient different writers were, or whether they could have done better given what was known about new weaponry or the experience of recent wars, but to explore the prevailing understandings about the causes of war and their likely conduct and course. How people imagined the wars of the future affected the conduct and course of those wars when they finally arrived. Unanticipated wars, in forms that had not been imagined, left participants and commentators struggling to understand where they had come from and how they might best be fought (xix).

Much of the work's value for the practitioner exists in its final couple of chapters. Chapter 24 "Coming Wars," for instance, initially highlights Major General Robert Scales's five schools of future wars thinking (264–65). Chapter 25, "The Future of the Future of War," on the other hand, revisits important themes discussed in the book related to the forecasting of knockout blows (such as quick victory scenarios) (277–79), the significance of the development of nuclear weapons on future war thinking (280–81), whether the America's present position as the predominant military power may continue (282), ring of institutional boundaries related to the state, and even war and peace itself, as a result of gray-zone conflicts (284–85).

Criticisms of the work are difficult to find, but a slight issue potentially exists in the author's ongoing use of thematic chapter foci—essentially, the minivignettes, such as those, focusing on barbarism, cyberwar, robots and drones, and megacities in some of the later chapters—which provide a quick and dirty overview of a theme along with some dominant concepts pertaining to it sourced to well-known scholars—for example Mary Kaldor's *New Wars* (143–44) or Dunlap's "lawfare" (201–2). This fast paced "short video clip" approach may lead the lay or undergraduate reader to readily accept the lessons learned without needing or wanting to understand the full extent of the argument Freedman presents.

In summation, Freedman's *The Future of War* would be highly useful for graduate and War College level military strategy courses and those focused on better understanding the rationale behind and biases inherent in producing visions of future warfare. While some general readership interest may exist for the work, its arguments—and a reader's ability to contextualize them along the continuum of late mid-nineteenth century military developments—are too daunting for undergraduate level study. Still, the work is extremely well written and an erudite product produced

by a renowned military theorist. It should, without reservation, be considered a welcome addition to both the personal library of the more seasoned scholar as well as that of the senior level officer.

War in 140 Characters: How Social Media is Reshaping Conflict in the Twenty-First Century

By David Patrikarakos

Reviewed by James Farwell, Associate Fellow in the Centre for Strategic Communication, Department of War Studies, Kings College
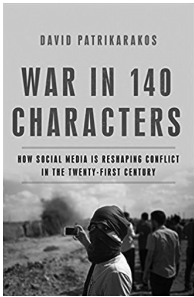
New York: Basic Books, 2017

320 pages

$17.67

This lively account describes how Twitter and Facebook are changing the dimension of warfare. He argues social media has helped to dismantle traditional information and media hierarchies. That point has been well made elsewhere. Patrikarakos's contribution is to bring alive the realities of this change through the experiences of individuals dealing with the Middle East, Russia, and Ukraine to weaponize social media.

The stories of Palestinian Farah Baker and two Israelis, Lieutenant Colonel Peter Lerner and David Rubenstein, show how social media can create global impact.

Sixteen years old, Farah bore witness to Israel's 2014 incursions into Gaza. Her credibility lay in her status as an eyewitness. Photographs and vivid language brought home the emotion and horror of a little girl trying to survive battlefield violence. She used Twitter to highlight the most extreme effects of war, garner sympathy, and build public support for Gaza by showing the extent of the carnage that the Israel Defense Forces (IDF) was wreaking. "BOMBING CHILDREN IS NOT OKAY," she tweeted. "That when u know that HUMANITY DIED. #Gaza."

Her tweets show how users reacting in real time can powerfully bypass media filters and articulate ground realities. Using media to tell a story that detailed what she was living through, Farah defined a powerful message: war caused children to suffer. She showed that controlling the narrative mattered as much or more than kinetic warfare.

Imaginative and brilliant Israelis such as Lerner and Rubenstein proved resourceful. Israelis had to show they were not targeting civilians. They responded rapidly, using YouTube to generate powerful visuals to get out their narratives. Sending out clear and compelling content caused legacy media—broadcast networks—to pick it up. Israel thus refocused the perspective through which actions should be judged. Their technique started sentences with verbs and created titles and subtitles for the illustrations of the battlefield violence, which bolstered credibility.

In Ukraine, Anna Sandalova proved the power of Facebook in assembling a volunteer network that supplied Ukrainian soldiers fighting Russian-backed separatists. The author's account of the effort provides a primer on how to use weaponized Facebook for troop support. Notable is the account of how Elliot Higgins proved that crowdsourcing intelligence can beat government bureaucracy. He and a volunteer team proved that Russian-armed separatists shot down Flight MH17.

Interesting but less impressive is Patrikarakos's account of Russian trolling. That topic has been better covered elsewhere. The section lacks depth in articulating Russia's doctrine of hybrid warfare, Attributed to Chief of the Russian General Staff Valery Gerasimov, it calls for a "hybrid" capability for which the Internet is one tool in the arsenal. Patrikarokos's story of Russian troller Vitaly Bespalov is interesting. But his account fails to explain, as others have, the trolling operation, and the analysis of Putin's strategy could use greater dimension.

Patrikarakos's account of how the Islamic State used social media to recruit individuals like Sophie Kasiki is well told but adds nothing to what has been previously written. The final section discusses the State Department's Center for Strategic Counterterrorism Communications, supplanted today by the Global Engagement Center, in countering such narratives. Neither entity has proven successful.

Bottom line. This book is definitely worth a read. The author is a fine journalist. While imperfect, the book's strengths add strong insight and keen understanding into a new, potentially decisive element in conducting engagement and waging conflict in today's threat environment.

Irregular Warfare

Eisenhower's Guerrillas: The Jedburghs, the Maquis, & the Liberation of France

By Benjamin F. Jones

Reviewed by Raymond A. Millen, Professor of Security Sector, Peacekeeping and Stability Operations Institute, US Army War College

In *Eisenhower's Guerrillas*, Benjamin F. Jones examines the operations of Jedburgh teams in support of the Allied campaign for France in 1944. Formed into three-person teams, comprised of American, British, and French service members, the Jedburghs began parachuting into France just prior to D-Day in order to organize, equip, and train the various French resistance groups, the Maquis, in guerrilla warfare. Altogether, 93 Jedburgh teams deployed to France, organized tens of thousands of guerrillas, and coordinated the delivery of hundreds of thousands of weapons and munitions.

Jones's research unveils new details regarding the Allied use of the Maquis during the liberation of France. By delving into American, British, and French war archives, as well as interviewing Jedburgh and Maquis veterans, Jones provides fresh perspectives regarding Eisenhower's intent with, and ulterior motives for, the Jedburgh mission. Jones expands on the history of the Jedburghs by tying together the planning and implementation of their mission, the involvement of other Allied special forces—often at cross purposes—with the Maquis, and the reasons for successes and failures among the various Jedburgh teams.

Operating through the Maquis, the Jedburgh mission was to support the Normandy invasion by sabotaging rail and road bridges, ambushing
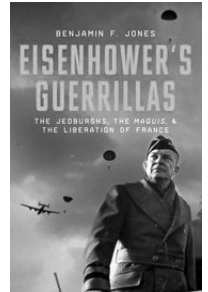
German occupation troops in Brittany, and actively interdicting German units moving to the Normandy beachhead. Counterintuitively, Supreme Headquarters Allied Expeditionary Forces (SHAEF) and the Special Forces Headquarters (SFHQ) stressed that the Maquis were not to instigate a wholesale insurrection for fear of indiscriminate German reprisals against the population. Restricting Maquis activities until after the Normandy invasion, SHAEF and SFHQ sought to preclude German and Vichy French counterespionage operations to neutralize the Maquis prematurely.

As more Jedburgh teams parachuted into the French interior during June and July, 1944, the Allied invasion of southern France (early August) prompted a change in mission—preventing German forces in southwestern France from withdrawing to the east. The results were mixed: German armored and mechanized divisions managed to avoid capture; however, the Maquis forced the surrender of one German infantry division. Ultimately, the failure to ensnare substantial numbers of German troops permitted a defensive line to be established in eastern France. One important lesson from the latter stages of fighting in France is that the Jedburghs and the Maquis were more effective when rear areas existed, but less so once German divisions began streaming eastwards.

The Jedburghs faced numerous challenges. This political tension inhibited cooperation, and these groups refused to cooperate with one another due to these differences. Paradoxically, the communist resistance groups were better organized, motivated, and fought more effectively, a fact the Jedburghs quickly recognized and supported.

The Jedburghs's inability to arm hundreds of thousands of Maquis who enthusiastically materialized after the Normandy invasion stemmed from various causes. Significantly, SHAEF and SFHQ vastly underestimated the number of French who wanted to end the German occupation and replace the Vichy government. Successful supply drops required good weather, appropriate moon phases, and secure drop zones, which rarely aligned. Communications between the Jedburgh teams and SFHQ to coordinate the airdrops was also problematic when communications sergeants were injured or the radios were destroyed. Finally, Eisenhower wanted to limit the number of armed Maquis (less than 120,000) to prevent their activities from spiraling out of control.

For Eisenhower, the Jedburghs served a higher purpose than disrupting German operations, a revelation that Jones explains in detail. President Franklin D. Roosevelt and Prime Minister Winston Churchill's persistent refusal to recognize General Charles de Gaulle's provisional government, French Committee of National Liberation, until the fall of 1944, posed significant challenges for the successful prosecution of the war. To optimize combat power on the front, Eisenhower sought to have de Gaulle's provisional government assume governance functions at the local and national level so as to minimize the need to secure the rear areas with combat troops.

Accordingly, Eisenhower appointed French General Pierre Koenig as a SHAEF field commander, making him responsible for the French Forces of the Interior and the various French military delegates, as well as control of the Maquis through the Jedburgh teams. As the Allies liberated France, Koenig incorporated scores of Maquis groups into the

Free French Army. In this manner, de Gaulle enjoyed the political support of the French people and was able to assume control of government.

Jones's account of the Jedburghs is often repetitious and confusing, which is understandable given the complexity of French and Allied attitudes and agendas regarding the political landscape, the plethora of personalities involved, and the magnitude of the Jedburgh mission. Fortunately, Jones provides two appendices on the French resistance leaders and the Jedburgh teams, outlining names, assigned regions, and deployment dates. The maps depicting Jedburgh locations and activities are also essential for reader understanding.

For strategic leaders, *Eisenhower's Guerrillas* provides useful insights in the use of resistance groups in occupied territories in conjunction with the execution of conventional military campaigns. Jones emphasizes that Jedburgh-like teams are quite effective in occupied enemy territories but fail dismally in enemy countries with domestic resistance groups. He concludes such resistance groups lack the requisite passion, organization, and wherewithal to overthrow the government of a police state. Strategic leaders will find Jones' history of the Jedburgh teams and his keen insights invaluable.

Blood Sacrifices: Violent Non-State Actors and Dark Magico-Religious Activities

Edited by Robert J. Bunker

Reviewed by Nathan Jones, Associate Professor, Department of Security Studies, Sam Houston State University

*Blood Sacrifices: Violent Non-State Actors and Dark Magico-Religious Activitie*s is an edited volume that addresses some of the more extreme violence found on the twenty-first century criminal and insurgent battlefields. Editor and author of a particularly strong chapter, Robert Bunker has assembled a strong cast of authors including Dawn Perlmutter and Paul Rexton Kan to explore this understudied topic. The general thrust of their argument is that the role of blood sacrifice and dark magic symbols, is understudied, under-recognized and under-appreciated in the modern study of violent nonstate actors (VNSA).

In addition to the preface and introductory chapter, the book consists of five topical essays, one review essay, four book reviews, and a postscript. Various chapters introduce case studies on the use of dark magico-religious activities—that are so defined because "they involve morally reprehensible acts directed at other human beings"—including case studies of al-Qaeda, the Islamic State, Boko Haram, the Lord's Resistance Army, and Mexican drug trafficking organizations such as Los Zetas, the Beltran Leyva Organization, and La Familia Michoacána.

Dawn Perlmutter's preface is masterful and its introduction of etic and emic cultural anthropological concepts are useful for those outside the anthropology discipline. Her argument is that a refusal to acknowledge some of these VNSAs engage in dark magic violence has led scholars to ignore an important motivation and factor in these violent acts. Rational choice theorists are at a loss in these types of cases, and the
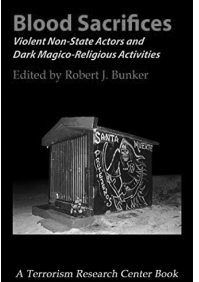
dominance of these methodologies has stifled our understanding of and willingness to even acknowledge VNSA's use of dark magic.

Bunker's introduction defines and operationalizes dark as "criminal in nature and involves morally reprehensible acts directed at other human beings." He acknowledges that dark magico-religious criminals are a small subset of all VNSAs in a useful chart, which provides a framework for the analysis. As a researcher of Mexican drug trafficking organizations, I enjoyed Bunker's chapter on dark magico-religious violence in Mexico and his discussions of the Saint Death, Santa Muerte, which graces the cover art of the volume. Bunker argues that while organized crime or rational choice explanations are not incorrect, "a much deeper social process can also be said to be taking place." He goes on to argue traditional social norms are being supplanted by norms of criminality, drug use, and violence.

This volume has already received significant attention on Borderland Beat, a popular webpage covering border security issues, and was reviewed by Patrick Corcoran for Insight Crime, another popular and respected website covering organized crime in the Americas. While I agree with Corcoran's critique that viewing VNSAs through the economic and political motivation lens is still best, though he does recognize additional study is needed, the authors of this volume illustrate the importance of acknowledging and understanding the dark magico-religious aspects of their behavior.

Further, authors such as Rexton Kan acknowledge how the rational choice and economic understandings of VNSAs are not mutually exclusive with dark magico-religious practices. In his chapter on drug use by organized criminals, guerrillas, and terrorists, Kan describes how VNSAs incorporate drug use to enable gruesome killings that build a reputation. Rexton Kan acknowledges the instrumental use of extreme violence by terror groups and cartels to strike fear in the population and rivals. A careful reading of Bunker makes clear he does not reject rational choice explanations but sees deeper underlying phenomena at play in an evolutionary or devolutionary process. This point could have been pushed further to meld the rational choice theories with emic anthropological perspectives on the use of dark magic violence by VSNAs.

Lisa J. Campbell's Islamic State, al-Qaeda, and Boko Haram, dark magic violence case study chapter is illuminating for those seeking to understand the role ritualized executions can have in increasing the internal cohesion of enemy fighters. She provides useful insights such as Islamic State continued drug use, which is non-Islamic, pushing it in the direction of a criminal network rather than a political insurgency.

As Corcoran argues in his review of *Blood Sacrifices*, there is no systematic research telling us exactly how widespread these phenomena are, such as what percentage of criminal or insurgent organization members engage in this activity. This level of aggregate data is vexingly hard to obtain and, even if it were fluid, criminal networks and insurgencies are dynamic. As the various authors persuasively note, however, the practices are evolving and even when limited, have a wider symbolic impact upon the VSNAs and are thus worthy of study and attention.

The Forgotten Front: Patron-Client Relationships in Counterinsurgency

By Walter C. Ladwig III

Reviewed by Jacqueline L. Hazelton, Strategy and Policy Department, US Naval War College

New York: Cambridge University Press, 2017

360 pages

$28.97

In *The Forgotten Front: Patron-Client Relationships in Counterinsurgency,* Walter Ladwig III argues that a liberal great power is more likely to coerce a counterinsurgent government into making reforms when it makes its support for its client conditional. Imposing tit-for-tat conditions on aid and other types of support, Ladwig argues in this scholarly investigation, tells the counterinsurgent government clearly that it must make the demanded changes in its behavior if it wants to get more help.

The Forgotten Front makes the valuable and often overlooked point that counterinsurgent governments backed by a liberal great-power sponsor face significant domestic costs if they implement their sponsor's demands for reform. The interests of patron and client align on defeating insurgency, but often little more. Reducing corruption such as nepotism, expanding political participation, and initiating other liberalizing reforms will deprive the host nation's elites of the benefits that they are fighting to protect (23). This is particularly a problem for the host nation if it is focused on the short-term need to defeat the insurgency quickly, Ladwig argues (34). Repression may quickly defeat a challenge but increase violence longer term. The government's liberal sponsor, meanwhile, believes reforms will drive insurgent defeat and lead to greater political stability in the longer term, though reform may be destabilizing in the shorter term. The important related point Ladwig also underlines is that the patron has relatively little leverage over the client because it has already identified client survival as an important security interest.

Ladwig focuses on how the patron can increase the likelihood of implementing reforms to professionalize the counterinsurgent military and increase political participation or otherwise reduce the grievances driving the insurgency. The lavish provision of aid, he argues, is unlikely to produce the desired changes in counterinsurgent government behavior. He bases his argument on analysis of three US interventions, in the Philippines against the Huk from 1947–53, in South Vietnam from 1957–63, and in El Salvador from 1979–92. Ladwig identifies specific US demands for reform and its behavior toward the client (conditionality or inducement, sticks or carrots), and then evaluates whether the counterinsurgent government complied with US demands or not, and if so, to what degree.

His policy recommendations are sensible:

1. Expect tense relations with the client.

2. Do not fear coercing allies in crisis.
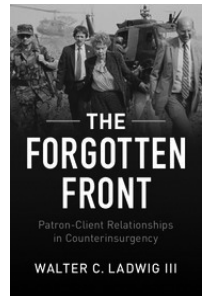
3. Make conditions clear, measurable, and realistic.

4. Prepare for internal opposition.

5. Cultivate ties with local reformers.

This clearly written, well-researched study brings welcome attention to counterinsurgent government interests and the client government's ability to resist patron pressure. Ladwig's book fits well into mainstream counterinsurgency studies with its assumption about the need for reforms to defeat the insurgency but is more rigorous in its theoretical and empirical analysis than much other work in this area.

One surprising gap is the limited reference to the work of Douglas J. Macdonald, whose wonderfully named *Adventures in Chaos: American Intervention for Reform in the Third World* makes an argument similar to Ladwig's. Ladwig cites Macdonald for his concept of the commitment trap, in which a great power's commitment to its client's survival reduces the great power's leverage over that client (46). But Macdonald, like Ladwig, finds that a tit-for-tat relationship with the client is most effective in attaining reforms. In Macdonald's study, the patron increases its leverage over the client by bargaining for specific reforms and providing support contingent upon implementation of the previously specified actions by the client government. Macdonald, like Ladwig, also finds unconditional commitments to the client mean less success in coercing the client to implement reforms. The studies are not identical, of course, though two of the authors' cases (the Philippines and Vietnam) are the same.

As with any scholarly work, there are limitations to the findings in *The Forgotten Front*. Ladwig considers only grievance-based insurgencies with significant popular support and those in which insurgents rely on the populace for their existence. In addition, the study examines only cases of US intervention during the Cold War. These scope conditions properly raise questions about to what degree these findings may apply to cases beyond the three studied. It is also not clear how the author identifies and measures leverage and degrees of policy implementation.

The author also does not consider the relative cost to the client of different reforms and different types of reforms. Ladwig notes that military aid is of particular interest to the counterinsurgent government but might have drawn this thread throughout his analysis (313). A government is more likely to make policy changes that cost it relatively less than other demanded changes, and it is more likely to make policy changes that gain it more desirable benefits. Thus client compliance is more likely on less costly reforms and on military reforms.

No one book can answer all questions, of course. *The Forgotten Front* raises important questions for further study. The most pressing questions involve client interests and behavior, including the relative likelihood of client implementation of different types of reforms. Other questions raised here likely to lead to further fruitful analysis include the degree to which reforms are necessary for insurgent defeat, and to what degree, if at all, symbolic reforms help defeat an insurgency (141).

Gangs and the Military: Gangsters, Bikers, and Terrorists with Military Training

By Carter F. Smith

Reviewed by Robert J. Bunker, Adjunct Research Professor, Strategic Studies Institute, US Army War College

The author of *Gangs and the Military: Gangsters, Bikers, and Terrorists with Military Training*, Carter F. Smith, possesses a unique blend of Army-gang investigative experience, primarily gained in the 1990s, and advanced academic qualifications that provide him with a deep understanding of this national security concern as well as many insightful perspectives related to the area of military-trained gang members (MTGMs). On a positive note, the work also has the endorsement of a number of well-respected gang researchers with considerable field time under their duty belts.

With a forward by Al Valdez, a former gang unit supervisor in Orange County, CA, and the afterward by George E. Reed, a former Commanding Officer, US Army Criminal Investigation Command battalion, Fort Bragg, NC, the work focuses on "the intersection of gang life and military services" with the gangs representing violent nonstate actors (2). As specified in the work itself, a military-trained gang member "is defined as a member of a street gang, prison gang, outlaw motorcycle gang, or domestic terrorist group who appears to have received military training either directly or indirectly" (2). Chapters five and six highlight gang activity in the military and civilian communities, respectively, and the criminality—including numerous homicides—that such members have engaged in.

The fact that gang members are increasingly using military-like tactics on the streets of the United States is made clear to the reader. The threat these individuals represent elicits the author to propose "it would make sense to respond to gangs whose members have military training (whether in or out of the military) as if they were insurgents" and recommend that a counterinsurgency approach, initially focused on intelligence gathering and analysis should be followed to contend with them (153).

Unsurprisingly, given such concerns, the book conceptually draws upon the third generation gangs (3 GEN Gangs) model of which John P. Sullivan and the reviewer are proponents (21–23). This model, developed in the later 1990s, discusses the evolution of street gangs through turf (1st), drug (2nd), and mercenary (3rd) generations of sophistication and how the more evolved 3 GEN Gangs—Mara Salvatrucha (MS-13) and Los Zetas type entities—are becoming a significant threat to domestic security despite being a minority representation of gangs. This model is in variance with more traditional criminological- and sociological-based gang models, which focus on delinquency and deviance and are devoid of any form of gang-derived national security threat potentials.

The reviewer found the work to be very well written and engaging, with the overview on early gangs, from the seventeenth through the mid-twentieth centuries, and their connections to the US military quite fascinating from a historical perspective. It has been written with
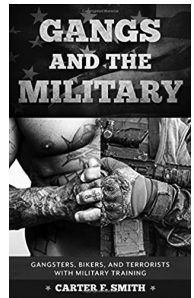
professionals, not academics, in mind which makes it more readable than more densely written scholarly tomes. Critiques of the book are relatively minor and focus on three primarily style and layout issues. First, the work could benefit from a selected references section. Paging through over 30 pages of notes to determine which works have been consulted in the book can be rather tedious. Second, the notes section suffers from overcitation of the works drawn upon, with full bibliographic information then continually being provided rather than simply using an "ibid." Third, the use of stock photos tends to debase the value of this unique and important work. All of these shortcomings could easily be addressed in a second edition of the work.

The book has few, if any, equals with other works on this subject outside of some US governmental gang reports—such as National Gang Intelligence Center publications—or possibly Matt Kennard's *Irregular Army*, which is more of a journalistic account of gang members, extremists, and other undesirables joining the US military after September 11, 2001. I see great value in the work for military readers as it candidly chronicles an internal personnel issue—and metastasizing homeland security issue—typically shunned by the services due to bad publicity.

In closing, *Gangs and the Military*—due to widening recognition of this concern—should be of increasing interest to US military officers and national security scholars well into the future. It provides them with an understanding of how security threat groups have gained a foothold in the armed services, the implications of their military-trained members being unleashed on their constituent communities, and the author's recommendations for the military to address this issue (201–7). These recommendations focus on providing commanders tools and options to mitigate the emergence, existence, and effects of military-trained gang members in their units as well as advocating a points system for agencies to determine the gang involvement of military personnel.

UTILITY OF WAR
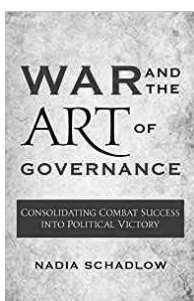
War and the Art of Governance: Consolidating Combat Success into Political Victory

By Nadia Schadlow

Reviewed by Conrad Crane, Chief of Historical Series of the US Army Heritage and Education Center, US Army War College

All of us who teach at the US Army War College have experienced moments of epiphany when a student makes a particularly insightful observation. In a recent session examining stability operations, Colonel Pat Proctor observed the Army proudly proclaims it wins the nation's wars, when in reality, it is not structured organizationally or intellectually to do so. Instead the service is content just to win the nation's battles, and strongly resists any attempts to go beyond that role, a position reinforced by civilian leaders reluctant to concede any role to the military in translating battlefield success into lasting political outcomes.

As Nadia Schadlow argues persuasively in *War and the Art of Governance* only the military has the authority and resources to accomplish that difficult task in the wake of war. Through more than a dozen rich historical case studies, she illustrates a persistent "American denial syndrome" that refuses to properly recognize and prepare for the political and military challenges involved in restoring order after combat operations. She attributes this syndrome to four main causes: democratic discomfort with the military leading political activities, a traditional American aversion to any taint of colonialism, a belief that civilians should always handle governance, and a narrow military view of its proper professional role in war reinforced by interpretations of Carl von Clausewitz and Samuel P. Huntington.

Well versed on national security issues from her work at the Smith Richardson Foundation, Schadlow begins her historical analysis with General Winfield Scott's conduct of basic reconstruction in Mexico in 1847 despite a lack of guidance from Washington. In many ways the exercise of military governance there and in the conquered territories marked a sort of highpoint for the practice, as the American record over the rest of next century was usually much worse. It was only with the establishment in 1942 of a separate Civil Affairs Division on the General Staff and the School for Military Government at Charlottesville that the whole issue of military governance began to gather significant interest and adherents further motivated by the problems General Eisenhower was confronting in North Africa. Extended occupations in Italy, Germany, and Japan produced models of what enlightened and empowered military governance could accomplish. More limited and less well-prepared efforts in Korea were not as successful. Schadlow's analysis could have also profited from looking at the American experience in Austria, a 10-year occupation judged also to be successful, though Austrians claim that was despite Allied polices and not because of them.

After examining Cold War postconflict reconstructions of Korea, the Dominican Republic, and Panama, she moves on to the rather dismal record in Afghanistan and Iraq, demonstrating how the denial syndrome undermined any chance for strategic success in both theaters of operation from the very beginning. And again, we have failed to learn from that experience. She points out the Defense strategic guidance for 2015 specifically states US forces will "no longer be sized to conduct large-scale, prolonged stability operations" that are actually essential to consolidate political gains. (274) She argues the Army must be big enough and capable enough to accomplish necessary governance tasks along with conventional kinetic requirements, civilian leaders must be prepared to relinquish operational control of such reconstruction efforts, there should be real unity of command and not competing fiefdoms, and everyone must understand how long political consolidation will take.

This very important book should be read by soldiers and policymakers, although the message may not be one they want to hear. As General Buck Turgidson proclaimed in *Dr. Strangelove*, "The truth is not always a pleasant thing." But until the US government realizes, and acts on, the necessity of reforms, the nation will be destined to continue struggling toward any strategic gains from modern conflict, especially in contemporary wars among the people.
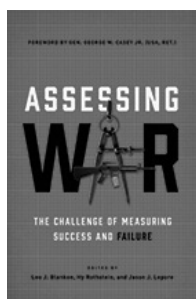
Assessing War: The Challenge of Measuring Success and Failure

Edited By Leo J. Blanken, Hy Rothstein, and Jason Lepore

Reviewed by John A. Bonin, Professor of Concepts and Doctrine, US Army War College

*A*ssessing War: The Challenge of Measuring Success and Failure is a timely and needed anthology. The editors—Leo J. Blanken, Hy Rothstein, and Jason Lepore—address a previously ignored and esoteric aspect of national defense, military assessment, in a comprehensible manner. Two of the editors serve in the Defense Analysis Department, US Naval Post Graduate School. The third, Jason Lepore, is a professor of economics at California Polytechnic State University. General George W. Casey Jr (US Army Retired), the first commander of Multi-National Force Iraq, provides the foreword, stating the importance of an assessment process that anticipates challenges and identifies opportunities as well as justifies changes. The authors include leading experts and veterans of the recent wars in Iraq and Afghanistan. This book seeks to generate recommendations and models for future strategic assessments and to document historical accounts of this neglected aspect of military history.

The editors seek to provide a multidimensional look at military assessments in theory and in practice through historic and contemporary case studies as well as through alternative dimensions. In the introduction, the editors describe "wartime assessment" to mean the act of gathering information to update one's belief as to who is winning the war with subordinate lines of effort that may include "measures of effectiveness" *and* "measures of performance."

The first section of the book expands the theoretical basis for an assessment process. In the first chapter, Blanken and Lepore, discuss a metrics triangle composed of benchmarks, incentives, and information, as well as the critically important separation between a state's political goals and its operational benchmarks. In the next chapter, Rothstein further analyzes this "Clauswitzian gap" and argues it is often caused by divergence between the experiences of political and military leaders. The final chapter of this section discusses the three primary problems with assessments: information overload, decision making without sufficient information, and uncertainty.

The editors tasked the authors of the nine historical chapters of the second section to consider, what types of assessments had been made and how they affected actors' conduct during the war. As with any anthology, the case studies proved somewhat uneven in both subjects and sources. Edward Lengel's chapter on the American Revolution effectively argues the centrality of George Washington, his headquarters for American military assessments, and his growth in effective decisionmaking that resulted in victory at Yorktown. The chapter on the Seven Years' War in America only assesses a narrow aspect, regarding the use of proxy forces by the British and French during the first three years. Several of the case studies, such as those on the Civil War and the Indian Wars, cover only singular aspects of these long and complicated conflicts.

Brian Linn's chapter on "Assessing the Philippine War" proved to be one of the best in that it covers this entire, almost forgotten, successful counterinsurgency and concluded "the assessment process . . . worked better than could be expected" (124).

Likewise, Conrad Crane's chapter on measuring gains in Korea effectively argues wartime assessments of successes and failures there shaped future US policies, and not always for the best. The chapters covering the two world wars only provide analysis of selected aspects of strategic assessment. Stephenson considers Falkenhayn's belief the French could be bled white at Verdun and the German Navy's belief in unrestricted submarine warfare proved to be strategic failures; Foch's belief that a series of coordinated allied offensives in 1918 could achieve decisive results proved correct. Gerhard Weinburg only looks at assessments used during two major strategic decisions in World War II: Hitler's decision to postpone the invasion of Russia from his unrealistic date in the fall of 1940 to his advisors preferred date in the summer of 1941 and Churchill's controversial policy shift by the Royal Air Force to night area-bombing of cities to prevent unacceptable losses.

The last chapter on Vietnam, and the third section, focus on more current case studies during limited wars and counterinsurgencies. The wars in Vietnam, Iraq, and Afghanistan proved difficult for the military to assess as these included more nonmilitary factors such as political, economic, and informational impacts on military efforts, and were subject to the "Clauswitzian gap." Despite practitioners' perspectives, not only is it too early to assess American success and failure in the latter two conflicts accurately, but as Mark Stout tentatively presents, even al-Qaeda does assessments.

The last section addresses alternative dimensions of assessing war. These include a discussion of the Just War concept of proportionality; the challenge of assessment in cyberspace; the significance of assessing the war of ideas, or the battle of the narrative, and immature assessments of expensive economic development efforts. Finally, the prolific author on modern war Anthony Cordesman and Rothstein conclude the United States must set meaningful strategic goals with appropriate public narratives that can be assessed by suitable military assessment organizations using realistic metrics.

Assessing War is a valuable book for serious students of strategy and military policy and is a must for readers interested in assessing military success. Expanded case studies that further investigate this important, but often overlooked, aspect of military strategy and planning—assessing how we are doing—are still needed.

US Defense Budget Outcomes: Volatility and Predictability in Army Weapons Funding

By Heidi Brockmann Demarest

Reviewed by Lawrence Korb, Center for American Progress
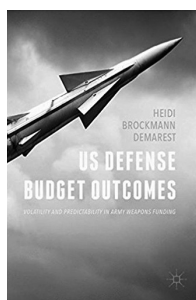
New York: Palgrave
Macmillan, 2017

205 pages

$106.00

I n defense, dollars are policy. If the nation does not spend sufficient funds wisely on procuring the correct amount of manpower and matériel necessary to provide for the common defense, national security will suffer. Unfortunately, most strategic thinkers do not spend sufficient time mastering the details of the annual defense-budget process. Instead, most prefer to focus on the more glamorous strategic and tactical issues.

The American political system was never designed to be efficient. Instead, it emphasizes checks and balances and popular control. Therefore, even though the women and men of the Department of Defense spend at least eighteen months carefully developing the annual defense budget for the armed services and defense agencies, the entire Congress, individual committees, or even individual members or their staffers can and do make numerous changes to specific programs in the proposed budget. Moreover Congress is not only becoming increasingly involved in the details, it is taking longer and longer each year to pass a defense budget even in a time of war. In fact, Congress has not passed a budget on time in nine of the last ten years. Therefore, it is more important than ever for soldiers, scholars, and practitioners to understand the relationship between policy, strategy, and budgets.

In her new book, *US Defense Budget Outcomes: Volatility and Predictability in Army Weapons Funding*, Army Major Heidi Brockmann Demarest helps close the gap. She does this by providing an excellent analysis of how and why certain Army procurement programs were, or were not, funded adequately or even at all in the annual Congressional budget process in the period after September 11, 2001.

Demarest demonstrates even though the top line for defense only changes incrementally from year to year, or even during the Congressional process, there is a great deal of volatility in individual procurement programs after the budget is submitted to Congress. She does this by examining voluminous data from 1,152 programs over several fiscal years. She analyses how the Congress alters funding for 40 percent of the programs in the Army budget each year, and alters two-thirds of those programs by more than 25 percent. Major Army programs like the Crusader, the Bradley, the Striker, the Ground Combat Vehicle, Mine Resistant Ambush Protected (MRAP) vehicle, and the Future Combat System are among the programs she carefully and comprehensively analyzes.

According to Demarest, no single factor directly accounts for this volatility. Instead, each program's funding history is a combination of its technical, industrial, and political characteristics. Moreover, the Army's ability to influence Congress depends more on the quality of the engagement with Congress than the quantity.

The book also offers some important suggestions on how to improve, clarify, and extend the discussion of the budget as it makes its way through Congress. According to Demarest, program funding is not incremental, no single factor explains outcomes, quality Congressional engagements can suppress funding volatility, and an incremental strategy may control budget outcomes for individual systems most effectively.

While many people, particularly in the executive branch, understandably become frustrated with what they perceive as Congressional meddling in the budget process, Demarest points out correctly that members of Congress or congressional staffers not only can, but should, get involved in determining how the Army and the Pentagon spend our taxpayers' dollars each year. These women and men are from the most representative branch of the American government. Those who agree or disagree with their decisions have a remedy. It is called elections.

I have spent the majority of my professional career analyzing defense budgets, and spent five years actually helping to formulate and defend them. Yet, I still learned a great deal from Demarest's book and recommend it to all who analyze national security or become involved in the decision-making process.

To her credit, Demarest recognizes the results she outlines can be expanded insuring that her conclusions are not exclusively driven by a decade of war, or whether her insights apply to the Navy, Air Force, and Marine Corps as well. Based upon my own research and involvement, I would argue that the budgets of the Air Force, Navy, and Marine Corps are not changed nearly as much by Congress as those of the Army, but that can be the subject of her next book.

I do, however, have a minor suggestion to improve the usefulness of the book. While Demarest has voluminous footnotes within and references at the end of each chapter, the bibliography at the end does not include the vast number of the references nor are many of them included in the index.

The Origins of the Grand Alliance: Anglo-American Military Collaboration from the Panay Incident to Pearl Harbor

By William T. Johnsen

Reviewed by Henry G. Gole, author of *The Road to Rainbow: Army Planning for Global War, 1934–1940*

In the prologue of his *Origins of the Grand Alliance,* Professor William T. Johnsen, of the US Army War College, tells the reader precisely what to expect in this 256-page narrative validated by 85 pages of endnotes: "The story told in this book is an effort to explain the origins of the Anglo-American coalition, outline its early development, and clarify how this early collaboration set the conditions that led to the Allied victory" (prologue). This clear statement of intent is realized in execution so that he can conclude "between December 1937 and December 1941 British and American staff planners forged the foundation of the Grand Alliance." Historian Rick Atkinson, author of *The Liberation Trilogy*, highlights the
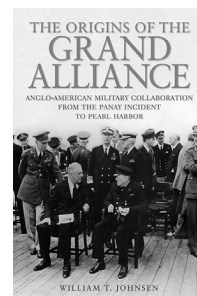
Lexington: University of Kentucky, 2017

406 pages

$50.00

singular importance of that alliance, calling it "the most vital American partnership of the twentieth century."

Scrutiny of that partnership has produced many excellent works, but "no one treatment offers a comprehensive picture of the military elements of the early Anglo-American process" (2). Johnsen provides that comprehensive picture. Many earlier works begin with, and focus on, the full-fledged staff talks in January–March 1941, the American-British Conversations known as ABC. They were "held in utmost secrecy," because President Franklin D. Roosevelt was concerned with isolationists and noninterventionists still active in the United States (6). Johnsen writes with authority grounded in tight organization, thoroughness, extensive research in British and American archives and secondary sources, and judgment shaped by his scholarship, teaching experience, and military career.

Johnsen begins with two short chapters providing context, one on the American-British coalition experience in the Great War and one on the interwar years. Then, his descriptive chapter headings cue the reader to the deepening relationship as it evolves from handholding to marriage, which are abbreviated here and robbed of the wit found in the original: Coalition Encounters, 1936–1939; Ties That Bind; Allocation of War Matériel, 1939–1940; Assessing that Britain Would Survive After the French Collapse, 1940; ABC in January–March 1941; Turning Grand Strategy into Practical Military Plans; The State of Cooperation at the Time of Pearl Harbor; and the Conclusion. Johnsen does a good job sorting out what is essential to his story from what is interesting but extraneous, focusing on coalition grand strategy. Political leaders agree on grand strategy and provide coherent guidance to military leadership, as poetry becomes prose.

Formulation of national strategy is a complex process; making coalition strategy is even more complex. Then, providing military leaders with coherent and timely guidance for implementation is problematic, particularly when, as Johnsen and many biographers note, Roosevelt "loathed closing any options" (238). His management style has been characterized as divide-and-conquer with a strong preference for oral communication that often left advisers wondering what he had really said. His American military advisers, left in the dark, sometimes got their guidance from British counterparts who were clearly guided by Winston Churchill.

Unfortunately, strategy formulation does not flow textbook fashion from national interests—in this case coalition interests—from policy to strategy, with the latter's component ends, ways, and means. It is a human activity. Errors and misunderstandings abound. So do shading of meaning and "spin" by staffers. And, sometimes in the course of bilateral discussions and analyses, the US Navy and the Royal Navy shared more on a specific issue than either navy shared with its own national army or air force.

The best writing in the book is in Johnsen's concluding chapter, replete with wit and wisdom. He captures the special relationship of Churchill (strategist) and Roosevelt (planner) as well as the evolution and iteration of planning that led to victory. A "Reflection for the Future," his last words, are three pages on planning for coalition warfare and

recommended for the curricula of staff schools and colleges as well as for serious students to mull over.

Historians will forgive this reviewer's counterfactual grace note. What if Germany and Japan, in a grand alliance, had given priority to defeating Russia by a coordinated offensive in 1941? Without Pearl Harbor, the United States might have bowed to noninterventionists as the Japanese exploited the defeat of Russia by grabbing Dutch and French colonies. The Brits had their hands full defending the homeland, combating German submarines in the Atlantic, and keeping open their lines of communication through the Mediterranean to east of Suez. The sinking of HMS *Repulse* and HMS *Prince of Wales* and the loss of Singapore and its garrison demonstrated by actual events that the British cupboard was bare. That German-Japanese grand alliance would have produced a very different future, now past.

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Scope:	The manuscript addresses strategic issues regarding US defense policy or the theory and practice of land warfare. Visit our website (http://ssi.armywarcollege.edu/pubs/parameters/submission.cfm) to gain a better understanding of our current editorial scope.
Audience:	US Army War College graduates and other senior military officers as well as members of government and academia concerned with national security affairs.
Clearance:	If you are a member of the US military or a civilian employee of the Department of Defense or one of its service departments, your manuscript may require official clearance (see AR 360-1, ch. 6). Contact your local Public Affairs Office for assistance.
Concurrent Submissions:	The manuscript is not under consideration with other publishers and has not been published elsewhere, including on the Internet.

Formatting Requirements

Length:	5,000 words or less.
File Type and Layout:	MS Word Document (.doc) or Rich Text Format (.rtf) file; Times New Roman, 12-point font; double-spaced; 1-inch margins.
Visual Aids:	Only include charts, graphs, and photographs when they are essential to clarify or amplify the text. Images must be grayscale, a minimum of 640 x 480 pixels, and submitted in their original file format (.tiff or .jpg). It is not sufficient to submit images embedded in a .doc or .rtf file.
Citations:	Document sources as footnotes. Indicate all quoted material by quotation marks or indentation. Reduce the number of footnotes to the minimum consistent with honest acknowledgement of indebtedness, consolidating notes where possible. Lengthy explanatory footnotes are discouraged and will be edited. *Parameters* generally uses the conventions prescribed in the *Chicago Manual of Style*.

Submission Requirements

Submit to:	usarmy.carlisle.awc.mbx.parameters@mail.mil
Include:	• Each author's full name, mailing address, phone number, email address, and curriculum vitae or biographical sketch. When there are multiple authors, please identify the primary point of contact • All original files (.doc or .rtf, and any .tiff or .jpg files, if applicable) as attachments • An abstract
Lead Times:	If you would like your manuscript considered for a specific issue, submit it by the following dates: • 1 December—Spring • 1 March—Summer • 1 June—Autumn • 1 September—Winter *Note: Lead times only ensure the editor will consider a manuscript for publication in a specific issue; however, the editor reserves the right to recommend a manuscript for publication in any upcoming issue to meet space or topic requirements.*
Review Process:	Upon receipt, we will send you a confirmation email. The review process can take four to six weeks from date of receipt.

Book Review Submissions

Parameters publishes reviews of books on history, political science, military strategy, grand strategy, and defense studies. The editor welcomes inquiries for potential book reviews.

Email inquiries about a potential book or requests to review a specific title to usarmy.carlisle.awc.mbx.parameters@mail.mil. Please provide:

- The book's title and the name of the author(s) or editor(s)

- Your qualifications, full name, e-mail address, phone number, and mailing address

US Army War College Quarterly

Parameters

The US Army War College

The US Army War College educates and develops leaders for service at the strategic level while advancing knowledge in the global application of landpower.

The purpose of the US Army War College at this time in our nation's history is to produce graduates who are skilled critical thinkers and complex problem solvers in the global application of landpower. Concurrently, it is our duty to the Army to also act as a "think factory" for commanders and civilian leaders at the strategic level worldwide and routinely engage in discourse and debate on ground forces' role in achieving national security objectives.

The Strategic Studies Institute publishes national security and strategic research and analysis to influence policy debate and bridge the gap between military and academia.

The Center for Strategic Leadership develops senior leaders and supports the strategic needs of the Army by educating senior military and civilian leaders on landpower at the operational and strategic levels, developing expert knowledge and solutions for the operating and generating force, and conducting research activities, strategic exercises, and strategic communication.

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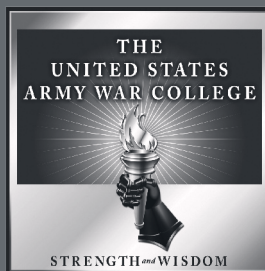
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